Maryland Transit Administration Pension Plan Actuarial Valuation as of July 1, 2024







October 25, 2024

Maryland Transit Administration Pension Plan 6 St. Paul Street, 8th Floor Baltimore, Maryland 21202

The results of the July 1, 2024 annual actuarial valuation of the Maryland Transit Administration Pension Plan ("MTA") are presented in this report. This report was prepared at the request of the Board and is intended for use by the Plan and those designated or approved by the Board. This report may be provided to parties other than the Plan only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purposes of the valuation are to measure the Plan's funding progress and to determine the ADEC for this fiscal year. The results of the valuation may not be applicable for other purposes. Information required by the Governmental Accounting Standard Board (GASB) Statement Nos. 67 and 68 will be provided in a separate report. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The contribution rate in this report is determined using the actuarial assumptions and methods disclosed in Section E of this report. This report includes risk metrics beginning on page A-11 but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

This report reflects Cost-of-Living Adjustments (COLA) pursuant to collective bargaining agreements currently in effect through the fiscal year ending June 30, 2026. COLAs are based on the annual increase in the June CPI-W and are capped at 3.00%. This report assumes a 3.00% COLA payable on August 1, 2025. A 2.89% COLA paid on August 1, 2024 was reflected in the benefits payable to current retirees and beneficiaries reported for this valuation. Future COLAs, if any, are subject to collective bargaining.

We have assessed that the contribution rate calculated under the current funding policy is a reasonable Actuarially Determined Employer Contribution (ADEC) and it is consistent with the plan accumulating adequate assets to make benefit payments when due.

This valuation assumes the continuing ability of the employer to make the contributions necessary to fund this plan. A determination regarding whether or not the employer is actually able to do so is outside our scope of expertise. Consequently, we did not perform such an analysis.

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The valuation was based upon information, furnished by the MTA staff, concerning Pension Plan benefits, financial transactions, and individual members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided. Please see page 29 for data adjustments and assumptions made regarding incomplete and uncertain data for this valuation.

Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. The Board adopts these assumptions after considering the advice of the actuary and other professionals. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. The combined effect of the assumptions is expected to have no significant bias (i.e., not significantly optimistic or pessimistic). All actuarial assumptions and methods used in the valuation follow the guidance in the applicable Actuarial Standards of Practice. Additional information about the actuarial assumptions is included in Section E of this report entitled Actuarial Assumptions and Methods.

This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the MTA as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board

Brad Lee Armstrong, Derek Henning and Kevin T. Noelke are Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

Respectfully submitted, Gabriel, Roeder, Smith & Company

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SECTION A

EXECUTIVE SUMMARY

Executive Summary

Valuation Date:		July 1, 2024		July 1, 2023	
Fiscal Year Ending:		June 30, 2025		June 30, 2024	
Actuarially Determined Employer Contributions:					
Annual Amount	\$	56,614,872	\$	54,407,351	
Percentage of Covered Employee Payroll		30.25 %		32.00 %	
Membership					
Number of:					
Active Members		2,475		2,532	
Service Retirees, Beneficiaries and QDRO's		1,793		1,684	
Disability Retirees and Beneficiaries		479		451	
Inactive, Nonretired Members		715		562	
Total		5,462		5,229	
Covered Employee Payroll	\$	187,149,685	\$	170,004,336	
Assets					
Market Value	\$	533,694,916	\$	487,366,205	
Actuarial Value	\$	555,371,599	\$	514,581,341	
Return on Market Value		6.78 %		3.14 %	
Return on Actuarial Value		5.36 %		5.37 %	
Ratio – Actuarial Value to Market Value		104.06 %		105.58 %	
Actuarial Information					
Employer Normal Cost \$	\$	5,291,947	\$	4,821,727	
Actuarial Accrued Liability (AAL)	\$	994,644,480	\$	956,439,701	
Unfunded Actuarial Accrued Liability (UAAL)	\$	439,272,881	\$	441,858,360	
Funded Ratio		55.84 %		53.80 %	
UAAL as % of Covered Employee Payroll		234.72 %		259.91 %	
Equivalent Single Amortization Period		12 years		13 years	

This report uses an investment return rate of 6.80%.



SECTION B

VALUATION RESULTS

Principal Valuation Results as of July 1, 2024

Valuation Date:		July 1, 2024		July 1, 2023
A. Number of Participants		2 475		2 522
Active Members		2,475		2,532
Participants Receiving a Benefit		2,272		2,135
Terminated Vested Participants		715		562
Total	Ι.	5,462		5,229
Covered Employee Payroll	\$	187,149,685	\$	170,004,336
Development of the Contribution				
for Fiscal Year Ending:		lune 30, 2025		June 30, 2024
Assumed Payment Date:	Sep	otember 1, 2024	Se	ptember 1, 2023
B. Normal Cost				
Total	\$	16,721,649	\$	13,579,867
Member		11,487,410		8,810,719
Employer	\$	5,234,239	\$	4,769,148
Interest to Assumed Payment Date		57,707		52,580
Employer Total	\$	5,291,947	\$	4,821,727
C. Unfunded Actuarial Accrued Liabilities (UAAL)				
Actuarial Accrued Liability	\$	994,644,480	\$	956,439,701
Actuarial Value of Assets		555,371,599		514,581,341
UAAL	\$	439,272,881	\$	441,858,360
Payment Required to Amortize the UAAL	\$	51,322,925	\$	49,585,624
D. Actuarially Determined Employer Contribution	\$	56,614,872	\$	54,407,351



Actuarial Liabilities as of July 1, 2024

Actuarial Present Value of	Total Present Value	Portion Covered by Future Normal Cost Contributions	Actuarial Accrued Liabilities (1) – (2)
	value	Contributions	(1) - (2)
Age and service allowances based on total service likely to be rendered by present active members	\$ 445,691,330	\$ 78,769,221	\$ 366,922,109
Disability benefits likely to be paid to present active members	73,826,719	21,062,741	52,763,978
Death-in-service benefits likely to be paid on behalf of present active members	8,189,241	1,311,935	6,877,306
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	29,705,318	20,488,514	9,216,804
Benefits likely to be paid to vested inactive members	63,458,126	0	63,458,126
Benefits to be paid to current retirees, beneficiaries, and future beneficiaries of			
current retirees	495,406,157	0	495,406,157
Total	\$ 1,116,276,891	\$ 121,632,411	\$ 994,644,480
Actuarial Value of Assets	\$ 555,371,599	\$ 0	\$ 555,371,599
Unfunded Liabilities (to be covered by future contributions)	\$ 560,905,292	\$ 121,632,411	\$ 439,272,881



Unfunded Actuarial Accrued Liability Amortization Bases

		Unfunded Actuarial Amortization Period Accrued Liability (UAAL)		ember 1, 2024 mortization				
Date	Source	Initial	Remaining	Ini	tial Amount	Cur	rrent Amount	Payment
7/1/2019	Initial	25	20	\$	391,292,358	\$	356,375,979	\$ 31,351,487
7/1/2019	Assumption Change	20	15		208,201		179,392	18,411
7/1/2019	Plan Amendment	12	7		261,181		177,729	31,002
7/1/2019	Experience Loss	20	15		28,448,294		24,512,109	2,515,635
7/1/2020	Assumption Change (lowering DR to 7.40%)	20	16		4,675,175		4,172,951	412,649
7/1/2020	Plan Amendment (EE Cont Inc)	12	8		49,174		37,017	5,823
7/1/2020	Experience Loss	20	16		34,212,140		30,536,949	3,019,692
7/1/2021	Experience Gain	20	17		(30,788,502)		(28,371,625)	(2,712,957)
7/1/2022	Assumption Change (lowering DR to 6.80%)	20	18		35,683,650		33,843,922	3,139,200
7/1/2022	Plan Amendment (COLA Award)	4	2		52,742,435		28,103,622	14,673,877
7/1/2022	Experience Gain	20	18		(45,001,950)		(42,681,802)	(3,958,960)
7/1/2023	Assumption Change (Experience Study)	20	19		(6,050,540)		(5,899,695)	(532,284)
7/1/2023	Plan Amendment (EE Cont Inc)	12	11		(1,540,117)		(1,453,003)	(181,608)
7/1/2023	Experience Loss	20	19		20,502,362		19,991,224	1,803,656
7/1/2024	Experience Loss	20	20		19,748,112		19,748,112	1,737,302
						\$	439,272,881	\$ 51,322,925



Unfunded Actuarial Accrued Liability Amortization Schedule

Year	Expected UAAL	
2024	\$439,272,881	
2025	414,928,287	
2026	388,928,246	
2027	376,661,007	
2028	363,559,597	
2033	283,487,870	
2038	171,762,179	
2043	32,727,965	
2044	0	

The Expected Unfunded Actuarial Accrued Liability (UAAL) on this page assumes that future experience will match assumed experience. It does not consider any experience gains/losses, benefit changes, or assumption/method changes.



Actuarial Balance Sheet as of July 1, 2024

Assets and Present Value of Expected Future Contributons					
Valuation Date:	2024	2023			
 A. Present Actuarial Value of Assets 1. Net Assets from System Financial Statements 2. Adjustment for Valuation Assets 3. Actuarial Value of Assets 	\$ 533,694,916 21,676,683 555,371,599	\$ 487,366,205 27,215,136 514,581,341			
 B. Actuarial Present Value of Expected Future Employer Contributions 1. For Normal Costs 2. For Unfunded Actuarial Accrued Liability 3. Total 	11,590,261 439,272,881 450,863,142	2,974,405 441,858,360 444,832,765			
C. Actuarial Present Value of Expected Future Member Contributions	110,042,150	93,604,644			
D. Total Present and Expected Future Resources	\$ 1,116,276,891	\$ 1,053,018,750			
Present Value of Expected Future Ben	efit Payments				
A. To Retirees and Beneficiaries	\$ 495,406,157	\$ 467,659,129			
B. To Vested Terminated Members	63,458,126	32,918,156			
 C. To Present Active Members Allocated to Service Rendered Prior to Valuation Date – Actuarial Accrued Liability Allocated to Service Likely to be Rendered After Valuation Date Total 	435,780,197 121,632,411 557,412,608	455,862,416 96,579,049 552,441,465			
D. Total Actuarial Present Value of Expected Future Benefit Payments	\$ 1,116,276,891	\$ 1,053,018,750			



Experience Gain/(Loss) as of July 1, 2024

Plan Year Ending	2024
A. Derivation of Experience Gain/(Loss)	
1. Unfunded Actuarial Accrued Liability (UAAL)	
Previous Valuation	\$441,858,360
2. Normal Cost (NC) at July 1	13,579,867
3. Expected Contributions	(63,315,209)
4. Interest Accrual	27,401,750
5. Expected UAAL before Changes: 1. + 2. + 3. + 4.	419,524,769
6. Change in Benefit Provisions	-
7. Change in Methods and Assumptions	-
8. Expected UAAL After Changes: 5. + 6. + 7.	419,524,769
9. Actual UAAL Current Year	439,272,881
10. Experience Gain/(Loss): (8) – (9)	(19,748,112)
B. Gain/(Loss) by Source	
1. Gain/(Loss) due to Actual vs. Expected Contribution	2,830,695
2. Gain/(Loss) due to Actual vs. Expected Rate of Return on Assets	(8,789,484)
3. Gain/(Loss) due to Demographic Experience	(13,789,323)
	(19,748,112)
C. Gain/(Loss) as a % of Beginning of Year Actuarial Liability	(2.36)%

Gain\(Loss) History

Plan Year Ending July 1	Experience Gain\(Loss) as % of Beginning Accrued Liability
2020	(4.34)%
2021	3.09%
2022	3.46%
2023	(2.23)%
2024	(2.36)%



Comments, Recommendations and Conclusion

Experience

Overall there was an actuarial loss of \$19.8 million during the year ended June 30, 2024 (see page 7). On a market value basis, investments returned the beginning of year assumption of 6.80% (see page 17); the result of this and the phase-ins of prior investment gains and losses yielded an asset loss on a funding value basis of \$8.8 million.

Liability losses due to demographic experience totaled \$13.8 million. This is primarily a result of higher than assumed salary increases and lower than assumed retiree mortality. The loss was partially offset by gains resulting from higher turnover than expected.

There was also a \$2.8 million employer/employee contribution gain.

Funded Status

The funded status for the Plan as a whole is 55.84%, based on the Actuarial Value of Assets. On the basis of the Market Value of Assets, the funded status is 53.67%. This indicates that deferred asset losses will slow down the funded status progress toward 100% as they become recognized (absent future gains) in each of the next 4 years 2025, 2026, 2027, and 2028.

Amortization Schedule

Effective July 1, 2019, all existing amortization bases were consolidated to be paid over 25 years. Gains and losses due to experience and assumption changes will be amortized over 20 years. The remaining amortization periods are shown on page 4. As amortization schedules wind down in the future (around 5 to 10 years), the computed contributions may become more volatile. In an effort to mitigate the potential adverse effects of this scenario, we suggest maintaining the current "layered" amortization schedule, but consider actively managing them by combining gains and losses when appropriate to avoid unnecessary contribution volatility.

Valuation Assumptions

From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations). Actuarial assumptions were last reviewed in connection with a study conducted by the prior actuary of 2018-2022 experience in the Experience Study report dated July 20, 2023, which includes the rationale for the assumptions.

For this valuation, the investment return rate was maintained at 6.80% and the wage inflation rate was maintained at 2.75%.



Comments, Recommendations and Conclusion

Benefit Changes

This valuation values a 3% COLA payable on August 1, 2025. The 2.89% COLA paid on August 1, 2024 was reflected in the reported benefits payable to participants in pay status. We understand that these are subject to bargaining and inflation.

Benefit provisions are summarized in Section F.

GASB Reporting Standards

The GASB Statement Nos. 67 and 68 reporting disclosures required for the plan this year are issued in a separate report.

Conclusion

The Pension Plan's financial objective is to meet long-term benefit obligations through contributions that remain approximately level as a dollar amount. Continued receipt of these contributions is the best guarantee that the Plan will be able to pay all promised benefits when due.

The Plan's funded ratio relies, in part, on timely receipt of employer contributions. This valuation assumes that the plan sponsor will be able to make future contributions on a timely basis. Failure to receive employer contributions on a timely basis could jeopardize the sustainability of the fund. We did not perform an analysis of the ability of the plan sponsor to make future contributions.



Other Observations

General Implications of Contribution Allocation Procedure or Funding Policy on Future Expected Contributions and Funded Status

Given the Plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the Retirement System earning 6.80% on the Market Value of Assets), it is expected that:

- 1. The employer normal cost is sufficient to cover the cost of benefits accruing each year;
- 2. The Unfunded Actuarial Accrued Liabilities (UAAL) will be fully amortized after the respective amortization periods end; and
- 3. The funded status of the Pension Plan will continue to increase gradually towards a 100% funded ratio.

Limitations of Funded Status Measurements

Unless otherwise indicated, a funded status measurement presented in this report is based upon the Actuarial Accrued Liability (AAL) and the Actuarial Value of Assets (AVA). Unless otherwise indicated, with regard to any funded status measurements presented in this report:

- 1. The measurement is inappropriate for assessing the sufficiency of Retirement System assets to cover the estimated cost of settling the Retirement System's benefit obligations; for example, transferring the liability to an unrelated third party in a market value type transaction.
- 2. The measurement is dependent upon the Actuarial Cost Method which, in combination with the Retirement System's amortization policy, affects the timing and amounts of future contributions. The amounts of future contributions will most certainly differ from those assumed in this report due to future actual experience differing from assumed experience based upon the actuarial assumptions. A funded status measurement in this report of 100% is not synonymous with no required future contributions. Even if the funded status were over 100%, the Retirement System would still require future normal cost contributions (i.e., contributions to cover the cost of active membership accruing an additional year of service credit).
- 3. The measurement would produce a different result if the Market Value of Assets (MVA) were used instead of the AVA, unless the MVA is used in the measurement.

Limitations of Project Scope

Actuarial standards do not require the actuary to evaluate the ability of the plan sponsor or other contributing entities to make required contributions to the plan when due. Such an evaluation was not within the scope of this project and is not within the actuary's domain of expertise. Consequently, the actuary performed no such evaluation.



Risks Associated with Measuring the Accrued Liability and Actuarially Determined Employer Contribution

The determination of the accrued liability and the actuarially determined employer contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report 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 due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

- 1. Investment Risk actual investment returns may differ from the expected returns;
- 2. Asset/Liability Mismatch Risk changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
- 3. **Contribution Risk** actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered employee payroll, or other relevant contribution base;
- 4. Salary and Payroll Risk actual salaries and covered employee payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
- 5. **Longevity Risk** members may live longer or shorter than expected and receive pensions for a period of time other than assumed; and
- 6. **Other Demographic Risks** members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.



Risks Associated with Measuring the Accrued Liability and Actuarially Determined Employer Contribution

Plan Maturity Measures

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	2024	2023
Ratio of the Market Value of Assets to Covered Payroll	2.85	2.87
Ratio of Actuarial Accrued Liability to Covered Payroll	5.31	5.63
Ratio of Actives to Retirees and Beneficiaries	1.09	1.19
Ratio of Net Cash Flow to Market Value of Assets	2.38%	2.53%

Ratio of Market Value of Assets to Covered Employee Payroll

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the covered employee payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of covered employee payroll.

Ratio of Actuarial Accrued Liability to Covered Employee Payroll

The relationship between actuarial accrued liability and covered employee payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of covered employee payroll.

Ratio of Actives to Retirees and Beneficiaries

A young plan with many active members and few retirees will have a high ratio of actives to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.



Risks Associated with Measuring the Accrued Liability and Actuarially Determined Employer Contribution

Ratio of Net Cash Flow to Market Value of Assets

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

Additional Risk Assessment

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.



Low-Default-Risk Obligation Measure

Introduction

In December 2021, the Actuarial Standards Board (ASB) adopted a revision to Actuarial Standard of Practice (ASOP) No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*. The revised ASOP No. 4 requires the calculation and disclosure of a liability referred to by the ASOP as the "Low-Default-Risk Obligation Measure" (LDROM). The rationale that the ASB cited for the calculation and disclosure of the LDROM was included in the Transmittal Memorandum of ASOP No. 4 and is presented below (emphasis added):

The ASB believes that the calculation and disclosure of this measure provides **appropriate**, **useful information for the intended user regarding the funded status of a pension plan**. The calculation and disclosure of this additional measure is **not intended to suggest that this is the "right" liability measure** for a pension plan. However, the ASB does believe that **this additional disclosure provides a more complete assessment of a plan's funded status and provides additional information regarding the security of benefits that members have earned as of the measurement date.**

Comparing the Accrued Liabilities and the LDROM

One of the fundamental financial objectives of the MTA is to finance each member's retirement benefits over the period from the member's date of hire until the member's projected date of retirement (entry age actuarial cost method) as a level dollar amount. To fulfill this objective, the discount rate that is used to value the accrued liabilities is set equal to the **expected return** on the System's diversified portfolio of assets (referred to sometimes as the investment return assumption). The current investment return assumption is 6.80%.

The LDROM is meant to approximately represent the lump sum cost to a plan to purchase low-defaultrisk fixed income securities whose resulting cash flows essentially replicate in timing and amount the benefits earned (or the costs accrued) as of the measurement date. The LDROM is very dependent upon market interest rates at the time of the LDROM measurement. The lower the market interest rates, the higher the LDROM, and vice versa. The LDROM results presented in this report are based on the projected unit credit actuarial cost method and discount rates based upon the June 2024 Treasury Yield Curve Spot Rates (monthly average). The 1-, 5-, 10- and 30-year rates follow: 5.12%, 4.34%, 4.22%, and 4.45%. This measure may not be appropriate for assessing the need for or amount of future contributions. This measure may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligation.

The difference between the two measures (Valuation and LDROM) is one illustration of the savings the sponsor anticipates by taking on risk in a diversified portfolio.

Valuation Accrued Liabilities	LDROM
\$994,644 <i>,</i> 480	\$1,185,624,442

Accrued Liabilities and LDROM



SECTION C

ASSETS

Statement of Plan Assets

(Assets at Market or Fair Value)

		Jul	y 1,	
		2024		2023
Assets				
Cash and Cash Equivalents	\$	15,109,960	\$	9,329,973
Collateral for Loaned Securities		32,184,682		43,230,816
Total Cash	\$	47,294,642	\$	52,560,789
Investments				
U.S. Government Obligations	\$	46,694,434	\$	46,984,932
Domestic Corporate Obligations		22,185,966		27,587,788
International Obligations		13,482,064		11,942,450
Domestic Stocks		85,620,413		78,099,737
International Stocks		78,779,322		71,984,304
Mortgage and Mortgage Related Securities		15,452,636		12,477,413
Alternative Investments		258,177,503		231,610,180
Total Investments	\$	520,392,338	\$	480,686,804
Receivables				
Accrued Investment Income		1,573,124		1,487,432
Investment Sales Proceeds		1,856,657		3,291,042
Total Receivables	\$	3,429,781	\$	4,778,474
Total Assets		571,116,761		538,026,067
Liabilities				
Investment Purchases Payable	\$	5,139,693	\$	7,336,523
Manager Fees Payable		97,470		92,523
Obligation for Collateral for Loaned Securities		32,184,682		43,230,816
	\$	37,421,845	\$	50,659,862
Net Position Held in Trust for Pension Benefits	\$	533,694,916	\$	487,366,205
	-		•	
Allocation of Assets				
U.S. Government Obligations		8.75 %		9.64 %
Domestic Corporate Obligations		4.16 %		5.66 %
International Obligations		2.53 %		2.45 %
Domestic Stocks		16.04 %		16.02 %
International Stocks		14.76 %		14.77 %
Mortgage and Mortgage Related Securities		2.90 %		2.56 %
Alternative Investments		48.38 %		47.52 %
Total Cash		2.49 %		1.37 %
Net Position Held in Trust for Pension Benefits		100.00 %		100.00 %



Reconciliation of Plan Assets

	July 1,			
		2024		2023
Additions				
Contributions				
Employer	\$	56,110,153	\$	54,647,403
Employee		10,103,899		8,302,217
Total Contributions	\$	66,214,052	\$	62,949,620
Investment Income				
Net Appreciation (Depreciation) in Fair Value				
of Investments	\$	14,132,573	\$	(3,687,932)
Interest Income		22,770,194		21,574,370
Net Income from Securities Lending Activities		171,265		176,970
Investment Expenses		(3,444,342)		(3,277,545)
Total Investment Income	\$	33,629,690	\$	14,785,863
Total Additions	\$	99,843,742	\$	77,735,483
Deductions				
Benefit Payments	\$	53,341,941	\$	50,465,093
Administrative Expense		173,091		146,346
Other		0		0
Total Deductions	\$	53,515,032	\$	50,611,439
Net Increase in Net Position	\$	46,328,710	\$	27,124,044
Net Position Held in Trust for Pension Benefits				
Beginning of Year	\$	487,366,206	\$	460,242,161
End of Year	\$	533,694,916	\$	487,366,205



Development of the Actuarial Value of Assets

Valuation Date – July 1	2023	2024	2025	2026	2027	2028
A. Actuarial Value of Assets Beginning of Year	\$ 476,185,833	\$ 514,581,341				
B. Market Value End of Year	487,366,205	533,694,916				
C. Market Value Beginning of Year	460,242,161	487,366,205				
D. Non-Investment Net Cash Flow						
D1. Employer Contributions	54,647,403	56,110,153				
D2. Member Contributions	8,302,217	10,103,899				
D3. Retirement Benefits including Refunds	(50,465,093)	(53,341,941)				
D4. Administrative Expenses	0	0				
D5. Total Net Cash Flow: D1+D2+D3+D4	12,484,527	12,872,111				
E. Investment Income						
E1. Actual Market Total: B-C-D5	14,639,517	33,456,600				
E2. Assumed Rate of Return	6.80 %	6.80 %				
E3. Assumed Amount of Return	34,050,260	36,707,631				
E4. Amount Subject to Phase-In: E1–E3	(19,410,743)	(3,251,031)				
F. Phase-In Recognition of Investment Income						
F1. Current Year: 20% x E4	(3,882,149)	(650,206)				
F2. First Prior Year	(9,767,402)	(3,882,149) \$	(650,206)			
F3. Second Prior Year	12,105,392	(9,767,402)	(3,882,149) \$	(650,206)		
F4. Third Prior Year	(6,595,120)	12,105,392	(9,767,402)	(3,882,149) \$	(650,206)	
F4. Fourth Prior Year	0	(6,595,119)	12,105,390	(9,767,401)	(3,882,147) \$	(650,207)
F5. Total Phase-Ins	\$ (8,139,279)	\$ (8,789,484) \$	(2,194,367) \$	(14,299,756) \$	(4,532,353) \$	(650,207)
G. Actuarial Value of Assets End of Year						
G1. Preliminary Actuarial Value of Assets End of Year: A+D5+E3+F5	\$ 514,581,341	\$ 555,371,599				
G2. Actuarial Value of Assets End of Year	514,581,341	555,371,599				
H. Difference between Market & Actuarial Value of Assets	\$ (27,215,136) \$	\$ (21,676,683)				
I. Actuarial Rate of Return	5.37 %	5.36 %				
J. Market Rate of Return	3.14 %	6.78 %				
K. Ratio of Actuarial Value of Assets to Market Value	105.58 %	104.06 %				



SECTION D

MEMBERSHIP INFORMATION

Retirees and Beneficiaries by Type of Benefit Being Paid

Type of Benefit Being Paid	No.	Annual Benefits		verage enefits
Age and Service Benefits				
Straight Life Terminating at Death of Retiree	948	\$ 25,992,579	\$	27,418
Certain and Life	22	488,697		22,214
Joint and Survivor Benefit	539	16,335,198		30,306
Survivor Beneficiary of Deceased Retiree	259	4,124,087		15,923
QDROs	25	273,536		10,941
Total Age and Service Benefits	1,793	\$ 47,214,097	\$	26,332
Disability Benefits				
Straight Life	347	5,475,851		15,781
Certain and Life	2	46,095		23,048
Joint and Survivor Benefit	125	2,129,857		17,039
Survivor Beneficiary of Deceased Retiree	5	79,110		15,822
Total Disability Benefits	479	\$ 7,730,913	\$	16,140
Total Benefits Being Paid	2,272	\$ 54,945,010	\$	24,184



Inactive Member Age Distribution

Age	Age	e and Service		Disability	Vest	ted Terminated		Total
Last		Annual		Annual		Annual		Annual
Birthday	No.	Benefits	No.	Benefits	No.	Benefits	No.	Benefits
Under 45	7	\$ 76,908	13	\$ 152,210	135	\$ 1,528,821	155	\$ 1,757,939
45-49	8	109,266	20	229,982	54	717,082	82	1,056,330
50-54	11	195,275	36	434,785	109	1,687,893	156	2,317,953
55-59	40	1,056,068	43	579,238	138	2,252,386	221	3,887,692
60-64	138	4,303,112	94	1,748,537	143	1,917,812	375	7,969,461
65-69	380	10,818,294	85	1,335,456	82	1,231,286	547	13,385,036
70-74	426	11,291,862	93	1,755,755	36	323,594	555	13,371,211
75-79	359	9,523,560	48	862,319	9	71,664	416	10,457,543
80-84	252	6,018,685	33	452,850	8	84,772	293	6,556,307
85-89	106	2,544,998	10	126,338	1	7,276	117	2,678,612
90 & Over	66	1,276,069	4	53,443	0	0	70	1,329,512
Totals	1,793	\$ 47,214,097	479	\$ 7,730,913	715	\$ 9,822,586	2,987	\$ 64,767,596



Active Member Age and Service Distribution

Nearest Whole		Nearest W	hole Years	of Service c	on the Valua	ation Date		Total	Covered Employee
Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 or more	Number	Payroll
								<i>.</i>	
Under 20	-	-	-	-	-	-	-	- \$	-
20 - 24	22	-	-	-	-	-	-	22	1,288,74
25 - 29	87	6	-	-	-	-	-	93	6,282,59
30 - 24	126	59	6	-	-	-	-	191	12,940,09
35 - 29	147	111	66	34	-	-	-	358	25,991,02
40 - 24	90	97	43	80	19	1	-	330	24,676,12
45 - 29	74	66	47	60	59	15	-	321	24,308,69
50 - 24	48	69	48	56	59	44	-	324	24,989,7
55 - 59	29	55	45	60	73	48	37	347	27,335,8
60	8	7	7	13	15	9	8	67	5,338,5
61	3	5	6	13	15	13	14	69	5,657,5
62	1	3	8	18	13	6	11	60	4,837,8
63	2	8	6	7	14	9	12	58	4,686,5
64	4	8	6	9	11	7	16	61	4,866,0
65	1	5	3	9	8	2	8	36	2,867,4
66	1	6	3	5	5	-	8	28	2,218,1
67	2	1	4	3	1	3	7	21	1,640,3
68	-	1	2	4	5	2	8	22	1,798,0
69	1	1	1	6	2	5	3	19	1,552,5
70	-	1	4	1	3	1	5	15	1,225,1
Over 70	-	1	2	9	5	4	12	33	2,648,4
Total	646	510	307	387	307	169	149	2,475 \$	187,149,6



SECTION E

ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Cost Method – Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using a Level Dollar Individual Entry-Age Actuarial Cost Method having the following characteristics:

- (i) The annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement; and
- (ii) Each annual normal cost is a level dollar.

Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Unfunded Actuarial Accrued Liabilities were amortized by level dollar payments over:

- Effective July 1, 2019, all existing amortization bases were consolidated to be paid over 25 years.
- 20 years for experience gains and losses after 2002.
- 20 years for assumption and method changes.
- COLA awards are amortized over the life of the contract in which they are negotiated.
- Benefit awards and plan changes are amortized over the expected future working lifetime of the entire active population.

The **Asset Valuation Method** – Last year's valuation assets are increased by contributions and reduced by refunds, benefit payments and expenses. An amount equal to the assumed investment return for the year is then added. Differences between actual return on a market value basis and an assumed return are phased-in over a five-year period.



Demographic assumptions were developed in connection with a study conducted by the prior actuary of 2018-2022 experience in the Experience Study report dated July 20, 2023, which includes the rationale for the assumptions. Economic assumptions were first used in the July 1, 2023 actuarial valuation based on MSRPS economic assumptions which include how the Pension Plan's assets are expected to perform. Actuarial assumptions are based on a combination of future expectations and historical data. Specific assumptions are shown below.

The *investment return rate* assumed in the valuation is 6.80% per year, compounded annually (net of investment expenses).

Although not explicitly used in the valuation, the economic assumptions are consistent with a *price inflation rate* assumption of 2.40% per year.

The *wage inflation rate* assumed in this valuation was 2.75% per year. The wage inflation rate is defined to be the portion of total pay increases for an individual that are due to macro-economic forces including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes related to individual merit and seniority effects.

The assumed *real rate of return* over wage inflation is defined to be the portion of total investment return that is more than the assumed wage inflation rate. Considering other economic assumptions, the 6.80% investment return rate translates to an assumed real rate of return over wage inflation of 4.05%.

The *rates of merit and seniority salary increase* used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefit amounts will be based.

	Merit &	Seniority Salary I	ncreases
Year of		Maintenance/	All
Service	Management	Operators	Others
0	0.65 %	7.80 %	5.20 %
5	0.65 %	7.80 %	5.20 %
10	0.65 %	0.33 %	3.90 %
15	0.65 %	0.33 %	3.90 %
20	0.65 %	0.33 %	3.90 %
25	0.65 %	0.33 %	1.30 %
30	0.65 %	0.00 %	0.65 %

If the number of active members remains constant, then the covered employee payroll will increase 2.75% annually, the base portion of the individual salary increase assumptions.



The mortality tables used to measure post-retirement mortality are as follows:

Pre-retirement	The fully generational Pri-2012 Amount-Weighted Blue Collar Employee mortality table, sex distinct, with generational mortality improvements from 2012 using scale MP-2021.
Post-retirement Healthy lives	The fully generational Pri-2012 Amount-Weighted Blue Collar Healthy Retiree mortality table, sex distinct, with generational mortality improvements from 2012 using scale MP-2021.
Post-retirement Disabled lives	The fully generational Pri-2012 Amount-Weighted Total Disabled Retiree mortality table, sex distinct, with generational mortality improvements from 2012 using scale MP-2021.

Sample values for healthy retirees follow:

			Single Life Ret	tirement Value		
Sample Ages	Actuarial Present Value of \$1 Monthly for Life		Percent Dying Next Year		Future Life Expectancy (Years)	
in 2024	Men	Women	Men	Women	Men	Women
50	\$152.92	\$157.28	0.4736%	0.3038%	33.17	35.70
55	144.87	149.68	0.6068%	0.4662%	28.49	30.83
60	134.86	140.46	0.9388%	0.7259%	24.00	26.19
65	122.99	129.53	1.2864%	1.0440%	19.77	21.82
70	108.73	116.31	1.9364%	1.4610%	15.79	17.68
75	92.42	100.34	3.0070%	2.3160%	12.15	13.78
80	74.60	82.58	5.1776%	3.9783%	8.93	10.30



The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

	Ar	nual Rates of Retireme	nt
Ages	Management	Maintenance	All Others
52	13.65 %	4.55 %	7.28%
53	13.65 %	4.55 %	7.28 %
54	13.65 %	4.55 %	7.28 %
55	13.65 %	4.55 %	7.28 %
56	13.65 %	4.55 %	7.28 %
57	18.20 %	4.55 %	7.28 %
58	18.20 %	4.55 %	7.28 %
59	18.20 %	4.55 %	7.28 %
60	18.20 %	9.10%	9.10%
61	18.20 %	9.10 %	18.20 %
62	22.75 %	13.65 %	18.20 %
63	22.75 %	13.65 %	18.20 %
64	22.75 %	18.20 %	18.20 %
65	22.75 %	22.75 %	18.20 %
66	22.75 %	22.75 %	22.75 %
67	22.75 %	22.75 %	22.75 %
68	22.75 %	22.75 %	22.75 %
69	22.75 %	22.75 %	22.75 %
70	100.00 %	22.75 %	22.75 %
71	100.00 %	22.75 %	13.65 %
72	100.00 %	18.20 %	13.65 %
73	100.00 %	18.20 %	13.65 %
74	100.00 %	18.20 %	13.65 %
75	100.00 %	100.00 %	100.00 %



Rates of separation from active membership are represented by the following table (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

Years of	Annual	Rates of Withdrav	wal from Active	Service
Service	Management	Maintenance	Operators	All Others
0	33.00 %	15.00 %	17.00 %	20.00 %
1	25.00 %	7.00 %	12.00 %	20.00 %
2	18.00 %	5.00 %	8.25 %	15.00 %
3	15.00 %	5.00 %	8.25 %	10.00 %
4	12.50 %	5.00 %	7.50 %	6.00 %
5	10.00 %	4.00 %	5.25 %	6.00 %
6	5.50 %	3.00 %	3.75 %	6.00 %
7	5.50 %	3.00 %	3.75 %	6.00 %
8	5.50 %	3.00 %	3.75 %	4.00 %
9	5.50 %	3.00 %	3.75 %	4.00 %
10	5.50 %	1.50 %	2.25 %	1.50 %
11	5.50 %	1.50 %	2.25 %	1.50 %
12	5.50 %	1.50 %	2.25 %	1.50 %
13	5.50 %	1.50 %	2.25 %	1.50 %
14	5.50 %	1.50 %	2.25 %	1.50 %
15	3.50 %	1.50 %	2.25 %	1.50 %
16	3.50 %	1.50 %	2.25 %	1.50 %
17	3.50 %	1.50 %	2.25 %	1.50 %
18	3.50 %	1.50 %	2.25 %	1.50 %
19	3.50 %	1.50 %	2.25 %	1.50 %
20	1.50 %	1.50 %	1.50 %	1.50 %
21	1.50 %	1.50 %	1.50 %	1.50 %
22	1.50 %	1.50 %	1.50 %	1.50 %
23	1.50 %	1.50 %	1.50 %	1.50 %
24	1.50 %	1.50 %	1.50 %	1.50 %
25	1.50 %	1.50 %	1.50 %	1.50 %
I				



Rates of disability were as follows:

Sample	Annual Rates
Ages	of Disability
20	0.1786 %
25	0.1786 %
30	0.2538 %
35	0.3431 %
40	0.4324 %
45	0.5217 %
50	0.6110 %
55	0.8789 %
60	1.8612 %
65	1.8612 %



Miscellaneous and Technical Assumptions

Marriage Assumption:	85% of males and 85% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses.
Pay Increase Timing:	Middle of (Fiscal) year.
Decrement Timing:	Decrements of all types are assumed to occur mid-year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Decrement Relativity:	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
Decrement Operation:	Disability and turnover do not operate during retirement eligibility.
Liability Adjustments:	An additional 0.4 years of service is assumed for all members to account for sick leave conversion and prior military time.
	An additional pay load is assumed to account for expected overtime. For Local 1300 members (as well as management personnel who bargain with the Local 1300 Union), the amount is assumed to be 14% of their salary, and for all others, the load is assumed to be 9% of salary. No overtime pay load is assumed for management members who are not in the Local 1300 Union.
	A 1% load is applied for retirees who have elected a joint and survivor option that includes a pop-up provision.
	A 0.20% load was added to the Normal Cost to reflect Military Service Purchases for all active members.
Part-Time Members:	Part-time members are assumed to accrue one-half year of service credit each year.
Cost-of-Living Adjustments:	A 3.00% Cost-of-Living Adjustment was assumed to be payable on August 1 st of 2023, 2024, and 2025. There are no other Cost-of-Living Adjustments assumed for purposes of this valuation.



Miscellaneous and Technical Assumptions

Data Assumptions:	For the purposes of this valuation, retirement benefits were estimated for any members who terminated after attaining 100% vesting, whose retirement benefit was not provided.
Form of Payment:	All participants are assumed to elect payment in the form of a single life annuity.
Incidence of Contributions:	Contributions are assumed to be received September 1 st based on the computed dollar amount shown in this report.
Benefit Service:	Benefit service was calculated using the Pension Eligibility date provided in the data.
Deferred Retirement:	Terminated members with a vested benefit are assumed to retire at first eligibility for voluntary retirement.
Management Personnel:	The management personnel who bargain under the Local 1300 Union and are subject to the same plan provisions and benefits were identified for purposes of this valuation by using the position in prior years data.
Maintenance Employees:	Members with an unclear group status were assumed to be members of the Local 1300 Union. The job code field provided on the data was used to determine employees in the maintenance group classification as follows:

Job C	ode - Maintenance Empl	oyees
Repairman - Catenary	Repairman - Plumber	Janitor Rail
Repairman - Elect/Mech	Repairman - Welder	Leadman - Repairman A
Repairman - Facilities	Rep-Electrician-Skld	Leadman - Technician
Repairman - Locksmith	Rep-Hvac-Skld	Repairman - Bus
Repairman - Machinist	Rep-Locksmith-Skld	Repairman - Rail
Repairman - Syst Maint	Rep-Mason/Carp-Skld	Repairman B - Bus
Repairman - Track/Way	Rep-Plumber-Skld	Repairman B - Rail
Repairman - Heavy Equip	Rep-Welder-Skld	Repairman C - Bus
Repairman - Mason Carpen	Cleaner - Rail	Repairman C - Rail
Repairman - Mechanic	Cleaner - Bus	Shipping Clerk
Repairman - Rail Car Mnt	Cleaner B - Bus	Storeroom Attendant
Repairman - Electrician	Janitor - Bus	Technician - Bus
Repairman - Hvac	Janitor - Bus	Technician - Rail



Miscellaneous and Technical Assumptions (Concluded)

Data Adjustments and Assumptions for Incomplete/Uncertain Data

Active Participants

- 1. Records indicated as participants of the Law Enforcement Police Officers Pension System (*RETIRE_SYS_DESC* = LEOPS) were excluded from the valuation of the MTA Pension Plan. The remaining records were assumed to be plan participants of the MTA Pension Plan.
- 2. Duplicate records were excluded from the valuation.
- 3. Plan participants with dates of hire after the valuation date were excluded from the valuation.
- 4. Plan participants with dates of termination after the valuation date were included in the valuation and valued as active members.
- 5. Data fields indicating a participant's bargaining group (*MTA_PAY_GRP_DESC* and *STATUS_DESC*) were blank for all records. The bargaining group from the prior valuation was used, where available. For the remaining records, the bargaining group used was implied from the job title field.
- 6. For records with missing gender information, the gender from the prior valuation was used, where available. Otherwise, gender was assigned based on the member's first name.
- 7. For records with missing pay information, the highest annualized pay rate for an operator employee was used.

Terminated Vested Participants

 Records missing from the valuation data, that were indicated as active participants last year, were assumed to have terminated from the plan. Records that were eligible for a deferred or immediate benefit (vested) were included in the valuation. Benefits for these records were estimated using the prior year's valuation data. Records that were ineligible for a deferred or immediate benefit (non-vested) were excluded from the valuation.

Retired Pension Plan Participants

- Records indicated as participants of the Law Enforcement Police Officers Pension System (*RETIRE_SYS_DESC* = LEOPS) were excluded from the valuation of the MTA Pension Plan. The remaining records were assumed to be plan participants of the MTA Pension Plan.
- 2. Duplicate records were excluded from the valuation.
- 3. Data fields indicating a participant's pension plan (*Pension Code Description* and *Pension Code*) were blank for many records. The pension from the prior valuation was used, where available. For the remaining records, the pension plan used was assumed a straight life annuity.
- 4. For records with missing benefit amounts, the benefit amount from the prior valuation was used with a COLA adjustment, where available. A benefit amount was estimated for records who were active the prior year. Otherwise records with missing benefit amounts were assumed to not be in pay status and were excluded from the valuation.
- 5. All of the retired pension plan participants had missing gender information. The gender from the prior valuation was used, where available. Otherwise, gender was assigned based on the member's first name.



SECTION F

SUMMARY OF BENEFIT PROVISIONS

Plan Year:

July 1 – June 30

Effective Date of Plan:

January 8, 1950

Plan Participants:

Any employee who is a member of The Amalgamated Transit Union, Local 1300, or the Office & Professional Employees International Union, Local No. 2, who is not included in the Maryland State Retirement and Pension System.

Any employee who is a member of the Police Local Union No. 1859, who is not included in the Law Enforcement Officers' Pension System (LEOPS) offered by the Maryland State Retirement and Pension System.

Any management employee who transferred from any of the bargaining units above. For purposes of this Plan, management employees are classified as Local 1300 employees

Eligible employees become participants immediately upon employment.

Normal Form of Benefit:

Straight Life annuity

Optional Forms of Benefit:

- 50%, 75%, or 100% joint and survivor;
- 50%, 75%, or 100% joint and survivor with pop-up option; and
- Partial lump sum of 5%, 10%, or 15% of accrued benefit <u>plus</u> a 50%, 75%, or 100% joint and survivor annuity.



Normal Retirement:

Eligibility - First of the month coincident with or immediately following the earlier of:

- a. Attainment of age 65 and fully vested (as described under deferred retirement); or
- b. Attainment of age 52 with 30 years of service.

Benefit Amount - A monthly income payable for life that is equal to 1.70% of Average Compensation times years of service.

The above described benefit cannot be less than \$625 per month at age 65 with 25 years of service for Management, Local 2, and Local 1300 and \$450 per month for Local 1859. The benefit is offset by a fixed amount for a group of former All-America Financial Program members. Management members are also entitled to Minimum Alternate Benefits, if they are greater than the Plan benefit.

Creditable Service - Credited Service includes service with MTA, plus one month of service for every 20 days of unused sick leave. Part-time employees are credited service at the rate of one month for each 173 hours of work.

Compensation - Remuneration received as an MTA employee including overtime if eligible. Effective July 1, 2016 for Local 2 and Local 1300 and October 27, 2017 for Local 1859, participants' credited earnings shall not exceed the first 2,392 pay hours in any calendar year.

Average Annual Compensation - Average annual compensation is the average of the member's pensionable earnings for the three years over the last ten years of credited service that produces the highest average. Effective July 1, 2016 for Local 2 and Local 1300 and October 27, 2017 for Local 1859, credited earnings shall not exceed 2,392 pay hours in any calendar year.

Early Retirement:

Eligibility - Attainment of age 55 with age plus years of service equal to at least 85.

Benefit Amount - Computed as normal retirement benefit, but reduced to take into account earlier commencement of retirement income payments, as follows:

Age 60 or greater on early retirement date: 4/12% per month reduction for all months prior to age 65.

Less than age 60 on early retirement date: 5/12% per month reduction for all months prior to age 65.



Deferred Retirement (Vested Benefit):

Eligibility - The following table summarizes the vesting requirements for each bargaining unit:

Years of Service	Local 1300 & Management	Local 2	Police Local 1859
5	Hired before 5/18/2013	Hired before 7/1/2012	Hired before 1/1/2012
7	Hired on or after 5/18/2013 and before 7/1/2016	Hired on or after 7/1/2012 and before 7/1/2016	Hired on or after 1/1/2012 and before 10/27/2017
10	Hired on or after 7/1/2016	Hired on or after 7/1/2016	Hired on or after 10/27/2017

The benefit is paid monthly beginning at age 65 for the life of the member.

Benefit Amount - Computed as normal retirement but based upon service and average annual compensation and benefit formula at time of termination.

Disability Retirement:

Eligibility - Vested, and certification by the State Medical Director.

Benefit Amount - Computed as normal retirement but based upon service and average annual compensation at time of termination, but not less than the amounts below:

Years of Service	Minimum Monthly Benefit
100% Vesting	\$200
10	\$360
20	\$720

Death Before Retirement:

Eligibility - Death of participant before commencement of benefits and after eligibility for normal or early retirement.

Benefit Amount - The spouse will receive an allowance of 75% (50% for Police Local Union No. 1859) of the normal or early retirement benefit the member would have received if they had retired on the day before death and elected a 75% (50% for Police Local Union No. 1859) joint and survivor benefit.



Cost-of-Living Adjustment (COLA) Increases:

Pensions of retirees and beneficiaries, excluding members who retire from deferred vested status, who have been receiving payments for at least 13 months shall be granted a COLA on each of the following dates. Local 1300 union and Local 2 union received COLAs on 8/1/2019, 8/1/2020, 8/1/2021, 8/1/2022, 8/1/2023, and 8/1/2024. The Local 1859 union also received COLAs on 8/1/2019, 8/1/2022, 8/1/2023, and 8/1/2024. The Local 1859 union also received COLAs on 8/1/2019, 8/1/2022, 8/1/2023, and 8/1/2024. The percentage increase is equal to the increase in the Consumer Price Index (CPI-U, U.S. City Average, 1967=100) for the preceding fiscal year (July 1 to June 30), subject to a maximum increase of 3% annually.

Employee Contributions:

Effective July 1, 2016 for Local 2 and Local 1300 and effective October 27, 2017 for Local 1859, employees shall contribute 2% of pensionable earnings to the MTA Pension Plan. Local 1300 participants contribution increased to 3% effective July 1, 2019 and 4% effective July 1, 2020. Local 2 participants contribution increased 3% effective July 1, 2020 and 4% effective July 1, 2021. Local 1300 participant contributions increased to 5% effective January 8, 2023 and 6% effective July 1, 2024. Local 2 contributions increased to 6% effective January 8, 2023 and 6% effective July 1, 2024. Local 2 contributions increased to 6% effective November 6, 2023. Local 1859 contributions increased to 4% effective December 26, 2021. Contributions shall continue until such time as the plan actuary certifies that the market value funded ratio equals or exceeds 100%. Once the 100% funded ratio is reached, employee contributions shall cease. If the funded ratio falls below 95%, employee contributions shall resume until the funded ratio returns to 100%. Employees who separate before becoming eligible for a Normal, Early, Disability, or Deferred Vested pension benefit shall be entitled to a return of their contributions plus interest computed at 5.0% compounded annually.

This is a brief summary of the MTA Pension Plan provisions. In the event that any description contained herein differs from the actual eligibility or benefit, the appropriate contract or governing document will prevail.



SECTION G

GLOSSARY

Glossary

Actuarial Accrued Liability (AAL)	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
Actuarial Assumptions	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.
Actuarial Cost Method	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of future Normal Costs and the Actuarial Accrued Liability.
Actuarially Determined Employer Contribution (ADEC)	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADEC consists of the Employer Normal Cost and Amortization Payment.
Actuarial Equivalent	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial Present Value (APV)	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
Actuarial Present Value of Future Benefits (APVFB)	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial Valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 25, such as the Funded Ratio and the Annual Required Contribution (ARC).
Actuarial Value of Assets	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially required contribution (ARC).



Glossary

Amortization Method	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of covered employee payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which covered employee payroll of all active members is assumed to increase.
Amortization Payment	That portion of the plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
Amortization Period	The period used in calculating the Amortization Payment.
Closed Amortization Period	A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.
Employer Normal Cost	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Equivalent Single Amortization Period	For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.
Experience Gain/Loss	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.



Glossary

Funded Ratio	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
GASB	Governmental Accounting Standards Board.
Normal Cost	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
Open Amortization Period	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered employee payroll.
Unfunded Actuarial Accrued Liability	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.

