



**DELAWARE RIVER JOINT  
TOLL BRIDGE COMMISSION**

**REQUEST FOR PROPOSALS**

**ACTUARIAL SERVICES – OTHER POST-  
EMPLOYMENT BENEFITS (OPEB) TRUST FUND**

**INQUIRIES AND RESPONSES**

**POSTED: OCTOBER 28, 2022**

**PROPOSALS DUE: NOVEMBER 10, 2022**

Inquiry 1 of 17: *Several inquiries included a request for copies of the most recent GASB 74 and GASB 75 reports.*

Commission Response: The most recent GASB 74 and GASB 75 reports are included at the back of this posting.

Inquiry 2 of 17: *Several inquiries included a request for the actuarial fees paid over the past several years, while one inquiry requested the same broken down by GASB 74 and 75 actuarial reports and other fees for non-recurring services.*

Commission Response: The figures shown in the following table represent the fees paid for actuarial services over the past five calendar years.

Calendar Year	GASB 74 Report Fee	GASB 75 Report Fee	Non-Recurring Fees Paid
2018	\$3,000	\$14,000	\$0
2019	\$3,000	\$15,000	\$0
2020	\$3,500	\$15,500	\$1,250
2021	\$4,000	\$16,000	\$0
2022	\$4,500	\$16,500	\$661

Inquiry 3 of 17: *Please provide a copy of the Commission's funding policy (if not described in the GASB 74 and 75 reports).*

Commission Response: While the Commission's OPEB Trust Fund Contribution Policy is referenced in the GASB 74 and GASB 75 reports, the complete policy text is provided on the following page:

**Delaware River Joint Toll Bridge Commission**  
**Policy with respect to contributions to the OPEB Trust Fund**  
**Approved September 24, 2018; Amended July 25, 2022**

In order to provide a more consistent pattern of contributing Commission funds to the OPEB Trust Fund, and thereby improve the sustainability of the OPEB Trust Fund at its present funding level or better, the Delaware River Joint Toll Bridge Commission hereby establishes a contribution policy as follows:

- 1) For each calendar year, the Commission shall contribute to the OPEB Trust Fund an amount equivalent to the retiree benefit expenses paid during the immediately preceding calendar year plus a growth factor, such factor to be determined annually based on the average annual rate of change in retiree benefit expenses over the previous five calendar years.
- 2) Upon approval by the Administrative Committee of a calendar year's contribution amount, the contribution amount shall be paid into the OPEB Trust Fund in regular quarterly installments, or in such other regularly occurring time periods as determined by the Administrative Committee, after consultation with the OPEB Trust Fund Investment Manager. To the extent possible, the timing of such contribution installment payments should coincide with the requests for reimbursement from the OPEB Trust Fund of amounts paid by the Commission for retiree benefits for that time period.
- 3) The annual contribution amount and any installment thereof shall be reduced or suspended in any calendar year in which the OPEB Trust Fund assets exceed 100% of the actuarially determined liabilities.
- 4) Upon suspension of contributions under section 3 above, in any calendar year in which the assets of the OPEB Trust Fund shall have fallen below 85% of the actuarially determined liabilities, the Commission shall resume making contributions in accordance with this Policy beginning in the next subsequent calendar year.
- 5) The payment of the annual contribution amount or any installment thereof shall at all times be subject to the availability of funds for such purposes.

Inquiry 4 of 17: *In the RFP, there is a question about whether the Commission should combine the GASB 74 and GASB 75 reports into one report. Should the fee proposal reflect two separate reports at this time, or should the fee proposal include alternate pricing that assumes one report in the future (provided that is a recommendation)?*

Commission Response: The Fee Proposal is to include (among other items) a fee schedule by year for the GASB 74 Report, a fee schedule by year for the GASB 75 report and IF, in response to the combined report question a proposer recommends a combined annual report, a fee schedule by year for such combined report. The Commission has made no decision and is not bound to accept any recommendation regarding the combining of GASB 74 and 75 reports.

Inquiry 5 of 17: *Have there been any changes to the program since the last actuarial report was conducted?*

Commission Response: There have been no changes since the last actuarial report was conducted.

Inquiry 6 of 17: *Please provide the latest experience study report and any presentation materials.*

Commission Response: The Commission has not undertaken a recent experience study.

Inquiry 7 of 17: *Several inquiries included a request for confirmation of whether the Commission is requesting annual or biennial (with interim roll forwards) GASB 74 and GASB 75 compliant valuations and reports.*

Commission Response: The Commission expects to receive GASB 74 and GASB 75 compliant reports on an annual basis.

Inquiry 8 of 17: *Will the Commission accept a Professional Liability Coverage insurance minimum coverage amount of \$2,000,000?*

Commission Response: It is improper to negotiate contract terms during the RFP process. The RFP provides that exceptions or objections to any of the Commission's Insurance Requirements are to be identified in the Letter of Transmittal and detailed in the body of the Technical Proposal portion of your proposal. If selected, the Commission will consider any such proposed exceptions, but can make no determination regarding acceptance at this time.

Inquiry 9 of 17: *When were last GASB 74 and GASB 75 compliant OPEB full actuarial valuations and reports completed for the Commission?*

Commission Response: The most recent GASB 74 and GASB 75 reports are included at the back of this posting.

Inquiry 10 of 17: *What is the name of the firm that performed the last two annual GASB 74 and GASB 75 compliant OPEB full valuations and reports for the Commission?*

Commission Response: Aon.

Inquiry 11 of 17: *Why is the Commission seeking new bid proposals at this time?*

Commission Response: The most recent contract and extension periods have expired.

Inquiry 12 of 17: *Is the previously contracted firm expected to submit a new proposal?*

Commission Response: The previous firm is not precluded from submitting a proposal in response to this RFP.

Inquiry 13 of 17: *RFP Section Scope of Services, items 2 and 4 state "In conjunction with the delivery of the GASB 74 Report (and GASB 75 report), meet with the Administrative Committee..."; is the Commission requesting two (2) separate meetings?*

Commission Response: The Commission expects the selected firm to meet with the Administrative Committee and/or Commission staff to review the content of its actuarial reports. To the extent that the reports are prepared/delivered at different times of the year, separate review meetings would be expected.

Inquiry 14 of 17: *Is it the Commission's requirement that these meetings be held on-site and in-person or can they be done via teleconference or web meeting services?*

Commission Response: The Commission has accommodated meetings via web meeting services, particularly during the recent pandemic, and continues to operate in a "hybrid" manner (some attendees in person, some via teleconference). If the Commission in the future returns fully to in-person meetings, the selected firm's on-site attendance may be requested.

Inquiry 15 of 17: *Can all other meetings, planning sessions, consultations, and/or presentations be performed using teleconference or web-meeting services (virtual)?*

Commission Response: Please see response to Inquiry 14 above.

Inquiry 16 of 17: *Can you provide the number of participants who are active and eligible for future OPEB benefits? We also need the number inactive participants receiving OPEB benefits.*

Commission Response: The most recent participant data can be found in the actuarial reports at the end of this posting.

Inquiry 17 of 17: *Are the medical plans self-insured or fully insured?*

Commission Response: The Commission's active employee and retiree medical plans are self-insured.



# Actuarial Valuation Report

## GASB 74

Delaware River Joint Toll Bridge Commission

Postemployment Benefits Other Than Pensions

For the Fiscal Year Ending December 31, 2021

Measurement Date December 31, 2021

## Introduction

This report documents the results of the actuarial valuation for the fiscal year ending December 31, 2021 of the Postemployment Benefits Other Than Pensions for the Delaware River Joint Toll Bridge Commission. The plan is a single-employer plan and does not issue a separate financial statement. As a result, all reporting requirements are included in the employer's financial statement. These results are based on a Measurement Date of December 31, 2021. The information provided in this report is intended strictly for documenting information relating to company and plan disclosure and reporting requirements.

Determinations for purposes other than the financial accounting requirements may be significantly different from the results in this report. Thus, the use of this report for purposes other than those expressed here may not be appropriate.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board. In addition, the valuation results are based on our understanding of the financial accounting and reporting requirements under U.S. Generally Accepted Accounting Principles as set forth in Government Accounting Standards Board Statement 74 (GASB 74) including any guidance or interpretations provided by the Company and/or its audit partners prior to the issuance of this report. The information in this report is not intended to supersede or supplant the advice and interpretations of the Delaware River Joint Toll Bridge Commission's auditors. Additional disclosures may be required under GASB 75.

A valuation model was used to develop the liabilities for this valuation. The valuation model relies on ProVal software, which was developed by Winklevoss Technologies, LLC. Experts within Aon selected this software and determined it is appropriate for performing valuations. We coded and reviewed the software for the provisions, assumptions, methods, and data of the Postemployment Benefits Other Than Pensions.

The valuation model outputs various cost scenarios. The "1% increase" and "1% decrease" interest rate scenarios vary only the discount rate assumption, in order to illustrate the impact of a change in that assumption in isolation. In practice, certain other assumptions, such as the expected or realized asset returns, would also be expected to vary when the discount rate changes. Therefore, the output from these scenarios should be used solely for assessing the impact of the discount rate in isolation and may not represent a realistic set of results for other purposes.

The "1% increase" and "1% decrease" healthcare cost trend scenarios vary only the healthcare cost trend assumption, in order to illustrate the impact of a change in that assumption in isolation. Therefore, the output from these scenarios should be used solely for assessing the impact of the healthcare cost trend in isolation and may not represent a realistic set of results for other purposes.

Models are used to estimate underlying per capita medical, prescription drug, and dental claims costs, subsequently utilized as assumption inputs for valuation models used to develop the liabilities for the 2021 and future valuations. The Aon consulting team leveraged expertise of Health experts within Aon as it relates to reviewing the models developed by experts outside of Aon, and those used for development of the per capita claims costs and future trend rates.



Future actuarial measurements may differ significantly from the current measurements presented in this report due to (but not limited to) such factors as the following:

- Plan experience differing from that anticipated by the economic or demographic assumptions;
- Changes in actuarial methods or in economic or demographic assumptions;
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and
- Changes in plan provisions or applicable law.

Due to the limited scope of our assignment, we did not perform an analysis of the potential range of such future measurements.

Funded status measurements shown in this report are determined based on various measures of plan assets and liabilities. For entity and plan disclosure and reporting purposes, funded status is determined using plan assets measured at market value. Plan liabilities are measured based on the interest rates and other assumptions summarized in the Actuarial Assumptions and Methods section of this report.

These funded status measurements may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations, and funded status measurements for Delaware River Joint Toll Bridge Commission and plan disclosure and reporting purposes may not be appropriate for assessing the need for or the amount of future contributions. In conducting the valuation, we have relied on personnel, plan design, health care claim cost, and asset information supplied by Delaware River Joint Toll Bridge Commission as of the valuation date. While we cannot verify the accuracy of all the information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy or completeness of the information and believe that it has produced appropriate results.

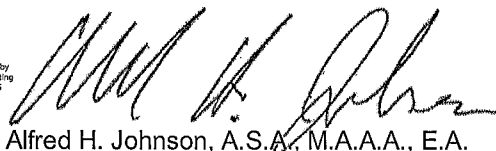
The actuarial assumptions and methods used in this valuation are described in the Actuarial Assumptions and Methods section of this report. Delaware River Joint Toll Bridge Commission selected the economic and demographic assumptions and prescribed them for use for purposes of compliance with GASB 74/75. Aon provided guidance with respect to these assumptions, and it is our belief that the assumptions represent reasonable expectations of anticipated plan experience.

The undersigned is familiar with the near-term and long-term aspects of OPEB valuations and collectively meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. The information provided in this report is dependent upon various factors as documented throughout this report, which may be subject to change. Each section of this report is considered to be an integral part of the actuarial opinions.

To our knowledge, no colleague of Aon providing services to Delaware River Joint Toll Bridge Commission has any material direct or indirect financial interest in Delaware River Joint Toll Bridge Commission. Thus, we believe there is no relationship existing that might affect our capacity to prepare and certify this actuarial report for Delaware River Joint Toll Bridge Commission.

Aon Ret.  
Consulting

Digitally signed by  
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June 15, 2022

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# Accounting Requirements

## GASB 74 Net OPEB Liability

### Calculation Details

The following table illustrates the Net OPEB Liability under GASB 74.

	Fiscal Year Ending 12/31/2020	Fiscal Year Ending 12/31/2021
(1) OPEB Liability		
(a) Retired Participants and Beneficiaries Receiving Payment	\$ 46,244,208	\$ 47,889,295
(b) Active Participants	<u>56,747,451</u>	<u>52,828,738</u>
(c) Total	\$ 102,991,659	\$ 100,718,033
(2) Plan Fiduciary Net Position	<u>(106,802,956)</u>	<u>(110,289,668)</u>
(3) Net OPEB Liability (Asset)	\$ (3,811,297)	\$ (9,571,635)
(4) Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	103.70%	109.50%

#### Summary of key factors impacting change in Net OPEB Liability:

- 1) Investment Return: Plan assets returned \$0.9M more than the 6% assumed return in 2021. Expected return was \$6.3M actual was \$7.2M.
- 2) Demographic changes: Favorable demographic trends decreased liabilities by about \$0.5M.
- 3) Claims cost changes: Favorable premium trends decreased liabilities by about \$6.5M.
- 4) Trend changes: Updates to medical trend rates decreased liabilities by about \$1.1M.
- 5) Employer Contributions: Trust deposits of approximately \$1M were \$3.7M less than benefit payments and administrative expenses.
- 6) Mortality Table: Updated mortality projection scale increased liabilities by about \$0.3M.
- 7) SERS Assumptions: Updated retirement rates, termination rates and salary scale increased liabilities by about \$0.5M.

## Statement of Fiduciary Net Position

	Fiscal Year Ending 12/31/2020	Fiscal Year Ending 12/31/2021
<b>Assets</b>		
Cash and deposits	\$ 2,483,351	\$ 411,273
Receivables		
Contributions	\$ 0	\$ 0
Due from broker for investments sold	0	0
Investment income	0	0
Loans	0	0
Total receivables	\$ 0	\$ 0
Investments		
US Equity	\$ 13,334,248	\$ 13,407,406
Global Equity	19,924,519	21,267,607
Non-US Equity	6,502,834	6,566,506
Fixed income	61,914,105	65,470,927
Private equity	0	0
Real estate	3,549,207	4,343,755
Total investments	\$ 105,224,913	\$ 111,056,201
Total assets	\$ 107,708,264	\$ 111,467,474
<b>Liabilities</b>		
Payables		
Benefits payable	\$ 905,308	\$ 1,177,806
Due to broker for investment purchased	0	0
Total liabilities	\$ 905,308	\$ 1,177,806
<b>Net position restricted for postemployment benefits other than pensions</b>	\$ 106,802,956	\$ 110,289,668

## Statement of Changes in Fiduciary Net Position

	Fiscal Year Ending 12/31/2020	Fiscal Year Ending 12/31/2021
<b>Additions</b>		
Employer contributions	\$ 4,526,168	\$ 985,287
Investment income:		
Net increase in fair value of investments	\$ 8,414,997	\$ 5,437,938
Interest and dividends	2,183,115	1,881,213
Less investment expense	(158,773)	(118,374)
Net investment income	\$ 10,439,339	\$ 7,200,777
Total additions	14,965,507	8,186,064
<b>Deductions</b>		
Benefit payments	\$ (3,807,739)	\$ (4,674,708)
Administrative expense	(22,139)	(24,644)
Total deductions	\$ (3,829,878)	\$ (4,699,352)
Net increase in net position	\$ 11,135,629	\$ 3,486,712
<b>Net position restricted for postemployment benefits other than pensions</b>		
Beginning of year	\$ 95,667,327	\$ 106,802,956
End of year	\$ 106,802,956	\$ 110,289,668

## Plan Fiduciary Net Position Projection

The following table illustrates the projection of the fiduciary net position for use in the calculation of the discount rate as of December 31, 2021.

(\$ in thousands)

Year Ending December 31 <sup>2</sup>	Beginning Fiduciary Net Position (a)	Total Contributions (b)	Benefit Payments (c)	Investment Earnings (d)	Ending Fiduciary Net Position <sup>1</sup> (e)
2021	\$106,803	\$985	\$4,675	\$7,176	\$110,290
2022	110,290	0	4,622	6,481	112,148
2023	112,148	0	4,841	6,586	113,893
2024	113,893	0	5,168	6,681	115,405
2025	115,405	0	5,289	6,768	116,883
2026	116,883	1,890	5,577	6,848	120,044
2027	120,044	3,282	5,925	7,027	124,429
2028	124,429	3,345	6,272	7,280	128,783
2029	128,783	3,319	6,653	7,530	132,980
2030	132,980	3,263	6,946	7,773	137,071
2031	137,071	3,199	7,268	8,009	141,012
2032	141,012	3,122	7,602	8,236	144,769
2033	144,769	3,037	7,887	8,453	148,372
2034	151,565	2,932	8,393	8,654	151,565
2035	151,565	2,767	8,799	8,834	154,367
2036	154,367	2,564	9,246	8,989	156,674
2037	156,674	2,384	9,612	9,116	158,562
2038	158,562	2,200	10,219	9,212	159,755
2039	159,755	2,008	10,644	9,271	160,389
2040	160,389	1,833	11,206	9,292	160,308
2041	160,308	1,653	11,617	9,275	159,620
2042	159,620	1,497	12,020	9,222	158,318
2043	158,318	1,360	12,221	9,138	156,595
2044	156,595	1,234	12,436	9,028	154,421
2045	154,421	1,123	12,546	8,894	151,893
2046	151,893	1,008	12,535	8,743	149,108
2047	149,108	891	12,556	8,575	146,018
2048	146,018	784	12,285	8,398	142,915
2049	142,915	680	12,403	8,208	139,400
2050	139,400	578	12,195	8,003	135,787

<sup>1</sup> (e) = (a) + (b) – (c) + (d)

<sup>2</sup> Years later than 2050 were omitted from this table.



## Plan Fiduciary Net Position

The last year in which projected benefit payments are due from the Plan is 2119.

The Plan's projected fiduciary net position is not projected to reach \$0.

As such, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "depletion date" when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 6.00% per annum was applied to all periods of projected benefit payments to determine the total OPEB liability as of December 31, 2021 shown earlier in this report, pursuant to paragraph 48 of GASB Statement No. 74.

In projecting the Plan's fiduciary net position the following assumptions were made:

1. Interest rate for discounting was 6.00% per annum.
2. Assumed contributions are based on the contribution policy of the Delaware River Joint Toll Bridge Commission as communicated by Administrative Committee on September 28, 2018. The Delaware River Joint Toll Bridge Commission will contribute subject to the availability of funds, for each calendar year, the Commission shall contribute to the OPEB Trust Fund an amount equivalent to the retiree benefit expenses paid during the immediately preceding calendar year plus a growth factor, such factor to be determined annually based on the average annual rate of change in retiree benefit expenses over the previous five calendar years. The annual contribution amount and any installment thereof shall be reduced to the extent that the OPEB Trust Fund assets exceed 100% of the actuarially determined, expected liabilities.
3. Projected benefit payments have been determined in accordance with Paragraphs 43-47 of GASB Statement No. 74 and are based on the closed group of active, retired members and beneficiaries as of December 31, 2021. Benefit payments are assumed to be paid mid-year.
4. Projected investment earnings are based on the assumed investment rate of return of 6.00% per annum. The first year's earnings have been adjusted to account for the actual return through December 31, 2021.

## Interest Rate Sensitivity

The following table illustrates the impact of interest rate sensitivity on the Net OPEB Liability for fiscal year ending December 31, 2020:

	<b>1% Decrease (5.00%)</b>	<b>Current Rate (6.00%)</b>	<b>1% Increase (7.00%)</b>
(1) Total OPEB Liability	\$ 116,613,385	\$ 102,991,659	\$ 91,646,194
(2) Plan Fiduciary Net Position	<u>(106,802,956)</u>	<u>(106,802,956)</u>	<u>(106,802,956)</u>
(3) Net OPEB Liability (Asset)	\$ 9,810,429	\$ (3,811,297)	\$ (15,156,762)

The following table illustrates the impact of interest rate sensitivity on the Net OPEB Liability for fiscal year ending December 31, 2021:

	<b>1% Decrease (5.00%)</b>	<b>Current Rate (6.00%)</b>	<b>1% Increase (7.00%)</b>
(1) Total OPEB Liability	\$ 114,011,999	\$ 100,718,033	\$ 89,647,770
(2) Plan Fiduciary Net Position	<u>(110,289,668)</u>	<u>(110,289,668)</u>	<u>(110,289,668)</u>
(3) Net OPEB Liability (Asset)	\$ 3,722,331	\$ (9,571,635)	\$ (20,641,898)

## Healthcare Cost Trend Sensitivity

The following table illustrates the impact of healthcare cost trend sensitivity on the Net OPEB Liability for fiscal year ending December 31, 2020:

	<b>1% Decrease</b>	<b>Trend Rate</b>	<b>1% Increase</b>
(1) Total OPEB Liability	\$ 89,429,523	\$ 102,991,659	\$ 119,828,550
(2) Plan Fiduciary Net Position	<u>(106,802,956)</u>	<u>(106,802,956)</u>	<u>(106,802,956)</u>
(3) Net OPEB Liability (Asset)	\$ (17,373,433)	\$ (3,811,297)	\$ 13,025,594

The following table illustrates the impact of healthcare cost trend sensitivity on the Net OPEB Liability for fiscal year ending December 31, 2021:

	<b>1% Decrease</b>	<b>Trend Rate</b>	<b>1% Increase</b>
(1) Total OPEB Liability	\$ 87,608,235	\$ 100,718,033	\$ 116,967,384
(2) Plan Fiduciary Net Position	<u>(110,289,668)</u>	<u>(110,289,668)</u>	<u>(110,289,668)</u>
(3) Net OPEB Liability (Asset)	\$ (22,681,433)	\$ (9,571,635)	\$ 6,677,716

# Disclosure—Changes in the Net OPEB Liability and Related Ratios

## Changes in the Net OPEB Liability and Related Ratios<sup>1</sup>

	Fiscal Year Ending			
	2017	2018	2019	2020
<b>Total OPEB Liability</b>				<b>2021</b>
Service Cost	\$ 4,161,867	\$ 3,388,535	\$ 3,901,375	\$ 3,496,407
Interest Cost	6,592,495	6,388,854	6,633,709	5,860,350
Changes of Benefit Terms	(45,529)	0	0	0
Differences Between Expected and Actual Experience	2,550,800	0	(18,843,509)	628,729
Changes of Assumptions	(18,919,078)	4,913,868	(604,773)	(6,308,475)
Benefit Payments	(3,144,352)	(3,161,037)	(4,144,492)	(3,807,739)
<b>Net Change in Total OPEB Liability</b>	<b>\$ (8,803,797)</b>	<b>\$ 11,530,220</b>	<b>\$ (13,057,690)</b>	<b>\$ (130,728)</b>
<b>Total OPEB Liability (Beginning)</b>	<b>113,453,654</b>	<b>104,649,857</b>	<b>116,180,077</b>	<b>103,122,387</b>
<b>Total OPEB Liability (Ending)</b>	<b>\$ 104,649,857</b>	<b>\$ 116,180,077</b>	<b>\$ 103,122,387</b>	<b>\$ 102,991,659</b>
<b>Plan Fiduciary Net Position</b>				
Contributions—Employer	\$ 7,500,000	\$ 0	\$ 3,304,940	\$ 4,526,168
Contributions—Member	0	0	0	0
Net Investment Income	9,056,129	(2,848,376)	12,649,219	10,439,339
Benefit Payments	(3,144,352)	(3,161,037)	(4,144,492)	(3,807,739)
Administrative Expense	(21,604)	(22,622)	(20,655)	(22,139)
Other	0	0	0	0
<b>Net Change in Plan Fiduciary Net Position</b>	<b>\$ 13,390,173</b>	<b>\$ (6,032,035)</b>	<b>\$ 11,789,012</b>	<b>\$ 11,135,629</b>
<b>Plan Fiduciary Net Position (Beginning)</b>	<b>76,520,177</b>	<b>89,910,350</b>	<b>83,878,315</b>	<b>95,667,327</b>
<b>Plan Fiduciary Net Position (Ending)</b>	<b>\$ 89,910,350</b>	<b>\$ 83,878,315</b>	<b>\$ 95,667,327</b>	<b>\$ 106,802,956</b>
<b>Net OPEB Liability (Ending)</b>	<b>\$ 14,739,507</b>	<b>\$ 32,301,762</b>	<b>\$ 7,455,060</b>	<b>\$ (3,811,297)</b>
<b>Net Position as a Percentage of OPEB Liability</b>	<b>85.92%</b>	<b>72.20%</b>	<b>92.77%</b>	<b>103.70%</b>
<b>Covered-Employee Payroll</b>	<b>\$ 19,416,733</b>	<b>\$ 22,381,020</b>	<b>\$ 24,588,730</b>	<b>\$ 26,570,518</b>
<b>Net OPEB Liability as a Percentage of Payroll</b>	<b>75.91%</b>	<b>144.33%</b>	<b>30.32%</b>	<b>-14.34%</b>
				<b>-38.28%</b>

<sup>1</sup> GASB 74 was effective first for employer fiscal years beginning after June 15, 2017.

## Disclosure—Contribution Schedule

### Contributions

	2017		2018		2019		2020		2021	
	\$	N/A	\$	N/A	\$	N/A	\$	N/A	\$	N/A
Actuarially Determined Contribution										
Contributions Made in Relation to the										
Actuarially Determined Contribution		7,500,000		0		3,304,940		4,526,168		985,287
Contribution Deficiency (Excess)	\$	N/A	\$	N/A	\$	N/A	\$	N/A	\$	N/A
Covered-Employee Payroll	\$	19,416,733	\$	22,381,020	\$	24,588,730	\$	26,570,518	\$	25,007,013
Contributions as a Percentage of Payroll		38.63%		0.00%		13.44%		17.03%		3.94%

#### Notes to Schedule:

During fiscal year 2017 and 2018, the Commission did not determine an actuarially based contribution. Beginning in 2019, the Commission adopted the following policy.

1. For each calendar year, the Commission shall contribute to the OPEB Trust Fund an amount equivalent to the retiree benefit expenses paid during the immediately preceding calendar year plus a growth factor, such factor to be determined annually based on the average annual rate of change in retiree benefit expenses over the previous five calendar years.
2. Upon approval by the Administrative Committee of a calendar year's contribution amount, the contribution amount shall be paid into the OPEB Trust Fund in regular quarterly installments or in such other regularly occurring time periods as determined by the Administrative Committee, after consultation with the OPEB Trust Fund Investment Manager. To the extent possible, the timing of such contribution installment payments should coincide with the requests for reimbursement from the OPEB Trust Fund of amounts paid by the Commission for retiree benefits for that time period.
3. The annual contribution amount and any installment thereof shall be reduced to the extent that the OPEB Trust Fund assets exceed 100% of the actuarially determined, expected liabilities.
4. The payment of the annual contribution amount or any installment thereof shall at all times be subject to the availability of funds for such purposes.

# Appendix

## Payout Projection

Annual payments expected based on assumptions and contributions detailed in the Methods and Assumptions Section.

Fiscal Year Ending	Total
12/31/2022	4,632,295
12/31/2023	4,851,043
12/31/2024	5,177,885
12/31/2025	5,298,780
12/31/2026	5,586,534
12/31/2027	5,933,911
12/31/2028	6,280,994
12/31/2029	6,662,160
12/31/2030	6,954,724
12/31/2031	7,276,682

Projected benefit payments include payments expected to be made during the fiscal year for both current retirees and those participants assumed to retire during the year.

## Participant Data

The actuarial valuation was based on personnel information from Delaware River Joint Toll Bridge Commission records as of January 1, 2021. Following are some of the pertinent characteristics from the personnel data as of that date. Prior valuation characteristics are also provided for comparison purposes. Both age and service have been determined using years and months as of the valuation date.

	January 1, 2020	January 1, 2021
<b>Health Care Participants</b>		
Active Participants		
Number	390	371
Average Age	51.2	51.2
Average Service	11.6	11.8
Inactive Participants		
Retirees and Surviving Spouses	208	214
Average Age	72.3	72.2
Covered Spouses	127	130
Average Age	68.7	68.6
Total Participants		
Number	725	715
<b>Life Insurance Participants</b>		
Active Participants		
Number	41	32
Average Age	54.3	55.0
Average Service	29.7	29.6
Inactive Participants		
Number	175	171
Average Age	72.6	72.5
Average Current Life Insurance	\$ 30,545	\$ 34,561
Average Ultimate Life Insurance	\$ 11,079	\$ 10,883

## Participant Data (continued)

## Active: Age-Service Scatter

Age	Service										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	
Under 25	0	8	0	0	0	0	0	0	0	0	8
25 to 29	0	11	7	1	0	0	0	0	0	0	19
30 to 34	0	12	6	1	0	0	0	0	0	0	19
35 to 39	0	8	11	5	5	2	0	0	0	0	31
40 to 44	0	9	10	5	9	3	0	0	0	0	36
45 to 49	0	12	7	7	4	3	3	0	0	0	36
50 to 54	0	15	14	3	5	3	4	15	0	0	59
55 to 59	0	14	9	9	8	6	4	8	0	0	58
60 to 64	0	12	18	7	9	4	0	5	3	1	59
65 to 69	0	2	9	6	8	3	1	2	2	0	33
70 & up	0	0	6	2	4	0	1	0	0	0	13
<b>Total</b>	<b>0</b>	<b>103</b>	<b>97</b>	<b>46</b>	<b>52</b>	<b>24</b>	<b>13</b>	<b>30</b>	<b>5</b>	<b>1</b>	<b>371</b>



## Asset Allocation

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the OPEB plan's target asset allocation as of December 31, 2021 are summarized in the following table<sup>1</sup>:

<b>Asset Class</b>	<b>Expected Nominal Rate of Return</b>	<b>Expected Real Rate of Return</b>	<b>Allocation</b>
Broad U.S. Equity	7.74%	5.63%	22.00%
International Equity (Developed & Emerging)	8.12%	6.00%	14.00%
Core Fixed Income	4.10%	2.06%	60.00%
Core Real Estate	7.36%	5.25%	4.00%
Total Portfolio	6.05%	3.98%	100.00%

The discount rate used to measure the total OPEB liability is 6.00%. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on these assumptions, the OPEB Fund's fiduciary net position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on OPEB Plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

<sup>1</sup> The real rates of return reflect the best estimate as provided by Marquette Associates.

## Health Care Claims Development

The sample per capita claims cost assumptions shown below by age, benefit, and plan represent the true underlying baseline experience estimated for Delaware River Joint Toll Bridge Commissions' sponsored postretirement benefits and costs. These rates are used in the expense calculation for the period 1/1/2021–12/31/2021 and disclosures as of 12/31/2021.

Age	Medical	Rx	Admin	Part B	Dental	Vision
50	\$ 8,687	\$ 3,110	\$ 1,473	\$ -	\$ 425	\$ 39
55	\$ 10,723	\$ 3,839	\$ 1,473	\$ -	\$ 425	\$ 39
60	\$ 13,300	\$ 4,761	\$ 1,473	\$ -	\$ 425	\$ 39
65	\$ 2,365	\$ 2,931	\$ -	\$ 1,782	\$ 425	\$ 39
70	\$ 2,755	\$ 3,416	\$ -	\$ 1,782	\$ 425	\$ 39
75	\$ 3,057	\$ 3,790	\$ -	\$ 1,782	\$ 425	\$ 39
80	\$ 3,277	\$ 4,063	\$ -	\$ 1,782	\$ 425	\$ 39
85	\$ 3,496	\$ 4,335	\$ -	\$ 1,782	\$ 425	\$ 39
90+	\$ 3,601	\$ 4,466	\$ -	\$ 1,782	\$ 425	\$ 39

The average medical per capita claims costs for pre-65 were developed using a blend of active claims experience and enrollment for the period from October 2016 through September 2017, January 2018 through December 2018 and January 2020 through December 2020, and 2021 cobra rates provided by Delaware River Joint Toll Bridge Commission. Calendar year 2020 medical claims were adjusted to remove the estimated impacts of COVID-19. The average medical per capita claims costs were trended to the mid-point of the annual period following the valuation date. In order to improve the credibility of a single projection estimate, a combination of estimates from the distinct historical periods was used, placing 33.3% credibility on each period. Average medical per capita claims costs were then age-adjusted based on the demographics of the population and the assumed health care aging factors shown in the table below.

The average Rx per capita claim costs for pre-65 were developed using the cobra rates provided by Delaware River Joint Toll Bridge Commission. The average Rx per capita claims costs were trended to the mid-point of the annual period following the valuation date. Average Rx per capita claims costs were then age-adjusted based on the demographics of the population and the assumed health care aging factors shown in the table below.

The post-65 medical plan is insured, and we developed per capita costs using the 2021 fully insured Medical/Rx rate.

Average dental and vision per capita claims costs were determined using 2021 premium rates.

Implicit per capita administrative costs were provided by the client in aggregate for the pre-65 retirees. We developed per member rates using the enrollments from the active and retiree census data.

The 2021 calendar year premium rates used in the per capita claims cost development are shown below:

<b>Experience Population</b>	<b>Benefit</b>	<b>Rating Tier</b>	<b>Monthly Premium Rate</b>	<b>Annual Premium Rate</b>
Pre-65	Medical	Retiree Only	\$ 1,198	\$14,376
Pre-65	Rx	Retiree Only	\$ 319	\$ 3,828
Post-65	Medical/Rx	Retiree Only	\$ 552	\$ 6,624

#### Health Care Aging (Morbidity) Factors:

Since health care costs increase with age and an OPEB valuation is by its nature an analysis of a closed group that will age throughout the measurement, the effect that this aging of the population will have on claims costs must be reflected in the valuation. The claim costs for medical and prescription drugs were assumed to increase with age according to the table below.

<b>Age Band</b>	<b>Medical</b>	<b>Rx</b>	<b>Composite</b>
40-44	3.00%	4.80%	3.30%
45-49	3.70%	4.70%	3.80%
50-54	4.20%	4.70%	4.30%
55-59	4.40%	4.60%	4.40%
60-64	3.70%	4.60%	3.80%
65-69	2.70%	3.80%	3.10%
70-74	1.80%	2.50%	2.10%
75-79	2.20%	0.80%	1.40%
80-84	2.80%	0.20%	1.30%
85-89	1.40%	0.10%	0.60%
90+	0.00%	0.00%	0.00%

The aging factor assumptions shown above were based on normative data analyses, along with consideration of the results from the 2013 Society of Actuaries sponsored study "Health Care Costs—From Birth to Death" prepared by Dale H. Yamamoto, reporting on the effect of age on claims costs. In addition to age, this study shows the effect of service type (medical vs. pharmacy) and gender on claims costs.

### Health Care Cost Trend Rates:

The health care cost trend assumptions shown below were based on national average information from a variety of sources, including S&P Healthcare Economic Index, NHCE data, plan renewal data and vendor Rx reports, with adjustments based on the provisions of the benefits sponsored by Delaware River Joint Toll Bridge Commission.

<b>Year</b>	<b>Pre-65</b>	<b>Post-65</b>	<b>Dental/Vision/ Part B</b>
2021	6.70%	7.48%	5.00%
2022	6.49%	7.17%	5.00%
2023	6.28%	6.87%	5.00%
2024	6.07%	6.56%	5.00%
2025	5.86%	6.25%	5.00%
2026	5.64%	5.94%	5.00%
2027	5.43%	5.63%	5.00%
2028	5.22%	5.31%	5.00%
2029	5.00%	5.00%	5.00%
2030	4.75%	4.67%	5.00%
2031	4.57%	4.51%	5.00%
2032+	4.50%	4.50%	5.00%

## Actuarial Assumptions and Methods

Discount Rate                      6.00%<sup>1</sup> as of December 31, 2021  
    6.00%<sup>2</sup> as of December 31, 2020  
    5.59%<sup>3</sup> as of December 31, 2019

20 Yr. Municipal Bond Rate        2.06% as of December 31, 2021  
    2.12% as of December 31, 2020  
    2.74% as of December 31, 2019

Municipal Bond Rate Basis        Bond Buyer General Obligation 20-year Municipal Bond Index

Salary Increases

Merit Scale			
Completed Years of Service	Annual Increase	Completed Years of Service	Annual Increase
1	3.25%	16	1.20%
2	2.90%	17	1.15%
3	2.70%	18	1.15%
4	2.50%	19	1.10%
5	2.35%	20	1.00%
6	2.15%	21	0.95%
7	2.10%	22	0.90%
8	2.00%	23	0.85%
9	1.60%	24	0.80%
10	1.55%	25	0.70%
11	1.45%	26	0.60%
12	1.40%	27	0.50%
13	1.35%	28	0.50%
14	1.30%	29	0.50%
15	1.25%	30+	0.50%

General Inflation                    2.8%

<sup>1</sup> Based on the employer's funding policy, projected assets are projected to be sufficient to cover projected benefit payments, so the expected return is used as the discount rate.

<sup>2</sup> Based on the employer's funding policy, projected assets are projected to be sufficient to cover projected benefit payments, so the expected return is used as the discount rate.

<sup>3</sup> Based on the employer's funding policy, projected assets were not projected to be sufficient to cover projected benefit payments, so the expected return is not used as the discount rate.

## Actuarial Assumptions and Methods (continued)

### Retirement Rates Active Participants

The following table shows sample annual rates of retirement at selected ages. Retirement rates vary by age, service, and is based upon the Pennsylvania State Employees' Retirement System.

Age	Male	Female
55-57	20.00%	23.00%
58	25.00%	23.00%
59	25.00%	28.00%
60	20.00%	23.00%
61-64	20.00%	20.00%
65-67	26.00%	26.00%
68-70	23.00%	23.00%
71-79	20.00%	20.00%
80	100.00%	100.00%

### Mortality Rates Healthy and Disabled

Pub-2010 Mortality Table projected generationally with scale MP-2021 from the central year.

### Withdrawal Rates

The following table shows sample annual rates of withdrawal and is based upon the Pennsylvania State Employees' Retirement System.

Age	Male Years of Service				Female Years of Service			
	0	5	9	14	0	5	9	14
20	30.0%	N/A	N/A	N/A	40.0%	N/A	N/A	N/A
25	21.0%	6.1%	3.0%	N/A	24.8%	8.5%	2.4%	N/A
30	18.5%	6.1%	3.0%	1.9%	21.3%	7.7%	2.3%	2.9%
35	18.5%	4.9%	1.6%	1.9%	16.6%	4.5%	2.4%	2.1%
40	18.2%	3.4%	2.8%	1.9%	14.8%	4.5%	2.3%	1.6%
45	17.4%	3.4%	1.6%	0.6%	17.8%	4.3%	1.1%	1.6%
50	19.1%	3.1%	1.6%	0.6%	15.8%	4.3%	1.8%	1.6%
55	19.1%	2.6%	0.8%	0.4%	15.8%	4.0%	1.3%	1.0%

### Decrement Timing

Beginning of year decrements.

### Health Care Participation Rate Future Retirees

We have assumed that 100% of current and future contingent eligible participants will elect health care benefits at their full eligibility age, or current age if later.

### Current Retirees

All current retirees are assumed to continue coverage.

### Spouse Coverage Election Rate Future Retirees

Males are assumed to be 2 years older than females. Active male employees are assumed to be 70% married, and active female employees are assumed to be 50% married.

## Actuarial Assumptions and Methods (continued)

Current Retirees	Spousal coverage is based on actual retiree coverage elections. Actual spouse age is used where available. In instances where this information is not available, males are assumed to be two years older than their female spouses.
Projected Retiree Health Care Contributions	Equal to applicable percentage of projected salary based on all relevant assumptions described in this section, including health care trend rates, health care cost aging, and various demographic assumptions.
Life Insurance Loads	Life insurance liabilities were loaded by 10% to reflect carrier retention charges, including administrative costs, risk charges, premium taxes, and other miscellaneous related charges.
Administrative Expenses	Actual administrative expenses during the measurement period are recognized in expense.
Asset Method	Fair market value.
Actuarial Cost Method	Entry Age Normal cost method.
Measurement Date	December 31, 2021
Valuation Date	January 1, 2021
Census Data	January 1, 2021
Valuation Methodology and Terminology	We have used GASB accounting methodology to determine the postretirement medical benefit obligations.

## Changes in Financial Accounting Methods/Assumptions Since the Prior Year

### Method Changes

There have been no method changes in the financial accounting valuation since the prior valuation.

### Assumption Changes

- The mortality table was updated to the Pub-2010 Generational mortality with MP-2021 projection scale.
- The retirement, withdrawal and salary scale assumptions were updated based on the Commonwealth of Pennsylvania State Employees' Retirement System's 19th Investigation of Actuarial Experience January 1, 2015 to December 31, 2019.

## Actuarial Assumptions and Methods

### Discussion of Actuarial Assumptions and Methods

Delaware River Joint Toll Bridge Commission selected the economic, demographic and health care claim cost assumptions and prescribed them for use for purposes of compliance with GASB 74. Aon provided guidance with respect to these assumptions, and it is our belief that the assumptions represent reasonable expectations of anticipated plan experience. Assumptions for withdrawal, retirement, general inflation and salary scale are based upon the Pennsylvania State Employees' Retirement System. An evaluation of the reasonability and consistency of these assumptions is beyond the scope of the assignment.

### Calculation of Normal Costs and Liabilities

The method used to calculate the service cost and accumulated postretirement benefit obligation for determining OPEB expense is the entry age normal cost method. Under this cost method, the actuarial accrued liability is based on a prorated portion of the present value of all benefits earned to date over expected future working lifetime as defined by GASB. The proration is determined so that the cost with respect to service accrued from date of hire is recognized as a level percentage of pay each year. The Normal Cost is equal to the prorated cost for the year of the valuation.

### Accounting Information Under GASB 74

Benefit obligations and expense/(income) are calculated under U.S. Generally Accepted Accounting Principles as set forth in Government Accounting Standards Board Statement 74.

The total OPEB liability represents the actuarial present value of benefits based on the entry age normal cost method as of the measurement date. The service cost represents the actuarial present value of benefits that are attributed to the 2021 fiscal year, reflecting the effect of assumed future health care claim cost and/or pay increases.



## Plan Provisions

### Eligibility:

Employees hired prior to January 1, 1995 are eligible according to the following table.

Hire Date	Required Years of Service at Retirement Equals
Prior to January 1, 1979	65 minus age times 2
January 1, 1979- December 31, 1994	70 minus age times 2

Employees hired after December 31, 1994 and before January 1, 2017, earliest of:

- Attainment of 55 with 25 years of service
- 60 with 20 years of service
- 65 with 15 years of service

Service includes all service in state, county or municipal pension systems within the State of New Jersey or the Commonwealth of Pennsylvania, with the last 5 years with the Bridge Commission.

Employees hired after December 31, 2016, earliest of:

- Attainment of age 55 with 25 years of service
- Age 60 with 20 years of service
- Age 65 with 15 years of service

Service includes all service in state, county or municipal pension systems within the State of New Jersey or the Commonwealth of Pennsylvania. U.S. military service may also be included (up to 5 years). The maximum non-Bridge Commission service to be credited is 10 years. The last 10 years of employment must be with the Bridge Commission.

If an employee retires prior to 55 with 25 or more years of service, he may receive COBRA until age 55 at which time he would be eligible for the retiree health benefit plan in effect at that time provided the employee is within 18 months of retirement eligibility at the time of separation of employment.

## Summary of Principal Plan Provisions (continued)

### Medical Benefit:

All eligible employees are allowed to continue medical, prescription drug, dental and vision coverage under the Plan for the retiree and any eligible dependents for the lifetime of the retiree. For those under 65, coverage is continued in the same plan the retiree had at retirement. For those over 65, benefits are provided under NEBCO. In addition, the retiree is reimbursed for retiree/dependent Medicare Part B premiums (up to the standard premium for those who retire on or after January 1, 2018).

Employees hired before April 1, 1995 who retire on or after September 1, 2007 but before January 1, 2018 pay the current active co-pay of \$260 per year.

Employees hired on or after April 1, 1995 or who retire on or after January 1, 2018 pay half of the dental premium and a percentage of their final year earnings toward medical. The percentage is shown in the table below.

Coverage	Percent of Final Pay
Single	1.00%
Husband/Wife or Parent/Child	1.25%
Family or Parent/Children	1.50%

Retirees who retire on or after January 1, 2018 who become eligible for non-disability related Medicare coverage, have their obligation to pay a retiree contribution cease.

### Life Benefit:

Only applies to employees hired prior to January 1, 1995.

Employees receive life insurance coverage with no cost to the retiree according to the following schedule:

Age at Retirement	Benefit
Less than 70	150% of annual salary at retirement reduced each year to age 70 to \$10,000. After age 70 the benefit remains at \$10,000.
70 or more	75% of annual salary

### Plan Changes

None.



# Actuarial Valuation Report

Delaware River Joint Toll Bridge Commission

Postemployment Benefits Other Than Pensions

For the Fiscal Year Ending December 31, 2022

Measurement Date December 31, 2021

## Introduction

This report documents the results of the actuarial valuation for the fiscal year ending December 31, 2022 of the Postemployment Benefits Other Than Pensions for the Delaware River Joint Toll Bridge Commission. The plan is a single-employer plan and does not issue a separate financial statement. As a result, all reporting requirements are included in the employer's financial statement. These results are based on a Measurement Date of December 31, 2021. The information provided in this report is intended strictly for documenting information relating to company and plan disclosure and reporting requirements.

Determinations for purposes other than the financial accounting requirements may be significantly different from the results in this report. Thus, the use of this report for purposes other than those expressed here may not be appropriate.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board. In addition, the valuation results are based on our understanding of the financial accounting and reporting requirements under U.S. Generally Accepted Accounting Principles as set forth in Government Accounting Standards Board Statement 75 (GASB 75) including any guidance or interpretations provided by the Company and/or its audit partners prior to the issuance of this report. The information in this report is not intended to supersede or supplant the advice and interpretations of the Delaware River Joint Toll Bridge Commission's auditors. Additional disclosures may be required under GASB 74.

A valuation model was used to develop the liabilities for this valuation. The valuation model relies on ProVal software, which was developed by Winklevoss Technologies, LLC. Experts within Aon selected this software and determined it is appropriate for performing valuations. We coded and reviewed the software for the provisions, assumptions, methods, and data of the Postemployment Benefits Other Than Pensions.

The valuation model outputs various cost scenarios. The "1% increase" and "1% decrease" interest rate scenarios vary only the discount rate assumption, in order to illustrate the impact of a change in that assumption in isolation. In practice, certain other assumptions, such as the expected or realized asset returns, would also be expected to vary when the discount rate changes. Therefore, the output from these scenarios should be used solely for assessing the impact of the discount rate in isolation and may not represent a realistic set of results for other purposes.

The "1% increase" and "1% decrease" healthcare cost trend scenarios vary only the healthcare cost trend assumption, in order to illustrate the impact of a change in that assumption in isolation. Therefore, the output from these scenarios should be used solely for assessing the impact of the healthcare cost trend in isolation and may not represent a realistic set of results for other purposes.

Models are used to estimate underlying per capita medical, prescription drug, and dental claims costs, subsequently utilized as assumption inputs for valuation models used to develop the liabilities for the 2021 and future valuations. The Aon consulting team leveraged expertise of Health experts within Aon as it relates to reviewing the models developed by experts outside of Aon, and those used for development of the per capita claims costs and future trend rates.

The valuation model was used to project certain financial results for the liability projections. The valuation model relies on ProVal software, which was developed by Winklevoss Technologies, LLC and selected, reviewed, and evaluated by experts within Aon as appropriate for use for developing liabilities for liability projections.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to (but not limited to) such factors as the following:

- Plan experience differing from that anticipated by the economic or demographic assumptions;
- Changes in actuarial methods or in economic or demographic assumptions;
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and
- Changes in plan provisions or applicable law.

Due to the limited scope of our assignment, we did not perform an analysis of the potential range of such future measurements.

Funded status measurements shown in this report are determined based on various measures of plan assets and liabilities. For entity and plan disclosure and reporting purposes, funded status is determined using plan assets measured at market value. Plan liabilities are measured based on the interest rates and other assumptions summarized in the Actuarial Assumptions and Methods section of this report.

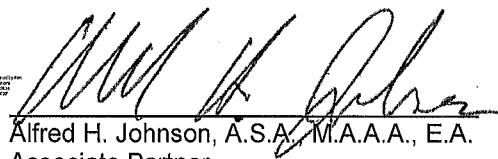
These funded status measurements may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations, and funded status measurements for Delaware River Joint Toll Bridge Commission and plan disclosure and reporting purposes may not be appropriate for assessing the need for or the amount of future contributions. In conducting the valuation, we have relied on personnel, plan design, health care claim cost, and asset information supplied by Delaware River Joint Toll Bridge Commission as of the valuation date. While we cannot verify the accuracy of all the information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy or completeness of the information and believe that it has produced appropriate results.

The actuarial assumptions and methods used in this valuation are described in the Actuarial Assumptions and Methods section of this report. Delaware River Joint Toll Bridge Commission selected the economic and demographic assumptions and prescribed them for use for purposes of compliance with GASB 75. Aon provided guidance with respect to these assumptions, and it is our belief that the assumptions represent reasonable expectations of anticipated plan experience.

The undersigned is familiar with the near-term and long-term aspects of OPEB valuations and collectively meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. The information provided in this report is dependent upon various factors as documented throughout this report, which may be subject to change. Each section of this report is considered to be an integral part of the actuarial opinions.

To our knowledge, no colleague of Aon providing services to Delaware River Joint Toll Bridge Commission has any material direct or indirect financial interest in Delaware River Joint Toll Bridge Commission. Thus, we believe there is no relationship existing that might affect our capacity to prepare and certify this actuarial report for Delaware River Joint Toll Bridge Commission.

Aon Wealth  
Solutions



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August 26, 2022

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# Accounting Requirements



## Development of GASB 75 Net OPEB Expense

### Calculation Details

The following table illustrates the Net OPEB Liability under GASB 75.

	<b>Fiscal Year Ending 12/31/2021</b>	<b>Fiscal Year Ending 12/31/2022</b>
(1) OPEB Liability		
(a) Retired Participants and Beneficiaries Receiving Payment	\$ 49,188,428	\$ 53,312,315
(b) Active Participants	<u>46,221,664</u>	<u>49,071,841</u>
(c) Total	\$ 95,410,092	\$ 102,384,156
(2) Plan Fiduciary Net Position	<u>(106,802,956)</u>	<u>(110,289,668)</u>
(3) Net OPEB Liability/(Asset)	\$ (11,392,864)	\$ (7,905,512)
(4) Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	111.94%	107.72%
(5) Deferred Outflow of Resources for Contributions Made After Measurement Date	\$ 985,287	\$ 0

### Expense

The following table illustrates the OPEB expense under GASB 75.

	<b>Fiscal Year Ending 12/31/2021</b>	<b>Fiscal Year Ending 12/31/2022</b>
(1) Service Cost	\$ 3,268,131	\$ 3,030,475
(2) Interest Cost	5,855,483	5,768,237
(3) Expected Investment Return	(5,759,951)	(6,297,628)
(4) Employee Contributions	0	0
(5) Administrative Expense	22,139	24,644
(6) Plan Changes	0	0
(7) Amortization of Unrecognized		
(a) Liability (Gain)/Loss	(840,138)	(403,789)
(b) Asset (Gain)/Loss	(1,701,471)	(1,882,103)
(c) Assumption Change (Gain)/Loss	<u>(6,493,131)</u>	<u>(6,423,253)</u>
(8) Total Expense/(Income)	\$ (5,648,938)	\$ (6,183,417)

Shown below are details regarding the calculation of Service Cost, Interest Cost and Expected Investment Return components of the Expense.

	Fiscal Year Ending 12/31/2021	Fiscal Year Ending 12/31/2022
(1) Development of Service Cost:		
(a) Normal Cost at Beginning of Measurement Period	\$ 3,268,131	\$ 3,030,475
(2) Development of Interest Cost:		
(a) Total OPEB Liability at Beginning of Measurement Period	\$ 96,199,382	\$ 95,410,092
(b) Normal Cost at Beginning of Measurement Period	3,268,131	3,030,475
(c) Actual Benefit Payments	(3,807,739)	(4,674,708)
(d) Discount Rate	6.00%	6.00%
(e) Interest Cost	\$ 5,855,483	\$ 5,768,237
(3) Development of Expected Investment Return:		
(a) Plan Fiduciary Net Position at Beginning of Measurement Period	\$ 95,667,327	\$ 106,802,956
(b) Actual Contributions—Employer	4,526,168	985,287
(c) Actual Contributions—Employee	0	0
(d) Actual Benefit Payments	(3,807,739)	(4,674,708)
(e) Administrative Expenses	(22,139)	(24,644)
(f) Other	0	0
(g) Expected Return on Assets	6.00%	6.00%
(h) Expected Return	\$ 5,759,951	\$ 6,297,628

## Reconciliation of Net OPEB Liability

Shown below are details regarding the Total OPEB Liability, Plan Fiduciary Net Position, and Net OPEB Liability for the Measurement Period from December 31, 2020 to December 31, 2021:

	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability/(Asset) (c) = (a) – (b)
Balance Recognized at 12/31/2021 (Based on 12/31/2020 Measurement Date)	\$ 95,410,092	\$ 106,802,956	\$ (11,392,864)
Changes Recognized for the Fiscal Year:			
Service Cost	\$ 3,030,475	N/A	\$ 3,030,475
Interest on the Total OPEB Liability	5,768,237	N/A	5,768,237
Changes of Benefit Terms	0	N/A	0
Differences Between Expected and Actual Experience	2,456,647	N/A	2,456,647
Changes of Assumptions	393,413	N/A	393,413
Benefit Payments	(4,674,708)	(4,674,708)	0
Contributions From the Employer	N/A	985,287	(985,287)
Contributions From the Employee	N/A	0	0
Net Investment Income	N/A	7,200,777	(7,200,777)
Administrative Expense	N/A	(24,644)	24,644
Net Changes	\$ 6,974,064	\$ 3,486,712	\$ 3,487,352
Balance Recognized at 12/31/2022 (Based on 12/31/2021 Measurement Date)	\$ 102,384,156	\$ 110,289,668	\$ (7,905,512)

## Liability (Gain)/Loss

The following table illustrates the liability gain/loss under GASB 75.

	<b>Fiscal Year Ending 12/31/2021</b>	<b>Fiscal Year Ending 12/31/2022</b>
(1) OPEB Liability at Beginning of Measurement Period	\$ 96,199,382	\$ 95,410,092
(2) Service Cost	3,268,131	3,030,475
(3) Interest on the Total OPEB Liability	5,855,483	5,768,237
(4) Changes of Benefit Terms	0	0
(5) Changes of Assumptions	(8,114,901)	393,413
(6) Benefit Payments	<u>(3,807,739)</u>	<u>(4,674,708)</u>
(7) Expected OPEB Liability at End of Measurement Period	\$ 93,400,356	\$ 99,927,509
(8) Actual OPEB Liability at End of Measurement Period	<u>95,410,092</u>	<u>102,384,156</u>
(9) OPEB Liability (Gain)/Loss	\$ 2,009,736	\$ 2,456,647
(10) Average Future Working Life Expectancy	<u>5.76</u>	<u>5.63</u>
(11) OPEB Liability (Gain)/Loss Amortization	\$ 348,913	\$ 436,349

## Asset (Gain)/Loss

The following table illustrates the asset gain/loss under GASB 75.

	<b>Fiscal Year Ending 12/31/2021</b>	<b>Fiscal Year Ending 12/31/2022</b>
(1) OPEB Asset at Beginning of Measurement Period	\$ 95,667,327	\$ 106,802,956
(2) Contributions—Employer	4,526,168	985,287
(3) Contributions—Employee	0	0
(4) Expected Investment Income	5,759,951	6,297,628
(5) Benefit Payments	(3,807,739)	(4,674,708)
(6) Administrative Expense	(22,139)	(24,644)
(7) Other	<u>0</u>	<u>0</u>
(8) Expected OPEB Asset at End of Measurement Period	\$ 102,123,568	\$ 109,386,519
(9) Actual OPEB Asset at End of Measurement Period	<u>106,802,956</u>	<u>110,289,668</u>
(10) OPEB Asset (Gain)/Loss	\$ (4,679,388)	\$ (903,149)
(11) Amortization Factor	<u>5.00</u>	<u>5.00</u>
(12) OPEB Asset (Gain)/Loss Amortization	\$ (935,878)	\$ (180,630)

## Deferred Outflows/Inflows

The following table illustrates the Deferred Inflows and Outflows as of December 31, 2022 under GASB 75.

	<b>Deferred Outflows</b>	<b>Deferred Inflows</b>
(1) Difference Between Actual and Expected Experience	\$ 4,831,998	\$ 6,097,334
(2) Net Difference Between Expected and Actual Earnings on OPEB Plan Investments	0	4,957,157
(3) Assumption Changes	<u>323,535</u>	<u>13,609,404</u>
(4) Sub Total	\$ 5,155,533	\$ 24,663,895
(5) Contributions Made in Fiscal Year Ending 12/31/2022 After Measurement Date	<u>0</u>	<u>N/A</u>
(6) Total	\$ 5,155,533	\$ 24,663,895

## Amortization of Deferred Inflows/Outflows

The table below lists the amortization bases included in the deferred inflows/outflows as of December 31, 2022.

Date Established	Type of Base	Period		Balance		Annual Payment
		Original	Remaining	Original	Remaining	
12/31/2021	Liability (Gain)/Loss	5.63	4.63	\$2,456,647	\$2,020,298	\$436,349
12/31/2021	Asset (Gain)/Loss	5.00	4.00	(903,149)	(722,519)	(180,630)
12/31/2021	Assumptions	5.63	4.63	393,413	323,535	69,878
12/31/2020	Liability (Gain)/Loss	5.76	3.76	2,009,736	1,311,910	348,913
12/31/2020	Asset (Gain)/Loss	5.00	3.00	(4,679,388)	(2,807,632)	(935,878)
12/31/2020	Assumptions	5.76	3.76	(8,114,901)	(5,297,227)	(1,408,837)
12/31/2019	Liability (Gain)/Loss	5.76	2.76	(12,724,871)	(6,097,334)	(2,209,179)
12/31/2019	Asset (Gain)/Loss	5.00	2.00	(7,641,950)	(3,056,780)	(1,528,390)
12/31/2019	Assumptions	5.76	2.76	(5,931,498)	(2,842,176)	(1,029,774)
12/31/2018	Liability (Gain)/Loss	5.61	1.61	3,436,978	986,370	612,652
12/31/2018	Asset (Gain)/Loss	5.00	1.00	8,148,878	1,629,774	1,629,776
12/31/2018	Assumptions	5.61	1.61	(5,791,220)	(1,662,008)	(1,032,303)
12/31/2017	Liability (Gain)/Loss	6.26	1.26	2,550,800	513,420	407,476
12/31/2017	Asset (Gain)/Loss	5.00	0.00	(4,334,897)	0	(866,981)
12/31/2017	Assumptions	6.26	1.26	(18,919,078)	(3,807,993)	(3,022,217)
Total Charges					(\$19,508,362)	(\$8,709,145)

Amounts Recognized in the deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in the OPEB expense as follows:

### Year End December 31:

2023	\$ (7,842,168)
2024	\$ (7,373,367)
2025	\$ (4,131,807)
2026	\$ (479,948)
2027	\$ 318,926
Total Thereafter	\$ 0

## Plan Fiduciary Net Position Projection

The following table illustrates the projection of the fiduciary net position for use in the calculation of the discount rate as of December 31, 2022.

(\$ in thousands)

Year Ending December 31 <sup>2</sup>	Beginning Fiduciary Net Position (a)	Total Contributions (b)	Benefit Payments (c)	Investment Earnings (d)	Ending Fiduciary Net Position <sup>1</sup> (e)
2022	\$110,290	\$0	\$4,728	\$6,478	\$112,040
2023	112,040	0	4,944	6,576	113,672
2024	113,672	0	5,276	6,664	115,059
2025	115,059	1,334	5,408	6,744	117,729
2026	117,729	3,408	5,643	6,897	122,390
2027	122,390	3,515	6,005	7,166	127,066
2028	127,066	3,505	6,341	7,437	131,667
2029	131,667	3,482	6,720	7,701	136,131
2030	136,131	3,432	7,052	7,959	140,470
2031	140,470	3,374	7,364	8,211	144,691
2032	144,691	3,312	7,712	8,453	148,744
2033	148,744	3,233	7,998	8,688	152,666
2034	152,666	3,133	8,471	8,910	156,237
2035	159,436	2,980	8,893	9,111	159,436
2036	159,436	2,783	9,335	9,290	162,173
2037	162,173	2,603	9,736	9,443	164,483
2038	164,483	2,407	10,369	9,562	166,083
2039	166,083	2,195	10,826	9,645	167,097
2040	167,097	2,009	11,416	9,688	167,379
2041	167,379	1,825	11,816	9,693	167,082
2042	167,082	1,675	12,232	9,663	166,189
2043	166,189	1,536	12,462	9,603	164,866
2044	164,866	1,410	12,727	9,516	163,065
2045	163,065	1,294	12,916	9,402	160,845
2046	160,845	1,175	12,925	9,269	158,364
2047	158,364	1,055	13,056	9,116	155,479
2048	155,479	940	12,805	8,950	152,563
2049	152,563	823	12,962	8,771	149,195
2050	149,195	710	12,731	8,575	145,749
2051	145,749	613	12,917	8,363	141,809

<sup>1</sup> (e) = (a) + (b) - (c) + (d)

<sup>2</sup> Years later than 2051 were omitted from this table.

## Plan Fiduciary Net Position

The last year in which projected benefit payments are due from the Plan is 2120.

The Plan's projected fiduciary net position is not projected to reach \$0.

As such, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "depletion date" when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 6.00% per annum was applied to all periods of projected benefit payments to determine the total OPEB liability as of December 31, 2022 shown earlier in this report, pursuant to paragraph 48 of GASB Statement No. 74 and paragraph 36 of GASB Statement No. 75.

In projecting the Plan's fiduciary net position the following assumptions were made:

1. Interest rate for discounting was 6.00% per annum.
2. Assumed contributions are based on the contribution policy of the Delaware River Joint Toll Bridge Commission as communicated by Administrative Committee on September 28, 2018. The Delaware River Joint Toll Bridge Commission will contribute subject to the availability of funds, for each calendar year, the Commission shall contribute to the OPEB Trust Fund an amount equivalent to the retiree benefit expenses paid during the immediately preceding calendar year plus a growth factor, such factor to be determined annually based on the average annual rate of change in retiree benefit expenses over the previous five calendar years. The annual contribution amount and any installment thereof shall be reduced to the extent that the OPEB Trust Fund assets exceed 100% of the actuarially determined, expected liabilities.
3. Projected benefit payments have been determined in accordance with Paragraphs 43-47 of GASB Statement No. 74 and Paragraphs 30-35 of GASB Statement No. 75, and are based on the closed group of active, retired members and beneficiaries as of January 1, 2022. Benefit payments are assumed to be paid mid-year.
4. Projected investment earnings are based on the assumed investment rate of return of 6.00% per annum.



## Interest Rate Sensitivity

The following table illustrates the impact of interest rate sensitivity on the Net OPEB Liability for fiscal year ending December 31, 2021:

	1% Decrease (5.00%)	Current Rate (6.00%)	1% Increase (7.00%)
(1) Total OPEB Liability	\$ 107,833,463	\$ 95,410,092	\$ 85,040,417
(2) Plan Fiduciary Net Position	<u>(106,802,956)</u>	<u>(106,802,956)</u>	<u>(106,802,956)</u>
(3) Net OPEB Liability/(Asset)	\$ 1,030,507	\$ (11,392,864)	\$ (21,762,539)

The following table illustrates the impact of interest rate sensitivity on the Net OPEB Liability for fiscal year ending December 31, 2022:

	1% Decrease (5.00%)	Current Rate (6.00%)	1% Increase (7.00%)
(1) Total OPEB Liability	\$ 115,934,521	\$ 102,384,156	\$ 91,106,417
(2) Plan Fiduciary Net Position	<u>(110,289,668)</u>	<u>(110,289,668)</u>	<u>(110,289,668)</u>
(3) Net OPEB Liability/(Asset)	\$ 5,644,853	\$ (7,905,512)	\$ (19,183,251)

## Healthcare Cost Trend Sensitivity

The following table illustrates the impact of healthcare cost trend sensitivity on the Net OPEB Liability for fiscal year ending December 31, 2021:

	1% Decrease	Trend Rate	1% Increase
(1) Total OPEB Liability	\$ 83,834,353	\$ 95,410,092	\$ 109,682,897
(2) Plan Fiduciary Net Position	<u>(106,802,956)</u>	<u>(106,802,956)</u>	<u>(106,802,956)</u>
(3) Net OPEB Liability/(Asset)	\$ (22,968,603)	\$ (11,392,864)	\$ 2,879,941

The following table illustrates the impact of healthcare cost trend sensitivity on the Net OPEB Liability for fiscal year ending December 31, 2022:

	1% Decrease	Trend Rate	1% Increase
(1) Total OPEB Liability	\$ 89,883,345	\$ 102,384,156	\$ 117,818,987
(2) Plan Fiduciary Net Position	<u>(110,289,668)</u>	<u>(110,289,668)</u>	<u>(110,289,668)</u>
(3) Net OPEB Liability/(Asset)	\$ (20,406,323)	\$ (7,905,512)	\$ 7,529,319

## Disclosure—Changes in the Net OPEB Liability and Related Ratios

### Changes in the Net OPEB Liability and Related Ratios<sup>1</sup>

	Fiscal Year Ending		
	2017	2018	2019
<b>Total OPEB Liability</b>			
Service Cost	\$	\$ 4,161,867	\$ 3,388,535
Interest Cost		6,592,495	6,388,854
Changes of Benefit Terms	N/A	(45,529)	0
Differences Between Expected and Actual Experiences	N/A	2,550,800	3,436,978
Changes of Assumptions	N/A	(18,919,078)	(5,791,220)
Benefit Payments	N/A	(3,144,352)	(3,161,037)
<b>Net Change in Total OPEB Liability</b>	\$	\$ (8,803,797)	\$ -4,262,110
<b>Total OPEB Liability (Beginning)</b>	N/A	113,453,654	104,649,857
<b>Total OPEB Liability (Ending)</b>	\$	\$ 104,649,857	\$ 108,911,967
<b>Plan Fiduciary Net Position</b>			
Contributions—Employer	\$	\$ 7,500,000	\$ 0
Contributions—Member	N/A	0	0
Net Investment Income	N/A	9,056,129	(2,848,376)
Benefit Payments	N/A	(3,144,352)	(3,161,037)
Administrative Expense	N/A	(21,604)	(22,622)
Other	N/A	0	0
<b>Net Change in Plan Fiduciary Net Position</b>	\$	\$ 13,390,173	\$ (6,032,035)
<b>Plan Fiduciary Net Position (Beginning)</b>	N/A	76,520,177	89,910,350
<b>Plan Fiduciary Net Position (Ending)</b>	\$	\$ 89,910,350	\$ 83,878,315
<b>Net OPEB Liability/(Asset) (Ending)</b>	\$	\$ 14,739,507	\$ 25,033,652
<b>Net Position as a Percentage of OPEB Liability</b>	67.45%	85.92%	77.01%
<b>Covered-Employee Payroll</b>	\$	\$ 22,381,050	\$ 24,588,730
<b>Net OPEB Liability as a Percentage of Payroll</b>	190.21%	342.36%	101.81%

<sup>1</sup> GASB 75 was effective first for employer fiscal years beginning after June 15, 2017.

## Disclosure—Changes in the Net Pension Liability and Related Ratios

### Changes in the Net Pension Liability and Related Ratios<sup>1</sup>

	Fiscal Year Ending	
	2020	2021
<b>Total OPEB Liability</b>		
Service Cost	\$ 3,928,031	\$ 3,268,131
Interest Cost	6,160,245	5,855,483
Changes of Benefit Terms	0	0
Differences Between Expected and Actual Experiences	(12,724,871)	2,009,736
Changes of Assumptions	(5,931,498)	(8,114,901)
Benefit Payments	(4,144,492)	(3,807,739)
<b>Net Change in Total OPEB Liability</b>	<b>\$ (12,712,585)</b>	<b>\$ (789,290)</b>
<b>Total OPEB Liability (Beginning)</b>	<b>108,911,967</b>	<b>96,199,382</b>
<b>Total OPEB Liability (Ending)</b>	<b>\$ 96,199,382</b>	<b>\$ 95,410,092</b>
<b>Plan Fiduciary Net Position</b>		
Contributions—Employer	\$ 3,304,940	\$ 4,526,168
Contributions—Member	0	0
Net Investment Income	12,649,219	10,439,339
Benefit Payments	(4,144,492)	(3,807,739)
Administrative Expense	(20,655)	(22,139)
Other	0	0
<b>Net Change in Plan Fiduciary Net Position</b>	<b>\$ 11,789,012</b>	<b>\$ 11,135,629</b>
<b>Plan Fiduciary Net Position (Beginning)</b>	<b>83,878,315</b>	<b>95,667,327</b>
<b>Plan Fiduciary Net Position (Ending)</b>	<b>\$ 95,667,327</b>	<b>\$ 106,802,956</b>
<b>Net OPEB Liability/(Asset) (Ending)</b>	<b>\$ 532,055</b>	<b>\$ (11,392,864)</b>
<b>Net Position as a Percentage of OPEB Liability</b>	<b>99.45%</b>	<b>111.94%</b>
Covered-Employee Payroll	\$ 26,570,518	\$ 25,250,080
<b>Net OPEB Liability as a Percentage of Payroll</b>	<b>2.00%</b>	<b>-45.12%</b>
		<b>-31.33%</b>

<sup>1</sup> GASB 68 was effective first for employer fiscal years beginning after June 15, 2014.

## Disclosure—Contribution Schedule

### Contributions

	Fiscal Year Ending	
	2017	2018
Actuarially Determined Contribution	\$ N/A	\$ N/A
Contributions Made in Relation to the		
Actuarially Determined Contribution	7,500,000	0
Contribution Deficiency (Excess)	N/A	N/A
Covered-Employee Payroll	\$ 19,416,733	\$ 22,381,050
Contributions as a Percentage of Payroll	38.63%	0.00%

	Fiscal Year Ending	
	2020	2021
Actuarially Determined Contribution	\$ N/A	\$ N/A
Contributions Made in Relation to the		
Actuarially Determined Contribution	4,526,168	985,287
Contribution Deficiency (Excess)	N/A	N/A
Covered-Employee Payroll	\$ 26,570,518	\$ 25,250,080
Contributions as a Percentage of Payroll	17.03%	3.90%

### Notes to Schedule:

During fiscal year 2017 and 2018, the Commission did not determine an actuarially based contribution. Beginning in 2019, the Commission adopted the following policy.

1. For each calendar year, the Commission shall contribute to the OPEB Trust Fund an amount equivalent to the retiree benefit expenses paid during the immediately preceding calendar year plus a growth factor, such factor to be determined annually based on the average annual rate of change in retiree benefit expenses over the previous five calendar years.
2. Upon approval by the Administrative Committee of a calendar year's contribution amount, the contribution amount shall be paid into the OPEB Trust Fund in regular quarterly installments or in such other regularly occurring time periods as determined by the Administrative Committee, after consultation with the OPEB Trust Fund Investment Manager. To the extent possible, the timing of such contribution installment payments should coincide with the requests for reimbursement from the OPEB Trust Fund of amounts paid by the Commission for retiree benefits for that time period.
3. The annual contribution amount and any installment thereof shall be reduced to the extent that the OPEB Trust Fund assets exceed 100% of the actuarially determined, expected liabilities.
4. The payment of the annual contribution amount or any installment thereof shall at all times be subject to the availability of funds for such purposes.

# Appendix

## Payout Projection

Annual payments expected based on assumptions and contributions detailed in the Methods and Assumptions Section.

<b>Fiscal Year Ending</b>	<b>Total</b>
12/31/2022	4,727,641
12/31/2023	4,944,261
12/31/2024	5,276,485
12/31/2025	5,408,096
12/31/2026	5,643,300
12/31/2027	6,005,060
12/31/2028	6,340,974
12/31/2029	6,720,014
12/31/2030	7,052,049
12/31/2031	7,364,143

Projected benefit payments include payments expected to be made during the fiscal year for both current retirees and those participants assumed to retire during the year.

## Participant Data

The actuarial valuation was based on personnel information from Delaware River Joint Toll Bridge Commission records as of January 1, 2022. Following are some of the pertinent characteristics from the personnel data as of that date. Prior valuation characteristics are also provided for comparison purposes. Both age and service have been determined using years and months as of the valuation date.

	January 1, 2021	January 1, 2022
<b>Health Care Participants</b>		
Active Participants		
Number	371	364
Average Age	51.2	51.0
Average Service	11.8	12.0
Inactive Participants		
Retirees and Surviving Spouses	214	221
Average Age	72.2	71.9
Covered Spouses	130	138
Average Age	68.6	68.5
Total Participants		
Number	715	723
<b>Life Insurance Participants</b>		
Active Participants		
Number	32	41
Average Age	55.0	57.1
Average Service	29.6	32.3
Inactive Participants		
Number	171	174
Average Age	72.5	73.1
Average Current Life Insurance	\$ 34,561	\$ 32,920
Average Ultimate Life Insurance	\$ 10,883	\$ 10,000

## Participant Data (continued)

## Active: Age-Service Scatter

Age	Service										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	
Under 25	2	8	0	0	0	0	0	0	0	0	10
25 to 29	3	8	3	0	0	0	0	0	0	0	14
30 to 34	2	14	9	1	0	0	0	0	0	0	26
35 to 39	0	9	13	5	2	1	0	0	0	0	30
40 to 44	0	1	10	5	11	3	0	0	0	0	30
45 to 49	0	4	11	6	2	7	1	0	0	0	31
50 to 54	1	11	8	10	4	4	5	15	0	0	58
55 to 59	0	17	11	9	7	6	2	7	0	0	59
60 to 64	0	13	14	9	8	6	1	5	2	1	59
65 to 69	0	3	11	7	4	2	0	3	1	0	31
70 & up	0	0	5	5	4	1	0	0	1	0	16
<b>Total</b>	<b>8</b>	<b>88</b>	<b>95</b>	<b>57</b>	<b>42</b>	<b>30</b>	<b>9</b>	<b>30</b>	<b>4</b>	<b>1</b>	<b>364</b>



## Asset Allocation

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the OPEB plan's target asset allocation as of December 31, 2021 are summarized in the following table<sup>1</sup>:

<b>Asset Class</b>	<b>Expected Nominal Rate of Return</b>	<b>Expected Real Rate of Return</b>	<b>Allocation</b>
Broad U.S. Equity	7.74%	5.63%	22.00%
International Equity (Developed & Emerging)	8.12%	6.00%	14.00%
Core Fixed Income	4.10%	2.06%	60.00%
Core Real Estate	7.36%	5.25%	4.00%
Total Portfolio	6.05%	3.98%	100.00%

The discount rate used to measure the total OPEB liability is 6.00%. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on these assumptions, the OPEB Fund's fiduciary net position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on OPEB Plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

<sup>1</sup> The real rates of return reflect the best estimate as provided by Marquette Associates.

## Health Care Claims Development

The sample per capita claims cost assumptions shown below by age, benefit, and plan represent the true underlying baseline experience estimated for Delaware River Joint Toll Bridge Commissions' sponsored postretirement benefits and costs. These rates are used in the expense calculation for the period 1/1/2021–12/31/2021 and disclosures as of 12/31/2021. The per capita claims costs are then adjusted with the trend below for the current valuation cycle.

Age	Medical	Rx	Admin	Part B	Dental	Vision
50	\$ 8,687	\$ 3,110	\$ 1,473	\$ -	\$ 425	\$ 39
55	\$ 10,723	\$ 3,839	\$ 1,473	\$ -	\$ 425	\$ 39
60	\$ 13,300	\$ 4,761	\$ 1,473	\$ -	\$ 425	\$ 39
65	\$ 2,365	\$ 2,931	\$ -	\$ 1,782	\$ 425	\$ 39
70	\$ 2,755	\$ 3,416	\$ -	\$ 1,782	\$ 425	\$ 39
75	\$ 3,057	\$ 3,790	\$ -	\$ 1,782	\$ 425	\$ 39
80	\$ 3,277	\$ 4,063	\$ -	\$ 1,782	\$ 425	\$ 39
85	\$ 3,496	\$ 4,335	\$ -	\$ 1,782	\$ 425	\$ 39
90+	\$ 3,601	\$ 4,466	\$ -	\$ 1,782	\$ 425	\$ 39

The average medical per capita claims costs for pre-65 were developed using a blend of active claims experience and enrollment for the period from October 2016 through September 2017, January 2018 through December 2018 and January 2020 through December 2020, and 2021 cobra rates provided by Delaware River Joint Toll Bridge Commission. Calendar year 2020 medical claims were adjusted to remove the estimated impacts of COVID-19. The average medical per capita claims costs were trended to the mid-point of the annual period following the valuation date. In order to improve the credibility of a single projection estimate, a combination of estimates from the distinct historical periods was used, placing 33.3% credibility on each period. Average medical per capita claims costs were then age-adjusted based on the demographics of the population and the assumed health care aging factors shown in the table below.

The average Rx per capita claim costs for pre-65 were developed using the cobra rates provided by Delaware River Joint Toll Bridge Commission. The average Rx per capita claims costs were trended to the mid-point of the annual period following the valuation date. Average Rx per capita claims costs were then age-adjusted based on the demographics of the population and the assumed health care aging factors shown in the table below.

The post-65 medical plan is insured, and we developed per capita costs using the 2021 fully insured Medical/Rx rate.

Average dental and vision per capita claims costs were determined using 2021 premium rates.

Implicit per capita administrative costs were provided by the client in aggregate for the pre-65 retirees. We developed per member rates using the enrollments from the active and retiree census data.

The 2021 calendar year premium rates used in the per capita claims cost development are shown below:

Experience Population	Benefit	Rating Tier	Monthly Premium Rate	Annual Premium Rate
Pre-65	Medical	Retiree Only	\$ 1,198	\$14,376
Pre-65	Rx	Retiree Only	\$ 319	\$ 3,828
Post-65	Medical/Rx	Retiree Only	\$ 552	\$ 6,624

#### Health Care Aging (Morbidity) Factors:

Since health care costs increase with age and an OPEB valuation is by its nature an analysis of a closed group that will age throughout the measurement, the effect that this aging of the population will have on claims costs must be reflected in the valuation. The claim costs for medical and prescription drugs were assumed to increase with age according to the table below.

Age Band	Medical	Rx	Composite
40-44	3.00%	4.80%	3.30%
45-49	3.70%	4.70%	3.80%
50-54	4.20%	4.70%	4.30%
55-59	4.40%	4.60%	4.40%
60-64	3.70%	4.60%	3.80%
65-69	2.70%	3.80%	3.10%
70-74	1.80%	2.50%	2.10%
75-79	2.20%	0.80%	1.40%
80-84	2.80%	0.20%	1.30%
85-89	1.40%	0.10%	0.60%
90+	0.00%	0.00%	0.00%

The aging factor assumptions shown above were based on normative data analyses, along with consideration of the results from the 2013 Society of Actuaries sponsored study "Health Care Costs—From Birth to Death" prepared by Dale H. Yamamoto, reporting on the effect of age on claims costs. In addition to age, this study shows the effect of service type (medical vs. pharmacy) and gender on claims costs.

**Health Care Cost Trend Rates:**

The health care cost trend assumptions shown below were based on national average information from a variety of sources, including S&P Healthcare Economic Index, NHCE data, plan renewal data and vendor Rx reports, with adjustments based on the provisions of the benefits sponsored by Delaware River Joint Toll Bridge Commission.

<b>Year</b>	<b>Pre-65</b>	<b>Post-65</b>	<b>Dental/Vision/ Part B</b>
2022	6.49%	7.17%	5.00%
2023	6.28%	6.87%	5.00%
2024	6.07%	6.56%	5.00%
2025	5.86%	6.25%	5.00%
2026	5.64%	5.94%	5.00%
2027	5.43%	5.63%	5.00%
2028	5.22%	5.31%	5.00%
2029	5.00%	5.00%	5.00%
2030	4.75%	4.67%	5.00%
2031	4.57%	4.51%	5.00%
2032+	4.50%	4.50%	5.00%

## Actuarial Assumptions and Methods

Discount Rate                      6.00%<sup>1</sup> as of December 31, 2021  
    6.00%<sup>1</sup> as of December 31, 2020  
    6.00%<sup>1</sup> as of December 31, 2019

20 Yr. Municipal Bond Rate        2.06% as of December 31, 2021  
    2.12% as of December 31, 2020  
    2.74% as of December 31, 2019

Municipal Bond Rate Basis        Bond Buyer General Obligation 20-year Municipal Bond Index

Salary Increases

Merit Scale			
Completed Years of Service	Annual Increase	Completed Years of Service	Annual Increase
1	3.25%	16	1.20%
2	2.90%	17	1.15%
3	2.70%	18	1.15%
4	2.50%	19	1.10%
5	2.35%	20	1.00%
6	2.15%	21	0.95%
7	2.10%	22	0.90%
8	2.00%	23	0.85%
9	1.60%	24	0.80%
10	1.55%	25	0.70%
11	1.45%	26	0.60%
12	1.40%	27	0.50%
13	1.35%	28	0.50%
14	1.30%	29	0.50%
15	1.25%	30+	0.50%

General Salary Increase            2.8%

<sup>1</sup> Based on the employer's funding policy, projected assets are projected to be sufficient to cover projected benefit payments, so the expected return is used as the discount rate.

## Actuarial Assumptions and Methods (continued)

### Retirement Age Active Participants

The following table shows sample annual rates of retirement at selected ages. Retirement rates vary by age, service, and is based upon the Pennsylvania State Employees' Retirement System.

Age	Male	Female
55-57	20.00%	23.00%
58	25.00%	23.00%
59	25.00%	28.00%
60	20.00%	23.00%
61-64	20.00%	20.00%
65-67	26.00%	26.00%
68-70	23.00%	23.00%
71-79	20.00%	20.00%
80	100.00%	100.00%

### Mortality Rates Healthy and Disabled

Pub-2010 Mortality Table projected generationally with scale MP-2021 from the central year.

### Withdrawal Rates

The following table shows sample annual rates of withdrawal and is based upon the Pennsylvania State Employees' Retirement System.

Age	Male Years of Service				Female Years of Service			
	0	5	9	14	0	5	9	14
20	30.0%	N/A	N/A	N/A	40.0%	N/A	N/A	N/A
25	21.0%	6.1%	3.0%	N/A	24.8%	8.5%	2.4%	N/A
30	18.5%	6.1%	3.0%	1.9%	21.3%	7.7%	2.3%	2.9%
35	18.5%	4.9%	1.6%	1.9%	16.6%	4.5%	2.4%	2.1%
40	18.2%	3.4%	2.8%	1.9%	14.8%	4.5%	2.3%	1.6%
45	17.4%	3.4%	1.6%	0.6%	17.8%	4.3%	1.1%	1.6%
50	19.1%	3.1%	1.6%	0.6%	15.8%	4.3%	1.8%	1.6%
55	19.1%	2.6%	0.8%	0.4%	15.8%	4.0%	1.3%	1.0%

### Decrement Timing

Beginning of year decrements.

### Health Care Participation Rate Future Retirees

We have assumed that 100% of current and future contingent eligible participants will elect health care benefits at their full eligibility age, or current age if later.

### Current Retirees

All current retirees are assumed to continue coverage.

### Spouse Coverage Election Rate Future Retirees

Males are assumed to be 2 years older than females. Active male employees are assumed to be 70% married, and active female employees are assumed to be 50% married.

## Actuarial Assumptions and Methods (continued)

Current Retirees	Spousal coverage is based on actual retiree coverage elections. Actual spouse age is used where available. In instances where this information is not available, males are assumed to be two years older than their female spouses.
Projected Retiree Health Care Contributions	Equal to applicable percentage of projected salary based on all relevant assumptions described in this section, including health care trend rates, health care cost aging, and various demographic assumptions.
Life Insurance Loads	Life insurance liabilities were loaded by 10% to reflect carrier retention charges, including administrative costs, risk charges, premium taxes, and other miscellaneous related charges.
Administrative Expenses	Actual administrative expenses during the measurement period are recognized in expense.
Asset Method	Fair market value.
Actuarial Cost Method	Entry Age Normal cost method.
Measurement Date	December 31, 2021
Valuation Date	January 1, 2022
Census Data	January 1, 2022
Valuation Methodology and Terminology	We have used GASB accounting methodology to determine the postretirement medical benefit obligations.

## Changes in Financial Accounting Methods/Assumptions Since the Prior Year

### Method Changes

There have been no method changes in the financial accounting valuation since the prior valuation.

### Assumption Changes

- The mortality table was updated to the Pub-2010 Generational mortality with MP-2021 projection scale.
- The retirement, withdrawal and salary scale assumptions were updated based on the Commonwealth of Pennsylvania State Employees' Retirement System's 19<sup>th</sup> Investigation of Actuarial Experience January 1, 2015 to December 31, 2019.

## Actuarial Assumptions and Methods

### Discussion of Actuarial Assumptions and Methods

Delaware River Joint Toll Bridge Commission selected the economic, demographic and health care claim cost assumptions and prescribed them for use for purposes of compliance with GASB 75. Aon provided guidance with respect to these assumptions, and it is our belief that the assumptions represent reasonable expectations of anticipated plan experience. Assumptions for withdrawal, retirement, general inflation and salary scale are based upon the Pennsylvania State Employees' Retirement System. An evaluation of the reasonability and consistency of these assumptions is beyond the scope of the assignment.

### Calculation of Normal Costs and Liabilities

The method used to calculate the service cost and accumulated postretirement benefit obligation for determining OPEB expense is the entry age normal cost method. Under this cost method, the actuarial accrued liability is based on a prorated portion of the present value of all benefits earned to date over expected future working lifetime as defined by GASB. The proration is determined so that the cost with respect to service accrued from date of hire is recognized as a level percentage of pay each year. The Normal Cost is equal to the prorated cost for the year of the valuation.

### Accounting Information Under GASB 75

Benefit obligations and expense/(income) are calculated under U.S. Generally Accepted Accounting Principles as set forth in Government Accounting Standards Board Statement 75.

The total OPEB liability represents the actuarial present value of benefits based on the entry age normal cost method as of the measurement date. The service cost represents the actuarial present value of benefits that are attributed to the 2022 fiscal year, reflecting the effect of assumed future health care claim cost and/or pay increases.

The OPEB expense is the annual amount to be recognized in the income statement as the cost of OPEB benefits for this plan for the period ending December 31, 2022.



## Plan Provisions

### Eligibility:

Employees hired prior to January 1, 1995 are eligible according to the following table.

Hire Date	Required Years of Service at Retirement Equals
Prior to January 1, 1979	65 minus age times 2
January 1, 1979- December 31, 1994	70 minus age times 2

Employees hired after December 31, 1994 and before January 1, 2017, earliest of:

- Attainment of 55 with 25 years of service
- 60 with 20 years of service
- 65 with 15 years of service

Service includes all service in state, county or municipal pension systems within the State of New Jersey or the Commonwealth of Pennsylvania, with the last 5 years with the Bridge Commission.

Employees hired after December 31, 2016, earliest of:

- Attainment of age 55 with 25 years of service
- Age 60 with 20 years of service
- Age 65 with 15 years of service

Service includes all service in state, county or municipal pension systems within the State of New Jersey or the Commonwealth of Pennsylvania. U.S. military service may also be included (up to 5 years). The maximum non-Bridge Commission service to be credited is 10 years. The last 10 years of employment must be with the Bridge Commission.

If an employee retires prior to 55 with 25 or more years of service, he may receive COBRA until age 55 at which time he would be eligible for the retiree health benefit plan in effect at that time provided the employee is within 18 months of retirement eligibility at the time of separation of employment.

## Summary of Principal Plan Provisions (continued)

**Medical Benefit:** All eligible employees are allowed to continue medical, prescription drug, dental and vision coverage under the Plan for the retiree and any eligible dependents for the lifetime of the retiree. For those under 65, coverage is continued in the same plan the retiree had at retirement. For those over 65, benefits are provided under NEBCO. In addition, the retiree is reimbursed for retiree/dependent Medicare Part B premiums (up to the standard premium for those who retire on or after January 1, 2018).

Employees hired before April 1, 1995 who retire on or after September 1, 2007 but before January 1, 2018 pay the current active co-pay of \$260 per year.

Employees hired on or after April 1, 1995 or who retire on or after January 1, 2018 pay half of the dental premium and a percentage of their final year earnings toward medical. The percentage is shown in the table below.

Coverage	Percent of Final Pay
Single	1.00%
Husband/Wife or Parent/Child	1.25%
Family or Parent/Children	1.50%

Retirees who become eligible for non-disability related Medicare coverage have their obligation to pay a retiree contribution cease.

**Life Benefit:** Only applies to employees hired prior to January 1, 1995.

Employees receive life insurance coverage with no cost to the retiree according to the following schedule:

Age at Retirement	Benefit
Less than 70	150% of annual salary at retirement reduced each year to age 70 to \$10,000. After age 70 the benefit remains at \$10,000.
70 or more	75% of annual salary

**Plan Changes** None.