

# Maryland Transit Administration

GASB Statement No. 75, Accounting and Financial Reporting  
for Postemployment Benefits Other Than Pensions  
June 30, 2021





October 6, 2021

Ms. Laurie Brown  
Deputy CFO  
Maryland Transit Administration  
6 St. Paul Street, 8<sup>th</sup> Floor  
Baltimore, MD 21202

Dear Ms. Brown:

This report provides information on behalf of the Maryland Transit Administration (MTA) in connection with the Governmental Accounting Standards Board (GASB) Statement No. 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions."

The calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statement No. 75. 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 No. 75 may produce significantly different results. This report may be provided to parties other than the Maryland Transit Administration only in its entirety and only with the permission of MTA. GRS is not responsible for unauthorized use of this report.

This report contains updates to our draft report dated September 15, 2021. The draft valuation utilized an estimate of employer paid benefit payments for the Fiscal Year Ended June 30, 2020 of \$19,632,000. Since issuing the draft, MTA reported the actual employer paid benefit payments for the Fiscal Year Ended June 30, 2020 of \$20,354,336, consisting of \$19,799,205 of claims payments and \$555,131 of administrative expense payments. Additionally, the recognition period for changes in liabilities (the average expected remaining service life of all employees) was changed from 8.3813 years to a rounded 8.0 years, consistent with past GASB reports. Reflecting these two changes impacted the Total OPEB Expense and the Deferred Inflows/Outflows. The Total OPEB Liability remains unchanged from the draft report.

This report is based upon information, furnished to us by MTA, concerning Other Postemployment Benefits (OPEB), active members, retirees and beneficiaries, and financial data. This information was checked for internal consistency, but it was not audited.

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.

Based on the available data, the information contained in this report is accurate and fairly represents the actuarial position of the Maryland Transit Administration as of the reporting date. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as the Actuarial Standards of Practice. If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

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; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

The signing actuaries are independent of the plan sponsor.

Brad Lee Armstrong and Derek Henning 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,



Brad Lee Armstrong, ASA, EA, FCA, MAAA



Derek Henning, ASA, EA, MAAA

BLA/DH:sc



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**

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### **EXECUTIVE SUMMARY**

# Executive Summary as of June 30, 2021

	<b>2021</b>	<b>2020</b>
Actuarial Valuation Date	June 30, 2020	June 30, 2018
Measurement Date of the Total OPEB Liability	June 30, 2020	June 30, 2019
Employer's Fiscal Year Ending Date (Reporting Date)	June 30, 2021	June 30, 2020
<b>Membership</b>		
Number of		
- Retirees and Beneficiaries	1,433	1,411
- Inactive, Nonretired Members	0	0
- Active Members	2,363	2,350
- Total	3,796	3,796
Covered Payroll	N/A	N/A
<b>Total OPEB Liability</b>		
Total OPEB Liability	\$ 882,994,093	\$ 832,674,441
Total OPEB Liability as a Percentage of Covered Payroll	N/A	N/A
<b>Development of the Single Discount Rate</b>		
Long-Term Municipal Bond Rate*	2.45 %	3.13%
<b>Total OPEB Expense</b>	<b>\$ 46,104,823</b>	<b>\$ 31,676,760</b>

## Deferred Outflows and Deferred Inflows of Resources by Source to be Recognized in Future OPEB Expenses

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>	<b>Net Deferred Outflows/Inflows of Resources</b>
Difference between expected and actual experience	\$ 17,278,739	\$ (9,636,115)	\$ (11,535,323)
Changes in assumptions	48,162,667	(166,763,122)	(123,991,673)
<b>Total</b>	<b>\$ 65,441,406</b>	<b>\$ (176,399,237)</b>	<b>\$ (135,526,996)</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, 2020. 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.

# Discussion

## Accounting Standard

GASB Statement No. 75 replaces the requirements of GASB Statements No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, as amended, and No. 57, OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans, for OPEB.

Reporting under GASB Statement No. 75 is effective for fiscal years commencing after June 15, 2017.

The following discussion provides a summary of the information that is required to be disclosed under this new accounting standard. A number of these disclosure items are provided in this report. However, certain information, such as notes regarding accounting policies and investments, is not included in this report. As a result, the employer is responsible for preparing and disclosing the non-actuarial information needed to comply with these accounting standards.

## Financial Statements

GASB Statement No. 75 requires state and local government employers to recognize the net OPEB liability and the OPEB expense on their financial statements, along with the related deferred outflows and inflows of resources. The net OPEB liability is the difference between the total OPEB 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.

GASB Statement No. 75 states the employer contributions made to the OPEB plan subsequent to the measurement date and before the end of the employer's reporting period should be reported as a deferred outflow of resources. The information contained in this report does not incorporate any employer contributions made subsequent to the measurement date of June 30, 2017.

## Notes to Financial Statements

GASB Statement No. 75 requires the notes of the employer's financial statements to disclose the total OPEB expense, the OPEB plan's liabilities and assets, and deferred outflows of resources and inflows of resources related to OPEB.



In addition, GASB Statement No. 75 requires the notes of the financial statements for employers to include certain additional information. The requirements listed on the following pages apply to OPEB plans that do not have formal assets that meet the criteria in paragraph 4 of GASB Statement No. 75.

- **Plan Description:**
  - The name of the OPEB plan, the administrator of the OPEB plan and the identification of the OPEB plan as a single-employer or multiple-employer OPEB plan.
  - A brief description of the types of benefits provided by the plan, automatic or ad hoc postemployment benefit changes including COLAs, and terms or policies regarding the sharing of benefit-related costs with inactive plan members.
  - The authority under which benefit terms are established or may be changed.
  - The number of plan members by category and if the plan is closed.
  - A brief description of member and employer contribution requirements.
  - The fact that there are no assets accumulated in a trust.
- **The total OPEB liability**
- **Significant assumptions and other inputs used to measure the total OPEB liability**
  - Significant assumptions include: Inflation, healthcare cost trend rates, salary changes, ad hoc postemployment benefit changes, and the sharing of benefit-related costs with inactive plan members.
  - If applicable, the patterns of practice relied upon for projecting the sharing of benefit-related costs with inactive plan members.
  - Source of the assumptions for mortality and dates of experience studies.
- **Measure of the total OPEB liability using +/- 1% on the health care trend rate.**
- **On the discount rate:**
  - The discount rate used and the change in the discount rate since the prior fiscal year-end.
  - The municipal bond rate used and the source of that rate.
  - Measure of the net OPEB liability using +/- 1% on the discount rate.
- **The measurement date, the date of the actuarial valuation, and if applicable the fact that update procedures were used to roll forward the total OPEB liability.**
- **A brief description of changes in benefit terms or assumptions that affected the measurement of the total OPEB liability since the prior measurement date.**
- **A brief description of changes made between the measurement date and reporting date.**
- **The employer's contributions made subsequent to the measurement date.**

## Required Supplementary Information for Plans that Do Not Have Formal Assets

GASB Statement No. 75 requires a 10-year fiscal history of:

- Sources of changes in the total OPEB liability; and
- Information about the total OPEB liability and related ratios, including the total OPEB liability as a percent of covered-employee payroll.

### Frequency and Timing of the Actuarial Valuation

An actuarial valuation to determine the total OPEB liability is required to be performed at least every two years. For the employer's financial reporting purposes, the total OPEB liability and OPEB expense should be measured as of the employer's "measurement date," which may not be earlier than the employer's prior fiscal year-end date. If the actuarial valuation used to determine the total OPEB liability is not calculated as of the measurement date, the total OPEB liability is required to be rolled forward from the actuarial valuation date to the measurement date.

The total OPEB liability shown in this report is based on an actuarial valuation performed as of June 30, 2020 and a measurement date of June 30, 2020.

### Discount Rate

For plans that do not have formal assets, the discount rate should equal the 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. For the purpose of this valuation, the municipal bond rate is 2.45% (based on the daily rate closest to but not later than the measurement date of the Fidelity "20-Year Municipal GO AA Index").

### Actuarial Assumptions

The actuarial assumptions used to value the liabilities are outlined in detail in Section G. The assumptions include details on the health care trend assumption, the aging factors as well as the cost method used to develop the OPEB expense. The assumptions were based on the experience study covering the four-year period ending June 30, 2018 as conducted for the pension plan.

### Future Uncertainty or Risk

Future results may differ from those anticipated in this valuation. Reasons include, but are not limited to:

- Actual medical trend differing from expected;
- Changes in the healthcare plan designs offered to active and retired members;
- Participant behavior differing from expected;
  - Elections at retirement;
  - One-person versus two-person coverage elections; and
  - Time of retirement or termination.

## **Benefits Valued**

The benefit provisions that were valued are in Section D. The valuation is 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 actuary IMMEDIATELY so they can both be sure the proper provisions are valued.

## **Effective Date and Transition**

GASB Statement No. 75 is effective for an employer's fiscal years beginning after June 15, 2017.

## **SECTION B**

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### **VALUATION RESULTS**

## Actuarial Valuation Results

ACTUARIAL VALUATION RESULTS AS OF JUNE 30, 2020	
<b>Valuation Date:</b>	<b>June 30, 2020</b>
Number of Participants Covered	
Active Participants	2,363
Retired Participants	1,433
Total Participants	3,796
Actuarial Accrued Liability	
Active Participants	\$469,078,698
Retired Participants	413,915,395
Total Participants	\$882,994,093
Actuarial Value of Assets	\$ 0
Unfunded Actuarial Accrued Liability	\$882,994,093
<b>Employer Normal Cost for FYE</b>	<b>June 30, 2021</b>
Implicit Rate Subsidy	\$ 8,048,872
Medical/Rx Employer Premiums	31,098,255
Dental/Vision Employer Premiums	2,611,616
Life Insurance	173,367
Total Employer Normal Cost	\$ 41,932,110
<b>Expected Claims Cost for FYE</b>	<b>June 30, 2021</b>
Employer Explicit Costs	
Medical & Rx Claims	\$ 14,799,328
Part B Reimbursement	2,027,417
Dental & Vision Claims	1,061,718
Life Insurance	547,784
Total	\$ 18,436,247
Employer Implicit Costs	5,056,634
Total Employer Costs	\$ 23,492,881

## Valuation Results Gain/Loss Analysis as of June 30, 2020

The table below shows the reconciliation of the total OPEB liability.

<b>OPEB ACTUARIAL VALUATION RESULTS AS OF JUNE 30, 2020 (GAIN)/LOSS ANALYSIS</b>	
Total OPEB Liability as of July 1, 2019	\$832,674,441
Service Cost for 19/20	46,156,425
Actual Benefit Payments	(20,354,336)
Interest	<u>26,466,513</u>
Expected Total OPEB Liability as of June 30, 2020	\$884,943,043
(Gain)/Loss Items	
Demographic & Claims Experience	\$ 19,747,130
Change in Assumptions	<u>(21,696,080)</u>
Total	\$ (1,948,950)
Total OPEB Liability as of June 30, 2020	\$882,994,093

## Projected Claims Costs

Fiscal Year	Projected Employer Claims Cost
	Total
2022	\$25,391,760
2023	27,075,551
2024	28,581,099
2025	30,142,762
2026	31,902,183
2027	33,616,419
2028	35,431,196
2029	37,141,157
2030	38,859,549
2031	40,569,165
2032	42,173,668
2033	43,716,701
2034	45,211,832
2035	46,684,966
2036	48,062,997

## Comments

**Comment A:** Demographic experience was unfavorable since the last measurement date. This served to slightly increase the Total OPEB Liability (TOL). Premium experience was slightly favorable since the last measurement date.

**Comment B:** Assumptions were updated since the last measurement date:

- The discount rate was decreased from 3.13% to 2.45%.
- The wage inflation rate was reduced from 3.20% to 3.10%.
- The age rating factors used to allocate claims cost across ages were updated.
- The trend rates were reset to better reflect the plan's anticipated experience.

The overall impact of the assumption changes decreased the Total OPEB Liability.

**Comment C:** At the beginning of the 2021 plan year, the employer/retiree cost share differed by union group resulting in two rate structures. The reported monthly rates paid by retirees as of January 1, 2021 are displayed in the Summary of Benefits beginning on page 17.

The monthly retiree rates have since moved back to the single rate structure in effect beginning 2019. For valuation purposes, all union groups were assumed to follow the same cost sharing arrangement as a result. The employer/retiree cost sharing assumptions are described below:

- **Medical (HMO)**
  - 95/5 (employer/employee) split for employee only
  - 100/0 split for retiree only
  - 85/15 split for all other coverage levels
- **Medical (PPO)**
  - 80/20 split for employee only or retiree under 65 only
  - 75/25 split for all other coverage levels
- **Prescription Drug**
  - 75/25 split
- **Dental**
  - 76/24 split
- **Vision**
  - 82/18 split

**Comment D:** There were 159 active participants waiving coverage as of the measurement date. For purposes of the valuation, they were assumed to elect coverage upon retirement according to our election percent assumptions on page 34.



## SECTION C

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### FINANCIAL SCHEDULES

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.

# Statement of OPEB Expense under GASB Statement No. 75

## Fiscal Year Ended June 30, 2021

### A. Expense

1. Service Cost	\$	46,156,425
2. Interest on the Total OPEB Liability		26,466,513
3. Current-Period Benefit Changes		0
4. OPEB Plan Administrative Expense		0
5. Recognition of Outflow (Inflow) of Resources due to Liabilities		<u>(26,518,115)</u>
<b>6. Total OPEB Expense</b>	<b>\$</b>	<b>46,104,823</b>

### Recognition of Deferred Outflows and Inflows of Resources

Differences between expected and actual experience and changes in assumptions are recognized in OPEB 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 OPEB through the OPEB 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 31,058 years. Additionally, the total plan membership (active employees and inactive employees) was 3,796. 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 8 years.

# Statement of Outflows and Inflows Arising from Current Reporting Period Fiscal Year Ended June 30, 2021

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

1. Difference between expected and actual experience of the Total OPEB Liability (gains) or losses		\$ 19,747,130
2. Assumption Changes (gains) or losses		\$ (21,696,080)
3. Recognition period for Liabilities: Average of the expected remaining service lives of all employees {in years}		8.0000
4. Outflow (Inflow) of Resources to be recognized in the current OPEB expense for the difference between expected and actual experience of the Total OPEB Liability		\$ 2,468,391
5. Outflow (Inflow) of Resources to be recognized in the current OPEB expense for assumption changes		\$ (2,712,010)
6. Outflow (Inflow) of Resources to be recognized in the current OPEB expense due to Liabilities		\$ (243,619)
7. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses for the difference between expected and actual experience of the Total OPEB Liability		\$ 17,278,739
8. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses for assumption changes		\$ (18,984,070)
9. Deferred Outflow (Inflow) of Resources to be recognized in future OPEB expenses due to Liabilities		\$ (1,705,331)

# Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods Fiscal Year Ended June 30, 2021

## A. Outflows and Inflows of Resources by Source to be Recognized in Current OPEB Expense

	Outflows of Resources	Inflows of Resources	Net Outflows of Resources
1. Differences between expected and actual experience	\$ 2,468,391	\$ 1,899,208	\$ 569,183
2. Assumption changes	8,027,111	35,114,409	(27,087,298)
<b>3. Total</b>	<b>\$ 10,495,502</b>	<b>\$ 37,013,617</b>	<b>\$ (26,518,115)</b>

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

	Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows of Resources
1. Differences between expected and actual experience	\$ 17,278,739	\$ 9,636,115	\$ 7,642,624
2. Assumption changes	48,162,667	166,763,122	(118,600,455)
<b>3. Total</b>	<b>\$ 65,441,406</b>	<b>\$ 176,399,237</b>	<b>\$ (110,957,831)</b>

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

Year Ending June 30	Net Deferred Outflows of Resources
2022	\$ (26,518,115)
2023	(26,518,115)
2024	(26,518,115)
2025	(26,518,117)
2026	(12,285,167)
Thereafter	7,399,798
<b>Total</b>	<b>\$ (110,957,831)</b>

Employer contributions that were made subsequent to the measurement date of the total OPEB liability and prior to the end of the employer's reporting period should be reported by the employer as a deferred outflow of resources related to OPEB. The information contained in this report does not incorporate any contributions made subsequent to the measurement date.

# Statement of Outflows and Inflows Arising from Current and Prior Reporting Periods (Concluded) Fiscal Year Ended June 30, 2021

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	\$ -	8.0000	\$ -	\$ -	4.0000
2019	(14,073,053)	8.0000	(1,759,132)	(8,795,657)	5.0000
2020	(1,120,610)	8.0000	(140,076)	(840,458)	6.0000
2021	19,747,130	8.0000	2,468,391	17,278,739	7.0000
<b>Total</b>			<b>\$ 569,183</b>	<b>\$ 7,642,624</b>	
<b>Deferred Outflow (Inflow) Due to Assumption Changes</b>					
2018	\$ (113,863,562)	8.0000	\$ (14,232,945)	\$ (56,931,782)	4.0000
2019	(145,355,632)	8.0000	(18,169,454)	(90,847,270)	5.0000
2020	64,216,889	8.0000	8,027,111	48,162,667	6.0000
2021	(21,696,080)	8.0000	(2,712,010)	(18,984,070)	7.0000
<b>Total</b>			<b>\$ (27,087,298)</b>	<b>\$ (118,600,455)</b>	
<b>Deferred Outflow (Inflow) Due to Differences Between Projected and Actual Earnings on Plan Investments</b>					
2018	\$ -	5.0000	\$ -	\$ -	1.0000
2019	-	5.0000	-	-	2.0000
2020	-	5.0000	-	-	3.0000
2021	-	5.0000	-	-	4.0000
<b>Total</b>			<b>\$ -</b>	<b>\$ -</b>	
<b>Total Deferred Outflow (Inflow)</b>					
2018	\$ (113,863,562)		\$ (14,232,945)	\$ (56,931,782)	
2019	(159,428,685)		(19,928,586)	(99,642,927)	
2020	63,096,279		7,887,035	47,322,209	
2021	(1,948,950)		(243,619)	(1,705,331)	
<b>Total</b>			<b>\$ (26,518,115)</b>	<b>\$ (110,957,831)</b>	

# Schedule of Changes in Total OPEB Liability and Related Ratios

## Current Reporting Periods

### Fiscal Year Ended June 30, 2021

<b>A. Total OPEB liability</b>	
1. Service cost	\$ 46,156,425
2. Interest on the total OPEB liability	26,466,513
3. Changes of benefit terms	0
4. Difference between expected and actual experience of the total OPEB liability	19,747,130
5. Changes of assumptions	(21,696,080)
6. Benefit payments	(20,354,336)
<b>7. Net change in total OPEB liability</b>	<u>\$ 50,319,652</u>
<b>8. Total OPEB liability – beginning</b>	<u>832,674,441</u>
<b>9. Total OPEB liability – ending</b>	<u><u>\$ 882,994,093</u></u>
<b>B. Covered-employee payroll</b>	N/A
<b>C. Total OPEB liability as a percentage of covered-employee payroll</b>	N/A

## Schedules of Required Supplementary Information

### Schedule of Changes in Total OPEB Liability and Related Ratios Multiyear

#### Last 10 Fiscal Years (which may be built prospectively)

Fiscal year ending June 30,	2021	2020	2019	2018
<b>Total OPEB liability</b>				
Service cost	\$ 46,156,425	\$ 31,898,596	\$ 41,137,567	\$ 47,907,217
Interest on the total OPEB liability	26,466,513	26,052,660	29,486,571	25,090,434
Changes of benefit terms	0	0	0	0
Difference between expected and actual experience	19,747,130	(1,120,610)	(14,073,053)	0
Changes of assumptions	(21,696,080)	64,216,889	(145,355,632)	(113,863,562)
Benefit payments, including refunds of employee contributions	(20,354,336)	(17,240,303)	(15,617,475)	(12,421,897)
<b>Net change in total OPEB liability</b>	50,319,652	103,807,232	(104,422,022)	(53,287,808)
<b>Total OPEB liability - beginning</b>	832,674,441	728,867,209	833,289,231	886,577,039
<b>Total OPEB liability - ending (a)</b>	<u>\$ 882,994,093</u>	<u>\$ 832,674,441</u>	<u>\$ 728,867,209</u>	<u>\$ 833,289,231</u>
<b>Covered-employee payroll</b>	\$ 0	\$ 0	\$ 0	\$ 0
<b>Total OPEB liability as a percentage of covered-employee payroll</b>	N/A	N/A	N/A	N/A
<b>Notes to Schedule:</b>				
N/A				

## Discount Rate

For plans that do not have formal assets, the discount rate should equal the 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. For the purpose of this valuation, the municipal bond rate is 2.45% (based on the daily rate closest to but not later than the measurement date of the Fidelity “20-Year Municipal GO AA Index”). The discount rate was 3.13% as of the prior measurement date.

## Plan Assets

There are no plan assets accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.

## Summary of Membership Information

The following table provides a summary of the number of participants in the plan as of the valuation date:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	1,433
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	2,363
Total Plan Members	<u>3,796</u>



## Sensitivity of Total OPEB Liability

Regarding the sensitivity of the total OPEB liability to changes in the discount rate, the following presents the plan's total OPEB liability, calculated using a discount rate of 2.45%, as well as what the plan's total OPEB liability would be if it were calculated using a discount rate that is one percent lower or one percent higher:

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

<b>1% Decrease</b>	<b>Current Single Discount Rate Assumption</b>	<b>1% Increase</b>
<b>1.45%</b>	<b>2.45%</b>	<b>3.45%</b>
\$ 1,037,179,648	\$ 882,994,093	\$ 759,198,717

Regarding the sensitivity of the total OPEB liability to changes in the healthcare cost trend rates, the following presents the plan's total OPEB liability, calculated using the assumed trend rates as well as what the plan's total OPEB liability would be if it were calculated using a trend rate that is one percent lower or one percent higher:

### Sensitivity of Net OPEB Liability to the Healthcare Cost Trend Rate Assumption

<b>1% Decrease</b>	<b>Current Healthcare Cost Trend Rate Assumption</b>	<b>1% Increase</b>
\$ 734,862,771	\$ 882,994,093	\$ 1,077,444,759

## SECTION D

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### SUMMARY OF BENEFITS

# Summary of Benefit Provisions as of June 30, 2020

## Plan Participants

Retirees and beneficiaries of the Maryland Transit Administration Pension Plan (except for transfers from union to management positions) who had health and life coverage as active employees, and are receiving a pension, are eligible for coverage if they retire from active service.

## Benefit Eligibility - Retirement

The retirement eligibility is defined as the earlier of:

- a. Attainment of age 65 and fully vested (as described below),
- b. Attainment of age 52 with 30 years of service, or
- c. Attainment of age 55 with age plus years of service equal to at least 85.

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

## Deferred Retirement

Employees who terminate employment are not eligible for retiree health care benefits.

## Disability Retirement

Employees who terminate due to disability and are fully vested are eligible for retiree health care benefits if they are disabled in the opinion of the State Medical Director.

## Death in Service Retirement

If an active employee dies while in service and is eligible to retire at the time of death, the surviving spouse is eligible to access retiree medical benefits and pay the same premium rates as the participant for up to 3 years after the death of the member.

## Surviving Spouses of Retired Employees

Surviving spouses are allowed access to the plan and pay the same premium rates as the participant for up to 3 years after the death of the member.



# Summary of Benefit Provisions as of June 30, 2020

## Medicare Part B Reimbursement

Retiree Medicare Part B premiums are paid entirely by the MTA with proof of eligibility. Spouses, dependents, and surviving spouses are not eligible to receive this benefit.

## Life Insurance

Surviving spouses of members enrolled in the life insurance benefit receive a lump sum benefit of \$30,000 if a deceased member was active or \$10,000 if the deceased member was retired. \$3,000 of both amounts is deemed to be paid by the member while the balance is paid by the employer. Member contributes \$1.09 per month for this benefit.

## Retiree Contributions

Retirees and surviving spouses must contribute a monthly premium depending on the plan selected, tier of coverage, Medicare eligibility, and bargaining unit. The monthly rates paid by retirees are shown on the following pages.

## Monthly Rates for Retirees Without Medicare Effective January 1, 2021

Rates as reported for the beginning of the 2021 plan year are shown below. The monthly rates have since moved to a single rate structure. For valuation purposes, all union groups were assumed to follow the same cost sharing arrangement as a result of this change.

<b>Medical Plans</b>				
<b>Carefirst BCBC HMO and Carefirst BCBC PPO</b>				
	HMO		PPO	
	Local 2 & 1859	Local 1300	Local 2 & 1859	Local 1300
Employee Only	\$0.00	\$97.90	\$137.41	\$142.03
Employee + Child	\$152.18	\$185.91	\$321.25	\$265.65
Employee + Spouse	\$203.17	\$248.19	\$427.03	\$353.11
Employee + 2 or More Dependents	\$219.61	\$268.28	\$461.14	\$381.32
<b>Prescription Drug Plan</b>				
	Local 2 & 1859		Local 1300	
Employee Only	\$43.56		\$44.55	
Employee + Child	\$86.95		\$88.93	
Employee + Spouse	\$115.95		\$118.59	
Employee + 2 or More Dependents	\$141.94		\$145.18	
<b>Dental Plan</b>				
Employee Only	\$12.58			
Employee + Child	\$21.94			
Employee + Spouse	\$25.21			
Employee + 2 or More Dependents	\$37.59			
<b>Vision Plan</b>				
Employee Only	\$0.99			
Employee + Child	\$1.77			
Employee + Spouse	\$2.32			
Employee + 2 or More Dependents	\$3.31			



## Monthly Rates for Retirees With Medicare Effective January 1, 2021

Rates as reported for the beginning of the 2021 plan year are shown below. The monthly rates have since moved to a single rate structure. For valuation purposes, all union groups were assumed to follow the same cost sharing arrangement as a result of this change.

Medical Plans				
Carefirst BCBS HMO and Carefirst BCBS PPO				
	HMO		PPO	
	Local 2 & 1859	Local 1300	Local 2 & 1859	Local 1300
Retiree Only WITH Medicare	\$0.00	\$58.83	\$103.21	\$85.35
Retiree & Spouse WITH Medicare	\$96.31	\$117.65	\$188.07	\$155.52
Retiree WITH Medicare, Spouse Without	\$171.19	\$209.12	\$358.48	\$296.43
Retiree WITH Medicare, Child Without	\$120.20	\$146.84	\$252.71	\$208.96
Retiree WITH Medicare, Family Without	\$187.63	\$229.20	\$392.59	\$324.64
Retiree Without Medicare, Spouse WITH	\$128.29	\$156.72	\$256.62	\$212.20
Retiree & Family WITH Medicare	\$144.46	\$176.47	\$272.91	\$225.67
Retiree & Spouse WITH Medicare, Child Without	N/A		\$337.56	\$279.13
Prescription Drug Plan				
	Local 2 & 1859		Local 1300	
Retiree Only WITH Medicare	\$94.01		\$96.15	
Retiree & Spouse WITH Medicare	\$188.09		\$192.38	
Retiree & Spouse SPLIT	\$137.15		\$140.28	
Retiree WITH Medicare, Child Without	\$137.42		\$140.55	
Retiree WITH Medicare, Children Without	\$185.07		\$189.29	
Retiree & Spouse SPLIT, Child Without	\$180.99		\$185.11	
Retiree & Spouse WITH Medicare, Child Without	\$231.46		\$236.74	
Retiree & Spouse WITH Medicare, Children Without	\$235.56		\$240.93	
Dental Plan				
Employee Only	\$12.58			
Employee + Child	\$21.94			
Employee + Spouse	\$25.21			
Employee + 2 or More Dependents	\$37.59			
Vision Plan				
Employee Only	\$0.99			
Employee + Child	\$1.77			
Employee + Spouse	\$2.32			
Employee + 2 or More Dependents	\$3.31			

“Split” indicates a married couple with one person on Medicare and one without.

## Summary of Medical and Prescription Drug Insurance Offered as of January 1, 2021

<b>Medical Plans</b>			
<b>Carefirst BCBS HMO and Carefirst BCBS PPO</b>			
	<b>PPO</b>		<b>HMO</b>
	<b>In-Network</b>	<b>Out-of-Network</b>	
<b>Deductible</b>	None	\$300 Individual \$600 Family	None
<b>Out-of-pocket Maximum</b>	\$1500 Individual \$3000 Family	\$1500 Individual \$3000 Family	\$1500 Individual \$3000 Family
<b>Hospital</b>			
Inpatient Surgery	\$0	20% after deductible	\$0
Outpatient Surgery	\$0	20% after deductible	\$0
<b>Physician Services</b>			
Primary Care Doctor	\$10 per visit	20% after deductible	\$10 per visit
Specialist	\$20 per visit	20% after deductible	\$20 per visit
<b>Emergency Room</b>	\$50 per visit (waived if admitted)	\$50 per visit (waived if admitted)	\$50 per visit (waived if admitted)
<b>Prescription Drug Plan</b>			
<b>Prescription Plan Tier</b>	Formulary 1, 3 Tier		
<b>Prescription Deductible</b>	\$0		
<b>Prescription Out-of-pocket Maximum</b>	\$4,500 Individual/\$9,000 Family		
<b>Up to 34-day supply</b>			
Generic Drugs (Tier 1)	\$8		
Preferred Brand Drugs (Tier 2)	\$15		
Non-preferred Brand Drugs (Tier 3)	\$25		
<b>90-day supply</b>			
Generic Drugs (Tier 1)	Retail \$8/Mail order \$0		
Preferred Brand Drugs (Tier 2)	Retail \$15/Mail order \$15		
Non-preferred Brand Drugs (Tier 3)	Retail \$25/Mail order \$25		

**SECTION E**

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**RETIREE PREMIUM RATE DEVELOPMENT**



## Retiree Premium Rate Development

For the self-insured medical plans and drug plan, initial per capita costs were developed separately for pre-65 and post-65 retirees using medical and prescription drug claims experience from January 2018 to December 2020 supplied by MTA in conjunction with census data for the retired members of the health care program as of June 30, 2018 and June 30, 2020. The 2018 and 2020 total monthly exposures were estimated from the respective census data. The 2019 total monthly exposures were estimated as the average of the 2018 and 2020 exposures. These medical claims were projected on an incurred claim basis (using best estimate assumptions) and loaded for administrative expenses.

The initial medical and drug premium rates used in the valuation are a weighted average cost of the three-year experience period to smooth out any large year-to-year fluctuations.

Age graded and sex distinct premiums are utilized by this valuation. These costs are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process “distributes” the average premium over all age/sex combinations and assigns a unique premium for each combination. The age/sex specific costs more accurately reflect the health care utilization and cost at that age.

Combined monthly one-person medical, and drug premiums at select ages are shown below:

<b>Costs for Retirees and Spouses</b>				
<b>Expected Monthly Per Capita Costs</b>				
<b>Age</b>	<b>Medical</b>		<b>Prescription</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
<b>For Those Not Eligible for Medicare</b>				
45	\$520.43	\$718.26	\$178.98	\$247.01
50	677.66	834.81	233.05	287.09
55	891.72	973.63	306.66	334.83
60	1,151.71	1,134.04	396.07	390.00
<b>For Those Eligible for Medicare</b>				
65	304.87	287.55	451.98	426.31
70	332.11	321.37	492.37	476.44
75	356.69	348.05	528.82	516.01
80	374.46	367.91	555.15	545.44

Dental and vision benefits are not included in the benefits shown above. The underlying claims for the dental and vision benefits were not age-rated. The monthly dental premium valued for retirees is \$52.42 for one-person coverage and \$105.04 for two-person coverage. The monthly vision premium valued for retirees is \$5.50 for one-person coverage and \$12.89 for two-person coverage.

## Retiree Premium Rate Development

The January 1, 2021 retiree contribution rates provided by MTA were utilized to determine the portion of the premium expected to be contributed by employees. Based on the published rates, the assumed monthly premium rates for medical and prescription drugs are shown below.

Assumed Monthly Premium Rates for Retirees and Spouses				
	Medical		Prescription	
	Pre-65	Post-65	Pre-65	Post-65
1st Person	\$603.86	\$374.11	\$175.19	\$378.11
2nd Person	927.01	341.91	291.17	378.43

### Health Care Trend Assumption

The health care cost trend rate is the rate of change in per capita health care claims over time as a result of factors such as medical inflation, utilization of health care services, plan design, and technological improvements. It is a crucial economic assumption that is required for measuring retiree health care benefit obligations.

Retiree health care valuations use a health care cost trend assumption (trend vector) that changes over the years. The trend vector used in this valuation begins with a near-term trend assumption and declines over a time to an ultimate trend rate. The near-term rates reflect the increases in the current cost of health care goods and services. The process of trending down to a lower ultimate trend relies on the theory that premiums will moderate over the long term; otherwise, the health care sector would eventually consume the entire GDP.

While experience is often the best starting point for future costs, GRS does not rely on a group's experience in setting the near-term trend assumptions since trends vary significantly from year to year and are not credible for most groups. Therefore, professional judgment, trends from GRS' book of business and industry benchmarks (e.g., trend reports from various Pharmacy Benefit Management (PBM) organizations and national healthcare benefit consulting firms) are used in conjunction with a group's historical experience to establish the trend assumptions.

# Retiree Premium Rate Development

## Health Care Trend Assumption (Concluded)

The combined medical and prescription drug per capita costs are projected to increase as shown in the table below:

Beginning January 1,	Trend Assumption			
	Medical/Prescription Drug		Dental/Vision	
	Pre-65	Post-65	Pre-65	Post-65
2022	7.50%	6.25%	3.50%	3.50%
2023	7.25%	6.00%	3.50%	3.50%
2024	6.75%	5.75%	3.50%	3.50%
2025	6.50%	5.50%	3.50%	3.50%
2026	6.00%	5.25%	3.50%	3.50%
2027	5.75%	5.00%	3.50%	3.50%
2028	5.25%	4.75%	3.50%	3.50%
2029	5.00%	4.50%	3.50%	3.50%
2030	4.50%	4.25%	3.50%	3.50%
2031	4.25%	4.00%	3.50%	3.50%
2032	3.75%	3.75%	3.50%	3.50%
2033	3.50%	3.50%	3.50%	3.50%
2034	3.50%	3.50%	3.50%	3.50%
2035	3.50%	3.50%	3.50%	3.50%
2036	3.50%	3.50%	3.50%	3.50%
2037 & Later	3.50%	3.50%	3.50%	3.50%

## Actuarial Disclosures

The premium rates used in this valuation were developed using the proprietary Excel models which in James E. Pranschke’s professional judgment provide the initial projected costs which are consistent with the purposes of the valuation. We perform tests to ensure that the models, in their entirety, reasonably represent that which is intended to be modeled.

Aging factors used in the premium development models were developed based on the information and data from a 2013 study commissioned by the Society of Actuaries entitled “Health Care Costs – From Birth to Death.”

James E. Pranschke is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to certify the per capita retiree health care rates shown above.

  
 James E. Pranschke, FSA, FCA, MAAA

## SECTION F

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### SUMMARY OF PARTICIPANT DATA

## Summary of Participant Data Active Age and Service Distribution

Distribution of Active Members Electing Medical Coverage by Age and Service								
Attained Age	Years of Service to Valuation Date							Totals
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 Plus	No.
Under 20	-	-	-	-	-	-	-	-
20-24	4	-	-	-	-	-	-	4
25-29	69	7	-	-	-	-	-	76
30-34	139	96	32	-	-	-	-	267
35-39	103	65	85	20	-	-	-	273
40-44	70	52	71	62	17	-	-	272
45-49	70	58	86	60	46	4	-	324
50-54	52	58	49	78	57	21	13	328
55-59	25	41	74	90	66	48	49	393
60-64	19	26	42	57	46	31	77	298
65 & Over	-	16	19	24	17	15	37	128
<b>Totals</b>	<b>551</b>	<b>419</b>	<b>458</b>	<b>391</b>	<b>249</b>	<b>119</b>	<b>176</b>	<b>2,363</b>

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

**Age:** 48.3 years  
**Service:** 13.7 years

### Actives Waiving Coverage

There were 159 active participants waiving coverage. For purposes of the valuation, they were assumed to elect coverage upon retirement according to our election percent assumptions.

## Summary of Participant Data Retiree Age Distribution

Distribution of Retiree Medical Benefit by Age			
Attained Age	Male	Female	Total
Under 40	2	2	4
40-44	3	8	11
45-49	8	9	17
50-54	22	14	36
55-59	27	48	75
60-64	93	84	177
65-69	171	119	290
70-74	259	88	347
75-79	203	44	247
80-84	106	16	122
85-89	64	7	71
90 & Over	33	3	36
<b>Totals</b>	<b>991</b>	<b>442</b>	<b>1,433</b>

## Summary of Participant Data Distribution by Health Plan and Coverage Type

Actives	Medical			Prescription	Dental	Vision
	HMO	PPO	Total	Drug		
Employee Only	512	563	1,075	1,082	1,097	1,075
Employee + Child(ren)	156	194	350	310	315	302
Employee + Spouse	103	206	309	310	334	327
Employee + 2 or more Dependents	264	365	629	590	630	621
<b>Total</b>	<b>1,035</b>	<b>1,328</b>	<b>2,363</b>	<b>2,292</b>	<b>2,376</b>	<b>2,325</b>
Retirees	Medical			Prescription	Dental	Vision
	HMO	PPO	Total	Drug		
Retiree Only	468	411	879	810	781	795
Retiree + Child(ren)	12	16	28	30	30	29
Retiree + Spouse	146	313	459	476	522	522
Retiree + 2 or more Dependents	26	41	67	64	70	74
<b>Total</b>	<b>652</b>	<b>781</b>	<b>1,433</b>	<b>1,380</b>	<b>1,403</b>	<b>1,420</b>

## **SECTION G**

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### **ACTUARIAL ASSUMPTIONS AND METHODS**



# Actuarial Assumptions and Methods

## Valuation Methods

**Actuarial Cost Method** – Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **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 constant percentage of the member's year by year projected covered pay.

Since the health care benefits are not pay related, actual pay was not used in the valuation. For purposes of allocating benefit values between service rendered before and after the valuation, a "dummy" pay of \$10,000 was used for each active participant.

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

## Actuarial Assumptions and Methods

Actuarial assumptions were developed in connection with a study conducted by the prior actuary of the July 1, 2014-June 30, 2018 experience in the Experience Study report dated August 16, 2019, which includes the rationale for the assumptions. The assumptions were adopted by the Board on August 20, 2019. Actuarial assumptions are based on a combination of future expectations and historical data. Specific assumptions are shown below.

The **investment return rate under a pay-as-you-go arrangement** assumed in the valuation is 2.45% per year, compounded annually (net of expenses).

Although not explicitly used in the valuation, the economic assumptions are consistent with a **price inflation rate** assumption of 2.60% per year. No real rate of return is assumed.

The **wage inflation rate** assumed in this valuation was 3.10% per year. The wage inflation rate is defined to be the portion of total pay increases for an individual that are due to macroeconomic 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 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.

Year of Service	Merit & Seniority Salary Increases		
	Management	Maintenance/ Operators	All Others
0-5	0.50 %	6.00 %	4.00 %
6-20	0.50 %	0.25 %	3.00 %
21-29	0.50 %	0.25 %	1.00 %
30+	0.50 %	0.00 %	0.50 %
Ref	920	921	922

If the number of active members remains constant, then the total active member payroll will increase 3.10% annually, the base portion of the individual salary increase assumptions.

## Actuarial Assumptions and Methods

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

<b>Pre-retirement</b>	RP-2014 Blue Collar Employee mortality table, sex distinct, with generational mortality improvements projected from 2006 using scale MP-2018
<b>Post-retirement Healthy lives</b>	RP-2014 Blue Collar Healthy Retiree mortality table, sex distinct, with generational mortality improvements projected from 2006 using scale MP-2018
<b>Post-retirement Disabled lives</b>	RP-2014 Disabled Retiree mortality table, sex distinct, with generational mortality improvements projected from 2006 using scale MP-2018

Sample values for healthy retirees follow:

### Healthy Retirees

Single Life Retirement Value				
Sample Ages in 2020	Percent Dying Next Year		Future Life Expectancy (Years)	
	Men	Women	Men	Women
50	0.5666%	0.4070%	32.36	35.68
55	0.7444%	0.5291%	27.80	30.95
60	1.0494%	0.7309%	23.43	26.38
65	1.5203%	0.9912%	19.33	22.00
70	2.1942%	1.4733%	15.54	17.80
75	3.3770%	2.4138%	12.05	13.89
80	5.5169%	4.0623%	8.97	10.42

## Actuarial Assumptions and Methods

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

Ages	Annual Rates of Retirement		
	Management	Maintenance	All Others
52	15 %	5 %	8 %
53	15 %	5 %	8 %
54	15 %	5 %	8 %
55	15 %	5 %	8 %
56	15 %	5 %	8 %
57	20 %	5 %	8 %
58	20 %	5 %	8 %
59	20 %	5 %	8 %
60	20 %	10 %	10 %
61	20 %	10 %	20 %
62	25 %	15 %	20 %
63	25 %	15 %	20 %
64	25 %	20 %	20 %
65	25 %	25 %	20 %
66	25 %	25 %	25 %
67	25 %	25 %	25 %
68	25 %	25 %	25 %
69	25 %	25 %	25 %
70	100 %	25 %	25 %
71	100 %	25 %	15 %
72	100 %	20 %	15 %
73	100 %	20 %	15 %
74	100 %	20 %	15 %
75	100 %	100 %	100 %
Ref	3223	3224	3225

## Actuarial Assumptions and Methods

**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 Service	Annual Rates of Withdrawal from Active 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 %	5.50 %	15.00 %
3	15.00 %	5.00 %	5.50 %	10.00 %
4	12.50 %	5.00 %	5.00 %	6.00 %
5	10.00 %	4.00 %	3.50 %	6.00 %
6	5.50 %	3.00 %	2.50 %	6.00 %
7	5.50 %	0.50 %	2.50 %	6.00 %
8	5.50 %	0.50 %	2.50 %	4.00 %
9	5.50 %	0.50 %	2.50 %	4.00 %
10	5.50 %	0.50 %	1.50 %	4.00 %
11	5.50 %	0.00 %	1.50 %	4.00 %
12	5.50 %	0.00 %	1.50 %	4.00 %
13	5.50 %	0.00 %	1.50 %	2.00 %
14	5.50 %	0.00 %	1.50 %	2.00 %
15	3.50 %	0.00 %	1.50 %	2.00 %
16	3.50 %	0.00 %	1.50 %	2.00 %
17	3.50 %	0.00 %	1.50 %	2.00 %
18	3.50 %	0.00 %	1.50 %	2.00 %
19	3.50 %	0.00 %	1.50 %	2.00 %
20	1.50 %	0.00 %	1.00 %	0.00 %
21	1.50 %	0.00 %	1.00 %	0.00 %
22	1.50 %	0.00 %	1.00 %	0.00 %
23	1.50 %	0.00 %	1.00 %	0.00 %
24	1.50 %	0.00 %	1.00 %	0.00 %
25	0.00 %	0.00 %	0.00 %	0.00 %
<i>Ref</i>	<i>1355</i>	<i>1356</i>	<i>1358</i>	<i>1357</i>

This assumption measures the probabilities of members remaining in employment. The rates do not apply to members eligible to retire and do not include separation on account of disability.

## Actuarial Assumptions and Methods

*Rates of disability* were as follows:

Sample Ages	Annual Rates of Disability
20	0.1900 %
25	0.1900 %
30	0.2700 %
35	0.3650 %
40	0.4600 %
45	0.5550 %
50	0.6500 %
55	0.9350 %
60	1.9800 %
65	1.9800 %
Ref	1213

### Assumptions, Methods and Plan Changes

1. The discount rate was decreased from 3.13% to 2.45%. This change increased the Total OPEB Liability.
2. The trend rates were reset to better reflect the plan's anticipated experience. This change decreased the Total OPEB Liability.
3. The wage inflation rate was reduced from 3.20% to 3.10%.
4. Age rating factors were updated. Based on the 2013 SOA Study "Health Care Costs - From Birth to Death."

## Miscellaneous and Technical Assumptions

<b>Decrement Timing</b>	Decrements of all types are assumed to occur mid-year.
<b>Decrement Operation</b>	Turnover does not operate during retirement eligibility.
<b>Eligibility Testing</b>	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.
<b>Marriage Assumption</b>	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.
<b>Pay Increase Timing</b>	Middle of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during calendar year containing the valuation date.
<b>Medicare Coverage</b>	<p>Assumed to be available for all covered employees on attainment of age 65. Disabled retirees were assumed to be eligible for Medicare coverage at age 65.</p> <p>The Medicare Part B premium is assumed to be \$144.60 per month for current and future retirees. This is the Medicare Part B premium for 2020.</p>
<b>Retiree Opt-Out</b>	Retirees and spouses who have opted-out of coverage are assumed to not re-enroll
<b>Election Percentage</b>	<p>It was assumed that the following percentage of active participants (including those currently waiving coverage) would elect coverage upon retirement:</p> <ul style="list-style-type: none"><li>• 94% are assumed to elect medical coverage</li><li>• 88% are assumed to elect prescription drug coverage</li><li>• 89% are assumed to elect dental and vision coverage</li><li>• 50% are assumed to elect life insurance coverage</li></ul> <p>Of those who elect coverage, 40% of males and females were assumed to elect two-person coverage (not applicable for life insurance coverage), if eligible.</p> <p>For those that elect two-person coverage, it was assumed that spouses would not continue coverage upon death of the retiree.</p>
<b>Waived Coverage</b>	Active participants currently waiving coverage were assumed to elect retiree coverage with the same probabilities as the active group.
<b>Part-time Members</b>	Part-time members are assumed to accrue one-half year of service credit each year.
<b>Liability Adjustments:</b>	An additional 0.4 years of service is assumed for all members to account for sick leave conversion and prior military time.

## Miscellaneous and Technical Assumptions (Concluded)

### Election Percentage Detail:

Coverage Type	Medical	Prescription Drug	Dental/ Vision	Life Insurance
Waive	6.0%	12.0%	11.0%	50%
1-person	56.4%	52.8%	53.4%	50%
2-person	37.6%	35.2%	35.6%	N/A

### Assumptions for Incomplete/Uncertain Data:

1. The 2020 OPEB benefit election data was matched against the 2020 pension data to retrieve date of birth, date of hire, gender and union information. It was also matched against the 2018 OPEB data where necessary. There were 50 active records a missing date of birth, date of hire, gender and union code. For valuation purposes these members were assumed to be Operators and assigned the average age and service of the active members in the Operators group (Age 47 with 13 years of service). Gender was assigned based on the members first name.
2. There were two retiree records with a missing date of birth and gender. Gender was assigned based on the members first name. If the beneficiary date of birth was available (one record), we assumed male spouses are three years older than female spouses. Otherwise, the member was assumed to be age 57, the average age at retirement of the retired members.
3. There were five participants with both active benefits and retiree health coverage elections. They were treated as retired for purposes of the valuation and excluded from the active member counts.
4. Information on retired members participating in the Medicare Part B reimbursement plan was not provided. All retiree over the age of 65 were assumed to have Medicare Part B fully reimbursed for the retiree only.



## **SECTION H**

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### **GLOSSARY OF TERMS**

# Glossary of Terms

<b>Accrued Service</b>	Service credited under the system that was rendered before the date of the actuarial valuation.
<b>Actuarial Accrued Liability (AAL)</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>Actuarial Assumptions</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>Actuarial Cost Method</b>	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the OPEB 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>Actuarial Equivalent</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>Actuarial Gain (Loss)</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>Actuarial Present Value (APV)</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>Actuarial Valuation</b>	The actuarial valuation report determines, as of the actuarial valuation date, the service cost, total OPEB liability, and related actuarial present value of projected benefit payments for OPEB.
<b>Actuarial Valuation Date</b>	The date as of which an actuarial valuation is performed.

# Glossary of Terms

<b>Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC)</b>	A calculated contribution into an OPEB 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.
<b>Amortization Method</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>Amortization Payment</b>	The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.
<b>Cost-of-Living Adjustments</b>	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
<b>Cost-Sharing Multiple-Employer Defined Benefit OPEB Plan (cost-sharing OPEB plan)</b>	A multiple-employer defined benefit OPEB plan in which the OPEB obligations to the employees of more than one employer are pooled and OPEB plan assets can be used to pay the benefits of the employees of any employer that provides benefits through the OPEB plan.
<b>Covered-Employee Payroll</b>	The payroll of employees that are provided with benefits through the OPEB plan.
<b>Deferred Inflows and Outflows</b>	The deferred inflows and outflows of OPEB resources are amounts used under GASB Statement No. 75 in developing the annual OPEB expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in the OPEB expense should be included in the deferred inflows or outflows of resources.
<b>Discount Rate</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 OPEB 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

<b>Entry Age Actuarial Cost Method (EAN)</b>	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.
<b>Fiduciary Net Position</b>	The fiduciary net position is the market value of the assets of the trust dedicated to the defined benefit provisions.
<b>GASB</b>	The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.
<b>Long-Term Expected Rate of Return</b>	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.
<b>Money-Weighted Rate of Return</b>	The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For purposes of GASB Statement No. 74, the money-weighted rate of return is calculated as the internal rate of return on OPEB plan investments, net of OPEB plan investment expense.
<b>Multiple-Employer Defined Benefit OPEB Plan</b>	A multiple-employer plan is a defined benefit OPEB plan that is used to provide OPEB payments to the employees of more than one employer.
<b>Municipal Bond Rate</b>	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.
<b>Net OPEB Liability (NOL)</b>	The NOL is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan.
<b>Non-Employer Contributing Entities</b>	Non-employer contributing entities are entities that make contributions to an OPEB plan that is used to provide OPEB payments to the employees of other entities. For purposes of the GASB accounting statements, plan members are not considered non-employer contributing entities.

## Glossary of Terms

<b>Normal Cost</b>	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.
<b>Other Postemployment Benefits (OPEB)</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 healthcare benefits regardless of the manner in which they are provided. Other post-employment benefits do not include termination benefits.
<b>Real Rate of Return</b>	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
<b>Service Cost</b>	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.
<b>Total OPEB Expense</b>	The total OPEB 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 OPEB 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. OPEB 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>Total OPEB Liability (TOL)</b>	The TOL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.
<b>Unfunded Actuarial Accrued Liability (UAAL)</b>	The UAAL is the difference between actuarial accrued liability and valuation assets.
<b>Valuation Assets</b>	The valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of GASB Statement Nos. 74 and 75, the valuation assets are equal to the market value of assets.



September 30, 2021

Ms. Laurie Brown  
Deputy CFO  
Maryland Transit Administration  
6 St. Paul Street, 8th Floor  
Baltimore, MD 21202

Dear Ms. Brown:

Please find enclosed copies of the GASB Statement No. 75 "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions" report of the Maryland Transit Administration.

Sincerely,

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

Brad Lee Armstrong, ASA, EA, FCA, MAAA

BLA:sc  
Enclosures

cc: Lisa Lamberth (MTA)  
Edward Wilson (MTA)  
Glenn Davis (MTA)  
Brian Hoffmaster (MTA)  
Brian Murphy (GRS)  
Derek Henning (GRS)