

Pension Plan for Bargaining Unit Employees of TriMet

Actuarial Valuation Report as of July 1, 2020

Produced by Cheiron

August 2020

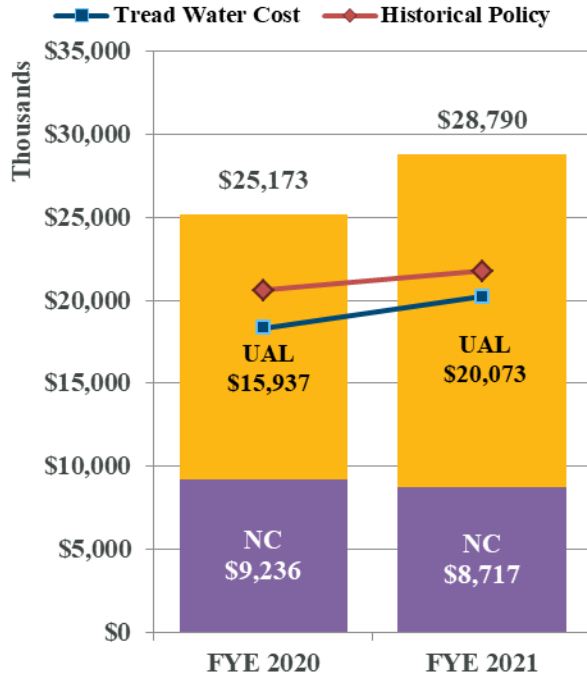
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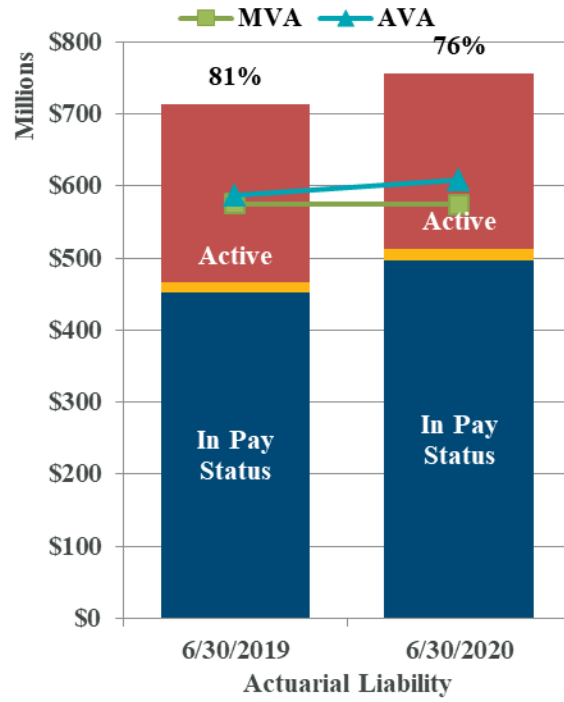
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SECTION I – BOARD SUMMARY

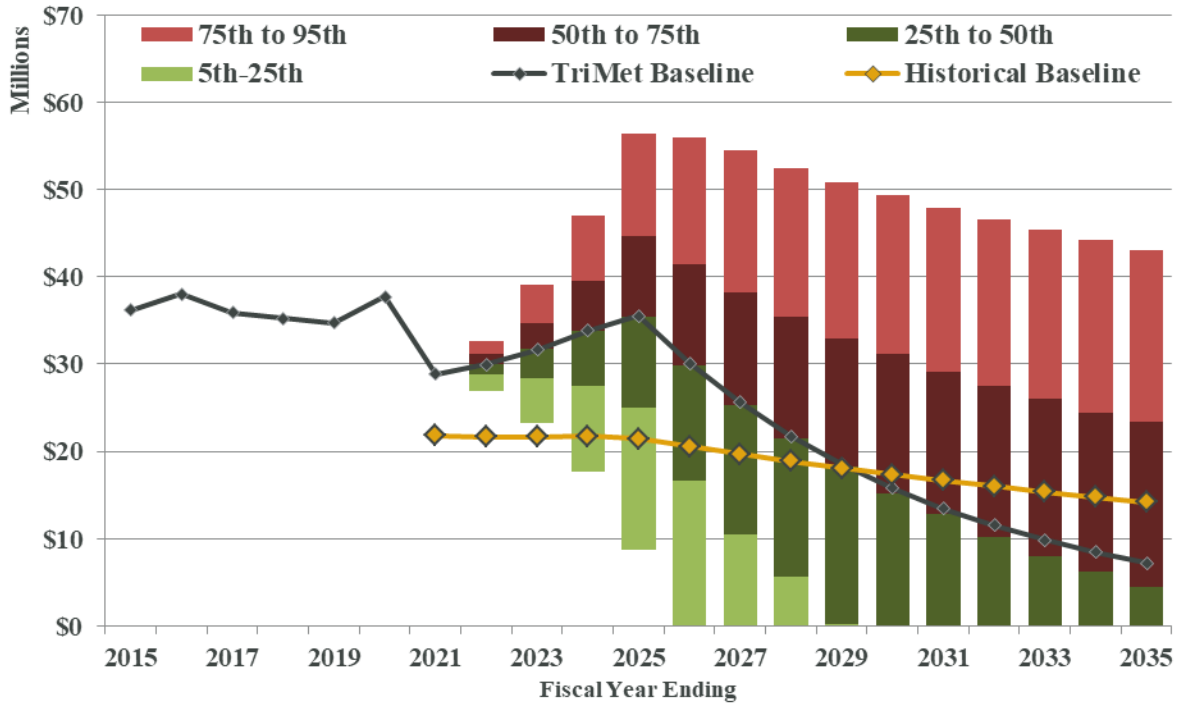
TriMet Policy Contributions



Funded Status



Historical and Projected Contributions



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Contributions and Pension Expense

The chart in the upper left corner of the dashboard on the prior page shows the Actuarially Determined Contribution (ADC) under the TriMet Funding Policy assuming it is paid monthly throughout the year compared to the Historical Policy (red line) and the Tread Water Cost (blue line) for the fiscal years ending June 30, 2020 and 2021, respectively. The ADC is composed of the normal cost plus an amortization payment on the Unfunded Actuarial Liability (UAL) based on the Actuarial Value of Assets.

There are currently two separate funding policies: the “TriMet” policy and the “Historical” policy. The “Historical” policy was established by the Trustees and is based on a rolling 20-year level dollar amortization of the UAL. The “TriMet” policy was established by TriMet and is based on a closed 15-year period commencing July 1, 2014 until the remaining period reaches five years at which time it becomes a rolling 5-year amortization period. Amortization payments under the TriMet policy increase 2.0% each year. The different policies are described in more detail in Appendix B.

The Tread Water Cost is the normal cost plus interest on the UAL. The normal cost represents the expected cost of the benefits attributed to the next year of service, and the interest on the UAL represents the amount that would need to be contributed to keep the UAL at the same dollar amount if all assumptions are met. To the extent the ADC exceeds the Tread Water Cost, the UAL is expected to decline, and to the extent actual contributions are even greater, the UAL is expected to decline further.

For FYE 2020, actual contributions were approximately \$37.8 million, exceeding the ADC under the TriMet policy and paying off about \$20 million of the UAL. While the normal cost decreased, other changes caused the UAL to increase and the amortization period became a year shorter. As a result, the ADC under the TriMet policy for FYE 2021 is approximately \$28.8 million if paid monthly throughout the year, about \$3.6 million higher than the \$25.2 million for FYE 2020.

Under GASB 68, the annual pension expense equals the Tread Water Cost plus the cost of any benefit increases 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-1 on the following page compares the ADC to actual contribution amounts and pension expense for the fiscal years ending in 2019 and 2020. The pension expense increased from \$30.2 million for FYE 2019 to \$42.2 million for FYE 2020, while the ADC decreased under both the “Historical” and “TriMet” funding policies.

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Table I-1

Annual Contributions and Pension Expense				
	FYE 2020	FYE 2019	% Change	
Pension Expense (\$ Amount)	\$ 42,181,408	\$ 30,224,284	39.6%	
Actuarially Determined Contribution				
Historical Policy	\$ 20,592,864	\$ 22,326,384	-7.8%	
TriMet Policy	\$ 25,173,360	\$ 26,040,372	-3.3%	
Actual Contribution	\$ 37,755,077	\$ 34,717,720	8.7%	

Actual contributions have exceeded \$34 million for the last eight years, which is significantly more than the ADC under either policy. For FYE 2020 and in the future, the projections in the chart at the bottom of the dashboard (page 1) assume that the ADC under the “TriMet” funding policy is contributed. The “TriMet” and “Historical” baselines represent the projected ADC under the respective policies if all assumptions are met and contributions are made in accordance with that policy. The “Historical” baseline shows level contributions for the next five years followed by a gradual decline in the ADC through the remainder of the projection period. The “TriMet” baseline shows an increasing ADC through FYE 2025, when the policy transitions to a rolling 5-year amortization, at which point the ADC gradually declines, crossing below the projected “Historical” ADC in 2029. This crossover is the result of the accumulated difference in assumed contributions prior to 2029. As long as the Plan is not fully funded, the “TriMet” ADC will be greater than the “Historical” ADC. The range of the bars represents the potential range of the “TriMet” ADC based on the potential range of actual investment returns. There is a wide range of projected ADC’s that is the combined result of investment volatility and the relatively short 5-year amortization period in the funding policy. For these projections, we used an expected return of 6.50% and a standard deviation of 10.19%¹.

Section II of this report provides information on the risks to contribution amounts and Section VI of this report provides additional detail on the development of the ADC under both policies.

Funded Status

The chart in the upper right corner of the dashboard (page 1) shows the measures of assets, Actuarial Liability, and funded status for the current and prior valuations. These measures are for the purpose of assessing funding progress in a budgeting context, and are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan’s benefit

¹ Calculated based on Meketa’s 2020 capital market assumptions and the Plan’s long-term asset class targets.

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obligations. For many pension plans, the measures for financial reporting under GASB 67 and 68 are different, but for TriMet, they are the same.

The bars represent the Actuarial Liability (or Total Pension Liability), which is used as a funding target, and are separated between the liability for members currently receiving benefits (dark blue), inactive members entitled to future benefits (gold), and active members (red). About 66% of the liability is for members currently receiving benefits. The green line shows the Market Value of Assets (or Fiduciary Net Position), and the light blue line is the Actuarial Value of Assets that recognizes investment gains and losses over five years. The percentage on the top of the bar represents the funded status based on the Market Value of Assets, which decreased from 80.5% to 75.9%.

Table I-2 below summarizes the Actuarial Liability, assets, and funded status as of July 1, 2019 and 2020.

Table I-2

Summary of Funded Status			
	July 1, 2020	July 1, 2019	% Change
Actuarial Liability			
Actives	\$ 244,148,400	\$ 247,952,697	-1.5%
Deferred Vested	16,380,028	14,367,801	14.0%
In Pay Status	<u>496,089,012</u>	<u>451,435,464</u>	<u>9.9%</u>
Total	\$ 756,617,440	\$ 713,755,962	6.0%
Market Value of Assets (MVA)	\$ 574,055,380	\$ 574,919,893	-0.2%
Unfunded Actuarial Liability - MVA Basis	\$ 182,562,060	\$ 138,836,069	31.5%
Funding Ratio - MVA Basis	75.9%	80.5%	-5.8%
Actuarial Value of Assets (AVA)	\$ 607,994,421	\$ 586,631,303	3.6%
Unfunded Actuarial Liability - AVA Basis	\$ 148,623,019	\$ 127,124,659	16.9%
Funding Ratio - AVA Basis	80.4%	82.2%	-2.2%

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 6.0% due in part to the assumption changes. The Market Value of Assets decreased 0.2% due to actual contributions and investment returns offset by benefit payments and expenses. As a result, the Unfunded Actuarial Liability (UAL) measured on the Market Value of Assets increased from approximately \$138.8 million to \$182.6 million.

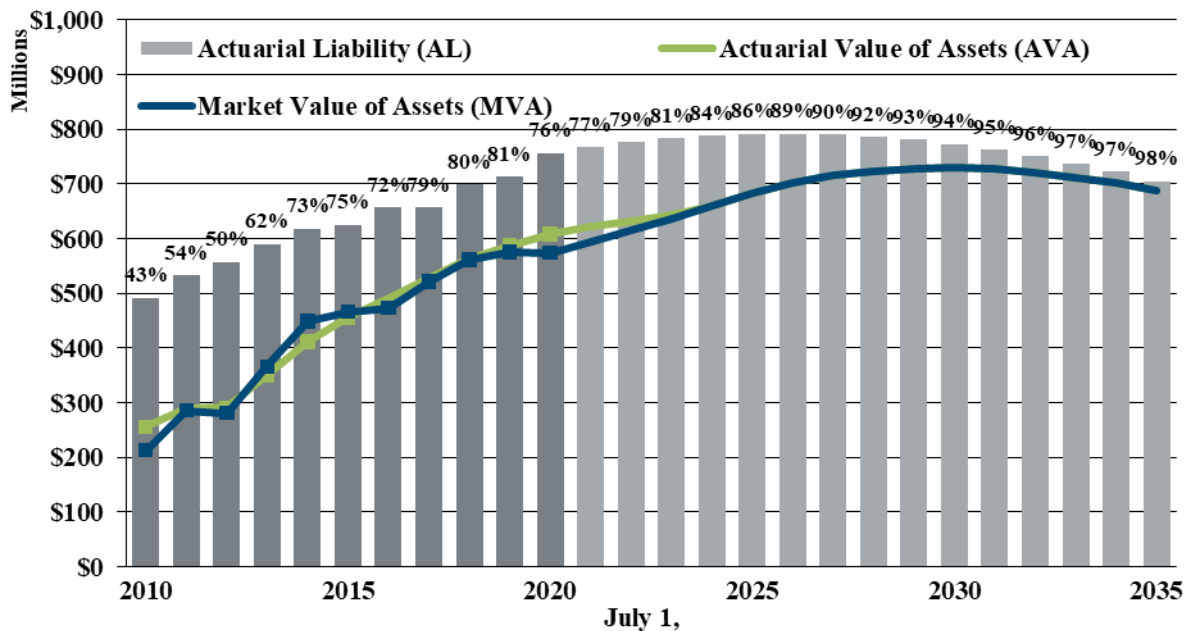
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The asset smoothing method deferred 80% of the current year’s investment loss while recognizing 20% of the prior four years’ gains and losses, resulting in an increase in the Actuarial Value of Assets of 3.6%. The UAL measured on the Actuarial Value of Assets increased to \$148.6 million from \$127.1 million. The Market Value of Assets is smaller than the actuarial value, so if assumptions are met in the future, we expect an increase in the ADC as the deferred asset losses are recognized in the Actuarial Value of Assets.

The chart below shows the historical and projected assets (both market and smoothed actuarial) compared to the Actuarial Liability, and also shows the progress of the funding ratios (based on the Market Value of Assets). The historical Actuarial Liability is shown in dark gray while the projected Actuarial Liability is shown in a lighter gray. If all assumptions are met in the future and contributions are made in accordance with the “TriMet” funding policy, the funded status is expected to reach 98% by 2035 (82% under “Historical” funding policy).

Historical and Projected Assets and Actuarial Liability



More detail on the assets can be found in section IV of this report, and more detail on the measures of liability can be found in section V of this report.

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Changes

During FYE 2020, the UAL increased by \$43.7 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, July 1, 2020	\$ 182,562,060
UAL/NPL, July 1, 2019	\$ 138,836,069
Change in UAL/NPL	\$ 43,725,991
<u>Sources of Changes</u>	
Plan Changes	\$ 0
Assumption Changes	34,128,985
Contributions vs. Tread Water Cost	(20,001,279)
Investment (gain) or loss	34,972,743
Liability (gain) or loss	
Benefit Rate experience	\$ (6,199,897)
Retiree COLA experience	(488,858)
Retirement experience	2,173,599
Termination experience	(980,389)
Other experience	121,087
Total Liability (gain) or loss	\$ (5,374,458)
Total Changes	\$ 43,725,991

The largest increase to the UAL was \$35.0 million due to investment losses followed by the \$34.1 million increase due to assumption changes. The most significant source of reduction in the UAL is that actual contributions exceeded the Tread Water Cost by approximately \$20.0 million. Liability experience reduced the UAL by approximately \$5.4 million due to gains attributable to benefit rate experience, retiree COLA experience, and termination experience offset by losses due to retirement experience.

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Table I-4 below provides a summary of the results of this valuation compared to the prior valuation.

Table I-4

Summary of Valuation Results			
	July 1, 2020	July 1, 2019	% Change
Membership			
Actives	1,099	1,236	-11.1%
Deferred	139	133	4.5%
In Pay Status	<u>2,058</u>	<u>1,975</u>	4.2%
Total	3,296	3,344	-1.4%
Active Member Payroll	\$ 76,529,206	\$ 86,219,192	-11.2%
Actuarial Liability/Total Pension Liability	\$ 756,617,440	\$ 713,755,962	6.0%
Market Value of Assets/Fiduciary Net Position	<u>574,055,380</u>	<u>574,919,893</u>	-0.2%
Unfunded Actuarial Liability/Net Pension Liability	\$ 182,562,060	\$ 138,836,069	31.5%
Deferred Outflows of Resources	(60,258,970)	(25,666,118)	134.8%
Deferred Inflows of Resources	<u>6,862,390</u>	<u>11,569,197</u>	-40.7%
Net Impact on Statement of Net Position	\$ 129,165,480	\$ 124,739,148	3.5%
Funding Ratio - MVA Basis	75.9%	80.5%	-4.7%
Actuarially Determined Contribution			
Historical Policy	\$ 21,750,888	\$ 20,592,864	5.6%
TriMet Policy	\$ 28,789,812	\$ 25,173,360	14.4%

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SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Actuarial valuations are based on a set of 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 provide an assessment of those risks.

Identification of Risks

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

- Investment risk,
- Inflation risk, and
- Contribution 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 there are other gains that 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. Expected future investment returns and their potential volatility are determined by the Plan's asset allocation.

Inflation risk is the potential for actual inflation to be different than expected. Retirement benefits under the plan are increased each year by 90% or 100% of inflation (CPI-W) depending upon retirement date. 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.

Contribution risk is the potential for actual future actuarially determined contributions to deviate from expected future contributions to an extent that they become unaffordable. TriMet's policy is to treat the Actuarially Determined Contribution (ADC) as a minimum, and the ADC under the TriMet funding policy is based on a short remaining amortization period. As a result, a significant loss or change in assumptions may cause a large increase in the ADC. While TriMet can change its Funding Policy when such a situation occurs, it may want to consider alternatives in advance.

The table on the next page shows a 9-year history of changes in the UAL by source.

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FYE	UAL Change by Source					
	Plan Changes	Assumption Changes	Contributions vs. Tread Water	Investments	Liability Experience	Total UAL Change
2012	\$(10,616,209)	\$ 0	\$ 9,269,242	\$22,499,513	\$ 7,780,692	28,933,238
2013	0	15,353,638	(40,663,591)	(18,892,593)	(8,583,422)	(52,785,968)
2014	0	29,476,059	(20,462,968)	(36,496,410)	(11,294,241)	(38,777,560)
2015	0	(16,558,463)	(12,601,239)	19,269,512	(541,183)	(10,431,373)
2016	0	18,776,392	(16,375,082)	30,755,311	(8,966,475)	24,190,146
2017	0	0	(12,798,667)	(14,722,298)	(19,614,961)	(47,135,926)
2018	3,286,046	0	(16,274,620)	(6,367,130)	20,935,664	1,579,960
2019	0	0	(15,849,436)	19,086,931	(2,453,333)	784,162
2020	0	34,128,985	(20,001,279)	34,972,743	(5,374,458)	43,725,991
Total	\$ (7,330,163)	\$81,176,611	\$(145,757,640)	\$50,105,579	\$(28,111,717)	\$(49,917,330)

Over the last nine years, the UAL has been reduced by approximately \$49.9 million. Contributions reduced the UAL by \$145.8 million; liability experience reduced the UAL by \$28.1 million; and plan changes reduced the UAL by \$7.3 million, while investment returns increased the UAL by \$50.1 million and assumption changes increased the UAL by \$81.2 million.

Plan Maturity Measures

The future financial condition of a mature pension plan is more sensitive to each of the risks identified above than a less mature plan. Before assessing each of these risks, it is important to understand the maturity of the plan.

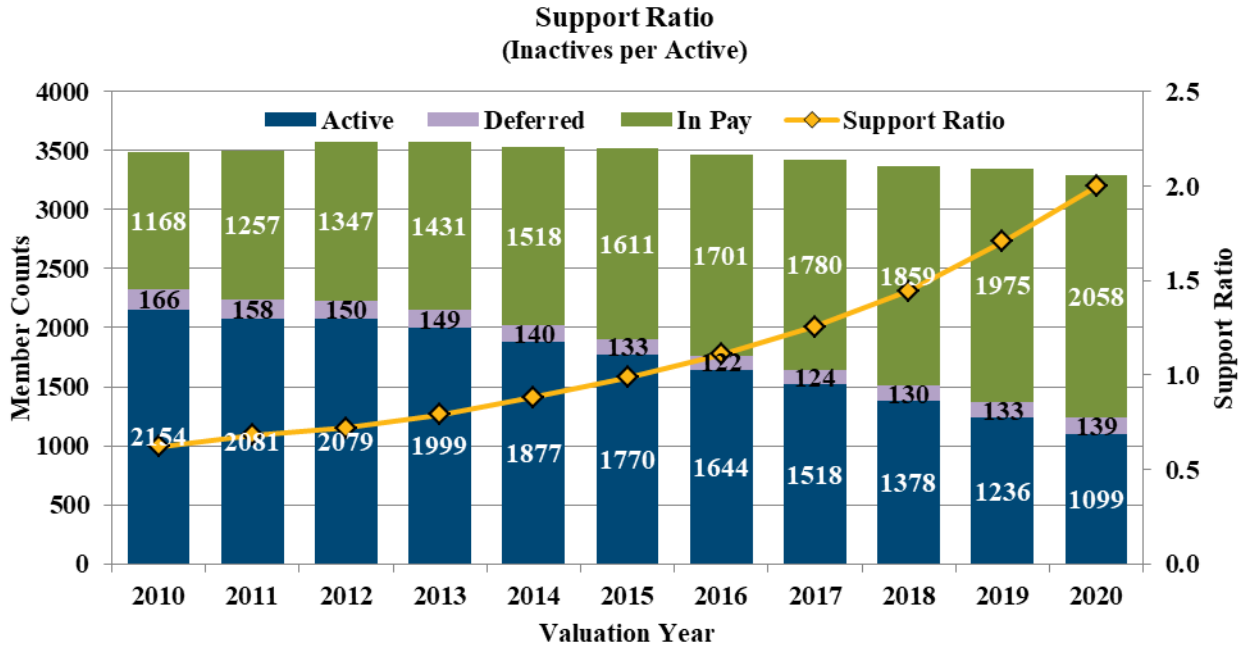
Plan maturity can be measured in a variety of ways, but there is one very important dynamic – the larger the plan is compared to the contribution or revenue base that supports it; the more sensitive the plan will be to risk. Given that the Plan has been closed to new entrants since 2012, maturity measures isolated on the Plan show significant increases in maturity.

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 are not covered by the Plan are included. The chart on the following page shows the growth in the Support Ratio for the closed Plan for the current and prior 10 years.

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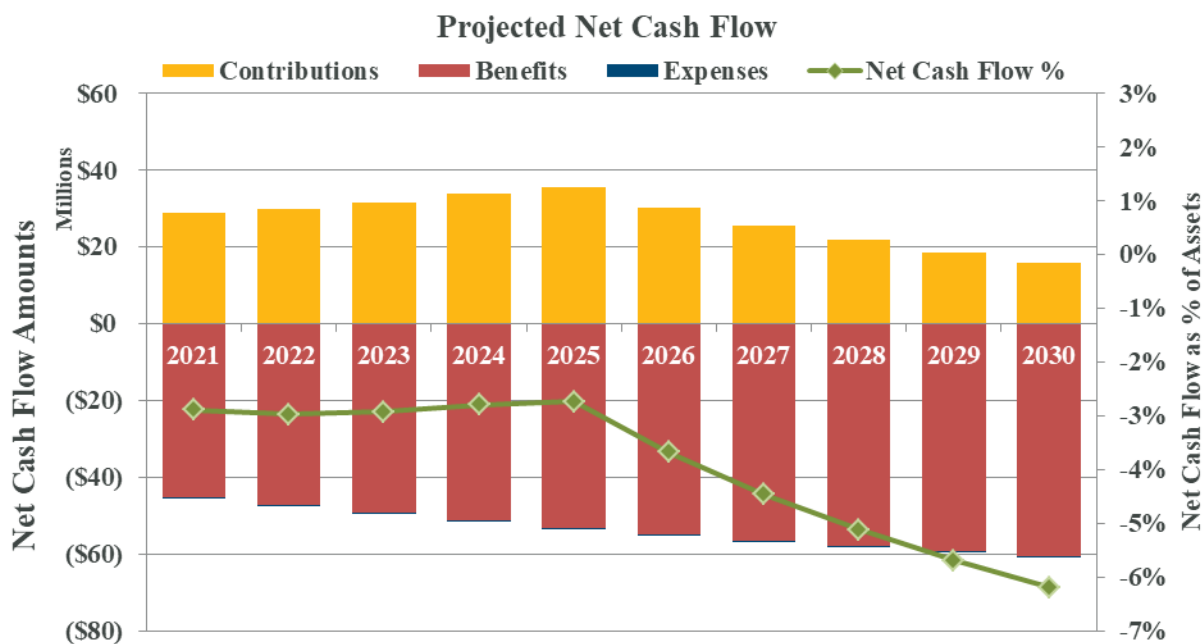
Net Cash Flow

The net cash flow of the plan 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 less 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 on the following page shows the projected net cash flow for the next 10 fiscal years assuming contributions are equal to the ADC based on TriMet’s funding policy. 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.

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With TriMet contributing amounts significantly greater than the ADC to improve the funded status of the Plan, the net cash flow has been only slightly negative the last two years. As benefit payments grow, the Plan becomes well-funded and contributions are reduced, the net cash flow is expected to become increasingly negative.

The first issue this change presents to the Plan is a need for liquidity in the investments so that benefits can be paid. When the cash flow was positive or close to neutral, benefits could be paid out of contributions without liquidating investments. As net cash flow becomes increasingly negative, the benefit payments will require liquidation of some investments to the extent the bond portfolio doesn't generate sufficient cash income.

The other change of note is the sensitivity to short-term investment returns. 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.

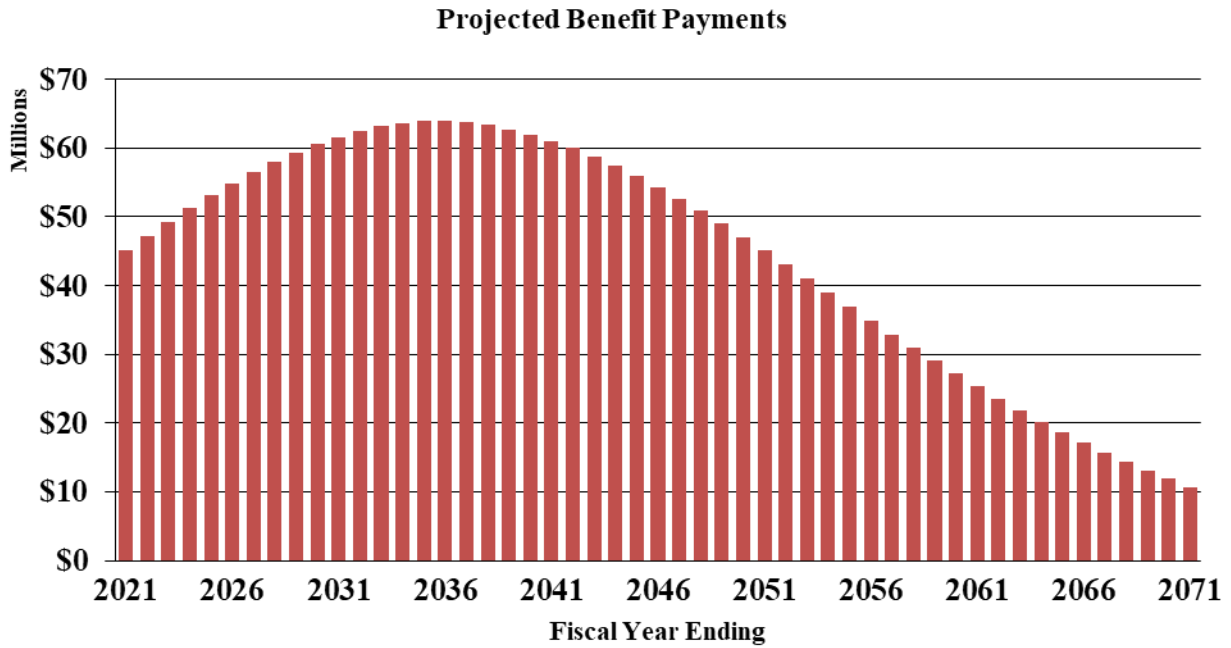
Assessing Costs and Risks

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 purchase annuities or immunize the portfolio, it is not clear how they could be used until all benefits have been paid.

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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 secure. However, if TriMet cannot afford the pay-as-you-go costs when the plan has run out of assets, benefits may be impaired. The chart below shows a projection of expected benefit payments for the closed plan.

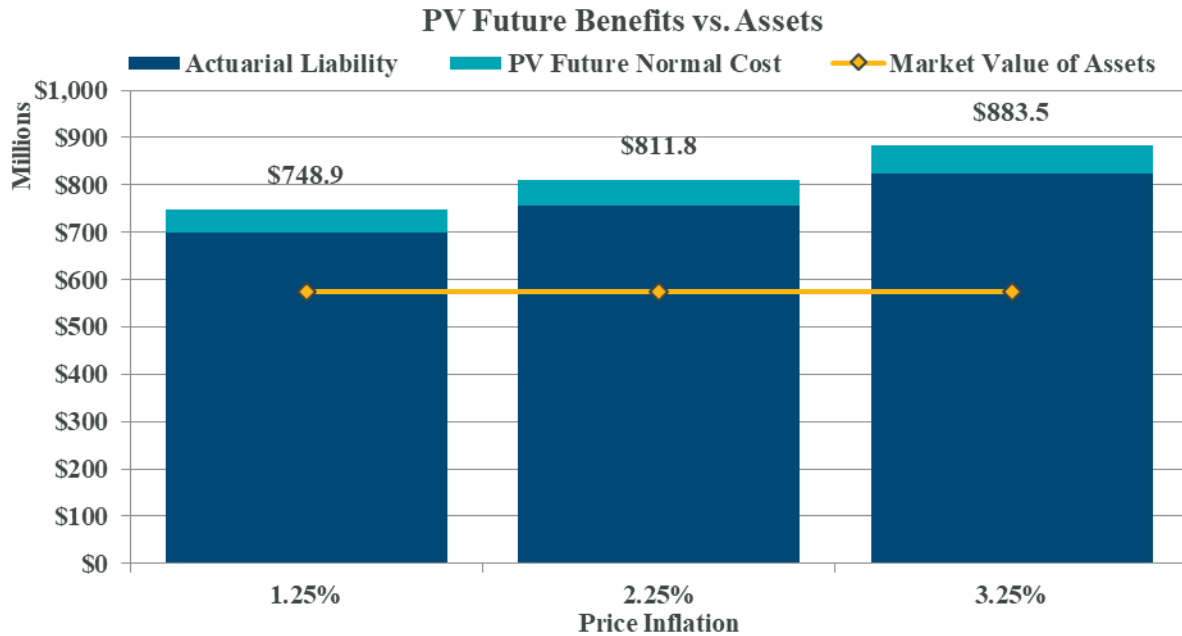


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Sensitivity to Inflation

The chart below compares assets to the present value of all projected future benefits assuming inflation of 2.25% and assuming inflation 100 basis points above and below the assumed rate of inflation. The present value of future benefits is shown as a bar with the portion attributable to past service in dark blue (Actuarial Liability) and the portion attributable to future service in teal (Present Value of Future Normal Costs). The Market Value of Assets is shown by the gold line.



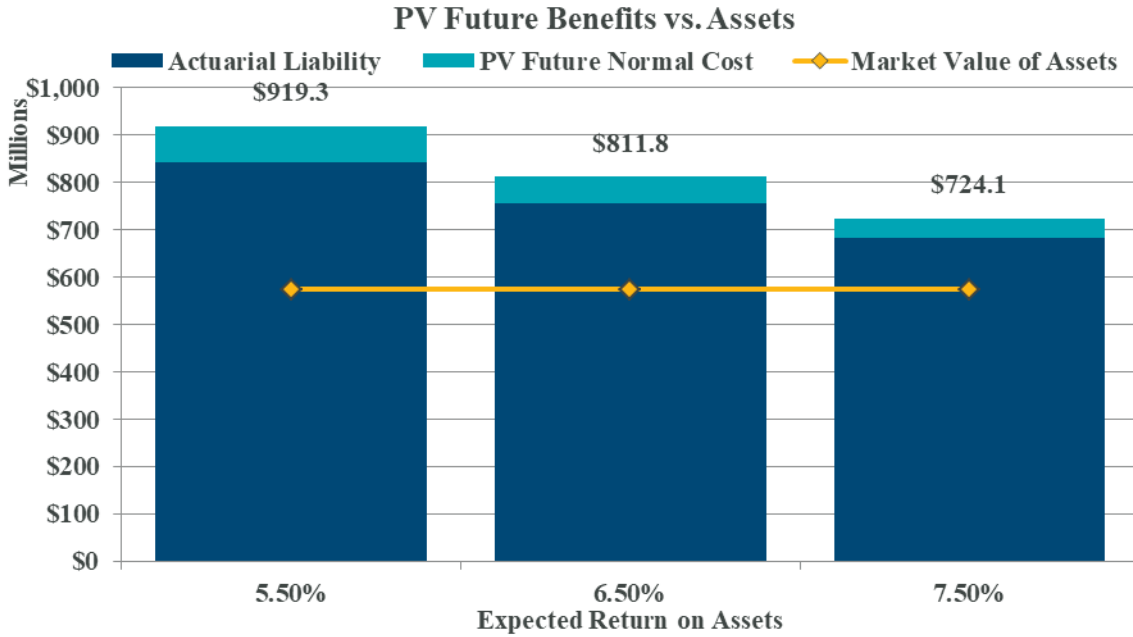
The COLA granted to retirees and beneficiaries receiving benefits is equal to either 100 percent or 90 percent of the rate of inflation depending on the date of retirement. If inflation is 2.25%, annual COLAs would be 2.25% (2.025% if 90 percent applies) and the Plan would need approximately \$812 million in assets today to pay all projected benefits compared to current assets of \$574 million. If inflation is 3.25%, annual COLAs would be 3.25% (2.925% if 90 percent applies) and the Plan would need approximately \$884 million in assets today. Finally, if inflation is 1.25%, annual COLAs would be 1.25% (1.125% if 90 percent applies) and the Plan would only need \$749 million in assets to pay all projected benefits. These estimates assume that all other assumptions are met.

Sensitivity to Investment Returns

The chart on the next page compares assets to the present value of all projected future benefits discounted at the current expected rate of return and at investment returns 100 basis points above and below the expected rate of return. The present value of future benefits is shown as a bar with the portion attributable to past service in dark blue (Actuarial Liability) and the portion attributable to future service in teal (Present Value of Future Normal Costs). The Market Value of Assets is shown by the gold line.

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If investments return 6.50% annually, the Plan would need approximately \$812 million in assets today to pay all projected benefits compared to current assets of \$574 million. If investment returns are only 5.50%, the Plan would need approximately \$919 million in assets today, and if investment returns are 7.50%, the Plan would need approximately \$724 million in assets today.

The present value of future benefits shown above, however, assumes annual inflation of 2.25%. If annual inflation is higher; more assets would be needed to pay the benefits, and if inflation is lower; fewer assets would be needed to pay benefits. In this case, it is better to think of the sensitivity based on the investment return in excess of inflation. The assumption of 6.50% nominal investment returns and 2.25% inflation equates to a real investment return assumption of 4.25%. Similarly, expected nominal investment returns of 5.50% and 7.50% equate to 3.25% and 5.25% real investment returns, respectively.

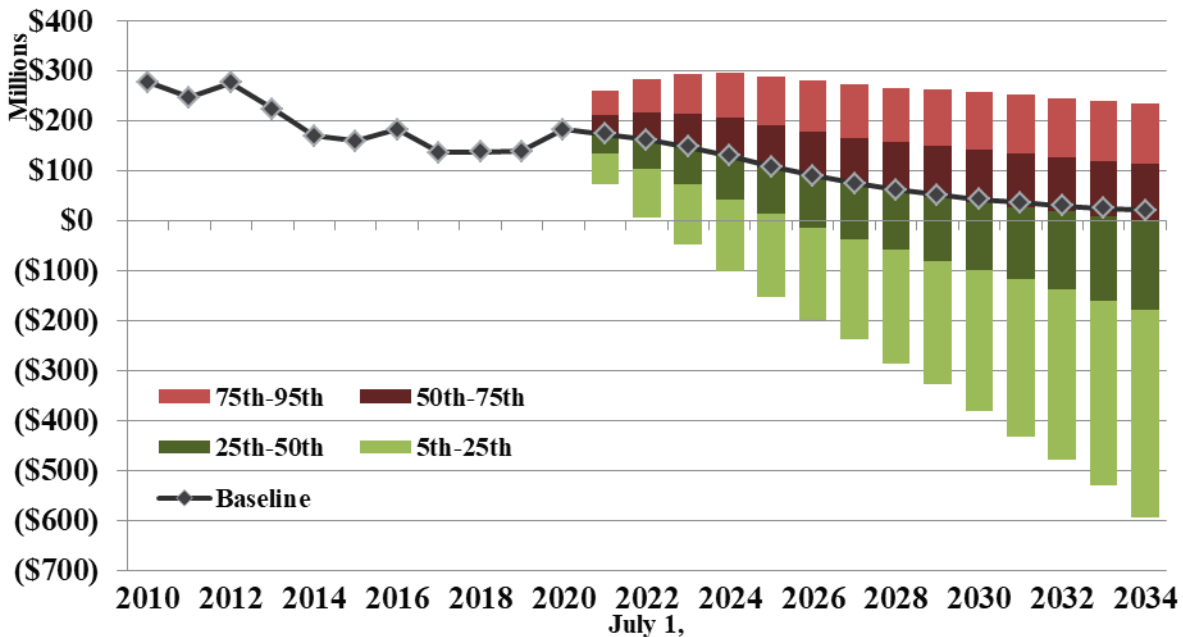
Stochastic Projections

The stochastic projections of contributions shown at the bottom of the dashboard (page 1) show a very wide range in future ADC’s. This range is driven both by the volatility of investment returns and by the short amortization period used to calculate the ADC under TriMet’s funding policy. The chart on the following page shows the projected range of the UAL or surplus on the same basis. Surplus amounts are shown as negative numbers.

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Historical and Stochastic Projection of UAL/(Surplus)



While the UAL is projected in the baseline to be relatively small by 2034, there is a wide range of potential outcomes. The relatively short amortization period for the UAL prevents the UAL from becoming too large. Good investment returns, however, can grow the surplus unrestrained because the minimum contribution is \$0. These projected surpluses may be restrained by changes in investment policy as the surplus develops.

More Detailed Assessment

While a more detailed assessment of risk is always valuable to enhance the understanding of the risks identified above, given the closed plan and the recently completed asset-liability study, the advantages of a more detailed assessment may not justify its costs at this time.

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SECTION III – CERTIFICATION

The purpose of this report is to present the July 1, 2020 Actuarial Valuation of the Pension Plan for Bargaining Unit Employees of TriMet (“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 actuarial assumptions were adopted by the trustees at their May 6, 2020 meeting based on the results of an experience study and our recommendations. Please refer to the experience study report 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.

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

This report was prepared 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.



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Consulting Actuary



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**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

SECTION IV – ASSETS

The Plan uses two different asset measurements: the Market Value and Actuarial Value of Assets. The market value represents the value of the assets if they were liquidated on the valuation date. The actuarial value smooths annual investment returns over five years to reduce the impact of short-term investment volatility on contributions. The Market Value of Assets is used primarily for reporting and disclosure, and the Actuarial Value of Assets is used primarily to calculate Actuarially Determined Contributions.

This section shows the changes in the Market Value of Assets, calculates the money-weighted investment return for GASB 67 and 68, and develops the Actuarial 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 2020		FYE 2019	
Market Value, Beginning of Year	\$	574,919,893	\$	560,882,099
Contributions		37,755,077		34,717,720
Net Investment Earnings		3,683,365		18,620,471
Benefit Payments		(41,940,023)		(38,904,785)
Administrative Expenses		(362,932)		(395,612)
Market Value, End of Year	\$	574,055,380	\$	574,919,893

The Market Value of Assets decreased from approximately \$574.9 million as of June 30, 2019 to \$574.1 million as of June 30, 2020. Actual contributions and investment earnings increased the market value by approximately \$41 million while benefit payments and administrative expenses decreased the market value by approximately \$42 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 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 0.71% 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.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

SECTION IV – ASSETS

Table IV-2

Money-Weighted Rate of Return Fiscal Year Ending June 30, 2020				
	Net External Cash Flows	Months Invested	Net External Cash Flows With Interest	
Beginning Value, July 1, 2019	\$ 574,919,893	12	\$	578,980,047
<u>Monthly Net External Cash Flows</u>				
July	(522,011)	11		(525,389)
August	(195,657)	10		(196,808)
September	(247,550)	9		(248,860)
October	(403,346)	8		(405,243)
November	(334,003)	7		(335,377)
December	(425,060)	6		(426,558)
January	(359,501)	5		(360,557)
February	(344,897)	4		(345,707)
March	(362,288)	3		(362,926)
April	(362,661)	2		(363,087)
May	(542,779)	1		(543,097)
June	(811,058)	0		(811,058)
Ending Value, June 30, 2020			\$	574,055,380
Money-Weighted Rate of Return	0.71%			

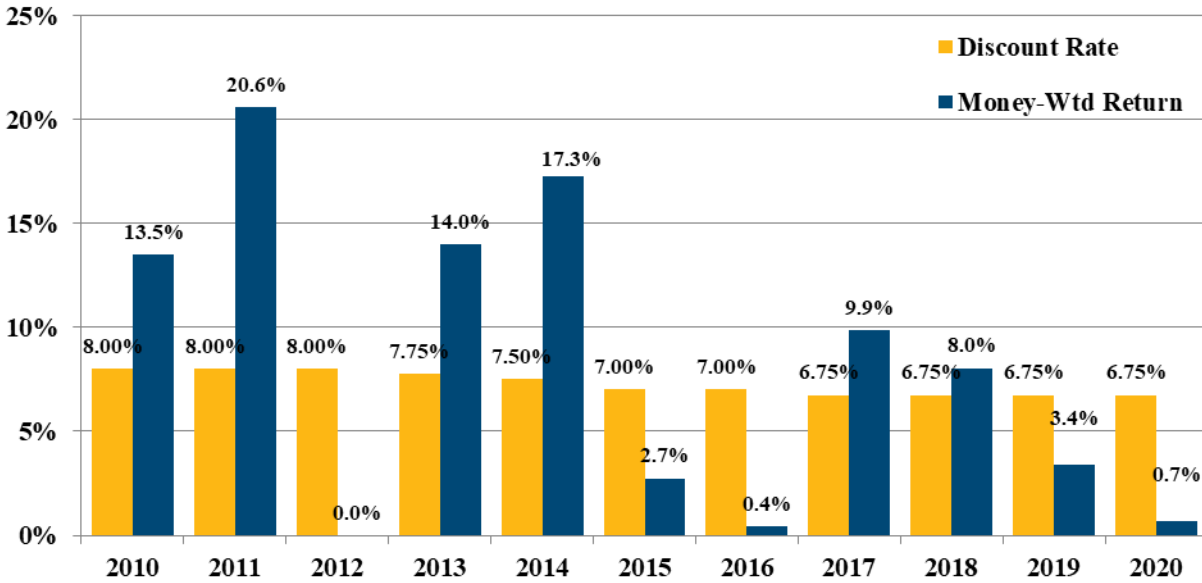
The money-weighted rate of return for the year ended June 30, 2020 was 0.71% compared to an expected return of 6.75%. As shown in the chart on the following page, over the last 10 years the money-weighted rate of return² has varied significantly from 20.6% in 2011 to 0.0% in 2012.

² Money-weighted returns prior to FYE 2014 were not calculated based on actual monthly external cash flows, but estimated the timing of external cash flows throughout the year.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
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SECTION IV – ASSETS

Historical Rates of Return



Actuarial Value of Assets

To determine on-going contributions, most pension plans utilize an Actuarial Value of Assets that smooths year-to-year market value returns in order to reduce the volatility of contributions.

The Actuarial Value of Assets is calculated by recognizing the deviation of actual investment returns compared to the expected return over a five-year period. The dollar amount of the expected return on the Market Value of Assets is determined using actual contributions, benefit payments, and administrative expenses during the year. Any difference between this amount and the actual net investment earnings is considered a gain or loss. For FYE 2020, the 0.70% actual return compared to the expected return of 6.75% produced an investment loss of approximately \$35.0 million.

Table IV-3 on the next page shows the calculation of the Actuarial Value of Assets. For each of the last four years, it shows the actual earnings, the expected earnings, the gain or loss, and the portion of the gain or loss that is not recognized in the current Actuarial Value of Assets. The remaining total deferred gain or loss will be recognized in future years.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

SECTION IV – ASSETS

Table IV-3

Development of Actuarial Value of Assets				
	FYE 2017	FYE 2018	FYE 2019	FYE 2020
Actual Earnings	\$ 46,645,429	\$ 41,479,101	\$ 18,620,471	\$ 3,683,365
Expected Earnings	<u>31,923,131</u>	<u>35,111,971</u>	<u>37,707,402</u>	<u>38,656,108</u>
Investment Gain or (Loss)	14,722,298	6,367,130	(19,086,931)	(34,972,743)
Percentage Deferred	20%	40%	60%	80%
Deferred Gain or (Loss)	\$ 2,944,460	\$ 2,546,852	\$ (11,452,159)	\$ (27,978,194)
Market Value of Assets (MVA)				\$ 574,055,380
Deferred Gain or (Loss)				
FYE 2017				\$ 2,944,460
FYE 2018				2,546,852
FYE 2019				(11,452,159)
FYE 2020				<u>(27,978,194)</u>
Total Deferred Gain or (Loss)				\$ (33,939,041)
Preliminary Actuarial Value of Assets (MVA less Deferred Gain or (Loss))				\$ 607,994,421
Minimum Actuarial Value of Assets (80% of Market Value)				459,244,304
Maximum Actuarial Value of Assets (120% of Market Value)				688,866,456
Actuarial Value of Assets (AVA)				\$ 607,994,421
Ratio of Actuarial to Market				105.9%
Estimated Rate of Return				4.4%

On an Actuarial Value of Assets basis, the aggregate return for the year ending June 30, 2020 was 4.4%. This return is less than the assumed return of 6.75% resulting in a loss of \$13.5 million.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

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 both 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 July 1, 2020 and July 1, 2019.

Table V-1

Present Value of Future Benefits			
	July 1, 2020	July 1, 2019	% Change
Actives	\$ 299,291,743	\$ 308,075,021	-2.9%
Deferred	16,380,028	14,367,801	14.0%
In Pay Status	<u>496,089,012</u>	<u>451,435,464</u>	<u>9.9%</u>
Total	\$ 811,760,783	\$ 773,878,286	4.9%

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

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 prior to 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 July 1, 2020 and July 1, 2019.

Table V-2

Actuarial Liability			
	July 1, 2020	July 1, 2019	% Change
Actives			
Retirement	\$ 219,784,301	\$ 222,280,851	-1.1%
Termination	4,408,724	1,745,305	152.6%
Death	2,036,808	2,138,714	-4.8%
Disability	13,056,118	17,457,375	-25.2%
Transfers to Management	<u>4,862,449</u>	<u>4,330,452</u>	<u>12.3%</u>
Total Actives	\$ 244,148,400	\$ 247,952,697	-1.5%
Vested Terminated	\$ 16,380,028	\$ 14,367,801	14.0%
In Pay Status			
Retirees and Beneficiaries	\$ 435,780,301	\$ 391,078,202	11.4%
Disabled	<u>60,308,711</u>	<u>60,357,262</u>	<u>-0.1%</u>
Total In Pay	\$ 496,089,012	\$ 451,435,464	9.9%
Total	\$ 756,617,440	\$ 713,755,962	6.0%

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

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 below provides a history of the experience gains and losses attributable to each of the primary demographic assumptions. Consistent patterns of gains or of losses provide an indication that an assumption may need to be updated.

Table V-3

	Fiscal Year Ending		
	2018	2019	2020
Benefit Rates	\$ 12,325,005	\$ (6,351,189)	\$ (6,199,897)
Retirement	(1,134,540)	(1,148,456)	2,173,599
Termination	(385,944)	(138,109)	(980,389)
Mortality	(487,247)	3,604,574	(135,833)
Disability	701,530	110,605	46,435
Retiree COLAs		1,469,242	(488,858)
Other	717,957	0	210,485
Total	\$ 11,736,761	\$ (2,453,333)	\$ (5,374,458)

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

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 the each member’s expected future salary. The normal cost rate is multiplied by current salary to determine each member’s normal cost. The normal cost of the Plan 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 referred to as the service cost. Table V-4 below shows the total normal cost as of July 1, 2020 and July 1, 2019.

Table V-4

Normal Cost			
	July 1, 2020	July 1, 2019	% Change
Retirement	\$ 6,233,113	\$ 6,959,443	-10.4%
Termination	769,202	234,779	227.6%
Death	86,943	97,088	-10.4%
Disability	949,456	1,265,246	-25.0%
Transfers to Management	<u>111,792</u>	<u>118,676</u>	<u>-5.8%</u>
Total Normal Cost	\$ 8,150,506	\$ 8,675,232	-6.0%

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

SECTION VI – CONTRIBUTIONS

This section of the report develops the Actuarially Determined Contribution in accordance with the Plan’s Pension Funding Policy and Objectives (Funding Policy).

Amortization of the Unfunded Actuarial Liability

There are two components to the contribution: the normal cost (including administrative expenses) and an amortization payment on the Unfunded Actuarial Liability (UAL). The normal cost was developed in Section V. This section develops the UAL contribution.

Under the “Historical” Funding Policy, the UAL is amortized as a level dollar amount over a rolling 20-year period. Because the period is reset each year to 20 years, this policy is not expected to fully pay off the UAL, but produces more stable contributions.

Under the “TriMet” Funding Policy, the UAL is amortized over a period that started at 15 years (9 years remaining) with payment increases of 2.0% each year and will transition to a rolling 5-year period. Because the period will be reset each year to 5 years, this policy also is not expected to fully pay off the UAL. However, 5 years is short enough that the UAL is expected to be nearly paid off and the Plan does not fail GASB’s crossover test until 2109.

Actuarially Determined Contribution

Table VI-1 shows the components of the Actuarially Determined Contribution (ADC) for FYE 2021 and 2020 under both the “Historical” policy and the “TriMet” policy. The ADC amounts are shown assuming contributions are made at the beginning of the fiscal year or at the beginning of each month.

Table VI-1

Actuarially Determined Contribution Amounts				
	FYE 2021		FYE 2020	
	Historical	TriMet	Historical	TriMet
Total Normal Cost	\$ 8,150,506	\$ 8,150,506	\$ 8,675,232	\$ 8,675,232
Administrative Expenses	319,771	319,771	290,360	290,360
UAL Payment	12,665,248	19,505,027	11,023,428	15,469,612
Total ADC (Beginning of Year)	\$ 21,135,525	\$ 27,975,304	\$ 19,989,020	\$ 24,435,204
Equivalent Monthly Contribution	\$ 1,812,574	\$ 2,399,151	\$ 1,716,072	\$ 2,097,780
Annual Amount (Equivalent Monthly Contribution x 12)	\$ 21,750,888	\$ 28,789,812	\$ 20,592,864	\$ 25,173,360

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

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 6.50%.

The projection of cash flows used to determine the discount rate assumed that contributions to the Plan will follow the “TriMet” Funding Policy, which requires contributions equal to normal cost (including assumed administrative expenses) and an amortization payment on the remaining UAL that will ultimately be over a rolling 5-year period. The UAL is based on an Actuarial Value of Assets that smooths investment gains and losses over five years.

Based on these assumptions, the Plan’s fiduciary net position was projected to be available to make projected future benefit payments for current members until FYE 2109, when only a portion of the projected benefit payments are expected to be made from the projected fiduciary net position. Projected benefit payments are discounted at the long-term expected return on assets of 6.50% to the extent the fiduciary net position is available to make the payments and at the municipal bond rate of 2.21% (Bond Buyer 20-Bond GO Index as of June 25, 2020) to the extent they are not available. The single equivalent rate used to determine the Total Pension Liability as of June 30, 2020 rounded to four decimals is 6.50%.

Appendix D shows the details of this calculation.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
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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

Change in Net Pension Liability			
	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a) - (b)
Balances at 6/30/2019	\$ 713,755,962	\$ 574,919,893	\$ 138,836,069
Changes for the year:			
Service cost	8,675,232		8,675,232
Interest	47,371,742		47,371,742
Changes of benefits	0		0
Differences between expected and actual experience	(5,374,458)		(5,374,458)
Changes of assumptions	34,128,985		34,128,985
Contributions - employer		37,755,077	(37,755,077)
Contributions - member		0	0
Net investment income		3,683,365	(3,683,365)
Benefit payments	(41,940,023)	(41,940,023)	0
Administrative expense		(362,932)	362,932
Net changes	<u>42,861,478</u>	<u>(864,513)</u>	<u>43,725,991</u>
Balances at 6/30/2020	<u>\$ 756,617,440</u>	<u>\$ 574,055,380</u>	<u>\$ 182,562,060</u>

During the measurement year, the NPL increased by approximately \$43.7 million. The service cost and interest cost increased the NPL by approximately \$56.0 million while contributions and investment returns offset by administrative expenses decreased the NPL by approximately \$41.0 million. In addition, assumption changes increased the NPL by approximately \$34.1 million, while gains due to liability experience reduced the NPL by approximately \$5.4 million.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

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 Liability to Changes in Discount Rate			
	1% Decrease 5.50%	Discount Rate 6.50%	1% Increase 7.50%
Total Pension Liability	\$ 843,475,521	\$ 756,617,440	\$ 683,467,612
Plan Fiduciary Net Position	<u>574,055,380</u>	<u>574,055,380</u>	<u>574,055,380</u>
Net Pension Liability	<u>\$ 269,420,141</u>	<u>\$ 182,562,060</u>	<u>\$ 109,412,232</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	68.1%	75.9%	84.0%

A one percent decrease in the discount rate increases the TPL by approximately 11.5% and increases the NPL by approximately 48%. A one percent increase in the discount rate decreases the TPL by approximately 9.7% and decreases the NPL by approximately 40%.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

SECTION VII – GASB 67 AND 68 DISCLOSURES

Required Supplementary Information

The schedules of Required Supplementary Information eventually will build up to 10 years of information. The schedule on the following page shows the changes in NPL and related ratios required by GASB for the years since TriMet implemented GASB 67.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

SECTION VII – GASB 67 AND 68 DISCLOSURES

Table VII-3

Schedule of Changes in Net Pension Liability and Related Ratios									
	FYE 2020	FYE 2019	FYE 2018	FYE 2017	FYE 2016	FYE 2015	FYE 2014	FYE 2013	FYE 2012
Total Pension Liability									
Service cost	\$ 8,675,232	\$ 9,642,740	\$ 9,875,234	\$ 10,850,730	\$ 10,702,574	\$ 11,756,232	\$ 11,406,016	\$ 11,122,166	\$ 11,030,625
Interest	47,371,742	46,537,334	43,832,738	43,888,922	43,371,673	43,025,200	42,869,939	41,827,133	40,065,267
Changes of benefit terms	0	0	3,286,046	0	0	0	0	0	(10,616,209)
Differences between expected and actual experience	(5,374,458)	(2,453,333)	20,935,664	(19,614,961)	(8,966,475)	(541,183)	(11,294,241)	(8,583,422)	7,780,692
Changes of assumptions	34,128,985	0	0	0	18,776,392	(16,558,463)	29,476,059	15,353,638	0
Benefit payments, including refunds	(41,940,023)	(38,904,785)	(36,394,436)	(34,162,919)	(32,679,854)	(30,677,192)	(28,845,723)	(27,372,519)	(23,863,800)
Net change in total pension liability	\$ 42,861,478	\$ 14,821,956	\$ 41,535,246	\$ 961,772	\$ 31,204,310	\$ 7,004,594	\$ 43,612,050	\$ 32,346,996	\$ 24,396,575
Total pension liability - beginning	<u>713,755,962</u>	<u>698,934,006</u>	<u>657,398,760</u>	<u>656,436,988</u>	<u>625,232,678</u>	<u>618,228,084</u>	<u>574,616,034</u>	<u>542,269,038</u>	<u>517,872,463</u>
Total pension liability - ending	<u>\$ 756,617,440</u>	<u>\$ 713,755,962</u>	<u>\$ 698,934,006</u>	<u>\$ 657,398,760</u>	<u>\$ 656,436,988</u>	<u>\$ 625,232,678</u>	<u>\$ 618,228,084</u>	<u>\$ 574,616,034</u>	<u>\$ 542,269,038</u>
Plan fiduciary net position									
Contributions - employer	\$ 37,755,077	\$ 34,717,720	\$ 35,227,507	\$ 35,862,442	\$ 38,026,735	\$ 36,200,926	\$ 47,261,301	\$ 70,379,741	\$ 18,823,691
Contributions - member	0	0	0	0	0	0	0	0	0
Net investment income	3,683,365	18,620,471	41,479,101	46,645,429	1,948,822	12,275,500	64,460,966	42,348,566	792,478
Benefit payments, including refunds	(41,940,023)	(38,904,785)	(36,394,436)	(34,162,919)	(32,679,854)	(30,677,192)	(28,845,723)	(27,372,519)	(23,863,800)
Administrative expense	(362,932)	(395,612)	(356,886)	(247,254)	(281,539)	(363,267)	(486,934)	(222,824)	(289,032)
Net change in plan fiduciary net position	\$ (864,513)	\$ 14,037,794	\$ 39,955,286	\$ 48,097,698	\$ 7,014,164	\$ 17,435,967	\$ 82,389,610	\$ 85,132,964	\$ (4,536,663)
Plan fiduciary net position - beginning	<u>574,919,893</u>	<u>560,882,099</u>	<u>520,926,813</u>	<u>472,829,115</u>	<u>465,814,951</u>	<u>448,378,984</u>	<u>365,989,374</u>	<u>280,856,410</u>	<u>285,393,073</u>
Plan fiduciary net position - ending	<u>\$ 574,055,380</u>	<u>\$ 574,919,893</u>	<u>\$ 560,882,099</u>	<u>\$ 520,926,813</u>	<u>\$ 472,829,115</u>	<u>\$ 465,814,951</u>	<u>\$ 448,378,984</u>	<u>\$ 365,989,374</u>	<u>\$ 280,856,410</u>
Net pension liability - ending	<u>\$ 182,562,060</u>	<u>\$ 138,836,069</u>	<u>\$ 138,051,907</u>	<u>\$ 136,471,947</u>	<u>\$ 183,607,873</u>	<u>\$ 159,417,727</u>	<u>\$ 169,849,100</u>	<u>\$ 208,626,660</u>	<u>\$ 261,412,628</u>
Plan fiduciary net position as a percentage of the total pension liability	75.87%	80.55%	80.25%	79.24%	72.03%	74.50%	72.53%	63.69%	51.79%
Covered payroll	\$ 90,088,824	\$ 97,405,506	\$ 109,924,285	\$ 106,596,389	\$ 117,666,306	\$ 116,555,801	\$ 124,695,531	\$ 125,143,307	\$ 125,142,143
Net pension liability as a percentage of covered payroll	202.65%	142.53%	125.59%	128.03%	156.04%	136.77%	136.21%	166.71%	208.89%

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

SECTION VII – GASB 67 AND 68 DISCLOSURES

The schedule below shows a comparison of the Actuarially Determined Contribution (ADC) to actual contributions.

Table VII-4

Schedule of Employer Contributions										
	FYE 2020	FYE 2019	FYE 2018	FYE 2017	FYE 2016	FYE 2015	FYE 2014	FYE 2013	FYE 2012	FYE 2011
Actuarially Determined Contribution	\$ 25,173	\$ 26,040	\$ 24,566	\$ 28,498	\$ 28,030	\$ 31,926	\$ 35,553	\$ 34,638	\$ 32,224	\$ 34,028
Contributions in Relation to the Actuarially Determined Contribution	<u>37,755</u>	<u>34,718</u>	<u>35,228</u>	<u>35,862</u>	<u>38,027</u>	<u>36,201</u>	<u>47,261</u>	<u>70,380</u>	<u>18,824</u>	<u>47,428</u>
Contribution Deficiency/(Excess)	<u>\$ (12,582)</u>	<u>\$ (8,677)</u>	<u>\$ (10,662)</u>	<u>\$ (7,365)</u>	<u>\$ (9,996)</u>	<u>\$ (4,275)</u>	<u>\$ (11,708)</u>	<u>\$ (35,742)</u>	<u>\$ 13,400</u>	<u>\$ (13,400)</u>
Covered Payroll	\$ 90,089	\$ 97,406	\$ 109,924	\$ 106,596	\$ 117,666	\$ 116,556	\$ 124,696	\$ 125,143	\$ 125,142	\$ 119,166
Contributions as a Percentage of Covered Payroll	41.91%	35.64%	32.05%	33.64%	32.32%	31.06%	37.90%	56.24%	15.04%	39.80%

Amounts in Thousands

Key methods and assumptions used to determine the ADC under TriMet’s funding policy for FYE 2020.

Actuarial Cost Method	Individual Entry Age as a level percent of pay
Asset Valuation Method	Investment gains and losses are smoothed over 5 years with the resulting actuarial value restricted to be between 80% and 120% of the market value
Amortization Method	Closed 15-year period until 5 years remains, then open. Payments are scheduled to increase 2.0% each year. (July 1, 2014)
Discount Rate	6.75% (July 1, 2016)
Benefit Rate Increases	2.75% (July 1, 2015)
Inflation	2.50% (July 1, 2016)
Healthy Mortality	RP-2014 Annuitant and Non-Annuitant Mortality with Blue Collar Adjustment set forward one year for males and two years for females (July 1, 2016)

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

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 2020. These schedules develop the annual pension expense, including the amounts of deferred inflows and outflows.

The impact of experience gains or losses and assumption changes on the TPL are recognized in expense over the average expected remaining service life of all active and inactive members of the Plan. For this measurement period, the recognition period is 2.7 years.

During the year, there was a liability experience gain of approximately \$5.4 million. Approximately \$2.0 million of that loss was recognized as a reduction in pension expense in the current year and the remainder will be recognized over the next 2 years, resulting in a deferred inflow of resources as of June 30, 2020 of approximately \$3.4 million. Approximately \$1.5 million was recognized as a reduction in pension expense in the current year due to experience gains and losses from prior periods. As of June 30, 2020, there is a deferred inflow of approximately \$6.9 million due to current and prior period gains and a deferred outflow of approximately \$4.8 million due to prior period losses.

There were assumption changes since the last measurement date that increased the NPL by approximately \$34.1 million. Approximately \$12.6 million was recognized as an increase in pension expense in the current year and the remainder will be recognized over the next 2 years, resulting in a deferred outflow of resources as of June 30, 2020 of approximately \$21.5 million. Approximately \$2.5 million was recognized as an increase in pension expense in the current year due to assumption changes from prior periods. As of June 30, 2020, there are no deferred inflows or deferred outflows due to prior assumption changes.

The impact of investment gains or losses is recognized over a period of five years. During the measurement year, there was an investment loss of approximately \$35.0 million. Approximately \$7.0 million of that loss was recognized in the current year and an identical amount will be recognized in each of the next four years. Unrecognized net investment losses from prior periods were approximately \$11.7 million of which \$5.8 million was recognized as an increase in pension expense in the current year. The combination of unrecognized investment gains and losses from this year and prior periods results in a deferred outflow of resources as of June 30, 2020 of approximately \$33.9 million.

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

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

SECTION VII – GASB 67 AND 68 DISCLOSURES

Table VII-5

Schedule of Deferred Inflows and Outflows of Resources		
	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 4,831,307	\$ 6,862,390
Changes in assumptions	21,488,620	0
Net difference between projected and actual earnings on pension plan investments	33,939,043	0
Total	<u>\$ 60,258,970</u>	<u>\$ 6,862,390</u>
Amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:		
Measurement year ended June 30:		
2021	18,750,043	
2022	16,840,054	
2023	10,811,936	
2024	6,994,547	
2025	0	
Thereafter	\$ 0	

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 individual components. While GASB does not require or suggest the organization of the individual components shown in the table on the following page, we believe it helps to understand the level and volatility of pension expense.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

SECTION VII – GASB 67 AND 68 DISCLOSURES

Table VII-6

Calculation of Pension Expense			
	Measurement Year Ending		
	2021	2020	2019
Change in Net Pension Liability	\$ (8,906,322)	\$ 43,725,991	\$ 784,162
Change in Deferred Outflows	24,065,723	(34,592,852)	3,958,294
Change in Deferred Inflows	(5,315,680)	(4,706,807)	(9,235,892)
Employer Contributions	<u>28,870,189</u>	<u>37,755,077</u>	<u>34,717,720</u>
Pension Expense	\$ 38,713,910	\$ 42,181,409	\$ 30,224,284
Operating Expenses			
Service cost	\$ 8,150,505	\$ 8,675,232	\$ 9,642,740
Employee contributions	0	0	0
Administrative expenses	<u>330,000</u>	<u>362,932</u>	<u>395,612</u>
Total	\$ 8,480,505	\$ 9,038,164	\$ 10,038,352
Financing Expenses			
Interest cost	\$ 48,266,426	\$ 47,371,742	\$ 46,537,334
Expected return on assets	<u>(36,783,064)</u>	<u>(38,656,108)</u>	<u>(37,707,402)</u>
Total	\$ 11,483,362	\$ 8,715,634	\$ 8,829,932
Changes			
Benefit changes	\$ 0	\$ 0	\$ 0
Recognition of assumption changes	12,640,365	15,169,092	5,006,258
Recognition of liability gains and losses	(484,373)	(3,486,593)	(3,254,724)
Recognition of investment gains and losses	<u>6,594,051</u>	<u>12,745,112</u>	<u>9,604,466</u>
Total	\$ 18,750,043	\$ 24,427,611	\$ 11,356,000
Pension Expense	\$ 38,713,910	\$ 42,181,409	\$ 30,224,284

Figures for the 2021 measurement year are projected

The components referred to as 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 are 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 interest on the service cost and contributions.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

SECTION VII – GASB 67 AND 68 DISCLOSURES

Finally, the recognition of changes will drive 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 increased from the prior year by about \$12.0 million. The recognition of changes increased by approximately \$13.1 million, operating expenses decreased about approximately \$1.0 million, and financing expenses decreased approximately \$0.1 million.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

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 for members identified as Full-Time Operators.
- The most recent annual salary for actives is calculated to be “Hourly Rate” multiplied by 1,560 for members identified as Mini-Run Operators.

Table A-1

Active Member Data			
	July 1, 2020	July 1, 2019	% Change
Active Union Members			
Count	1,052	1,186	-11.3%
Average Current Age	53.4	53.2	0.4%
Average Eligibility Service	17.7	17.3	2.3%
Average Benefit Service	17.1	16.7	2.4%
Transfers to Management			
Count	47	50	-6.0%
Average Age	53.9	53.0	1.7%

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

APPENDIX A – MEMBERSHIP INFORMATION

Table A-2

In Pay Status Member Data			
	July 1, 2020	July 1, 2019	%Change
Retirees			
Count	1,578	1,506	4.8%
Average Age	70.8	70.6	0.3%
Total Annualized Benefits	\$ 35,097,846	\$ 32,394,032	8.3%
Average Annual Benefit	\$ 22,242	\$ 21,510	3.4%
Beneficiaries & Alternate Payees			
Count	290	276	5.1%
Average Age	71.6	71.2	0.6%
Total Annualized Benefits	\$ 3,779,530	\$ 3,508,177	7.7%
Average Annual Benefit	\$ 13,033	\$ 12,711	2.5%
Disabled			
Count	190	193	- 1.6%
Average Age	63.9	63.2	1.1%
Total Annualized Benefits	\$ 4,812,959	\$ 4,721,354	1.9%
Average Annual Benefit	\$ 25,331	\$ 24,463	3.5%
Total			
Count	2,058	1,975	4.2%
Average Age	70.3	70.0	0.4%
Total Annualized Benefits	\$ 43,690,335	\$ 40,623,562	7.5%
Average Annual Benefit	\$ 21,230	\$ 20,569	3.2%

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

APPENDIX A – MEMBERSHIP INFORMATION

Table A-3

Deferred Member Data			
	Count		
	July 1, 2020	July 1, 2019	% Change
Vested Terminated Members			
Count	120	114	5.3%
Average Age	51.8	52.4	-1.0%
Total Annualized Benefits	\$ 1,497,017	\$ 1,291,158	15.9%
Average Annual Benefit	\$ 12,475	\$ 11,326	10.1%
Deferred Beneficiaries			
Count	19	19	0.0%
Average Age	55.5	55.4	0.2%

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

APPENDIX A – MEMBERSHIP INFORMATION

Table A-4

Change in Plan Membership										
	Active	Terminated Vested	Transfer to Mgmt	Deferred Beneficiary	Retiree	Beneficiary	Disabled	Alternate Payee	Deferred Alternate Payee	Totals
July 1, 2019	1,186	114	50	19	1,506	221	193	55	0	3,344
New Entrants	0	0	0	0	0	0	0	0	0	0
Rehires/Returned to Work	0	0	0	0	0	0	0	0	0	0
Vested Terminations	(19)	20	(1)	0	0	0	0	0	0	0
Nonvested Terminations	(9)	0	(1)	0	0	0	0	0	0	(10)
Disabilities	(5)	0	0	0	0	0	5	0	0	0
Retirements	(101)	(15)	(1)	0	117	0	0	0	0	0
Deaths	0	0	0	1	(44)	0	(8)	0	1	(50)
New Beneficiaries	0	0	0	(2)	0	22	0	1	0	21
Beneficiary Deaths	0	0	0	0	0	(7)	0	(2)	0	(9)
Benefit Ceased	0	0	0	0	0	0	0	0	0	0
Transfers to Mgmt*	(3)	0	3	0	0	0	0	0	0	0
Transfers from Mgmt*	3	0	(3)	0	0	0	0	0	0	0
Miscellaneous Adjustments	0	1	0	0	(1)	0	0	0	0	0
July 1, 2020	1,052	120	47	18	1,578	236	190	54	1	3,296

* Includes transfers who are not eligible for Management DB Plan.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

APPENDIX A – MEMBERSHIP INFORMATION

Table A-5

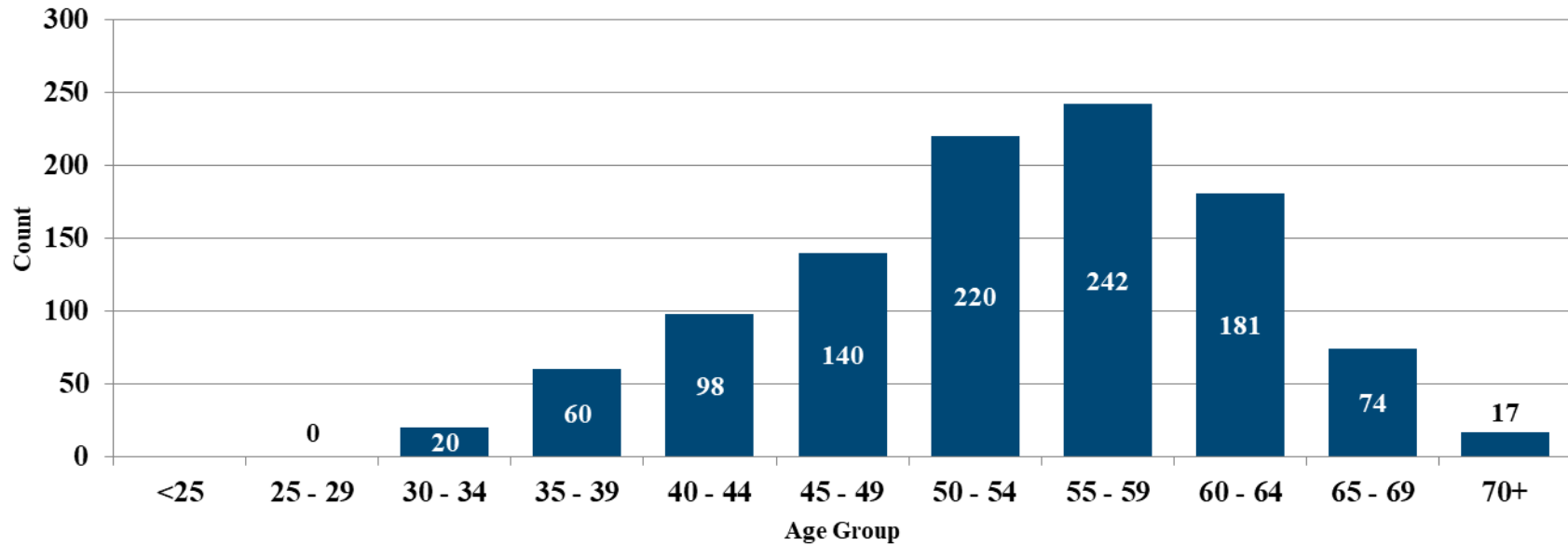
Distribution of Active Union Members as of July 1, 2020												
Age	Years of Service										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 and up		
Under 25	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	15	5	0	0	0	0	0	0	0	20
35 to 39	0	0	31	27	2	0	0	0	0	0	0	60
40 to 44	0	0	28	44	18	8	0	0	0	0	0	98
45 to 49	0	0	33	50	17	37	3	0	0	0	0	140
50 to 54	0	0	24	57	48	61	27	3	0	0	0	220
55 to 59	0	0	32	63	39	54	37	13	4	0	0	242
60 to 64	0	0	28	49	27	34	25	10	6	2	0	181
65 to 69	0	0	11	11	16	14	7	7	6	2	0	74
70 and up	0	0	3	3	2	6	2	0	1	0	0	17
Total Count	0	0	205	309	169	214	101	33	17	4	0	1,052

PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020

APPENDIX A – MEMBERSHIP INFORMATION

Chart A-1

Active Count Distribution



**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

APPENDIX A – MEMBERSHIP INFORMATION

Table A-6

Retirees, Disabled, Beneficiaries and Alternate Payees by Attained Age and Benefit Effective Date* as of July 1, 2020											
Benefit Effective Fiscal Year End	Age										Total
	Under 50	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and up	
Prior to 1995	0	0	0	3	2	1	4	4	20	25	59
1996	0	0	0	0	0	0	1	4	5	2	12
1997	0	0	0	0	0	1	4	4	11	0	20
1998	0	0	0	1	1	0	2	3	4	0	11
1999	0	0	0	0	0	0	3	13	2	1	19
2000	0	0	0	1	0	3	2	16	1	0	23
2001	0	0	0	0	0	1	7	18	0	0	26
2002	0	0	0	1	1	5	7	15	1	0	30
2003	0	0	0	2	2	2	20	13	0	0	39
2004	0	0	0	2	1	9	31	8	1	0	52
2005	0	0	0	3	4	17	29	9	0	0	62
2006	0	0	0	1	9	30	30	4	0	0	74
2007	0	0	1	0	1	41	36	8	0	0	87
2008	0	0	0	3	10	41	29	1	2	0	86
2009	0	0	3	3	20	53	13	2	0	0	94
2010	0	0	1	3	18	53	18	3	1	0	97
2011	0	1	1	5	17	52	17	2	0	0	95
2012	0	0	1	7	38	50	23	3	1	1	124
2013	0	0	0	11	41	35	3	2	0	0	92
2014	0	0	2	16	60	30	4	2	0	0	114
2015	0	0	4	18	48	22	3	2	0	0	97
2016	0	0	4	21	70	31	4	3	1	0	134
2017	1	0	8	41	46	20	0	1	3	2	122
2018	1	0	7	45	52	29	3	1	0	0	138
2019	1	0	21	54	37	21	3	0	0	0	137
2020	0	2	27	60	34	6	5	1	1	0	136
Missing	3	13	38	21	2	1	0	0	0	0	78
Total	6	16	118	322	514	554	301	142	54	31	2,058
Average Age at Retirement/Disability				61.6							
Average Current Age				70.3							
Average Annual Pension				\$ 21,230							

*Missing counts include 79 Disabled members who are receiving disability benefits until age 62.

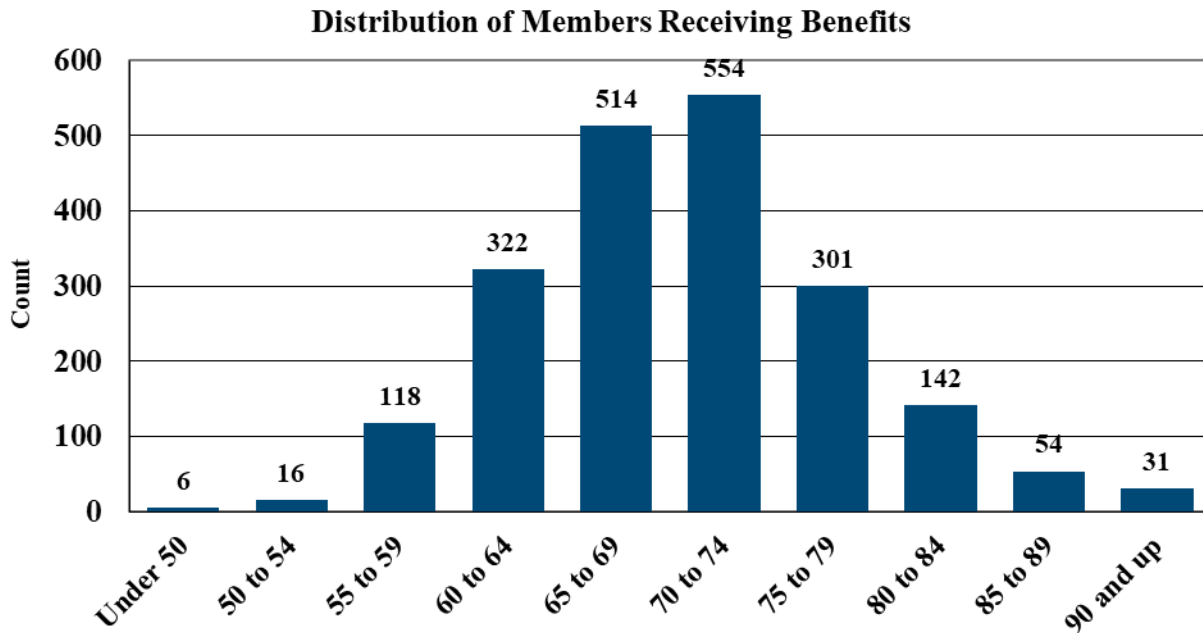
**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

APPENDIX A – MEMBERSHIP INFORMATION

Table A-7

Distribution of Retirees, Disabled Members, Beneficiaries and Alternate Payees as of June 30, 2020		
Age	Count	Annual Benefit
Under 50	6	\$ 100,340
50 to 54	16	326,902
55 to 59	118	2,369,831
60 to 64	322	6,996,924
65 to 69	514	10,631,015
70 to 74	554	12,451,854
75 to 79	301	6,256,652
80 to 84	142	2,905,841
85 to 89	54	923,609
90 and up	<u>31</u>	<u>727,367</u>
Total	2,058	\$ 43,690,335

Chart A-2

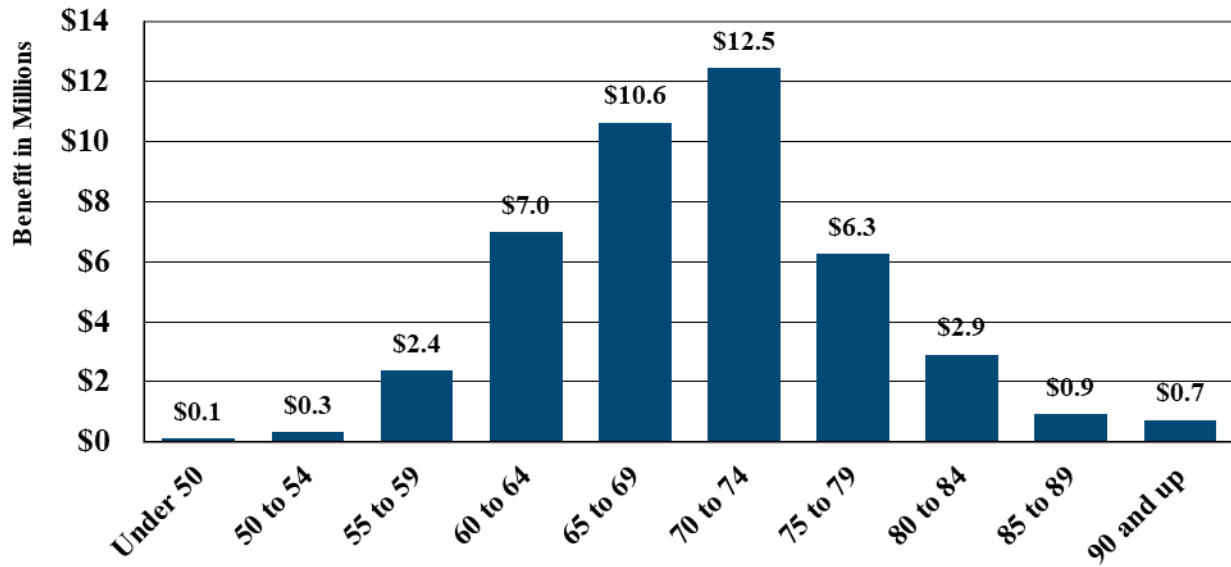


PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020

APPENDIX A – MEMBERSHIP INFORMATION

Chart A-3

Distribution of Annual Benefit Payments



**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Assumptions

The actuarial assumptions were adopted by the trustees at their May 6, 2020 meeting based upon an experience study and our recommendations. Please refer to the experience study report for the rationale for each assumption.

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

6.50% compounded annually net of investment management and custodial fees.

2. Salary Increases (effective July 1, 2015)

2.75%, compounded annually.

3. Pre-Retirement Benefit Rate Increases

The benefit rates used to calculate retirement and temporary disability benefits are assumed to increase with salary increases (2.75%) until benefit commencement.

4. Amortization Payment Growth

2.00%, compounded annually per the “TriMet” funding policy.

5. Price Inflation (effective July 1, 2020)

2.25%, compounded annually.

6. Post-Retirement Benefit Increases

Benefit payments for members who retired prior to August 1, 2012 are assumed to increase with price inflation (2.25%), and benefit payments for members who retire on or after August 1, 2012 are assumed to increase with 90% of price inflation (2.025%).

After commencement, temporary disability benefit payments are assumed to increase with price inflation (2.25%).

7. Administrative Expenses (effective July 1, 2020)

\$330,000 per year beginning FYE 2021 and increasing with price inflation thereafter. Expenses are assumed to be paid midyear.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

8. Base Mortality Rates (effective July 1, 2016)

Healthy Lives: RP-2014 Annuitant and Non-Annuitant Mortality Tables with Blue Collar Adjustment set forward 1 year for males and 2 years for females.

Disabled Lives: RP-2014 Disability Mortality Table for males and females.

9. Mortality Improvement Scale (effective July 1, 2020)

Mortality rates are applied on a generational basis using the MP-2019 mortality improvement scale to adjust base mortality rates beginning in 2016.

10. Rates of Retirement (effective July 1, 2020)

All active members and management transfers are assumed to retire by age 70. For those eligible to retire, the assumed rates of retirement prior to age 70 vary by sex and years of service as follows:

Age	Active Rates of Retirement			
	Males		Females	
	Under 20 Years	20+ Years	Under 20 Years	20+ Years
55	3.0%	4.0%	4.0%	6.0%
56	3.0	4.0	6.0	6.0
57	3.0	7.5	8.0	8.0
58	4.0	15.0	15.0	20.0
59	6.0	7.0	15.0	15.0
60	8.0	11.0	15.0	15.0
61	10.0	15.0	25.0	25.0
62	20.0	35.0	35.0	35.0
63	17.5	20.0	25.0	25.0
64	22.5	25.0	20.0	25.0
65	27.5	30.0	35.0	35.0
66 – 69	35.0	35.0	40.0	40.0
70+	100.0	100.0	100.0	100.0

Terminated vested members are assumed to retire at their earliest unreduced retirement age. Disabled members are assumed to retire at age 62.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

11. Form of Benefit (effective July 1, 2014)

Upon retirement, members who are married or have a domestic partner are assumed to elect the following form of payment:

Form of Payment	Election Rate
Single Life Annuity	33 1/3%
66 2/3% Joint & Survivor Annuity	66 2/3%

12. Rates of Disability (effective July 1, 2020)

CalPERS 2017 Industrial Disability Table for County Peace Officers multiplied by 83.1 percent. Sample rates of disability are shown below.

Age	Rate of Disability
30	0.2069%
35	0.3075
40	0.4263
45	0.5584
50	0.7637
55	1.2507
60	1.4459

85% of disabled members are assumed to qualify for Social Security disability benefits

13. Rates of Termination (effective July 1, 2020)

Assumed termination rates are shown below:

Years of Vesting Service	Rates of Termination	
	Males	Females
Less than 10	2.00%	3.00%
10	5.00	5.00
11	3.50	3.50
12	3.00	3.00
13	2.50	2.75
14	2.25	2.60
15	2.00	2.50
16	1.90	2.40
17	1.80	2.30
18	1.70	2.20
19	1.60	2.10
20+	1.50	2.00

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

14. Unused Sick Leave Benefits (effective July 1, 2020)

Active members are assumed to increase their accumulated sick leave hours 30.0 hours each year.

Active Management Transfers are not assumed to return to the Union Plan following their transfer date and are not assumed to receive the unused sick leave benefit. (effective July 1, 2012)

15. Probability of Marriage/Domestic Partner (effective July 1, 2014)

66 2/3% of members are assumed to be married or have a domestic partner.

16. Age of Spouse/Domestic Partner (effective July 1, 2020)

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.

17. Future Service Credits

Active and disabled members are assumed to earn one year of vesting service and one year of benefit service each future year. Transfers to Management are assumed to earn one year of vesting service and no benefit service each future year.

18. Mini-Run to Full Time (effective July 1, 2020)

Active mini-run members are assumed to transfer to full time at the following rates:

Years of Credited Service	Annual Probability
Less than 4	25.0%
4 or more	3.5%

19. Active Management Transfers (effective July 1, 2020)

Demographic assumptions for active members who transfer to Management are the same as those adopted for the TriMet Defined Benefit Retirement Plan for Management and Staff Employees.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

20. Changes Since the Last Valuation

Many assumptions were updated as a result of the experience study, including the expected return on assets, price inflation, administrative expenses, mortality improvement, rates of retirement, rates of disability, rates of termination, unused sick leave, spouse's age, probability of transfer from mini-run to full time, and demographic assumptions for management transfers.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
ACTUARIAL VALUATION REPORT AS OF JULY 1, 2020**

APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Contribution Allocation Procedure

The contribution allocation procedure primarily consists of an actuarial cost method, an asset smoothing method, and an amortization method as described below. All components of the contribution allocation procedure were adopted as part of the Plan’s Pension Funding Policy and Objectives on February 26, 2014.

1. Actuarial Cost Method (Effective July 1, 2014)

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.

2. Asset Valuation Method

For the purpose of determining contribution amounts, an Actuarial Value of Assets is used that dampens the volatility in the Market Value of Assets, resulting in a smoother pattern of contributions.

The Actuarial Value of Assets is calculated by recognizing 20% of the difference in each of the prior four years of actual investment returns compared to the expected return on the Market Value of Assets. The Actuarial Value of Assets is further limited to be not less than 80% nor greater than 120% of the Market Value of Assets.

3. Amortization Method

The Unfunded Actuarial Liability is the difference between the Actuarial Liability and the Actuarial Value of Assets. Under the “Historical” funding policy, the Unfunded Actuarial Liability is amortized as a level dollar amount over a rolling 20-year period. Under the “TriMet” funding policy, the Unfunded Actuarial Liability is amortized as a level percentage of total union payroll over a closed period of 15 years commencing July 1, 2014. When the remaining period is 5 years, the closed period will become a rolling 5-year period.

4. Changes Since the Last Valuation

None.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

1. Eligibility

All ATU 757 bargaining unit employees of TriMet (TriMet Union employees) hired before August 1, 2012. TriMet Union employees who transfer to a management position continue to earn service for vesting purposes and retirement eligibility. However, no additional benefits are earned for continuous service as a management employee.

TriMet Union employees hired on or after August 1, 2012 are not eligible to participate in this Plan.

Members who are re-employed as an eligible employee on or after August 1, 2012 may recommence participation if the rehire date is before the earlier of (1) 36 months following termination or (2) the date their break in service exceeds their continuous service before the break in service.

Members who transfer from an eligible employee to an ineligible employee may recommence participation if they transfer back to an eligible employee on or after August 1, 2012 and they did not have a termination date between transfers.

2. Credited Service

All periods of service during which the employee is a member of the bargaining unit represented by ATU 757, working either as a full-time employee or mini-run operator, is entitled to payment for services rendered to TriMet and is eligible to participate in this Plan. Continuous service includes periods of layoff due to reduction in force of less than five years, authorized leave of absences if certain requirements are met, and time while serving as an officer of the ATU 757.

Continuous service is measured using elapsed time. Each twelve month period of continuous service equals one year of continuous service and partial years are based on the number of days worked divided by 365.25.

3. Vesting Service

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

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

4. Normal Retirement

Eligibility

For participants who earn at least 10 years of vesting service, the Normal Retirement Age is determined from the following schedule:

Severance from Service Date	Normal Retirement Age
December 1, 1994 to November 30, 1998	62
December 1, 1998 to November 30, 2000	61
December 1, 2000 to November 30, 2002	60
December 1, 2002 to November 30, 2004	59
On or after December 1, 2004	58

Benefit

The normal retirement benefit for participants retiring or terminating after February 1, 1992 is determined by multiplying continuous service times the benefit rate in effect on the date of retirement or termination of employment, whichever is earlier. Mini-run operators receive 75% of the benefit rate shown below.

Effective Beginning	Benefit Rate	Effective Beginning	Benefit Rate
February 1, 1992	\$42.00	September 1, 2006	\$66.26
September 1, 1992	43.26	September 1, 2007	68.25
September 1, 1993	44.13	September 1, 2008	70.84
September 1, 1994	44.57	September 1, 2009	72.96
September 1, 1995	47.02	February 1, 2010	72.96
September 1, 1996	48.43	February 1, 2011	75.52
September 1, 1997	50.27	February 1, 2012	78.97
September 1, 1998	51.93	February 1, 2013	78.97
September 1, 1999	53.49	February 1, 2014	78.97
September 1, 2000	55.49	February 1, 2015	81.34
September 1, 2001	57.15	February 1, 2016	83.78
September 1, 2002	58.87	February 1, 2017	86.29
September 1, 2003	60.64	February 1, 2018	89.10
September 1, 2004	62.45	February 1, 2019	92.00
September 1, 2005	64.33	February 1, 2020	92.00

Beginning December 1, 2009, benefit rates are adjusted on February 1 each year by the amount of any specified general wage adjustment under the Working and Wage Agreement during the preceding twelve months.

A benefit derived from unused sick leave is added to the above benefit as described below.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Unused Sick Leave

Vested participants who terminate after becoming eligible for early retirement will have unused accumulated sick leave up to the maximum accumulated sick leave converted to a monthly benefit at a rate of \$.30 per hour for each hour of unused accrued sick leave.

Severance from Service Date	Maximum Accumulated Sick Leave
December 1, 1998	1,400 hours
December 1, 2003	1,450 hours
December 1, 2004	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

5. Early Retirement

Eligibility

A participant may retire prior to his normal retirement date if he has 10 years of vesting service and is at least 55 years of age.

30 & Out: From December 1, 2003 to December 1, 2009, an active participant may retire with unreduced benefits after he has earned 30 years of continuous service, regardless of age.

Benefit

The normal retirement benefit will be reduced according to the following table:

Age at Retirement / Effective	Percent Reduction from Normal Retirement Age				
	62	61	60	59	58
	12/01/1994 through 11/30/1998	12/01/1998 through 11/30/2000	12/01/2000 through 11/30/2002	12/01/2002 through 11/30/2004	12/01/2004 to Current
62	0.00%	0.00%	0.00%	0.00%	0.00%
61	10.12	0.00	0.00	0.00	0.00
60	19.06	9.95	0.00	0.00	0.00
59	26.98	18.76	9.78	0.00	0.00
58	34.01	26.59	18.48	9.63	0.00
57	40.28	33.56	26.22	18.21	9.49
56	45.87	39.78	33.13	25.87	17.97
55	50.87	45.34	39.31	32.72	25.55

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

6. Forms of Payment

The following forms of payment are available:

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

7. Disability Retirement

Eligibility

An active participant who becomes disabled after 10 years of continuous service may receive a disability benefit if he becomes permanently disabled from performing the participant's occupation while employed with TriMet prior to reaching Social Security retirement age (62). Disability benefits are paid from the Plan until the participant reaches age 62.

Benefit

A benefit payable during the period of disability is determined from the table below. If the participant is entitled to disability benefits under Social Security, the benefits shown below are doubled. Participants who are mini-run operators on the date they become permanently disabled will receive 75% of the amounts below.

Effective	10 Years of Continuous Service	15 Years of Continuous Service	20 Years of Continuous Service
February 1, 1992	\$ 388.60	\$ 468.38	\$ 544.07
February 1, 1993	400.26	482.43	560.39
February 1, 1994	408.27	492.08	571.60
February 1, 1995	434.80	524.06	608.75
February 1, 1996	441.76	532.45	618.49
February 1, 1997	457.22	551.08	640.14
February 1, 1998	472.31	569.27	661.26
February 1, 1999	481.76	580.66	674.49
February 1, 2000	502.72	605.92	703.83
February 1, 2001	519.71	626.40	727.62
February 1, 2002	533.90	643.50	747.48
February 1, 2003	545.01	656.88	763.03
February 1, 2004	569.92	686.90	797.90
February 1, 2005	586.50	706.89	821.12
February 1, 2006	602.28	725.91	843.21
February 1, 2007	620.47	747.83	868.67
February 1, 2008	643.37	775.42	900.72
February 1, 2009	669.62	807.06	937.47

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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Effective	10 Years of Continuous Service	15 Years of Continuous Service	20 Years of Continuous Service
February 1, 2010	674.51	812.95	944.31
February 1, 2011	698.19	841.49	977.46
February 1, 2012	730.10	879.95	1,022.13
May 1, 2013	745.43	898.43	1,043.59
May 1, 2014	755.64	910.74	1,057.89
May 1, 2015	766.98	924.40	1,073.76
May 1, 2016	766.98	924.40	1,073.76
May 1, 2017	774.50	933.46	1084.28
May 1, 2018	793.32	956.14	1,110.63
May 1, 2019	817.12	984.82	1,143.95
May 1, 2020	836.49	1,008.16	1,171.06

Disability benefits increase at the same time and percentage as post-retirement benefit increases for participants who retired before August 1, 2012.

The disabled participant’s retirement benefit at age 62 is calculated using service that includes continuous service during disability as if the participant remained in active employment from the date of disability to age 62, and the benefit rate in effect at age 62.

8. Vesting

A participant who terminates employment with at least ten years of vesting service as of the date of termination will be 100% vested.

9. Contributions

Contributions are made to the Trust Fund by TriMet. There are no member contributions. The Working and Wage Agreement between the ATU and TriMet establishes a minimum amortization period of 40 years. The necessary amount will be determined in accordance with accepted actuarial principles.

10. Pre-Retirement Death Benefit

Married Employee or Domestic Partner

If a vested participant, the participant’s spouse or domestic partner will receive 50% of the accrued benefit. The benefit is paid to the spouse when the spouse attains age 62 (or, if later, the date of the participant’s death). 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 domestic partner is younger than age 62, the benefit is actuarially reduced to reflect the age of the domestic partner on the date of benefit commencement.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
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APPENDIX C – SUMMARY OF PLAN PROVISIONS

Disability

If a participant receiving disability benefits dies on or after age 55 but prior to age 62, the surviving spouse or domestic partner may elect to receive either the benefits in (a) above or the survivor portion of the 66 2/3% joint and survivor annuity.

11. Post-retirement Cost-of-Living Benefit

Prior to August 1, 2012, post-retirement benefits were increased each February 1 by the aggregate amount of any specified general wage adjustment under the Working and Wage Agreement during the preceding twelve months.

Effective August 1, 2012, post-retirement benefits are increased each May 1 during the period of the agreement as follows:

- For participants who retired before August 1, 2012, the post-retirement benefit increase is 100% of the percentage increase in the U.S. Urban Wage Earners and Clerical Workers Consumer Price Index (CPI-W West - Size Class B/C) (annual average) for the previous calendar year. Annual increases will not be more than 7% per year.
- For participants who retire on or after August 1, 2012, the post-retirement benefit increase is 90% of the percentage increase in the U.S. Urban Wage Earners and Clerical Workers Consumer Price Index (CPI-W West - Size Class B/C) (annual average) for the previous calendar year. Annual increases will not be more than 7% per year.

12. Changes Since the Last Valuation

The Benefit Rate was increased 3.25% to \$92.00, and the temporary disability benefits were increased 3.00% to \$817.12, \$984.82, and \$1,143.95 for members with 10, 15, and 20 years of service respectively.

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.

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
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APPENDIX D – DETERMINATION OF GASB 67/68 DISCOUNT RATE

Fiscal Year Ending	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2021	\$ 574,055,380	\$ 28,870,189	\$ 45,125,460	\$ 330,000	\$ 36,783,064	\$ 594,253,172	\$ 45,125,460	\$ 0
2022	594,253,172	29,971,198	47,270,265	337,425	38,062,294	614,678,974	47,270,265	0
2023	614,678,974	31,667,214	49,266,749	345,017	39,380,116	636,114,537	49,266,749	0
2024	636,114,537	33,829,571	51,251,071	352,780	40,778,875	659,119,132	51,251,071	0
2025	659,119,132	35,490,423	53,143,490	360,717	42,266,512	683,371,859	53,143,490	0
2026	683,371,859	30,100,618	54,827,317	368,834	43,616,406	701,892,732	54,827,317	0
2027	701,892,732	25,592,617	56,515,677	377,132	44,621,785	715,214,324	56,515,677	0
2028	715,214,324	21,757,832	58,022,896	385,618	45,316,535	723,880,179	58,022,896	0
2029	723,880,179	18,528,031	59,331,234	394,294	45,734,371	728,417,051	59,331,234	0
2030	728,417,051	15,791,909	60,529,060	403,166	45,903,143	729,179,877	60,529,060	0
2031	729,179,877	13,478,149	61,481,154	412,237	45,847,967	726,612,603	61,481,154	0
2032	726,612,603	11,526,108	62,449,210	421,512	45,587,389	720,855,377	62,449,210	0
2033	720,855,377	9,839,108	63,192,254	430,996	45,135,132	712,206,366	63,192,254	0
2034	712,206,366	8,436,331	63,630,355	440,694	44,513,750	701,085,399	63,630,355	0
2035	701,085,399	7,230,604	63,898,389	450,610	43,743,426	687,710,431	63,898,389	0
2036	687,710,431	6,211,921	63,938,005	460,748	42,839,876	672,363,475	63,938,005	0
2037	672,363,475	5,321,447	63,739,632	451,533	41,820,479	655,314,235	63,739,632	0
2038	655,314,235	4,572,453	63,332,022	442,503	40,701,647	636,813,810	63,332,022	0
2039	636,813,810	3,925,914	62,746,424	433,653	39,497,453	617,057,102	62,746,424	0
2040	617,057,102	3,369,214	61,993,716	424,980	38,219,815	596,227,435	61,993,716	0
2041	596,227,435	2,898,078	61,070,975	416,480	36,880,605	574,518,663	61,070,975	0
2042	574,518,663	2,495,550	59,981,971	408,150	35,491,760	552,115,851	59,981,971	0
2043	552,115,851	2,148,837	58,736,066	399,987	34,064,602	529,193,238	58,736,066	0
2044	529,193,238	1,848,578	57,411,724	391,988	32,607,647	505,845,751	57,411,724	0
2045	505,845,751	1,595,606	55,937,447	384,148	31,129,379	482,249,142	55,937,447	0

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APPENDIX D – DETERMINATION OF GASB 67/68 DISCOUNT RATE

Fiscal Year Ending	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2046	482,249,142	1,376,658	54,333,478	376,465	29,640,149	458,556,006	54,333,478	0
2047	458,556,006	1,189,954	52,619,831	368,936	28,149,181	434,906,374	52,619,831	0
2048	434,906,374	1,030,278	50,865,068	361,557	26,663,215	411,373,243	50,865,068	0
2049	411,373,243	893,645	49,010,916	354,326	25,188,733	388,090,379	49,010,916	0
2050	388,090,379	780,815	47,075,700	347,239	23,733,869	365,182,123	47,075,700	0
2051	365,182,123	688,688	45,084,380	340,294	22,305,807	342,751,943	45,084,380	0
2052	342,751,943	613,026	43,067,289	333,489	20,910,166	320,874,357	43,067,289	0
2053	320,874,357	548,324	41,035,398	326,819	19,551,263	299,611,728	41,035,398	0
2054	299,611,728	496,462	38,986,582	320,282	18,233,281	279,034,606	38,986,582	0
2055	279,034,606	454,434	36,945,368	313,877	16,959,923	259,189,719	36,945,368	0
2056	259,189,719	419,548	34,923,682	307,599	15,733,761	240,111,747	34,923,682	0
2057	240,111,747	391,599	32,923,813	301,447	14,556,968	221,835,054	32,923,813	0
2058	221,835,054	368,771	30,956,950	295,418	13,431,363	204,382,819	30,956,950	0
2059	204,382,819	349,795	29,032,141	289,510	12,358,121	187,769,084	29,032,141	0
2060	187,769,084	333,143	27,159,320	283,720	11,337,789	171,996,976	27,159,320	0
2061	171,996,976	318,986	25,338,292	278,045	10,370,582	157,070,207	25,338,292	0
2062	157,070,207	306,597	23,575,133	272,484	9,456,525	142,985,711	23,575,133	0
2063	142,985,711	295,458	21,874,861	267,035	8,595,239	129,734,513	21,874,861	0
2064	129,734,513	285,377	20,239,859	261,694	7,786,061	117,304,397	20,239,859	0
2065	117,304,397	276,194	18,671,942	256,460	7,028,132	105,680,321	18,671,942	0
2066	105,680,321	267,773	17,172,208	251,331	6,320,436	94,844,991	17,172,208	0
2067	94,844,991	260,004	15,741,485	246,304	5,661,818	84,779,024	15,741,485	0
2068	84,779,024	252,793	14,380,528	241,378	5,050,992	75,460,904	14,380,528	0
2069	75,460,904	246,062	13,090,015	236,551	4,486,535	66,866,935	13,090,015	0
2070	66,866,935	239,745	11,870,034	231,820	3,966,901	58,971,727	11,870,034	0

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
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APPENDIX D – DETERMINATION OF GASB 67/68 DISCOUNT RATE

Fiscal Year Ending	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2071	58,971,727	233,787	10,720,466	227,183	3,490,443	51,748,308	10,720,466	0
2072	51,748,308	228,142	9,641,114	222,640	3,055,413	45,168,109	9,641,114	0
2073	45,168,109	222,771	8,631,164	218,187	2,659,977	39,201,507	8,631,164	0
2074	39,201,507	217,643	7,689,505	213,823	2,302,245	33,818,067	7,689,505	0
2075	33,818,067	212,729	6,814,886	209,547	1,980,279	28,986,643	6,814,886	0
2076	28,986,643	208,008	6,005,885	205,356	1,692,098	24,675,508	6,005,885	0
2077	24,675,508	203,458	5,261,097	201,249	1,435,685	20,852,306	5,261,097	0
2078	20,852,306	199,065	4,579,060	197,224	1,208,982	17,484,069	4,579,060	0
2079	17,484,069	194,813	3,957,977	193,279	1,009,904	14,537,531	3,957,977	0
2080	14,537,531	190,692	3,395,813	189,414	836,354	11,979,350	3,395,813	0
2081	11,979,350	186,690	2,890,395	185,625	686,233	9,776,253	2,890,395	0
2082	9,776,253	182,800	2,439,105	181,913	557,462	7,895,497	2,439,105	0
2083	7,895,497	179,014	2,038,973	178,275	448,008	6,305,271	2,038,973	0
2084	6,305,271	175,325	1,686,961	174,709	355,899	4,974,826	1,686,961	0
2085	4,974,826	171,728	1,380,046	171,215	279,235	3,874,528	1,380,046	0
2086	3,874,528	168,218	1,115,140	167,791	216,187	2,976,002	1,115,140	0
2087	2,976,002	164,791	889,085	164,435	165,011	2,252,285	889,085	0
2088	2,252,285	161,443	698,659	161,146	124,059	1,677,982	698,659	0
2089	1,677,982	158,171	540,516	157,923	91,787	1,229,500	540,516	0
2090	1,229,500	154,971	411,259	154,765	66,769	885,216	411,259	0
2091	885,216	151,841	307,424	151,669	47,711	625,674	307,424	0
2092	625,674	148,779	225,515	148,636	33,460	433,762	225,515	0
2093	433,762	145,783	162,162	145,663	23,011	294,731	162,162	0
2094	294,731	142,849	114,216	142,750	15,507	196,121	114,216	0
2095	196,121	139,978	78,734	139,895	10,232	127,701	78,734	0

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APPENDIX D – DETERMINATION OF GASB 67/68 DISCOUNT RATE

Fiscal Year Ending	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2096	127,701	137,166	53,066	137,097	6,605	81,309	53,066	0
2097	81,309	134,413	34,942	134,355	4,169	50,594	34,942	0
2098	50,594	131,716	22,471	131,668	2,571	30,743	22,471	0
2099	30,743	129,075	14,108	129,035	1,548	18,223	14,108	0
2100	18,223	126,487	8,639	126,454	909	10,527	8,639	0
2101	10,527	123,953	5,159	123,925	520	5,916	5,159	0
2102	5,916	121,469	3,007	121,446	289	3,221	3,007	0
2103	3,221	119,037	1,708	119,017	155	1,688	1,708	0
2104	1,688	116,653	941	116,637	80	843	941	0
2105	843	114,318	499	114,304	39	396	499	0
2106	396	112,029	255	112,018	18	170	255	0
2107	170	109,787	126	109,778	7	60	126	0
2108	60	107,590	60	107,582	2	10	60	0
2109	10	105,437	27	105,431	0	(10)	17	10
2110	(10)	103,328	11	103,322	(1)	(15)	0	11
2111	(15)	101,261	4	101,256	(1)	(15)	0	4

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
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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. 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.

13. 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.

14. 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

**PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET
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APPENDIX E – GLOSSARY OF TERMS

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.

15. 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.

16. Net Pension Liability

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

17. Normal Cost

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

18. Plan Fiduciary Net Position

The fair or Market Value of Assets.

19. 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.

20. Reporting Date

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

21. 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 68. The service cost is the normal cost calculated under the Entry Age actuarial cost method.

22. 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.

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APPENDIX E – GLOSSARY OF TERMS

The Total Pension Liability is the Actuarial Liability calculated under the entry age actuarial cost method.

23. 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.



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