

# Maryland Transit Administration Pension Plan

GASB Statement Nos. 67 and 68 Accounting and Financial  
Reporting for Pensions  
June 30, 2024





November 8, 2024

Ms. Laurie M. Brown  
Deputy Chief Financial Officer  
Maryland Transit Administration  
6 St. Paul Street, Suite 841  
Baltimore, Maryland 21202

Dear Ms. Brown:

This report provides information on behalf of the Maryland Transit Administration (MTA) Pension Plan that is intended to comply with Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 68 for the Maryland Transit Administration Pension Plan. These calculations have been made on a basis that is consistent with our understanding of these Statements.

GASB Statement No. 67 is the accounting standard that applies to the stand-alone financial reports issued by retirement systems. GASB Statement No. 68 establishes accounting and financial reporting for state and local government employers who provide their employees (including former employees) pension benefits through a trust.

The calculation of the liability associated with the benefits described in this report was performed for the purpose of providing reporting and disclosure information that satisfies the requirements of GASB Statement Nos. 67 and 68. The calculation of the plan's liability for this report is not applicable for funding purposes of the plan.

A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statement Nos. 67 and 68 may produce significantly different results. This report may be provided to parties other than the MTA only in its entirety and only with the permission of the MTA and the Board. GRS is not responsible for unauthorized use of this report.

The Net Pension Liability is not an appropriate measure for measuring the sufficiency of plan assets to cover the estimated cost of settling the employer's benefit obligation, nor is it an appropriate measure for assessing the need for or amount of future employer contributions.

This report is based upon information, provided to us by the MTA, concerning retirement and ancillary benefits, active members, deferred vested members, retirees and beneficiaries, and financial data. This information was checked for internal consistency, but it was not audited. We are not responsible for the accuracy or completeness of the information provided by the MTA.

This report complements the actuarial valuation report that was provided to the Maryland Transit Administration Pension Plan and should be considered in conjunction with that report. Please see the actuarial valuation report as of July 1, 2024 for additional discussion of the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

The actuarial assumptions in this report are the same as those used in the June 30, 2024 actuarial valuation with the following exceptions:

- The actuarial cost method is the Entry-age Normal Cost method, as required by GASB.
- Projected benefits for purposes of calculating the Single Discount Rate (SDR) and resulting liabilities in this report included an assumed Cost-of-Living Adjustment (COLA) of 2.00%.

Actuarial assumptions were last reviewed in the Experience Study report dated July 20, 2023 covering the 4-year period from July 1, 2018 through June 30, 2022, which includes the rationale for the assumptions. The decrease in the Single Discount Rate (SDR) from 5.37% to 5.35% was reflected as an assumption change in this report and increased the Total Pension Liability by approximately \$3.2M.

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.

To the best of our knowledge, the information contained within this report is accurate and fairly represents the actuarial position of the Maryland Transit Administration Pension Plan. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as with the Actuarial Standards of Practice issued by the Actuarial Standards Board.




Ms. Laurie M. Brown  
Maryland Transit Administration  
November 8, 2024  
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This information is intended to assist in preparation of the financial statements of the Maryland Transit Administration Pension Plan. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

The signing actuaries are independent of the plan sponsor.

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.

Respectfully submitted,  
Gabriel, Roeder, Smith & Company



Brad Lee Armstrong, ASA, EA, FCA, MAAA



Derek Henning, ASA, EA, FCA, MAAA



Kevin T. Noelke, ASA, FCA, MAAA

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Auditor's Note – This information is intended to assist in preparation of the financial statements of the Maryland Transit Administration. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.



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# SECTION A



## EXECUTIVE SUMMARY

# Executive Summary

Actuarial Valuation Date	July 1, 2024
Measurement Date of the Net Pension Liability	June 30, 2024
Employer's Fiscal Year Ending Date (Reporting Date)	June 30, 2024

## Membership

Number of	
- Retirees and Beneficiaries	2,272
- Inactive, Nonretired Members	715
- Active Members	2,475
- Total	5,462
Covered Employee Payroll #	\$ 187,149,685

## Net Pension Liability

Total Pension Liability	\$ 1,294,887,019
Plan Fiduciary Net Position	533,694,916
Net Pension Liability	\$ 761,192,103
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	41.22%
Net Pension Liability as a Percentage of Covered Employee Payroll	406.73%

## Development of the Single Discount Rate

Single Discount Rate, End of Year	5.35%
Single Discount Rate, Beginning of Year	5.37%
Long-Term Expected Rate of Investment Return, End of Year	6.80%
Long-Term Expected Rate of Investment Return, Beginning of Year	6.80%
Long-Term Municipal Bond Rate, End of Year *	3.97%
Long-Term Municipal Bond Rate, Beginning of Year *	3.86%
Last year ending June 30 in the 2025 to 2124 projection period for which projected benefit payments are fully funded	2053

<b>Total Pension Expense</b>	\$ 9,265,159
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## Deferred Outflows and Deferred Inflows of Resources by Source to be Recognized in Future Pension Expenses

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	\$ 32,264,867	\$ 31,824,490
Changes in assumptions	66,429,925	214,726,585
Net difference between projected and actual earnings on pension plan investments	27,045,431	13,581,590
<b>Total</b>	<b>\$ 125,740,223</b>	<b>\$ 260,132,665</b>

\*Source: Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2023 and June 30, 2024. In describing this index, Fidelity notes that the municipal curves are constructed using option-adjusted analytics of a diverse population of over 10,000 tax-exempt securities.

# Valuation payroll as of June 30, 2024.





# Discussion

## Accounting Standard

For pension plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 67 establishes standards of financial reporting for separately issued financial reports and specifies the required approach for measuring the pension liability. Similarly, GASB Statement No. 68 establishes standards for state and local government employers (as well as non-employer contributing entities) to account for and disclose the Net Pension Liability, Pension Expense, and other information associated with providing retirement benefits to their employees (and former employees) on their basic financial statements.

The following discussion provides a summary of the information that is required to be disclosed under these accounting standards. A number of these disclosure items are provided in this report. However, certain information is not included in this report if it is not actuarial in nature, such as the notes to the financial statements regarding accounting policies and investments. As a result, the retirement system and/or plan sponsor is responsible for preparing and disclosing the non-actuarial information needed to comply with these accounting standards.

## Financial Statements

GASB Statement No. 68 requires state and local government employers that contribute to DB pension plans to recognize the Net Pension Liability and the pension expense on their financial statements, along with the related deferred outflows of resources and deferred inflows of resources. The Net Pension Liability is the difference between the Total Pension Liability and the plan's Fiduciary Net Position. In traditional actuarial terms, this is analogous to the accrued liability less the Market Value of Assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

Paragraph 57 of GASB Statement No. 68 states, "Contributions to the pension plan from the employer subsequent to the measurement date of the collective Net Pension Liability and before the end of the employer's reporting period should be reported as a deferred outflow of resources related to pensions." The information contained in this report does not incorporate any contributions made to the Maryland Transit Administration Pension Plan subsequent to the measurement date of June 30, 2024.

The Pension Expense recognized each fiscal year is equal to the change in the Net Pension Liability from the beginning of the year to the end of the year, adjusted for deferred recognition of the certain changes in the liability and investment experience. Please see page 6 for more details.

Pension plans that prepare their own, stand-alone financial statements are required to present two financial statements – a statement of Fiduciary Net Position and a statement of changes in Fiduciary Net Position in accordance with GASB Statement No. 67. The statement of Fiduciary Net Position presents the assets and liabilities of the pension plan at the end of the pension plan's reporting period. The statement of changes in Fiduciary Net Position presents the additions, such as contributions and investment income, and deductions, such as benefit payments and expenses, and net increase or decrease in the Fiduciary Net Position.

# Discussion

## Notes to Financial Statements

GASB Statement No. 68 requires the notes of the employer's financial statements to disclose the total pension expense, the pension plan's liabilities and assets, and deferred outflows and inflows of resources related to pensions.

GASB Statement Nos. 67 and 68 require the notes of the financial statements for the employers and pension plans, to include certain additional information. The list of disclosure items should include:

- A description of benefits provided by the plan;
- The type of employees and number of members covered by the pension plan;
- A description of the plan's funding policy, which includes member and employer contribution requirements;
- The pension plan's investment policies;
- The pension plan's Fiduciary Net Position, Net Pension Liability, and the pension plan's Fiduciary Net Position as a percentage of the Total Pension Liability;
- The Net Pension Liability using a discount rate that is 1% higher and 1% lower than used to calculate the Total Pension Liability and Net Pension Liability for financial reporting purposes;
- Significant assumptions and methods used to calculate the Total Pension Liability;
- Inputs to the discount rates; and
- Certain information about mortality assumptions and the dates of experience studies.

Retirement systems that issue stand-alone financial statements are required to disclose additional information in accordance with GASB Statement No. 67. This information includes:

- The composition of the pension plan's Board and the authority under which benefit terms may be amended;
- A description of how fair value is determined;
- Information regarding certain reserves and investments, which include concentrations of investments greater than or equal to 5%, receivables, and insurance contracts excluded from plan assets; and
- Annual money-weighted rate of return.

## Required Supplementary Information

The financial statements of employers also include required supplementary information showing the 10-year fiscal history of:

- Sources of changes in the Net Pension Liability;
- Information about the components of the Net Pension Liability and related ratios, including the pension plan's Fiduciary Net Position as a percentage of the Total Pension Liability, and the Net Pension Liability as a percent of covered employee payroll; and
- A comparison of actual employer contributions to the actuarially determined contributions based on the plan's funding policy.

## Discussion

While the first two tables may be built prospectively as the information becomes available, sufficient information is currently available for the third table.

### Frequency and Timing of the Valuation

An actuarial valuation to determine the total pension liability is required to be performed at least every two years. For employer reporting, the net pension liability and pension expense should be measured as of a date (measurement date) no earlier than the end of the employer's prior fiscal year, consistently applied from period to period. If the actuarial valuation used to determine the total pension liability is not calculated as of the measurement date, the total pension liability is required to be rolled forward from the actuarial valuation date to the measurement date.

The Total Pension Liability shown in this report is based on an actuarial valuation performed as of July 1, 2024 and a measurement date of June 30, 2024.

### Benefits Valued

The benefit provisions that were valued in this report are the same as those stated in the July 1, 2024 actuarial valuation. They are required to be performed on the current benefit terms and existing legal agreements. Consideration is to be given to the written plan document as well as other communications between the employer and plan members and an established pattern of practice for cost sharing. The summary of major plan provisions is designed to outline principal plan benefits. If the plan summary is not in accordance with the actual provisions, please alert the actuaries immediately so they can both be sure the proper provisions are valued.

### Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects: (1) a long-term expected rate of return on pension plan investments (to the extent that the plan's Fiduciary Net Position is projected to be sufficient to pay benefits); and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the plan's projected Fiduciary Net Position is not sufficient to pay benefits).

For the purpose of this valuation, the expected rate of return on pension plan investments is 6.80%; the municipal bond rate is 3.97%; and the resulting Single Discount Rate is 5.35%.

# Discussion

## Actuarial Assumptions

The actuarial assumptions in this report are the same as those used in the July 1, 2024 actuarial valuation with the following exceptions:

- The actuarial cost method is the Entry-age Normal Cost method, as required by GASB.
- Projected benefits for purposes of calculating the Single Discount Rate (SDR) and resulting liabilities in this report included an assumed Cost-of-Living Adjustment (COLA) of 2.00%.

Actuarial assumptions were last reviewed in the Experience Study report dated July 20, 2023 covering the four-year period from July 1, 2018 through June 30, 2022, which includes the rationale for the assumptions. The decrease in the Single Discount Rate (SDR) from 5.37% to 5.35% was reflected as an assumption change in this report and increased the Total Pension Liability by approximately \$2.4M.

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

Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 6.80% on the actuarial value of assets), then the following outcomes are expected:

1. The employer normal cost as a percentage of pay is expected to remain level as a percentage of payroll.
2. The unfunded liability is not expected to be fully amortized during the lifetimes of current members.
3. The funded status of the plan is expected to increase gradually towards a 100% funded ratio.

This funding policy results in an expected crossover date in 2053 and a GASB single discount rate of 5.35%. The projections in this report are strictly for the purpose of determining the GASB single discount rate and are different from a funding projection for the ongoing plan.

**SECTION B**

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**FINANCIAL STATEMENTS**

# Statement of Pension Expense under GASB Statement No. 68

## Fiscal Years Ended June 30

A. Expense	2024	2023
1. Service Cost	\$ 31,691,278	\$ 29,388,577
2. Interest on the Total Pension Liability	65,254,685	62,494,802
3. Current-Period Benefit Changes	-	-
4. Employee Contributions (made negative for addition here)	(10,103,899)	(8,302,217)
5. Projected Earnings on Plan Investments (made negative for addition here)	(33,572,669)	(31,715,965)
6. Pension Plan Administrative Expense	173,091	146,346
7. Other Changes in Plan Fiduciary Net Position	-	-
8. Recognition of Outflow (Inflow) of Resources due to Liabilities	(45,120,912)	(79,623,606)
9. Recognition of Outflow (Inflow) of Resources due to Assets	943,585	(443,457)
<b>10. Total Pension Expense</b>	<b>\$ 9,265,159</b>	<b>\$ (28,055,520)</b>

# Statement of Outflows and Inflows Arising from Current Reporting Period Fiscal Year Ended June 30, 2024

## A. Outflows (Inflows) of Resources Due to Liabilities

1. Difference between expected and actual experience of the Total Pension Liability (gains) or losses	\$ 22,079,577
2. Assumption Changes (gains) or losses	\$ 3,207,044
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}	5.0000
4. Outflow (Inflow) of Resources to be recognized in the current pension expense for the difference between expected and actual experience of the Total Pension Liability	\$ 4,415,915
5. Outflow (Inflow) of Resources to be recognized in the current pension expense for Assumption Changes	\$ 641,409
6. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Liabilities	\$ 5,057,324
7. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for the difference between expected and actual experience of the Total Pension Liability	\$ 17,663,662
8. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses for Assumption Changes	\$ 2,565,635
9. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Liabilities	\$ 20,229,297

## B. Outflows (Inflows) of Resources Due to Assets

1. Net difference between projected and actual earnings on pension plan investments (gains) or losses	\$ (57,022)
2. Recognition period for Assets {in years}	5.0000
3. Outflow (Inflow) of Resources to be recognized in the current pension expense due to Assets	\$ (11,404)
4. Deferred Outflow (Inflow) of Resources to be recognized in future pension expenses due to Assets	\$ (45,618)

# Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods Fiscal Year Ended June 30, 2024

## A. Outflows and Inflows of Resources Due to Liabilities and Assets to be Recognized in Current Pension Expense

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Due to Liabilities	\$ 49,116,134	\$ 94,237,046	\$ (45,120,912)
2. Due to Assets	14,490,960	13,547,375	943,585
<b>3. Total</b>	<b>\$ 63,607,094</b>	<b>\$ 107,784,421</b>	<b>\$ (44,177,327)</b>

## B. Outflows and Inflows of Resources by Source to be Recognized in Current Pension Expense

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Differences between expected and actual experience	\$ 8,066,217	\$ 14,589,926	\$ (6,523,709)
2. Assumption Changes	41,049,917	79,647,120	(38,597,203)
3. Net Difference between projected and actual earnings on pension plan investments	14,490,960	13,547,375	943,585
<b>4. Total</b>	<b>\$ 63,607,094</b>	<b>\$ 107,784,421</b>	<b>\$ (44,177,327)</b>

## C. Deferred Outflows and Deferred Inflows of Resources by Source to be Recognized in Future Pension Expenses

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows of Resources
1. Differences between expected and actual experience	\$ 32,264,867	\$ 31,824,490	\$ 440,377
2. Assumption Changes	66,429,925	214,726,585	(148,296,660)
3. Net Difference between projected and actual earnings on pension plan investments	27,045,431	13,581,590	13,463,841
<b>4. Total</b>	<b>\$ 125,740,223</b>	<b>\$ 260,132,665</b>	<b>\$ (134,392,442)</b>

## D. Deferred Outflows and Deferred Inflows of Resources by Year to be Recognized in Future Pension Expenses

Year Ending June 30	Net Deferred Outflows of Resources
2025	\$ (35,721,387)
2026	(36,281,442)
2027	(66,212,796)
2028	3,823,183
2029	-
Thereafter	-
<b>Total</b>	<b>\$ (134,392,442)</b>



# Recognition of Deferred Outflows and Inflows of Resources

## Fiscal Year Ended June 30, 2024

Year Established	Initial Amount	Initial Recognition Period	Current Year Recognition	Remaining Recognition	Remaining Recognition Period
<b>Deferred Outflow (Inflow) Due to Differences between Expected and Actual Experience on Liabilities</b>					
2018	\$ 17,384,864	6.0000	\$ -	\$ -	0.0000
2019	(8,527,580)	6.0000	(1,421,265)	-	0.0000
2020	(17,140,142)	6.0000	(2,856,690)	(2,856,692)	1.0000
2021	(11,808,688)	6.0000	(1,968,115)	(3,936,228)	2.0000
2022	(50,063,138)	6.0000	(8,343,856)	(25,031,570)	3.0000
2023	21,901,809	6.0000	3,650,302	14,601,205	4.0000
2024	22,079,577	5.0000	4,415,915	17,663,662	4.0000
<b>Total</b>			<b>\$ (6,523,709)</b>	<b>\$ 440,377</b>	
<b>Deferred Outflow (Inflow) Due to Assumption Changes</b>					
2018	\$ (36,902,711)	6.0000	-	-	0.0000
2019	(58,175,626)	6.0000	(9,695,936)	-	0.0000
2020	101,716,323	6.0000	16,952,721	16,952,718	1.0000
2021	140,734,720	6.0000	23,455,787	46,911,572	2.0000
2022	(390,468,904)	6.0000	(65,078,151)	(195,234,451)	3.0000
2023	(29,238,200)	6.0000	(4,873,033)	(19,492,134)	4.0000
2024	3,207,044	5.0000	641,409	2,565,635	4.0000
<b>Total</b>			<b>\$ (38,597,203)</b>	<b>\$ (148,296,660)</b>	
<b>Deferred Outflow (Inflow) Due to Differences between Projected and Actual Earnings on Plan Investments</b>					
2020	\$ 13,306,275	5.0000	\$ 2,661,255	\$ -	0.0000
2021	(67,679,856)	5.0000	(13,535,971)	(13,535,972)	1.0000
2022	42,218,424	5.0000	8,443,685	16,887,369	2.0000
2023	16,930,102	5.0000	3,386,020	10,158,062	3.0000
2024	(57,022)	5.0000	(11,404)	(45,618)	4.0000
<b>Total</b>			<b>\$ 943,585</b>	<b>\$ 13,463,841</b>	

According to paragraph 33 of GASB Statement No. 68, differences between expected and actual experience and changes in assumptions are recognized in pension expense using a systematic and rational method over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the pension plan (active employees and inactive employees) determined as of the beginning of the measurement period.

At the beginning of the current measurement period, the expected remaining service lives of all active employees in the plan was approximately 26,145 years. Additionally, the total plan membership (active DB employees and inactive employees) was 5,229. As a result, the average of the expected remaining service lives for purposes of recognizing the applicable deferred outflows and inflows of resources established in the current measurement period is 5.0000 years.

Additionally, differences between projected and actual earnings on pension plan investments should be recognized in pension expense using a systematic and rational method over a closed five-year period. For this purpose, the deferred outflows and inflows of resources are recognized in the pension expense as a level dollar amount over the closed period identified above.



## Statement of Fiduciary Net Position as of June 30, 2024

<b>Assets</b>	
Cash and Cash Equivalents	\$ 15,109,960
Collateral for Loaned Securities	<u>32,184,682</u>
Total Cash	<u>\$ 47,294,642</u>
Investments	
U.S. Government Obligations	\$ 46,694,434
Domestic Corporate Obligations	22,185,966
International Obligations	13,482,064
Domestic Stocks	85,620,413
International Stocks	78,779,322
Mortgage and Mortgage Related Securities	15,452,636
Alternative Investments	<u>258,177,503</u>
Total Investments	<u>\$ 520,392,338</u>
Receivables	
Accrued Investment Income	\$ 1,573,124
Investment Sales Proceeds	<u>1,856,657</u>
Total Receivables	<u>\$ 3,429,781</u>
<b>Total Assets</b>	<u><b>\$ 571,116,761</b></u>
<b>Liabilities</b>	
Obligation for Collateral for Loaned Securities	\$ 32,184,682
Manager fees payable	97,470
Investment purchases payable	<u>5,139,693</u>
<b>Total Liabilities</b>	<u><b>\$ 37,421,845</b></u>
<b>Net Position Held in Trust for Pension Benefits</b>	<u><b>\$ 533,694,916</b></u>

## Statement of Changes in Fiduciary Net Position for Year Ended June 30, 2024

### Additions

Contributions		
Employer	\$	56,110,153
Employee		<u>10,103,899</u>
Total Contributions	\$	<u>66,214,052</u>
Investment Income		
Net Appreciation in Fair Value of Investments	\$	14,132,573
Interest and Dividends		22,770,194
Net Income from Securities Lending Activities		171,265
Less Investment Expense		<u>(3,444,342)</u>
Total Investment Income	\$	<u>33,629,690</u>
<b>Total Additions</b>	<b>\$</b>	<b><u>99,843,742</u></b>

### Deductions

Benefit Payments	\$	53,341,941
Administrative Expense		173,091
Other		<u>-</u>
<b>Total Deductions</b>	<b>\$</b>	<b><u>53,515,032</u></b>

**Net Increase in Net Position** \$ 46,328,710

### Net Position Held in Trust for Pension Benefits

Beginning of Year	\$	<u>487,366,205</u>
Adjustments	\$	<u>1</u>
End of Year	\$	<u>533,694,916</u>

## SECTION C

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### REQUIRED SUPPLEMENTARY INFORMATION

# Schedule of Changes in Net Pension Liability and Related Ratios

## Current Period

### Fiscal Year Ended June 30, 2024

#### A. Total Pension Liability

1. Service Cost	\$	31,691,278
2. Interest on the Total Pension Liability		65,254,685
3. Changes of benefit terms		-
4. Difference between expected and actual experience of the Total Pension Liability		22,079,577
5. Changes of assumptions		3,207,044
6. Benefit payments, including refunds of employee contributions		(53,341,941)
7. Net change in Total Pension Liability	\$	68,890,643
8. Total Pension Liability – Beginning		1,225,996,376
9. Total Pension Liability – Ending	\$	<u><u>1,294,887,019</u></u>

#### B. Plan Fiduciary Net Position

1. Contributions – employer	\$	56,110,153
2. Contributions – employee		10,103,899
3. Net investment income		33,629,690
4. Benefit payments, including refunds of employee contributions		(53,341,941)
5. Pension Plan Administrative Expense		(173,091)
6. Other <sup>#</sup>		1
7. Net change in Plan Fiduciary Net Position	\$	46,328,711
8. Plan Fiduciary Net Position – Beginning		487,366,205
9. Plan Fiduciary Net Position – Ending	\$	<u><u>533,694,916</u></u>

#### C. Net Pension Liability

\$ 761,192,103

#### D. Plan Fiduciary Net Position as a percentage of the Total Pension Liability

41.22%

#### E. Covered-Employee Payroll \*

\$ 187,149,685

#### F. Net Pension Liability as a percentage of Covered-Employee Payroll

406.73%

\* Covered-Employee Payroll shown is the valuation payroll.

# Includes BOY adjustments, if applicable.



# Schedules of Required Supplementary Information

## Schedule of Changes in Net Pension Liability and Related Ratios Multiyear

Fiscal year ending June 30,	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
<b>Total Pension Liability</b>										
Service Cost	\$ 31,691,278	\$ 29,388,577	\$ 50,802,171	\$ 43,826,625	\$ 42,307,645	\$ 36,026,872	\$ 37,194,586	\$ 36,333,940	\$ 48,498,923	\$ 24,718,074
Interest on the Total Pension Liability	65,254,685	62,494,802	51,484,768	56,405,792	55,831,451	56,518,997	54,904,314	57,880,638	31,181,033	39,236,563
Benefit Changes	-	-	-	-	208,455	(202,648)	3,105,575	2,132,647	82,510,189	-
Difference between Expected and Actual Experience	22,079,577	21,901,809	(50,063,138)	(11,808,688)	(17,140,142)	(8,527,580)	17,384,864	(20,741,099)	(15,023,996)	(19,621,279)
Assumption Changes	3,207,044	(29,238,200)	(390,468,904)	140,734,720	101,716,323	(58,175,626)	(36,902,711)	(162,605,699)	338,949,559	53,480,106
Benefit Payments, including refunds of contributions	(53,341,941)	(50,465,093)	(47,453,399)	(44,735,513)	(44,432,068)	(42,723,850)	(37,203,253)	(39,062,347)	(35,283,202)	(30,636,207)
<b>Net Change in Total Pension Liability</b>	<b>68,890,643</b>	<b>34,081,895</b>	<b>(385,698,502)</b>	<b>184,422,936</b>	<b>138,491,664</b>	<b>(17,083,835)</b>	<b>38,483,375</b>	<b>(126,061,920)</b>	<b>450,832,506</b>	<b>67,177,257</b>
<b>Total Pension Liability - Beginning</b>	<b>1,225,996,376</b>	<b>1,191,914,481</b>	<b>1,577,612,983</b>	<b>1,393,190,047</b>	<b>1,254,698,383</b>	<b>1,271,782,218</b>	<b>1,233,298,843</b>	<b>1,359,360,763</b>	<b>908,528,257</b>	<b>841,351,000</b>
<b>Total Pension Liability - Ending (a)</b>	<b>\$ 1,294,887,019</b>	<b>\$ 1,225,996,376</b>	<b>\$ 1,191,914,481</b>	<b>\$ 1,577,612,983</b>	<b>\$ 1,393,190,047</b>	<b>\$ 1,254,698,383</b>	<b>\$ 1,271,782,218</b>	<b>\$ 1,233,298,843</b>	<b>\$ 1,359,360,763</b>	<b>\$ 908,528,257</b>
<b>Plan Fiduciary Net Position</b>										
Employer Contributions	\$ 56,110,153	\$ 54,647,403	\$ 68,605,836	\$ 59,279,675	\$ 43,249,926	\$ 41,597,059	\$ 40,997,059	\$ 40,997,059	\$ 40,997,059	\$ 35,400,000
Employee Contributions	10,103,899	8,302,217	6,832,690	7,311,254	4,609,744	3,005,759	3,315,683	3,094,029	-	-
Pension Plan Net Investment Income	33,629,690	14,785,863	(10,985,822)	93,212,724	12,831,812	31,023,630	20,550,290	27,740,945	12,767,932	14,044,525
Benefit Payments, including refunds of contributions	(53,341,941)	(50,465,093)	(47,453,399)	(44,735,513)	(44,432,068)	(42,723,850)	(37,203,253)	(39,062,347)	(35,283,202)	(30,636,207)
Pension Plan Administrative Expense	(173,091)	(146,346)	(4,135,115)	(3,602,429)	(2,651,571)	(2,325,372)	(2,213,277)	(1,914,322)	(1,967,196)	(1,850,637)
Other#	1	-	-	-	-	(6,719,636)	-	(2,630,692)	-	-
<b>Net Change in Plan Fiduciary Net Position</b>	<b>46,328,711</b>	<b>27,124,044</b>	<b>12,864,190</b>	<b>111,465,711</b>	<b>13,607,843</b>	<b>23,857,590</b>	<b>25,446,502</b>	<b>28,224,672</b>	<b>16,514,593</b>	<b>16,957,681</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>487,366,205</b>	<b>460,242,161</b>	<b>447,377,971</b>	<b>335,912,260</b>	<b>322,304,417</b>	<b>298,446,827</b>	<b>273,000,325</b>	<b>244,775,653</b>	<b>228,261,060</b>	<b>211,303,379</b>
<b>Plan Fiduciary Net Position - Ending (b)</b>	<b>\$ 533,694,916</b>	<b>\$ 487,366,205</b>	<b>\$ 460,242,161</b>	<b>\$ 447,377,971</b>	<b>\$ 335,912,260</b>	<b>\$ 322,304,417</b>	<b>\$ 298,446,827</b>	<b>\$ 273,000,325</b>	<b>\$ 244,775,653</b>	<b>\$ 228,261,060</b>
<b>Net Pension Liability - Ending (a) - (b)</b>	<b>761,192,103</b>	<b>738,630,171</b>	<b>731,672,320</b>	<b>1,130,235,012</b>	<b>1,057,277,787</b>	<b>932,393,966</b>	<b>973,335,391</b>	<b>960,298,518</b>	<b>1,114,585,110</b>	<b>680,267,197</b>
<b>Plan Fiduciary Net Position as a Percentage of Total Pension Liability</b>	<b>41.22 %</b>	<b>39.75 %</b>	<b>38.61 %</b>	<b>28.36 %</b>	<b>24.11 %</b>	<b>25.69 %</b>	<b>23.47 %</b>	<b>22.14 %</b>	<b>18.01 %</b>	<b>25.12 %</b>
<b>Covered-Employee Payroll*</b>	<b>\$ 187,149,685</b>	<b>\$ 170,004,336</b>	<b>\$ 163,102,050</b>	<b>\$ 164,552,701</b>	<b>\$ 149,767,952</b>	<b>\$ 148,444,632</b>	<b>\$ 145,833,561</b>	<b>\$ 137,153,770</b>	<b>\$ 137,427,168</b>	<b>\$ 135,544,813</b>
<b>Net Pension Liability as a Percentage of Covered-Employee Payroll</b>	<b>406.73 %</b>	<b>434.48 %</b>	<b>448.60 %</b>	<b>686.85 %</b>	<b>705.94 %</b>	<b>628.11 %</b>	<b>667.43 %</b>	<b>700.16 %</b>	<b>811.04 %</b>	<b>501.88 %</b>

**Notes to Schedule:**

\* Covered-Employee Payroll shown is the valuation payroll.

# Includes BOY adjustments, if applicable.

Results prior to FYE 2021 were not calculated by GRS.



## Schedule of Required Supplementary Information Schedule of the Net Pension Liability

FY Ending June 30,	Total Pension Liability #	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered-Employee Payroll *	Net Pension Liability as a % of Covered- Employee Payroll
2015	\$ 908,528,257	\$ 228,261,060	\$ 680,267,197	25.12%	\$ 135,544,813	501.88%
2016	1,359,360,763	244,775,653	1,114,585,110	18.01%	137,427,168	811.04%
2017	1,233,298,843	273,000,325	960,298,518	22.14%	137,153,770	700.16%
2018	1,271,782,218	298,446,827	973,335,391	23.47%	145,833,561	667.43%
2019	1,254,698,383	322,304,417	932,393,966	25.69%	148,444,632	628.11%
2020	1,393,190,047	335,912,260	1,057,277,787	24.11%	149,767,952	705.94%
2021	1,577,612,983	447,377,971	1,130,235,012	28.36%	164,552,701	686.85%
2022	1,191,914,481	460,242,161	731,672,320	38.61%	163,102,050	448.60%
2023	1,225,996,376	487,366,205	738,630,171	39.75%	170,004,336	434.48%
2024	1,294,887,019	533,694,916	761,192,103	41.22%	187,149,685	406.73%

\* Covered-Employee Payroll shown is the valuation payroll.

# Results prior to FYE 2021 were not calculated by GRS.

## Schedule of Contributions Multiyear

FY Ending June 30,	Actuarially Determined Contribution #	Actual Contribution	Contribution Deficiency (Excess)	Covered-Employee Payroll *	Actual Contribution as a % of Covered- Employee Payroll
2015	\$ 40,807,270	\$ 35,400,000	\$ 5,407,270	\$ 135,544,813	26.12%
2016	44,736,075	40,997,059	3,739,016	137,427,168	29.83%
2017	62,217,185	40,997,059	21,220,126	137,153,770	29.89%
2018	66,495,406	40,997,059	25,498,347	145,833,561	28.11%
2019	64,648,783	41,597,059	23,051,724	148,444,632	28.02%
2020	55,213,341	43,249,926	11,963,415	149,767,952	28.88%
2021	58,841,684	59,279,675	(437,991)	164,552,701	36.02%
2022	53,638,723	68,605,836	(14,967,113)	163,102,050	42.06%
2023	55,926,030	54,647,403	1,278,627	170,004,336	32.14%
2024	54,407,351	56,110,153	(1,702,802)	187,149,685	29.98%

\* Covered-Employee Payroll shown is the valuation payroll.

# Contribution rates for FYE 2021 and prior were not calculated by GRS.



# Notes to Schedule of Contributions

**Valuation Date:** July 1, 2023  
**Notes** Actuarially determined contribution amounts are calculated as of July 1 each year, which is the beginning of the fiscal year in which contributions are reported.

**Methods and Assumptions Used to Determine Contribution Rates for FY Ending June 30, 2024:**

Actuarial Cost Method	Entry-Age - Level Dollar Normal Cost
Amortization Method	Level dollar, closed
Remaining Amortization Periods	3 -21 years
Asset Valuation Method	5-Year smoothed market for funding
Wage Inflation	2.75%
Salary Increases	2.75% to 10.55% including inflation
Investment Rate of Return	6.80%
Retirement Age	Age-based table of rates that are specific to the type of eligibility condition.
Mortality	<p><b>Pre-retirement:</b> The fully generational Pri-2012 Amount-Weighted Blue Collar Employee mortality table, sex distinct, with generational mortality improvements from 2012 using scale MP-2021.</p> <p><b>Post-retirement Healthy lives:</b> 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.</p> <p><b>Post-retirement Disabled lives:</b> The fully generational Pri-2012 Amount-Weighted Total Disabled Retiree mortality table, sex distinct, with generational mortality improvements from 2012 using scale MP-2021.</p>

**Other Information:**  
**Notes** N/A

## Sensitivity of Net Pension Liability to the Single Discount Rate Assumption

### Single Discount Rate

The Single Discount Rate used to measure the June 30, 2023 total pension liability was 5.37%. A Single Discount Rate of 5.35% was used to measure the June 30, 2024 total pension liability. This Single Discount Rate was based on a municipal bond rate of 3.97% and an expected rate of return on pension plan investments of 6.80%. The projection of cash flows used to determine this Single Discount Rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's Fiduciary Net Position and future contributions were sufficient to finance the benefit payments through the year 2053.

Regarding the sensitivity of the Net Pension Liability to changes in the Single Discount Rate, the following presents the plan's Net Pension Liability, calculated using a Single Discount Rate of 5.35%, as well as what the plan's Net Pension Liability would be if it were calculated using a Single Discount Rate that is 1-percentage-point lower or 1-percentage-point higher:

	<b>1% Decrease 4.35%</b>	<b>Current Single Discount Rate 5.35%</b>	<b>1% Increase 6.35%</b>
Total Pension Liability	\$ 1,471,661,045	\$ 1,294,887,019	\$ 1,148,217,608
Plan Fiduciary Net Position	533,694,916	533,694,916	533,694,916
Net Pension Liability/(Asset)	\$ 937,966,129	\$ 761,192,103	\$ 614,522,692

## **SECTION D**

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### **CALCULATION OF THE SINGLE DISCOUNT RATE**

## Calculation of the Single Discount Rate

GASB Statement No. 68 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Fiduciary Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a municipal bond rate is required, as described in the following paragraph.

The Single Discount Rate (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects: 1) the long-term expected rate of return on pension plan investments (during the period in which the Fiduciary Net Position is projected to be sufficient to pay benefits); and 2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 6.80%; the municipal bond rate is 3.97%; and the resulting SDR is 5.35%.

The tables in this section provide background for the development of the SDR.

The **Projection of Contributions** table shows the development of expected contributions in future years. Normal Cost contributions for future hires are not included (nor are their liabilities).

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years.

The **Present Values of Projected Benefit Payments** table shows the development of the SDR. It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

The projections in this report are strictly for the purpose of determining the GASB single discount rate and are different from a funding projection for the ongoing plan. Contribution amounts shown are strictly for the purpose of testing for a GASB depletion date and may differ from those determined by a funding valuation.

# Single Discount Rate Development Projection of Contributions Ending June 30, 2074

Year	Covered Employee Payroll	Service Cost Contributions and Contributions from Current Employees	Administrative Expense Contributions	UAL Contributions	Total Contributions
0	\$ 187,149,685				
1	191,776,455	\$ 16,721,649	\$ 177,370	\$ 52,452,429	\$ 69,351,448
2	184,703,977	15,404,135	170,829	52,661,452	68,236,416
3	179,271,832	14,335,683	165,805	39,144,173	53,645,661
4	173,712,154	13,376,464	160,663	39,639,926	53,177,053
5	168,375,151	12,525,201	155,727	39,713,133	52,394,061
6	162,344,719	11,750,770	150,149	39,713,133	51,614,052
7	156,240,291	11,042,855	144,504	39,713,133	50,900,492
8	150,108,245	10,369,239	138,832	39,681,443	50,189,514
9	144,287,870	9,739,126	133,449	39,675,490	49,548,066
10	138,470,253	9,130,755	128,068	39,675,490	48,934,313
11	132,870,883	8,561,589	122,890	39,675,490	48,359,969
12	127,480,908	8,027,094	117,905	39,861,134	48,006,133
13	121,999,878	7,510,896	112,835	39,861,134	47,484,864
14	116,748,306	7,022,660	107,978	39,861,134	46,991,772
15	111,389,204	6,548,941	103,022	39,861,134	46,513,097
16	105,995,267	6,089,873	98,033	37,270,778	43,458,683
17	100,664,983	5,654,159	93,103	33,762,165	39,509,427
18	95,132,509	5,224,936	87,986	36,535,408	41,848,330
19	89,655,426	4,813,726	82,921	37,373,383	42,270,031
20	84,093,345	4,412,590	77,776	36,073,760	40,564,126
21	78,497,971	4,026,582	72,601	2,248,628	6,347,811
22	72,882,784	3,655,817	67,408	2,039,557	5,762,783
23	66,994,985	3,285,794	61,962	568,960	3,916,716
24	61,101,603	2,929,090	56,512	73,207	3,058,808
25	55,217,578	2,587,682	51,070	-	2,638,752
26	49,349,681	2,260,176	45,643	-	2,305,819
27	43,739,341	1,957,564	40,454	-	1,998,018
28	38,388,540	1,678,589	35,505	-	1,714,094
29	33,429,856	1,428,398	30,919	-	1,459,317
30	28,790,285	1,202,155	26,628	-	1,228,783
31	24,566,755	1,002,832	22,721	-	1,025,553
32	20,914,734	835,391	19,344	-	854,735
33	17,679,850	690,940	16,352	-	707,292
34	14,883,891	569,107	13,766	-	582,873
35	12,394,056	463,484	11,463	-	474,947
36	10,242,239	373,993	9,473	-	383,466
37	8,347,492	297,796	7,720	-	305,516
38	6,714,382	234,092	6,210	-	240,302
39	5,324,790	181,552	4,925	-	186,477
40	4,108,535	136,944	3,800	-	140,744
41	3,164,272	102,950	2,927	-	105,877
42	2,374,108	75,503	2,196	-	77,699
43	1,777,726	55,267	1,644	-	56,911
44	1,303,858	39,603	1,206	-	40,809
45	947,535	28,050	876	-	28,926
46	700,557	20,286	648	-	20,934
47	515,220	14,636	477	-	15,113
48	370,320	10,216	343	-	10,559
49	252,169	6,811	233	-	7,044
50	160,822	4,220	149	-	4,369



# Single Discount Rate Development

## Projection of Plan Fiduciary Net Position

### Ending June 30, 2074

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 6.80%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
1	\$ 533,694,916	\$ 69,351,448	\$ 58,926,182	\$ 177,370	\$ 36,633,953	\$ 580,576,764
2	580,576,764	68,236,416	62,519,778	170,829	39,664,677	625,787,250
3	625,787,250	53,645,661	65,991,356	165,805	42,135,138	655,410,887
4	655,410,887	53,177,053	69,173,669	160,663	44,027,627	683,281,236
5	683,281,236	52,394,061	72,313,395	155,727	45,791,797	708,997,972
6	708,997,972	51,614,052	75,433,825	150,149	47,410,287	732,438,338
7	732,438,338	50,900,492	78,498,954	144,504	48,878,059	753,573,431
8	753,573,431	50,189,514	81,407,167	138,832	50,194,406	772,411,351
9	772,411,351	49,548,066	84,041,544	133,449	51,366,018	789,150,442
10	789,150,442	48,934,313	86,625,670	128,068	52,397,516	803,728,533
11	803,728,533	48,359,969	89,184,181	122,890	53,284,234	816,065,665
12	816,065,665	48,006,133	91,713,173	117,905	54,026,922	826,267,642
13	826,267,642	47,484,864	94,154,343	112,835	54,621,759	834,107,087
14	834,107,087	46,991,772	96,364,180	107,978	55,064,616	839,691,317
15	839,691,317	46,513,097	98,410,247	103,022	55,360,079	843,051,224
16	843,051,224	43,458,683	100,242,024	98,033	55,425,321	841,595,172
17	841,595,172	39,509,427	102,024,095	93,103	55,134,814	834,122,214
18	834,122,214	41,848,330	103,695,297	87,986	54,649,153	826,836,414
19	826,836,414	42,270,031	105,312,693	82,921	54,113,903	817,824,734
20	817,824,734	40,564,126	106,848,495	77,776	53,392,875	804,855,464
21	804,855,464	6,347,811	108,301,894	72,601	51,318,312	754,147,092
22	754,147,092	5,762,783	109,828,636	67,408	47,799,697	697,813,528
23	697,813,528	3,916,716	111,278,177	61,962	43,858,989	634,249,093
24	634,249,093	3,058,808	112,651,009	56,512	39,462,192	564,062,573
25	564,062,573	2,638,752	113,945,641	51,070	34,632,350	487,336,963
26	487,336,963	2,305,819	115,104,715	45,643	29,365,296	403,857,720
27	403,857,720	1,998,018	116,140,100	40,454	23,643,963	313,319,147
28	313,319,147	1,714,094	116,938,415	35,505	17,451,315	215,510,635
29	215,510,635	1,459,317	117,567,935	30,919	10,770,918	110,142,016
30	110,142,016	1,228,783	117,906,627	26,628	3,586,960	-
31	-	1,025,553	117,823,977	22,721	-	-
32	-	854,735	117,349,365	19,344	-	-
33	-	707,292	116,464,873	16,352	-	-
34	-	582,873	115,267,279	13,766	-	-
35	-	474,947	113,757,485	11,463	-	-
36	-	383,466	111,955,804	9,473	-	-
37	-	305,516	109,945,015	7,720	-	-
38	-	240,302	107,754,290	6,210	-	-
39	-	186,477	105,385,426	4,925	-	-
40	-	140,744	102,785,810	3,800	-	-
41	-	105,877	99,968,471	2,927	-	-
42	-	77,699	96,931,713	2,196	-	-
43	-	56,911	93,656,669	1,644	-	-
44	-	40,809	90,213,293	1,206	-	-
45	-	28,926	86,610,291	876	-	-
46	-	20,934	82,860,181	648	-	-
47	-	15,113	79,004,789	477	-	-
48	-	10,559	75,067,182	343	-	-
49	-	7,044	71,059,145	233	-	-
50	-	4,369	66,990,611	149	-	-



# Single Discount Rate Development

## Present Values of Projected Benefits

### Ending June 30, 2124

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments Using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments Using Municipal Bond Rate (v <sub>i</sub> )	Present Value of Benefit Payments Using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v <sup>(a)-.5</sup>	(g)=(e)*v <sub>i</sub> <sup>(a)-.5</sup>	(h)=(c)/(1+sdr) <sup>(a)-.5</sup>
1	\$ 533,694,916	\$ 58,926,182	\$ 58,926,182	\$ -	\$ 57,019,404	\$ -	\$ 57,410,978
2	580,576,764	62,519,778	62,519,778	-	56,644,865	-	57,819,902
3	625,787,250	65,991,356	65,991,356	-	55,983,355	-	57,932,233
4	655,410,887	69,173,669	69,173,669	-	54,946,677	-	57,643,097
5	683,281,236	72,313,395	72,313,395	-	53,783,383	-	57,200,329
6	708,997,972	75,433,825	75,433,825	-	52,532,037	-	56,639,471
7	732,438,338	78,498,954	78,498,954	-	51,185,945	-	55,948,728
8	753,573,431	81,407,167	81,407,167	-	49,702,502	-	55,075,985
9	772,411,351	84,041,544	84,041,544	-	48,043,913	-	53,971,804
10	789,150,442	86,625,670	86,625,670	-	46,368,144	-	52,807,160
11	803,728,533	89,184,181	89,184,181	-	44,698,163	-	51,606,845
12	816,065,665	91,713,173	91,713,173	-	43,039,014	-	50,376,094
13	826,267,642	94,154,343	94,154,343	-	41,371,351	-	49,091,512
14	834,107,087	96,364,180	96,364,180	-	39,646,396	-	47,693,036
15	839,691,317	98,410,247	98,410,247	-	37,910,294	-	46,233,092
16	843,051,224	100,242,024	100,242,024	-	36,157,252	-	44,702,904
17	841,595,172	102,024,095	102,024,095	-	34,456,970	-	43,187,886
18	834,122,214	103,695,297	103,695,297	-	32,791,564	-	41,666,933
19	826,836,414	105,312,693	105,312,693	-	31,182,616	-	40,168,580
20	817,824,734	106,848,495	106,848,495	-	29,622,996	-	38,685,432
21	804,855,464	108,301,894	108,301,894	-	28,114,177	-	37,221,029
22	754,147,092	109,828,636	109,828,636	-	26,695,229	-	35,829,537
23	697,813,528	111,278,177	111,278,177	-	25,325,429	-	34,459,494
24	634,249,093	112,651,009	112,651,009	-	24,005,494	-	33,113,666
25	564,062,573	113,945,641	113,945,641	-	22,735,370	-	31,793,854
26	487,336,963	115,104,715	115,104,715	-	21,504,342	-	30,486,801
27	403,857,720	116,140,100	116,140,100	-	20,316,271	-	29,199,420
28	313,319,147	116,938,415	116,938,415	-	19,153,483	-	27,907,602
29	215,510,635	117,567,935	117,567,935	-	18,030,517	-	26,633,454
30	110,142,016	117,906,627	110,142,016	7,764,611	15,816,161	2,462,252	25,354,211
31	-	117,823,977	-	117,823,977	-	35,936,712	24,050,209
32	-	117,349,365	-	117,349,365	-	34,425,270	22,737,316
33	-	116,464,873	-	116,464,873	-	32,861,208	21,420,356
34	-	115,267,279	-	115,267,279	-	31,281,428	20,123,850
35	-	113,757,485	-	113,757,485	-	29,692,890	18,852,037
36	-	111,955,804	-	111,955,804	-	28,106,777	17,611,575
37	-	109,945,015	-	109,945,015	-	26,548,008	16,417,250
38	-	107,754,290	-	107,754,290	-	25,025,509	15,273,295
39	-	105,385,426	-	105,385,426	-	23,540,781	14,179,209
40	-	102,785,810	-	102,785,810	-	22,083,374	13,127,375
41	-	99,968,471	-	99,968,471	-	20,657,952	12,119,398
42	-	96,931,713	-	96,931,713	-	19,265,579	11,154,682
43	-	93,656,669	-	93,656,669	-	17,903,867	10,230,651
44	-	90,213,293	-	90,213,293	-	16,587,106	9,354,238
45	-	86,610,291	-	86,610,291	-	15,316,571	8,524,730
46	-	82,860,181	-	82,860,181	-	14,093,858	7,741,593
47	-	79,004,789	-	79,004,789	-	12,924,965	7,006,661
48	-	75,067,182	-	75,067,182	-	11,811,853	6,319,477
49	-	71,059,145	-	71,059,145	-	10,754,243	5,678,377
50	-	66,990,611	-	66,990,611	-	9,751,373	5,081,495



# Single Discount Rate Development Present Values of Projected Benefits Ending June 30, 2124 (Concluded)

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments Using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments Using Municipal Bond Rate (v <sub>i</sub> )	Present Value of Benefit Payments Using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v <sup>a</sup> ((a)-.5)	(g)=(e)*v <sup>i</sup> ((a)-.5)	(h)=(c)/((1+sdr) <sup>a</sup> (a-.5))
51	\$ -	\$ 62,881,825	\$ -	\$ 62,881,825	\$ -	\$ 8,803,775	\$ 4,527,683
52	-	58,745,775	-	58,745,775	-	7,910,654	4,015,141
53	-	54,600,682	-	54,600,682	-	7,071,731	3,542,383
54	-	50,483,958	-	50,483,958	-	6,288,876	3,109,024
55	-	46,423,987	-	46,423,987	-	5,562,295	2,713,854
56	-	42,445,583	-	42,445,583	-	4,891,432	2,355,319
57	-	38,578,517	-	38,578,517	-	4,276,033	2,032,058
58	-	34,849,419	-	34,849,419	-	3,715,207	1,742,446
59	-	31,282,008	-	31,282,008	-	3,207,555	1,484,676
60	-	27,896,708	-	27,896,708	-	2,751,214	1,256,792
61	-	24,710,219	-	24,710,219	-	2,343,905	1,056,721
62	-	21,734,645	-	21,734,645	-	1,982,932	882,286
63	-	18,977,605	-	18,977,605	-	1,665,285	731,260
64	-	16,442,948	-	16,442,948	-	1,387,774	601,427
65	-	14,131,162	-	14,131,162	-	1,147,120	490,631
66	-	12,039,820	-	12,039,820	-	940,033	396,799
67	-	10,164,183	-	10,164,183	-	763,286	317,977
68	-	8,497,590	-	8,497,590	-	613,766	252,344
69	-	7,031,421	-	7,031,421	-	488,475	198,204
70	-	5,755,354	-	5,755,354	-	384,559	153,998
71	-	4,657,395	-	4,657,395	-	299,313	118,293
72	-	3,723,882	-	3,723,882	-	230,182	89,781
73	-	2,940,016	-	2,940,016	-	174,790	67,284
74	-	2,290,209	-	2,290,209	-	130,959	49,752
75	-	1,758,589	-	1,758,589	-	96,720	36,264
76	-	1,329,737	-	1,329,737	-	70,341	26,028
77	-	989,013	-	989,013	-	50,320	18,376
78	-	722,713	-	722,713	-	35,367	12,747
79	-	518,255	-	518,255	-	24,393	8,677
80	-	364,277	-	364,277	-	16,491	5,789
81	-	250,689	-	250,689	-	10,915	3,782
82	-	168,722	-	168,722	-	7,066	2,416
83	-	110,936	-	110,936	-	4,468	1,508
84	-	71,190	-	71,190	-	2,758	919
85	-	44,552	-	44,552	-	1,660	546
86	-	27,177	-	27,177	-	974	316
87	-	16,155	-	16,155	-	557	178
88	-	9,358	-	9,358	-	310	98
89	-	5,283	-	5,283	-	168	53
90	-	2,910	-	2,910	-	89	27
91	-	1,570	-	1,570	-	46	14
92	-	832	-	832	-	24	7
93	-	432	-	432	-	12	3
94	-	220	-	220	-	6	2
95	-	109	-	109	-	3	1
96	-	52	-	52	-	1	-
97	-	22	-	22	-	1	-
98	-	9	-	9	-	-	-
99	-	3	-	3	-	-	-
100	-	1	-	1	-	-	-
<b>Totals</b>					\$ 1,118,783,313	\$ 508,385,415	\$ 1,627,168,728





## **SECTION E**

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### **GLOSSARY OF TERMS**

## Glossary of Terms

<b><i>Accrued Service</i></b>	Service credited under the system which was rendered before the date of the actuarial valuation.
<b><i>Actuarial Accrued Liability (AAL)</i></b>	The AAL is the difference between the actuarial present value of all benefits and the actuarial value of future normal costs. The definition comes from the fundamental equation of funding which states that the present value of all benefits is the sum of the Actuarial Accrued Liability and the present value of future normal costs. The AAL may also be referred to as "accrued liability" or "actuarial liability."
<b><i>Actuarial Assumptions</i></b>	These assumptions are estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and compensation increases. Actuarial assumptions are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (compensation increases, payroll growth, inflation and investment return) consist of an underlying real rate of return plus an assumption for a long-term average rate of inflation.
<b><i>Actuarial Cost Method</i></b>	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the pension trust benefits between future normal cost and actuarial accrued liability. The actuarial cost method may also be referred to as the actuarial funding method.
<b><i>Actuarial Equivalent</i></b>	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.
<b><i>Actuarial Gain (Loss)</i></b>	The difference in liabilities between actual experience and expected experience during the period between two actuarial valuations is the gain (loss) on the accrued liabilities.
<b><i>Actuarial Present Value (APV)</i></b>	The amount of funds currently required to provide a payment or series of payments in the future. The present value is determined by discounting future payments at predetermined rates of interest and probabilities of payment.
<b><i>Actuarial Valuation</i></b>	The actuarial valuation report determines, as of the actuarial valuation date, the service cost, Total Pension Liability, and related actuarial present value of projected benefit payments for pensions.
<b><i>Actuarial Valuation Date</i></b>	The date as of which an actuarial valuation is performed.
<b><i>Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)</i></b>	A calculated contribution into a defined benefit pension plan for the reporting period, most often determined based on the funding policy of the plan. Typically, the Actuarially Determined Contribution has a normal cost payment and an amortization payment.

## Glossary of Terms

<b><i>Amortization Method</i></b>	The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be “open” (meaning, reset each year) or “closed” (the number of years remaining will decline each year).
<b><i>Amortization Payment</i></b>	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
<b><i>Cost-of-Living Adjustments</i></b>	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
<b><i>Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan)</i></b>	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
<b><i>Covered Employee Payroll</i></b>	The payroll of employees that are provided with pensions through the pension plan.
<b><i>Deferred Inflows and Outflows</i></b>	The deferred inflows and outflows of pension resources are amounts used under GASB Statement No. 68 in developing the annual pension expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in pension expense should be included in the deferred inflows or outflows of resources.
<b><i>Deferred Retirement Option Program (DROP)</i></b>	A program that permits a plan member to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The plan member continues to provide service to the employer and is paid for the service by the employer after the DROP entry date; however, the pensions that would have been paid to the plan member are credited to an individual member account within the defined benefit pension plan until the end of the DROP period. Other variations for DROP exist and will be more fully detailed in the plan provision section of the valuation report.
<b><i>Discount Rate</i></b>	For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically: <ol style="list-style-type: none"><li>1. The benefit payments to be made while the pension plans’ Fiduciary Net Position is projected to be greater than the benefit payments that are projected to be made in the period; and</li><li>2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.</li></ol>

## Glossary of Terms

### ***Entry Age Actuarial Cost Method (EAN)***

The EAN is a cost method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit age(s). The portion of the actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial accrued liability. The sum of the accrued liability plus the present value of all future normal costs is the present value of all benefits.

### ***Fiduciary Net Position***

The Fiduciary Net Position is the market value of the assets of the trust dedicated to the defined benefit provisions.

### ***GASB***

The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.

### ***Long-Term Expected Rate of Return***

The long-term rate of return is the expected return to be earned over the entire trust portfolio based on the asset allocation of the portfolio.

### ***Money-Weighted Rate of Return***

The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For GASB purposes, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.

### ***Multiple-Employer Defined Benefit Pension Plan***

A multiple-employer plan is a defined benefit pension plan that is used to provide pensions to the employees of more than one employer.

### ***Municipal Bond Rate***

The Municipal Bond Rate is the discount rate to be used for those benefit payments that occur after the assets of the trust have been depleted.

### ***Net Pension Liability (NPL)***

The NPL is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit pension plan.

### ***Non-Employer Contributing Entities***

Non-employer contributing entities are entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities. For purposes of the GASB accounting statements, plan members are not considered non-employer contributing entities.

### ***Normal Cost***

The portion of the actuarial present value allocated to a valuation year is called the normal cost. For purposes of application to the requirements of this Statement, the term normal cost is the equivalent of service cost.

## Glossary of Terms

<b><i>Other Postemployment Benefits (OPEB)</i></b>	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment health care benefits regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.
<b><i>Real Rate of Return</i></b>	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
<b><i>Service Cost</i></b>	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.
<b><i>Total Pension Expense</i></b>	The total pension expense is the sum of the following items that are recognized at the end of the employer's fiscal year: <ol style="list-style-type: none"><li>1. Service Cost</li><li>2. Interest on the Total Pension Liability</li><li>3. Current-Period Benefit Changes</li><li>4. Employee Contributions (made negative for addition here)</li><li>5. Projected Earnings on Plan Investments (made negative for addition here)</li><li>6. Pension Plan Administrative Expense</li><li>7. Other Changes in Plan Fiduciary Net Position</li><li>8. Recognition of Outflow (Inflow) of Resources due to Liabilities</li><li>9. Recognition of Outflow (Inflow) of Resources due to Assets</li></ol>
<b><i>Total Pension Liability (TPL)</i></b>	The TPL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.
<b><i>Unfunded Actuarial Accrued Liability (UAAL)</i></b>	The UAAL is the difference between actuarial accrued liability and valuation assets.
<b><i>Valuation Assets</i></b>	The valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of GASB Statement No. 68, the valuation assets are equal to the market value of assets.



October 3, 2024

Ms. Laurie M. Brown  
Deputy Chief Financial Officer  
Maryland Transit Administration  
6 St. Paul Street, Suite 841  
Baltimore, Maryland 21202

Dear Ms. Brown:

Please find enclosed copies of the GASB Statement Nos. 67 and 68 Employer Reporting Accounting Schedules report of the Maryland Transit Administration.

Sincerely,  
Gabriel, Roeder, Smith & Company

A handwritten signature in black ink, appearing to read "Brad Lee Armstrong". The signature is fluid and cursive, with a long horizontal stroke at the end.

Brad Lee Armstrong, ASA, EA, FCA, MAAA

BLA:sc  
Enclosures

cc: Lisa Lamberth, MTA  
Kevin T. Noelke, GRS  
Derek Henning, GRS