West Virginia Retiree Health Benefit Trust Fund

GASB Statement No. 74, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions

Actuarial Valuation as of June 30, 2020
Measured as of June 30, 2021, and Applicable to Sponsor' Fiscal Year End June 30, 2021



P: 312.456.9800 | www.grsconsulting.com

September 17, 2021

Mr. Jason A. Haught
Chief Financial Officer
West Virginia Public Employees Insurance Agency
601 57th Street, SE, Suite 2
Charleston, West Virginia 25304

Subject: GASB Statement No. 74 Actuarial Valuation as of June 30, 2020, for WV-RHBT

Submitted in this report are the results of the actuarial valuation of the liabilities associated with the employer financed postemployment benefits provided through the West Virginia Retiree Health Benefit Trust Fund (WV-RHBT). This program provides postretirement healthcare benefits to eligible retired members receiving pension benefits under the following retirement systems ("Retirement Systems") as administered by the West Virginia Consolidated Public Retirement Board (CPRB):

- Public Employees' Retirement System (PERS);
- Teachers' Retirement System (TRS);
- Teachers' Defined Contribution Retirement System (TDCRS);
- Great West (Plan G);
- West Virginia Death, Disability, and Retirement Fund (Troopers Plan A);
- West Virginia State Police Retirement System (Troopers Plan B);
- Deputy Sheriffs' Retirement System (DSRS);
- Emergency Medical Services Retirement System (EMSRS); and
- Judges' Retirement System (JRS).

The program also provides benefits to certain eligible members receiving pension benefits under the Teachers' Insurance and Annuity Association and College Retirement Equities Fund (TIAA-CREF).

This report was prepared at the request of WV-RHBT and is intended for use by WV-RHBT and those designated or approved by WV-RHBT. This report may be provided to other parties only in its entirety and only with the permission of WV-RHBT.

The actuarial valuation as of June 30, 2020, and measured as of June 30, 2021, was prepared for purposes of complying with the requirements of Governmental Accounting Standards Board (GASB) Statement No. 74 for the plan's fiscal year end June 30, 2021. The calculations reported herein have been made on a basis consistent with our understanding of these accounting standards. Determinations of the liability associated with the benefits described in this report for purposes other than satisfying the financial reporting requirements of the plan sponsor may produce significantly different results. The actuarial valuation was based upon:

- Census information as of June 30, 2020, provided by WV-RHBT, CPRB, and TIAA-CREF;
- Healthcare claims, premium and enrollment data provided by WV-RHBT;

- Substantive plan information provided by WV-RHBT;
- Retirement eligibility conditions for each respective retirement system found in CPRB actuarial valuation reports;
- Experience Study covering the period July 1, 2015, through June 30, 2020;
- Economic assumptions and other healthcare-related assumptions recommended by Gabriel, Roeder, Smith & Company and approved by the WV-RHBT including a discount rate of 6.65% and an ultimate trend rate assumption of 4.25%;
- Updated MAPD premium rates available as of June 1, 2021; and
- Entry age normal cost method and a 20-year closed level percent of pay amortization period as of June 30, 2017, with 17 years remaining as of June 30, 2020.

We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by WV-RHBT, CPRB, or TIAA-CREF. Authorization of the assumptions and methods applicable to this actuarial valuation was granted by WV-RHBT, and they are disclosed in the assumptions and methods section of this report.

The actuarial liabilities and actuarially determined contributions were developed in accordance with the requirements of GASB Statements No. 74 and 75, and are applicable only for financial reporting purposes. The unfunded actuarial accrued liability and actuarially determined contributions (ADC) disclosed in this report should not be used to assess the level of plan assets needed to settle the plan's benefit obligations.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic, healthcare, or demographic assumptions; changes in economic, healthcare or demographic assumptions; and changes in plan provisions, or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This report does not reflect the recent and still developing impact of COVID-19, which is likely to influence healthcare claims experience, demographic experience, and economic expectations, at least in the short term. We will continue to monitor these developments and their impact on healthcare and retirement programs.

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

The signing actuaries are independent of the plan sponsor.

To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of WV-RHBT as of the actuarial valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes. Alex Rivera and Jeff Tebeau are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions herein.

Sincerely,

Alex Rivera, FSA, EA, MAAA, FCA
Senior Consultant

Jeff Tebeau, FSA, EA, MAAA
Consultant

Table of Contents

		Page
Section A	Executive Summary	1-6
Section B	Overview	1-4
Section C	Actuarial Valuation Results	1
	(Gain)/Loss Analysis as of June 30, 2021	1
	Summary of Actuarial Valuation Results as of June 30, 2018	2
	Summary of Actuarial Valuation Results as of June 30, 2020	3-4
	Development of Actuarially Determined Contribution	5
	Market Value of Assets	6
	Statements of Fiduciary Net Position	7
	Statements of Changes in Fiduciary Net Position	8
	Investment Pool Disclosure	9
	WVIMB Asset Allocation as of June 30, 2020	10
Section D	GASB Statement No. 74 Information	
	Discussion	1-4
	Executive Summary	5
	Schedule of Changes in the Net OPEB Liability under GASB Statement No. 74	6
	Sensitivity of Net OPEB Liability to the Single Discount Rate	7
	Sensitivity of Net OPEB Liability to the Healthcare Cost Trend Rate Assumption	7
	Schedule of Net OPEB Liability Multiyear	8
	Schedule of Contributions Multiyear	9
	Notes to Schedule of Contributions	10
	Single Discount Rate	11
	Summary of Membership Information	11
Section E	Summary of Actuarial Assumptions and Methods	1-18
Section F	Summary of Principal Plan Provisions	1-10
Section G	Glossary	1-4
Appendix A	Projections of Assets and Liabilities	1-2
Appendix B	Summary of Participant Demographic Information	1-7

SECTION A

EXECUTIVE SUMMARY

Executive Summary

WV-RHBT administers and provides medical and prescription drug benefits to certain retired members receiving pension benefits under the PERS, TRS, TDCRS, Plan G, Troopers Plan A, Troopers Plan B, DSRS, EMSRS, or JRS pension systems, as administered by the CPRB, and TIAA-CREF. Healthcare benefits are administered by the West Virginia Public Employees Insurance Agency (PEIA). The key features of the postretirement healthcare benefit program include:

- The plan sponsor provides a capped pay-as-you-go subsidy on behalf of eligible retired members. The capped pay-as-you-go subsidy per member depends on a capped aggregate annual dollar amount and the expected costs of the program. Based on *WV-RHBT Quarterly Financial Report for Fiscal Years 2021 to 2025*, dated March 2021, the capped subsidy rate for plan year end June 30, 2021, was $263.28 per member per month.
- As of June of 2021, the Humana MAPD not-to-exceed per member per month premium rates were decreased significantly from approximately $148.62 for calendar year 2021 to $64.57 for calendar year 2022. Not-to-exceed rates after 2022, were also decreased significantly to $77.57 for CY 2023, $87.57 for CY 2024 and $97.57 for CY 2025. These changes are expected to reduce the capped subsidy rates. Based on additional information provided by WV-PEIA, the composite capped subsidy rates were reduced to $146.35 for PY 2022, $116.26 for PY 2023, $129.38 for PY 2024, and $146.68 for PY 2025. The composite capped subsidy rates reflect an aggregate PAYGO limit of $75 million for PY 2022, $60 million for PY 2023, $70 million for PY 2024, and $80 million for PY 2025.
- Based on Senate Bill 419: "For fiscal years beginning on and after July 1, 2016, an annual amount of $30 million from annual collections of the tax imposed by this article shall be dedicated for payment of the unfunded liability of the West Virginia Retiree Health Benefit Trust Fund." The $30 million annual prefunding contribution is provided through fiscal year 2037, or if earlier, the year the employer's benefit obligation is fully funded.
- WV-RHBT also administers a fully insured retiree life insurance program. We understand the retiree premium rates are self-supporting and the retiree pays 100% of the premium resulting in no plan sponsor subsidy.
- Retiree contributions are set each year by the WV-RHBT and approved by the WV-PEIA Finance Board. Retiree contributions are based on the experience of the plan including claim, premium and investment performance. Increases to retiree contributions may reflect healthcare inflation, claim experience, and premium increases above the plan sponsor capped pay-as-you-go subsidy. We understand WV-PEIA is currently considering reducing the retired member's share of premium rates for Medicare coverage beginning in plan year 2022. Our valuation reflects an expected reduction in the member's share of the Medicare coverage premium rate based on preliminary information provided by WV-PEIA.
- Retiree contributions depend on date of hire and years of service at retirement. Members hired on or after July 1, 2010, pay retiree healthcare contributions with no sponsor provided implicit or explicit subsidy. Members hired before July 1, 2010, pay retiree healthcare contributions that are reduced by a sponsor subsidy which depends on the member's years of service at retirement.
- The Sick and Annual Leave Program (SAL) allows members hired prior to July 1, 2001, to convert accrued sick leave and accrued annual leave balances at retirement into either retiree healthcare benefits or pension benefits. Members hired before July 1, 1988, may convert accrued sick or leave days into 100% of the required retiree healthcare contribution. Members hired from July 1, 1988, to June 30, 2001, may convert accrued sick or leave days into 50% of the required retiree healthcare contribution. The conversion rate is two days of unused sick and annual leave

days per month for single healthcare coverage and three days of unused sick and annual leave days per month for family healthcare coverage.

- Full-time higher education faculty members hired before July 1, 2009, who are employed on an annual contract basis for a period other than 12 months, upon retirement may extend years of teaching service into 100% of the employer-paid healthcare insurance coverage. The conversion rate is 3.3 years of teaching service for one year of single healthcare coverage, and 5.0 years of teaching service for one year of family healthcare coverage.
- Under the Retired Employee Assistance Program, the Plan provides premium subsidies to certain retirees if their income falls below 250% of the federal poverty level.
- WV-RHBT has established a qualified trust which receives contributions, pays benefits, and invests contributions made in excess of annual expenditures. As of June 30, 2020, the market value of assets was approximately $1,224.6 million, and as of June 30, 2021, increased to $1,673.0 million. Long-term pre-funding assets are invested with the West Virginia Investment Management Board (WVIMB). Based on the WVIMB 2020 Annual Report, the investment objective is to earn 7.50% per year net of investment expenses. The strategic asset allocation consists of 55% equity, 15% fixed income, 10% private equity, 10% hedge fund, and 10% real estate invested. Short-term assets used to pay current year benefits and expenses are invested with the West Virginia Board of Treasury Investment (WVBTI). Based on the amount of assets held in the BTI account and expected benefit payments, and solely for projection purposes, GRS has assumed that approximately six to nine months of benefits and expenses are held in reserve with the WVBTI. We also understand that, if needed, the plan sponsor may use assets held with the WVIMB to pay current benefits and expenses.
- The target investment return assumption is based on an inflation assumption of 2.75% which may be difficult to support. GRS performed an Experience Review study and recommended that the inflation assumption be reduced from 2.75% to 2.25%. Consequently, the recommended long-term investment return assumption for assets invested with WVIMB was reduced from 7.50% to 7.00%. Similarly, the long-term investment return assumption for assets held with the WVBTI was reduced from 3.00% to 2.50%.

GRS performed an actuarial valuation of the retiree healthcare for purposes of financial reporting under the requirements of GASB Statement No. 74. The basis of the actuarial valuation is outlined below:

- The actuarial valuation was based on census, claims, premium data, capped per member per month subsidies, aggregated projected capped subsidies and applicable accrued sick leave balances as of June 30, 2020, as provided by WV-RHBT and reported by CCA.
- The actuarial valuation as of June 30, 2020, reflects updates to the OPEB and demographic assumptions based on the Experience Study Review for the period from July 1, 2015, to June 30, 2020. Following is a summary of the key assumption changes:

    - **General/Price inflation –** Decrease price inflation rate from 2.75% to 2.25%.
    - **Discount Rate** – Decrease discount rate from 7.15% to 6.65%.
    - **Wage inflation** – Decrease wage inflation rate from 4.00% to 2.75% for PERS and TRS, and 3.25% for Troopers.
    - **OPEB Retirement –** Develop explicit retirement rates for members who are eligible to retire with healthcare benefits and **elect** healthcare coverage.
    - **Waived Annuitant Termination –** Develop explicit waived termination rates for members who are eligible to retire with healthcare benefits but **waive** healthcare coverage.

  - **SAL Conversion –** Develop explicit SAL conversion rates for members who are eligible to convert sick and annual leave (SAL) balances at retirement and convert SAL balances into OPEB benefits.
  - **Lapse/Re-entry –** Develop net lapse/re-entry rates for members who either lapse coverage after electing healthcare coverage or elect healthcare coverage after waiving coverage.
  - **Other demographic assumptions –** develop termination, disability, and mortality rates based on experience specific to OPEB covered group.
  - **Salary increase –** develop salary increase assumptions based on experience specific to the OPEB covered group.
- The actuarial valuation as of June 30, 2020, reflects updates to the following assumptions which are generally reviewed at each measurement date:
  - Projected capped subsidies;
  - Per capita claim costs;
  - Healthcare trend rates;
  - Coverage and continuance;
  - Percentage eligible for tobacco-free premium discount; and
  - Retired employee assistance program participation.
- The census as of June 30, 2020, includes data for 11,913 waived annuitants who are receiving an annuity and are eligible to receive healthcare benefits but have waived healthcare coverage.
- For purposes of the actuarial valuation as of June 30, 2020, we have assumed that 2.5% of all waived annuitants under the age of 75 will elect to participate in the retiree healthcare program as of the actuarial valuation date. As of June 30, 2020, there were 11,913 waived annuitants under age 75 who were included in the actuarial valuation data, and so approximately 298 waived annuitants were assumed to elect coverage as of June 30, 2020.
- The substantive healthcare plan provisions were found in WV-PEIA's Summary Plan Description and Shopper Guide used for plan year end June 30, 2021, enrollment.
- The retirement eligibility conditions were found in annual reports and actuarial valuation reports provided by CPRB.
- An expected long-term rate of return of 7.00% for long-term assets invested with WVIMB, was based on WVIMB's investment policy, the long-term strategic asset allocation, and an inflation assumption of 2.25%.
- An expected short-term rate of return of 2.50% for assets invested with WVBTI was based on the general inflation assumption of 2.25% plus 25 basis points.
- In the future, short-term assets invested with WVBTI are assumed to be approximately equal to six months of self-insured claims, fully-insured premiums, and administrative expenses. The remaining assets are invested in the long-term WVIMB account.
- Assets in the WVIMB account are assumed to be used to pay benefits and expenses only after the program is fully funded.
- The discount rate assumption of 6.65%, used to develop the actuarial accrued liability and normal cost, was based on the average expected return on invested plan assets during the projection period.

- A discount rate of 6.65% was also used to measure the Total OPEB Liability as of June 30, 2020. The discount rate reflects projected earnings of a short-term account managed by the WV-BTI and a long-term account managed by the WVIMB. The discount rate does not consider a municipal bond rate index since assets are projected to be available to pay benefits in all future years and based on the actuarial valuation as of June 30, 2020, the program is projected to be fully funded by 2025. However, during plan year end June 30, 2021, plan assets experienced significant investment gains and the program is fully funded as of June 30, 2021.
- The aggregate capped subsidy was assumed to reflect an aggregate PAYGO limit of $75 million for PY 2022, $60 million for PY 2023, $70 million for PY 2024, and $80 million for PY 2025. Based on the actuarial valuation as of June 30, 2020, and before reflecting asset gains during plan year end June 30, 2021, the program was projected to be fully funded by 2025. Projected employer contributions were assumed to equal the sum of State appropriations, the fixed annual capped pay as you go employer contribution, and expected SAL employer contributions. After the program is fully funded, we assumed the plan sponsor would contribute any amounts needed to maintain at least 100% funded.
- The percentage of program costs paid by the retired member was assumed to increase from approximately 22% for plan year end 2020 to approximately 44% for plan year end 2030, and remain stable thereafter.
- Please see Section E for a summary of the assumptions used for the projection. Please see Appendix A for additional details on projection results.
- GRS relied on information provided by WV-PEIA and Continuing Care Actuaries (CCA) to develop projected capped subsidy rates for plan years 2021 through 2025. Based on this information the estimated composite capped subsidy rates are assumed to be $146.35 for PY 2022, $116.26 for PY 2023, $129.38 for PY 2024, and $146.68 for PY 2025.
- GRS relied on information provided by WV-PEIA relating to expected Board approved projected aggregate sponsor PAYGO contribution limits of $75 million for PY 2022, $60 million for PY 2023, $70 million for PY 2024, and $80 million for PY 2025.
- GRS relied on Humana's not-to-exceed MAPD premium rates for calendar years 2021 through 2025.
- GRS relied on the WVIMB 2020 Annual Report for information relating to the investment policy and long-term expected return on assets including: an assumed inflation rate of 2.75%, an assumed long-term rate of return 7.50% on invested assets, and an effective real return of 4.75%.

Executive Summary

The key actuarial valuation results measured as of June 30, 2020, and June 30, 2019, are summarized in the following table ($ in thousands).

WV-RHBT Actuarial Valuation ($ in thousands)		
Actuarial Valuation as of	**June 30, 2020**	**June 30, 2018**
Measurement Date as of	**June 30, 2020**	**June 30, 2019**
Actuarial Accrued Liability	$ 1,666,334	$ 2,750,793
Market Value of Assets	$ 1,224,642	$ 1,091,661
Unfunded Actuarial Accrued Liability (UAAL)	$ 441,692	$ 1,659,132
Funded Ratio	73.49%	39.69%
Applicable for Plan Year End	**June 30, 2021**	**June 30, 2020**
Employer Normal Cost	$ 21,650	$ 43,991
Operating Expenses	$ 3,478	$ 3,236
Amortization of UAAL	$ 33,834	$ 117,373
Actuarially Determined Contribution	$ 58,962	$ 164,600
Actual Employer Contribution	$ 152,142	$ 158,406
Actual Employer Pre-Fund Contribution	$ 30,000	$ 35,000
Total Employer Contribution	$ 182,142	$ 193,406
Expected Claims, Expenses and Premium Margin	$ 218,218	$ 242,260
Expected Retiree Contributions	$ 67,027	$ 68,448
Expected Net Employer PAYGO, SAL, and REAP Costs	$ 151,191	$ 173,812
Percent of Total Claims and Expenses paid by Retired Members	30.72%	28.25%
Year Program is Projected to be 100% Funded	2021	2033

Executive Summary

Key observations and conclusions include:

- During the plan year end June 30, 2020, the actuarial accrued liability decreased from $2.751 billion as of June 30, 2019, to $1.666 billion as of June 30, 2020. The key factors which caused the change in actuarial liability include:
  - Increase/(decrease) due to normal cost, benefit payments, and interest: $62 million;
  - Increase/(decrease) due to demographic experience: $ (118) million;
  - Increase/(decrease) due to change in assumptions from experience review: $ (279) million;
  - Increase/(decrease) due to updated capped subsidy rates, per capita costs, and trend rates: $(831) million; and
  - Increase/(decrease) due to decrease in discount rate from 7.15% to 6.65%: $ 82 million.
- As shown above the change in capped subsidy rates, per capita costs, and trend rates had the greatest impact on reducing the actuarial liability. The key reason is due to significant decreases in MAPD per member per month rates from approximately $149 for CY 2021 to $65 for CY 2022, and the resulting decrease in the capped subsidy.
- As of June 30, 2020, the plan is funded at 73% and is projected to reach full funding in 2025. Appendix A shows the details of the projections. For purposes of the projections we assumed investment income would be used to pay employer benefits and expenses only after the program is fully funded.
- In our projection model, we have assumed the percentage of total costs paid by the plan member would increase gradually, level off, and remain stable at about 44% of total plan costs. After the program is fully funded in 2025, we have assumed the sponsor would make additional contributions needed to maintain a funded ratio of at least 100%.
- As the retired members' share of the total contributions increases, the future retired member's participation may decrease. We recommend monitoring retirement and participation experience especially during periods of significant increases in the retired member's share of the premium.
- Our projections assume increases in composite capped rates of about 2% to 3% per year. This assumption depends on the sponsor's ability to maintain rates that increase marginally after the MAPD "not-to-exceed" rates period expires. If there is a marked increase in premium rates after the "not-to-exceed" period, the results in these projections could be significantly different.

SECTION B

OVERVIEW

Overview

The following section presents the results of the actuarial valuation as of June 30, 2020, of the WV-RHBT Retiree Healthcare Benefit Program. The actuarial valuation reflects the liability for benefits paid by the plan sponsor including: capped subsidies, and percentage of retiree premiums under the Sick and Annual Leave Program. The actuarial valuation assumes self-insured claims, fully-insured premiums, and administrative costs in excess of sponsor paid benefits, including explicit and implicit subsidies, will be paid by the retired member.

The plan sponsor provides a capped pay-as-you-go subsidy on behalf of eligible retired members. The capped pay-as-you-go subsidy per member depends on a capped aggregate annual dollar amount and the expected costs of the program. Based on *WV-RHBT Quarterly Financial Report for Fiscal Years 2021 to 2025*, dated March 2021, the capped subsidy rate for plan year end June 30, 2021, was $263.28 per member per month.

As of June of 2021, the Humana MAPD not-to-exceed per member per month premium rates were decreased significantly from approximately $148.62 for calendar year 2021 to $64.57 for calendar year 2022. Not-to-exceed rates after 2022 were also decreased significantly to $77.57 for CY 2023, $87.57 for CY 2024 and $97.57 for CY 2025. These changes are expected to reduce the capped subsidy rates. Based on additional information provided by WV-PEIA, the composite capped subsidy rates were reduced to $146.35 for PY 2022, $116.26 for PY 2023, $129.38 for PY 2024, and $146.68 for PY 2025. The composite capped subsidy rates reflect an aggregate PAYGO limit of $75 million for PY 2022, $60 million for PY 2023, $70 million for PY 2024, and $80 million for PY 2025.

The Sick and Annual Leave Program (SAL) allows members hired prior to July 1, 2001, to convert accrued sick leave and accrued annual leave balances at retirement into either retiree healthcare benefits or pension benefits. Members hired before July 1, 1988, may convert accrued sick or leave days into 100% of the required retiree healthcare contribution. Members hired from July 1, 1988, to June 30, 2001, may convert accrued sick or leave days into 50% of the required retiree healthcare contribution. The conversion rate is two days of unused sick and annual leave days per month for single healthcare coverage and three days of unused sick and annual leave days per month for family healthcare coverage.

Full-time higher education faculty members hired before July 1, 2009, who are employed on an annual contract basis for a period other than 12 months, upon retirement may extend years of teaching service into 100% of the employer-paid healthcare insurance coverage. The conversion rate is 3.3 years of teaching service for one year of single healthcare coverage and 5.0 years of teaching service for one year of family healthcare coverage.

Under the Retired Employee Assistance Program, the Plan provides premium subsidies to certain retirees if their income falls below 250% of the federal poverty level.

Overview

Most retired members are receiving benefits under the self-insured PPB Plan A for non-Medicare coverage and the fully-insured MAPD Plan 1 for Medicare coverage. The retired member's share of the premium depends on the date of hire and years of service at retirement. Members hired on or after July 1, 2010, pay 100% of the premium, resulting in no explicit or implicit subsidy to the plan sponsor. The following table shows representative plan year 2021 premium rates for single coverage under PPB Plan A and MAPD Plan 1:

FY 2021 Monthly Premium	PPB Plan A [a]	MAPD Plan 1 [a]
Hired on or after July 1, 2010	$1,160	$473
5 to 9 years service	929	431
10 to 14 years service	716	317
15 to 19 years service	501	204
20 to 24 years service	375	136
25 or more years service	291	91

[a] Premium rates are standard rates. Retirees receive a monthly discount of $25 per tobacco-free covered member. It is assumed that 88% of future retirees and dependents are eligible for the preferred rates.

The WV-RHBT established a qualified trust to pre-fund sponsor benefit obligations. Future pre-funding contributions include a $30 million annual contribution made by the State from 2017 through 2037, or if earlier, the year the employer benefit obligations are fully funded.

Long-term pre-funding assets are invested with the WVIMB. The strategic asset allocation consists of 55% equity, 15% fixed income, 10% private equity, 10% hedge fund and 10% real estate invested. Short-term assets used to pay current year benefits and expenses are invested with the WVBTI.

The Unfunded Actuarial Accrued Liabilities (UAAL) were amortized as a level percent of active member payroll over a 20-year closed period as of June 30, 2017. Unlike a level-dollar amortization which pays principal and interest each year, a level percent-of-pay (or increasing-payment) amortization may not finance principal for a period of time depending on the amortization period.

The UAAL represents the portion of the total actuarial present value of all future employer-provided benefits which is attributable to prior years, minus any actuarial valuation assets. It represents a measure of the unfunded liability allocable to past service. The cost and liabilities shown on the following pages are employer costs and liabilities, relating to the capped premium subsidy and the accrued sick and annual leave SAL program.

Actuarial Assumptions

In any long-term actuarial valuation (such as for Pensions and OPEBs), certain demographic, economic, and behavioral assumptions are made concerning the population, the investment discount rates, and the benefits provided. These actuarial assumptions form the basis for the actuarial model which is used to project the future population, the future benefits provided, and the future contributions collected. The discount rate assumption is used to discount projected net OPEB benefits to a present value. This and other related present values are used to calculate the Actuarial Accrued Liability, Normal Cost and Actuarially Determined Contribution.

Overview

The actuarial valuation results contained in the report reflect the Experience Review Study for the period from July 1, 2015, to June 30, 2020. This study includes OPEB and demographic experience that is specific to members who participate in the WV-RHBT Retiree Healthcare Program. Please refer to full Experience Study Review report for additional details on the basis and development of the actuarial assumptions.

Certain healthcare benefits are evaluated at each measurement. Generally, these assumptions include the healthcare trend, per capita claim costs, the likelihood a member elects a certain healthcare plan, and the likelihood that a retiree selects one-person, two-person, or family coverage.

The interest rate used to discount expected future benefit payments was based on the expected return on current assets and pre-funding contributions that are expected to accumulate and fully fund the projected actuarial accrued liability. For pre-funded assets invested in the long-term WVIMB account, an investment return of 7.00% was assumed. For assets invested in the short-term WVBTI account, an investment return of 2.50% was assumed. An overall discount rate of 6.65% was used to develop the actuarial liability and normal costs, which was based on the average return on invested plan assets during the projection period. The key basis of the projection includes:

- The employer's aggregate capped subsidy of $75 million for PY 2022, $60 million for PY 2023, $70 million for PY 2024, and $80 million for PY 2025. After 2025, the plan is projected to be fully funded.
- Prior to 2026, the employer's total contribution equals the sum of State appropriations, aggregate capped contributions, and SAL program contributions.
- Approximately six months of self-insured claims, fully-insured premiums, and administrative expenses will be held in the WVBTI account.
- Investment earnings and principal from the WVIMB will be used to pay sponsor benefits only after the sponsor's benefit obligations are fully funded.
- After the program becomes fully funded, the sponsor contributes amounts needed to remain fully funded.
- Annual increases for the member's share of the plan cost increases at a higher rate when compared to annual increases of capped costs. After 2029, the percentage of plan cost paid by the member is assumed to remain stable at about 44%.

Appendix A of the report contains a projection supporting the Single Discount Rate assumption. Appendix A shows that the program is projected to be fully funded by 2025 and the return on invested plan assets ranges from 6.75% to 6.85% during the projection period.

Actuarial Cost Method

WV-RHBT has selected the entry age normal cost method for this actuarial valuation which is an acceptable method and the required cost method for GASB Statements No. 74 and 75 financial reporting. This cost method spreads cost on a level percent of pay basis. The amortization of the Unfunded Actuarial Accrued Liability was calculated using a level percent of pay over a 20-year closed period, as of June 30, 2017.

Overview

The remainder of the report is an integral component of the actuarial valuation and includes:

- Actuarial valuation results and gain/loss analysis as of June 30, 2020;
- Statements of Fiduciary Net Position as of June 30, 2021, and Statements of Changes in Fiduciary Net Position as of June 30, 2021;
- GASB Statement No. 75 financial reporting information measured as of June 30, 2021, and applicable to the plan sponsor's fiscal year end June 30, 2021;
- Summary of actuarial assumptions and methods and plan provisions; and
- Projection of actuarial liabilities, normal costs, assets, benefits and contributions measured as of June 30, 2020.

SECTION C

ACTUARIAL VALUATION RESULTS

Actuarial Valuation Results

The following section contains:

- A reconciliation of the Total OPEB Liability from June 30, 2019, to June 30, 2020, by source of (gain)/loss, and projection of the Total OPEB Liability as of June 30, 2021;
- Summary of actuarial valuation results as of June 30, 2018, by pension plan group;
- Summary of actuarial valuation results as of June 30, 2020, by pension plan group, before and after change in the discount rate; and
- Comparison of actuarially determined contributions for the plan year end June 30, 2021, and June 30, 2020.

(Gain)/Loss Analysis as of June 30, 2020 and Projection to June 30, 2021

West Virginia Retiree Health Benefit Trust Fund GASB 74 Total OPEB Liability as of June 30, 2020		
Total OPEB Liability as of June 30, 2019[a]	**$**	**2,750,793,325**
Service Cost for Fiscal Year 2020	$	43,991,277
Employer Benefits and Expenses for Fiscal Year 2020		(87,772,000)
(Gain)/Loss due to Expected versus Actual Benefit Payments		(86,082,954)
Interest		192,119,243
Total	**$**	**62,255,566**
Expected Total OPEB Liability as of June 30, 2020	**$**	**2,813,048,891**
(Gain)/Loss at June 30, 2020		
Demographic Experience	$	(118,419,734)
Change in Demographic and OPEB Valuation Assumptions [b]		(279,313,510)
Change in Healthcare-Related Assumptions [c]		(831,170,927)
Change in Discount Rate from 7.15% to 6.65%		82,189,026
Total	**$**	**(1,146,715,145)**
Total OPEB Liability as of June 30, 2020	**$**	**1,666,333,746**
Service Cost for Fiscal Year 2021	$	21,649,978
Employer Benefits and Expenses for Fiscal Year 2021		(113,282,000)
(Gain)/Loss due to Expected versus Actual Benefit Payments		(39,957,345)
Interest		108,544,912
Total	**$**	**(23,044,455)**
Total OPEB Liability as of June 30, 2021	**$**	**1,643,289,291**

[a] Based on actuarial valuation as of June 30, 2018, projected to June 30, 2019.
[b] Reflects Experience Study review from July 1, 2015, to June 30, 2020.
[c] Reflects available capped subsidy and premium information through June 1, 2021.

Summary of Actuarial Valuation Results as of June 30, 2018

Discount Rate	7.15%
Ultimate Trend Pre-Medicare	4.50%
Ultimate Trend Post-Medicare	4.50%

		Local Agencies	PERS	Troopers Plan A	Troopers Plan B	TRS Pre-6/30/91	TRS Post-6/30/91	Retiree PERS	Retiree TRS	Total
A)	Present Value of Benefits									
	i) Active[a]	$ 162,685,654	$ 385,710,657	$ 2,181,160	$ 28,675,926	$ 222,984,007	$ 681,487,200	$ -	$ -	$ 1,483,724,604
	ii) Active SAL[b]	156,024	23,766,302	68,361	572,864	23,240,889	13,414,902	-	-	61,219,342
	iii) Retired	-	-	-	-	-	-	675,228,321	795,867,552	1,471,095,873
	iv) Waived Annuitants[c]	-	-	-	-	-	-	5,451,029	4,708,394	10,159,423
	v) Total	$ 162,841,678	$ 409,476,959	$ 2,249,521	$ 29,248,790	$ 246,224,896	$ 694,902,102	$ 680,679,350	$ 800,575,946	$ 3,026,199,242
B)	Actuarial Accrued Liability									
	i) Active[a]	$ 133,316,505	$ 318,422,955	$ 2,048,550	$ 22,854,043	$ 206,131,071	$ 478,106,124	$ -	$ -	$ 1,160,879,248
	ii) Active SAL[b]	139,632	21,991,085	64,489	515,864	21,789,399	11,115,687	-	-	55,616,156
	iii) Retired	-	-	-	-	-	-	675,228,321	795,867,552	1,471,095,873
	iv) Waived Annuitants[c]	-	-	-	-	-	-	5,451,029	4,708,394	10,159,423
	iii) Total	$ 133,456,137	$ 340,414,040	$ 2,113,039	$ 23,369,907	$ 227,920,470	$ 489,221,811	$ 680,679,350	$ 800,575,946	$ 2,697,750,700
C)	Employer Normal Cost									
	i) Fiscal Year Ending June 30, 2019	$ 4,935,985	$ 11,727,002	$ 52,111	$ 850,395	$ 4,709,266	$ 25,794,898	$ -	$ -	$ 48,069,657
	ii) Fiscal Year Ending June 30, 2020	4,436,044	10,592,191	41,322	824,318	3,879,653	24,217,749	-	-	43,991,277
D)	Employer Benefit Payments									
	i) Fiscal Year Ending June 30, 2019	$ 1,002,297	$ 2,722,090	$ 16,662	$ 62,060	$ 3,276,991	$ 3,104,791	$ 81,852,777	$ 91,021,563	$ 183,059,231
	ii) Fiscal Year Ending June 30, 2020	2,826,214	7,711,067	52,254	196,472	9,162,665	8,578,172	69,095,532	76,150,004	173,772,381
E)	Covered Members									
	i) Active[d]	4,679	10,596	21	375	4,796	19,517	-	-	39,984
	ii) Retired	-	-	-	-	-	-	19,934	23,120	43,054
	iii) Waived Annuitants	-	-	-	-	-	-	6,395	5,486	11,881
	iv) Total	4,679	10,596	21	375	4,796	19,517	26,329	28,606	94,919
F)	Covered Payroll[e]	$203,012,553	$441,758,038	$1,370,664	$20,505,836	$286,230,234	$898,309,205	$ -	$ -	$ 1,851,186,530

[a] *Includes employer capped subsidy and Employee Assistance Program benefits.*

[b] *Includes employer paid premium under the Accrued Sick Annual Leave Program.*

[c] *The actuarial valuation assumes 2.5% of waived annuitants under the age of 75 will select retiree healthcare coverage in the future. As of June 30, 2018, there were 11,881 waived annuitants under age 75 and 6,238 waived annuitants over age 75.*

[d] *Excludes active members hired on or after July 1, 2010.*

[e] *Covered payroll excludes members hired on or after July 1, 2010, and is based on the payroll data provided as of the actuarial valuation date. Based on updated actuarial valuation data as of June 30, 2018.*

Summary of Actuarial Valuation Results as of June 30, 2020
After Updates to OPEB and Other Demographic Assumptions

		Local Agencies	PERS	Troopers Plan A	Troopers Plan B	TRS Pre-6/30/91	TRS Post-6/30/91	Retiree PERS	Retiree TRS	Retiree Public Safety	Total
	Discount Rate										7.15%
	Ultimate Trend Pre-Medicare										4.25%
	Ultimate Trend Post-Medicare										4.25%
A)	Present Value of Benefits										
	i) Active[a]	$76,686,668	$193,022,578	$1,053,982	$20,267,647	$94,429,381	$352,009,100	$ -	$ -	$ -	$737,469,356
	ii) Active SAL[b]	$59,188	$7,862,558	$12,920	$367,946	$11,050,808	$8,155,134	-	-	-	$27,508,554
	iii) Retired	-	-	-	-	-	-	$406,131,384	$523,289,875	$16,042,561	945,463,820
	iv) Waived Annuitants[c]	-	-	-	-	-	-	$3,579,720	$3,133,964	$174,907	6,888,591
	v) Total	$ 76,745,856	$ 200,885,136	$ 1,066,902	$ 20,635,593	$ 105,480,189	$ 360,164,234	$ 409,711,104	$ 526,423,839	$ 16,217,468	$1,717,330,321
B)	Actuarial Accrued Liability										
	i) Active[a]	$64,229,829	$163,592,923	$1,027,213	$17,591,169	$89,340,294	$270,533,126	$ -	$ -	$ -	$606,314,554
	ii) Active SAL[b]	$54,554	$7,403,899	$12,697	$344,720	$10,486,278	$7,175,607	-	-	-	$25,477,755
	iii) Retired	-	-	-	-	-	-	406,131,384	523,289,875	16,042,561	945,463,820
	iv) Waived Annuitants[c]	-	-	-	-	-	-	3,579,720	3,133,964	174,907	6,888,591
	v) Total	$ 64,284,383	$ 170,996,822	$ 1,039,910	$ 17,935,889	$ 99,826,572	$ 277,708,733	$ 409,711,104	$ 526,423,839	$ 16,217,468	$ 1,584,144,720
C)	Employer Normal Cost										
	i) Fiscal Year End 2021	$2,042,551	$4,954,905	$14,232	$476,111	$1,440,337	$10,491,048	$ -	$ -	$ -	$19,419,184
	ii) Fiscal Year End 2022	$1,881,888	$4,575,035	$7,674	$447,773	$1,190,889	$10,208,461	$ -	$ -	$ -	$18,311,720
D)	Employer Benefit Payments										
	i) Fiscal Year End 2021	$ 501,243	$ 1,317,544	$ 24,584	$ 87,873	$ 1,555,970	$ 1,121,497	$ 68,314,313	$ 76,180,650	$ 2,087,169	$ 151,190,843
	ii) Fiscal Year End 2022	$ 1,081,824	$ 2,978,507	$ 47,101	$ 182,846	$ 3,485,977	$ 2,576,041	$ 45,031,118	$ 49,625,201	$ 1,399,330	$ 106,407,945
E)	Covered Members										
	i) Active[d]	3,932	9,156	18	354	3,366	17,493	-	-	-	34,319
	ii) Retired	-	-	-	-	-	-	19,638	23,237	394	43,269
	iii) Waived Annuitants	-	-	-	-	-	-	6,263	5,409	241	11,913
	iv) Total	3,932	9,156	18	354	3,366	17,493	25,901	28,646	635	89,501
F)	Payroll[e]										
	i) Fiscal Year End 2021	$154,318,831	$416,702,125	$807,772	$20,120,675	$196,777,748	$873,817,206	$0	$0	$0	$1,662,544,357
	ii) Fiscal Year End 2022	$143,119,230	$386,596,867	$450,291	$18,822,354	$162,013,089	$855,916,296	$0	$0	$0	$1,566,918,127

[a] *Includes employer capped subsidy and Employee Assistance Program benefits.*

[b] *Includes employer paid premium under the Accrued Sick Annual Leave Program.*

[c] *The actuarial valuation assumes 2.5% of waived annuitants under the age of 75 will select retiree healthcare coverage in the future. As of June 30, 2020, there were 11,913 waived annuitants under age 75 and 5,013 waived annuitants over age 75.*

[d] *Excludes active members hired on or after July 1, 2010.*

[e] *Payroll excludes members hired on or after July 1, 2010, and is based on the payroll data provided as of June 30, 2020, projected to 2021 and 2022.*

Summary of Actuarial Valuation Results as of June 30, 2020
After Updates to the Discount Rate

								Discount Rate				6.65%
								Ultimate Trend Pre-Medicare				4.25%
								Ultimate Trend Post-Medicare				4.25%
		Local Agencies	PERS	Troopers Plan A	Troopers Plan B	TRS Pre-6/30/91	TRS Post-6/30/91	Retiree PERS	Retiree TRS	Retiree Public Safety	Total
A)	Present Value of Benefits										
	i) Active[a]	$82,715,102	$208,087,411	$1,118,315	$21,996,562	$100,818,055	$386,689,353	$ -	$ -	$ -	$801,424,798
	ii) Active SAL[b]	$61,606	$8,197,930	$13,308	$385,925	$11,404,817	$8,564,578	-	-	-	$28,628,164
	iii) Retired	-	-	-	-	-	-	$420,813,248	$544,871,806	$16,798,695	982,483,749
	iv) Waived Annuitants[c]	-	-	-	-	-	-	$3,731,092	$3,273,791	$184,580	7,189,463
	v) Total	$ 82,776,708	$ 216,285,341	$ 1,131,623	$ 22,382,487	$ 112,222,872	$ 395,253,931	$ 424,544,340	$ 548,145,597	$ 16,983,275	$1,819,726,174
B)	Actuarial Accrued Liability										
	i) Active[a]	$68,616,087	$174,762,435	$1,087,732	$18,907,182	$94,898,165	$292,083,350	$ -	$ -	$ -	$650,354,951
	ii) Active SAL[b]	$56,391	$7,670,364	$13,063	$359,767	$10,756,995	$7,449,003	-	-	-	$26,305,583
	iii) Retired	-	-	-	-	-	-	420,813,248	544,871,806	16,798,695	982,483,749
	iv) Waived Annuitants[c]	-	-	-	-	-	-	3,731,092	3,273,791	184,580	7,189,463
	v) Total	$ 68,672,478	$ 182,432,799	$ 1,100,795	$ 19,266,949	$ 105,655,160	$ 299,532,353	$ 424,544,340	$ 548,145,597	$ 16,983,275	$ 1,666,333,746
C)	Employer Normal Cost										
	i) Fiscal Year End 2021	$2,244,108	$5,454,129	$16,094	$536,635	$1,642,903	$11,756,109	$ -	$ -	$ -	$21,649,978
	ii) Fiscal Year End 2022	$2,069,515	$5,039,950	$8,728	$505,082	$1,360,183	$11,448,932	$ -	$ -	$ -	$20,432,390
D)	Employer Benefit Payments										
	i) Fiscal Year End 2021	$ 501,243	$ 1,317,544	$ 24,584	$ 87,873	$ 1,555,970	$ 1,121,497	$ 68,314,313	$ 76,180,650	$ 2,087,169	$ 151,190,843
	ii) Fiscal Year End 2022	$ 1,081,824	$ 2,978,507	$ 47,101	$ 182,846	$ 3,485,977	$ 2,576,041	$ 45,031,118	$ 49,625,201	$ 1,399,330	$ 106,407,945
E)	Covered Members										
	i) Active[d]	3,932	9,156	18	354	3,366	17,493	-	-	-	34,319
	ii) Retired	-	-	-	-	-	-	19,638	23,237	394	43,269
	iii) Waived Annuitants	-	-	-	-	-	-	6,263	5,409	241	11,913
	iv) Total	3,932	9,156	18	354	3,366	17,493	25,901	28,646	635	89,501
F)	Payroll[e]										
	i) Fiscal Year End 2021	$154,318,831	$416,702,125	$807,772	$20,120,675	$196,777,748	$873,817,206	$ -	$ -	$ -	$ 1,662,544,357
	ii) Fiscal Year End 2022	$143,119,230	$386,596,867	$450,291	$18,822,354	$162,013,089	$855,916,296	$ -	$ -	$ -	$ 1,566,918,127

[a] *Includes employer capped subsidy and Employee Assistance Program benefits.*

[b] *Includes employer paid premium under the Accrued Sick Annual Leave Program.*

[c] *The actuarial valuation assumes 2.5% of waived annuitants under the age of 75 will select retiree healthcare coverage in the future. As of June 30, 2020, there were 11,913 waived annuitants under age 75 and 5,013 waived annuitants over age 75.*

[d] *Excludes active members hired on or after July 1, 2010.*

[e] *Payroll excludes members hired on or after July 1, 2010, and is based on the payroll data provided as of June 30, 2020, projected to 2021 and 2022.*

Development of Actuarially Determined Contribution

Actuarial Valuation Date		June 30, 2020		June 30, 2018
A) Funded Status Beginning at Measurement Date		**June 30, 2020**		**June 30, 2019**
i) Actuarial Accrued Liability	$	1,666,333,746	$	2,750,793,325
ii) Market Value of Assets		1,224,642,000		1,091,661,000
iii) Unfunded Actuarial Accrued Liability	$	441,691,746	$	1,659,132,325
iv) Funded Ratio		73.49%		39.69%
B) Actuarially Determined Contribution (ADC) for FYE		**June 30, 2021**		**June 30, 2020**
i) Employer Normal Cost	$	21,649,978	$	43,991,277
ii) Operating Expenses		3,478,000		3,236,000
ii) Amortization of Unfunded Actuarial Accrued Liability		33,834,361		117,372,701
iv) Actuarially Determined Contribution	$	58,962,339	$	164,599,978
C) Employer Contribution for FYE		**June 30, 2021**		**June 30, 2020**
i) PAYGO Contributions	$	152,142,000	$	158,406,000
ii) Pre-Fund Contributions	$	30,000,000	$	35,000,000
ii) Total	$	182,142,000	$	193,406,000
D) Percentage of ADC Contributed		308.91%		117.50%
E) Retired Member Health Premiums	$	67,038,561	$	67,776,000

Market Value of Assets

This section contains the following information relating to the market value of plan assets:

- Statement of Plan Net Position as of June 30, 2021, and June 30, 2020;
- Statement of Changes in Plan Net Position for fiscal years ending June 30, 2021, and June 30, 2020;
- Market value of assets broken out by investment pool as of June 30, 2021, and June 30, 2020; and
- WVIMB asset allocation as of 2020.

West Virginia Retiree Health Benefit Trust Fund
Statements of Fiduciary Net Position
June 30, 2021 and 2020

	2021	2020
ASSETS		
Cash and cash equivalents	$ 7,119,000	$ 6,411,000
Equity position in investment pools	1,670,305,000	1,193,675,000
Contributions receivable - net of allowance for doubtful accounts	-	-
of $177,000 and $143,000 respectively	6,875,000	1,637,000
Due from the State - contributions	1,826,000	1,029,000
Due from the State - State appropriation (Contribution)	-	2,500,000
Other receivables	7,861,000	38,108,000
Total assets	1,693,986,000	1,243,360,000
DEFERRED OUTFLOWS OF RESOURCES		
Pension	249,000	112,000
Other Post-Employment Benefits	121,000	79,000
Total deferred outflows of resources	370,000	191,000
LIABILITIES		
Claims payable	8,613,000	9,244,000
Due to PEIA	1,722,000	6,457,000
Payables to managed care organizations	-	-
Other liabilities	10,663,000	2,973,000
Total liabilities	20,998,000	18,674,000
DEFERRED INFLOWS OF RESOURCES		
Pension	21,000	84,000
Other Post-Employment Benefits	313,000	151,000
Total deferred inflows of resources	334,000	235,000
NET POSITION		
Net position restricted for other postemployment benefits	$ 1,673,024,000	$ 1,224,642,000

West Virginia Retiree Health Benefit Trust Fund
Statements of Changes in Fiduciary Net Position
For the Years Ended June 30, 2021 and 2020

	2021	2020
Additions:		
Contributions:		
Employers	$ 104,503,000	$ 107,756,000
State appropriation (School Aid)	47,639,000	50,650,000
State appropriation (Contribution)	-	5,000,000
State appropriation (OPEB)	30,000,000	30,000,000
Total contributions	182,142,000	193,406,000
Retiree drug subsidy	825,000	643,000
Other Revenue	9,000	19,000
Interest and dividend income	98,000	1,350,000
Net appreciation in fair value of investments	381,533,000	28,571,000
Total additions	564,607,000	223,989,000
Deductions:		
Benefit payments, net	111,627,000	85,786,000
Administrative service fees	1,655,000	1,986,000
Other expenses	2,943,000	3,236,000
Total deductions	116,225,000	91,008,000
Net increase in net position	448,382,000	132,981,000
Net position restricted for other postemployment benefits:		
Net position, beginning of year	1,224,642,000	1,091,661,000
Net position, beginning of year, as restated	1,224,642,000	1,091,661,000
Net position, end of year	$ 1,673,024,000	$ 1,224,642,000

West Virginia Retiree Health Benefit Trust Fund
Equity Position in Investment Management Pools
June 30, 2021 and 2020

	June 30, 2021	June 30, 2020
West Virginia Board of Treasury Investments (WVBTI)		
Money Market Pool	$ 58,540,954	$ 43,446,727
West Virginia Investment Management Board (WVIMB)		
Domestic Equity	$ 61,929,848	$ 275,409,721
Portable Alpha	368,871,650	$ -
International Equity Pool	275,088,815	198,283,960
International Non-Qualified Pool	101,668,751	73,847,713
Short-Term Fixed Income	-	80,000,492
Total Return Fixed Income Pool	160,741,571	100,929,831
Core Fixed Income Pool	69,018,325	43,025,913
Hedge Funds Pool	146,683,551	105,533,069
Private Markets	427,761,576	273,196,916
	$ 1,611,764,087	$ 1,150,227,614
Grand Total	**$ 1,670,305,041**	**$ 1,193,674,341**

WVIMB Target Asset Allocation as of 2020

WV - RHBT
GASB No. 75 Actuarial Valuation as of June 30, 2020
Measured as of June 30, 2020, and applicable for the fiscal year end June 30, 2021

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 rates of return 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 rates of return by the target asset allocation percentage. Target asset allocations, capital market assumptions ("CMA"), and forecast returns were provided by the plan's investment advisors, including the West Virginia Investment Management Board ("WV-IMB"). The projected return for the Money Market Pool held with the West Virginia Board of Treasury Investments ("WV-BTI") was estimated based on WV-IMB assumed inflation of 2.0% plus a 25 basis point spread.

		CMA 10-Year	
	Current Policy Target Asset Allocation	Geometric Nominal Return	Standard Deviation
WV-IMB [a]			
Global Equity	55.0 %	6.8 %	17.1 %
Core Plus Fixed Income	15.0 %	4.1 %	8.4 %
Core Real Estate	10.0 %	6.1 %	12.9 %
Hedge Fund	10.0 %	4.4 %	7.8 %
Private Equity	10.0 %	8.8 %	25.6 %
Target Allocation [a]	**100.0 %**		
Percentage of Portfolio [b]	**95.0 %**		
Forecast 10-year Return [a,c]		6.7 %	
Standard Deviation [a]		13.1 %	
CMA 10-year Inflation [a]		2.0 %	
10-year Real Return		4.7 %	
Actuarial Valuation Inflation Assumption		2.25 %	
10-year Nominal Return after Inflation Adjustment		6.95 %	
Actuarial Valuation Return Assumption [d]		7.00 %	
WV-BTI		Expected Return	
Money Market Pool with 2.00% inflation [d]	**100.0 %**	2.25 %	
Percentage of Portfolio [b]	**5.0 %**		

[a] Target asset allocation, capital market assumtpions, and forecast of 10-year returns provided by WV-IMB.

[b] Based on invested assets as of June 30, 2019, June 30, 2020, and assumptions used for long-term projection.

[c] Ten-year forecast returns provided by WV-IMB are based on gross market return assumption for each asset class. WV-IMB utilizes active management and generally expects actively managed net returns to meet or exceed forecast net returns.

[d] For the actuarial valuation as of June 30, 2020, inflation assumption was changed to 2.25%, WV-IMB return was changed to 7.00%, and WV-BTI return was changed to 2.50%.

SECTION D

GASB STATEMENT NO. 74 INFORMATION

Auditor's Note – This information is intended to assist in preparation of the plan sponsor's financial statements relating to the West Virginia Retiree Health Benefit Trust Fund. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes.

Discussion

Accounting Standard

For postemployment (OPEB) benefit plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 74, "Financial Reporting for Postemployment Benefit Plans other than Pension Plans," replaces the requirements of GASB Statement No. 43, "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans." GASB Statement No. 74 establishes standards of financial reporting for separately issued financial reports of state and local government OPEB plans.

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

GASB Statements No. 74 and 75 are effective for fiscal years beginning after June 15, 2016, and June 15, 2017, respectively.

The following discussion provides a summary of the information that is required to be disclosed under these accounting standards.

Plan Financial Statements

GASB Statement No. 74 requires defined benefit OPEB plans which are administered as trusts or equivalent arrangements to present two financial statements: a statement of fiduciary net position and a statement of changes in fiduciary net position. The statement of fiduciary net position presents the assets and liabilities of the OPEB plan at the end of the OPEB plan's reporting period. The statement of changes in fiduciary net position presents the additions, such as contributions and investment income, and deductions, such as benefit payments and expense, and net increase or decrease in the fiduciary net position.

GASB Statement No. 75 requires state and local government employers to recognize the net OPEB liability and the OPEB expense on their financial statements, along with the related deferred outflows and inflows of resources. The net OPEB liability is the difference between the total OPEB liability and the plan's fiduciary net position. In traditional actuarial terms, this is analogous to the accrued liability less the market value of assets.

The OPEB expense recognized each fiscal year is equal to the change in the net OPEB liability from the beginning of the year to the end of the year, adjusted for deferred recognition of the liability and investment experience.

GASB Statement No. 75 requires that employer contributions made to the OPEB plan subsequent to the measurement date and before the end of the employer's reporting period should be reported as a deferred outflow of resources.

Notes to Financial Statements

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

GASB Statements No. 74 and 75 require the notes of the financial statements for the Plan and Plan Sponsor to include certain additional information. The list of disclosure items should include:

- The name of the OPEB plan, the administrator of the OPEB plan, and the identification of whether the OPEB plan is a single-employer, agent, or cost-sharing OPEB plan;
- A description of the benefits provided by the plan;
- A brief description of changes in benefit terms or assumptions that affected the measurement of the total OPEB liability since the prior measurement date;
- The number of plan members by category and if the plan is closed;
- A description of the plan's funding policy, which includes member and employer contribution requirements;
- The OPEB plan's investment policies;
- The OPEB plan's fiduciary net position and the net OPEB liability;
- The net OPEB liability using +/- 1% change on the discount rate;
- The net OPEB liability using +/- 1% change on the healthcare trend rate;
- Significant assumptions and methods used to calculate the total OPEB liability;
- Inputs to the discount rates; and
- Certain information about mortality assumptions and the dates of experience studies.

OPEB plans that are administered through trusts or equivalent arrangements are required to disclose additional information in accordance with GASB Statement No. 74. This information includes:

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

Required Supplementary Information

GASB Statement No. 74 requires a 10-year fiscal history of:

- Sources of changes in the net OPEB liability.
- Information about the components of the net OPEB liability and related ratios, including the OPEB plan's fiduciary net position as a percentage of the total OPEB liability, and the net OPEB liability as a percent of covered-employee payroll.
- Comparison of the actual employer contributions to the actuarially determined contributions based on the plan's funding policy.

- For plans with an actuarially determined contribution, the schedule covering each of the 10 most recent fiscal years of the actuarially determined contribution, contributions to the OPEB plan, and related ratios.

Frequency and Timing of the Actuarial Valuation

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

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on OPEB plan investments to the extent that the plan's fiduciary net position is projected to be available and sufficient to pay benefits, and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date to the extent that the benefits are effectively financed on a pay-as-you-go basis.

Since the RHBT is projected to be fully funded by fiscal year end June 30, 2025, and plan assets are available to pay benefits and expenses in all future years, we have assumed a rate of 6.65% for the long-term expected return on plan assets and the discounting of future plan obligations. Please see Appendix A for a projection supporting the 6.65% long-term return and discount rate assumptions.

Actuarial Assumptions

The actuarial assumptions used to value actuarial liabilities are outlined in detail in Section E. Healthcare-related assumptions include: per capita claim costs, trend rates, aging factors, and participation rates. The pension-related assumptions were based on experience studies conducted by the pension system's actuary as approved by the pension system. The OPEB-related assumptions were based on a recent experience study conducted by GRS and approved by WV-RHBT.

Future Uncertainty or Risk

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

- Claims experience differing from expected;
- Healthcare trend experience differing from expected;
- Changes in the healthcare plan designs offered to active and retired members;
- Changes in healthcare related costs due to recent experience; and
- Participant behavior differing from expected; e.g.,
    - Elections at retirement;
    - One-person versus two-person coverage elections; and

- Timing of retirement or termination.

Benefits Valued

The benefit provisions that were valued are described in Section F. The actuarial valuation is required to be performed on the current benefit terms and existing legal agreements. Consideration is to be given to the written plan document as well as other communications between the employer and plan members and an established pattern of practice for cost sharing. The summary of major plan provisions is designed to outline principal plan benefits.

GASB Statement No. 74 Information

The actuarial valuation as of June 30, 2020, with a measurement date of June 30, 2021, was prepared for purposes of complying with the requirements of GASB Statement No. 74 for the plan fiscal year end June 30, 2021.

A number of disclosure items are provided in this report. However, certain non-actuarial information, such as notes regarding accounting policies and investments, is not included in this report. As a result, the plan sponsor will be responsible for preparing and disclosing the non-actuarial information needed to comply with these accounting standards.

This section contains the following GASB Statement No. 74 information:

- GASB Statement No. 74 Executive Summary;
- GASB Statement No. 74 Changes in Net OPEB Liability for plan year end June 30, 2021, applicable to plan's fiscal year end June 30, 2021;
- GASB Statement No. 74 Sensitivity of Net OPEB Liability plan year end June 30, 2021;
- GASB Statement No. 74 Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear;
- GASB Statement No. 74 Schedule of Contributions; and
- Notes to Schedule of Contributions.

Executive Summary

	2021
Actuarial Valuation Date	June 30, 2020
Measurement Date of the Net OPEB Liability	June 30, 2021
Employer's Fiscal Year End for GASB Statement No. 74	June 30, 2021
Membership	
Number of	
- Retirees and Beneficiaries	43,269
- Waived Annuitants [a]	11,913
- Active Members	34,319
- Total	89,501
Covered Payroll [b]	$ 1,662,544,357
Net OPEB Liability	
Total OPEB Liability	$ 1,643,289,292
Plan Fiduciary Net Position	1,673,024,000
Net OPEB Liability	$ (29,734,708)
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	101.81%
Net OPEB Liability as a Percentage of Covered Payroll	-1.79%
Development of the Single Discount Rate	
Single Discount Rate Beginning of Year	6.65%
Single Discount Rate End of Year	6.65%
Long-Term Expected Rate of Investment Return	6.65%
WVIMB Long-Term Expected Rate of Investment Return	7.00%
WVBTI Short-Term Expected Rate of Investment Return	2.50%
Long-Term Municipal Bond Rate Beginning of Year [c]	2.45%
Long-Term Municipal Bond Rate End of Year [c]	1.92%
Year WV-RHBT is Projected to be Fully Funded	2021

[a] *Represents eligible waived annuitants under age 75. It is assumed that 2.5% of these members will elect coverage.*

[b] *Covered payroll excludes members hired on or after July 1, 2010, and is based on expected payroll for plan year end 2021.*

[c] *Based on fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2020, and June 30, 2021. In describing this index, Fidelity notes that the municipal curves are constructed using option-adjusted analytics of a diverse population of over 10,000 tax-exempt securities.*

GASB Statement No. 74 Information

Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear

Fiscal Year Ending June 30,	2021	2020	2019	2018	2017
Total OPEB Liabililty					
Service Cost	$ 21,649,978	$ 43,991,277	$ 51,870,039	$ 60,108,139	$ 66,067,781
Interest on the Total OPEB Liability	108,544,912	192,119,243	219,338,640	232,001,350	223,113,462
Changes of Benefit Terms	-	-	-	-	-
Difference between Expected and Actual Experience	(158,377,079)	(112,307,742)	(194,391,468)	(51,625,410)	(10,450,977)
Changes of Assumptions	(1,028,295,411)	(253,744,141)	(296,677,844)	-	-
Benefit Payments and Administrative Expenses	(113,282,000)	(87,772,000)	(135,061,413)	(137,700,187)	(164,823,111)
Net Change in Total OPEB Liability	(1,169,759,600)	(217,713,363)	(354,922,046)	102,783,892	113,907,155
Total OPEB Liability - Beginning	2,813,048,891	3,030,762,254	3,385,684,300	3,282,900,408	3,168,993,253
Total OPEB Liability - Ending (a)	$ 1,643,289,292	$ 2,813,048,891	$ 3,030,762,254	$ 3,385,684,300	$ 3,282,900,408
Plan Fiduciary Net Position					
Employer Contributions	$ 182,142,000	$ 193,406,000	$ 206,028,203	$ 204,234,825	$ 204,908,111
Net Investment Income	381,631,000	29,921,000	59,498,185	74,048,016	99,447,152
Benefit Payments and Administrative Expenses	(113,282,000)	(87,772,000)	(135,061,413)	(137,700,187)	(164,823,111)
Operating Expenses	(2,943,000)	(3,236,000)	(2,824,857)	(3,056,005)	(1,846,001)
Other	834,000	662,000	906,084	1,572,248	557,162
Net Change in Plan Fiduciary Net Position	448,382,000	132,981,000	128,546,202	139,098,897	138,243,313
Plan Fiduciary Net Position - Beginning, as restated [a]	1,224,642,000	1,091,661,000	963,114,601	824,015,704	685,668,002
Plan Fiduciary Net Position - Ending (b)	1,673,024,000	1,224,642,000	1,091,660,803	963,114,601	823,911,315
Net OPEB Liability - Ending (a) - (b)	$ (29,734,708)	$ 1,588,406,891	$ 1,939,101,451	$ 2,422,569,699	$ 2,458,989,094
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability	101.81%	43.53%	36.02%	28.45%	25.10%
Covered-Employee Payroll	$1,662,544,357	$ 1,768,975,119	$ 1,892,941,244	$ 2,286,998,500	$ 2,199,037,019
Net OPEB Liability as a Percentage of Covered-Employee Payroll	-1.79%	89.79%	102.44%	105.93%	111.82%

[a] *The Plan Fiduciary Net Position at the beginning of plan year 2018 was adjusted by $104,389 to account for the cumulative effect of adoption of accounting principle.*

Sensitivity of Net OPEB Liability

Regarding the sensitivity of the net OPEB liability to changes in the Single Discount Rate, the following presents the plan's net OPEB liability, calculated using a Single Discount Rate of 6.65%, as well as what the plan's net OPEB liability would be if it were calculated using a Single Discount Rate that is one percentage point higher or lower:

Sensitivity of Net OPEB Liability as of June 30, 2021, to the Single Discount Rate Assumption

1% Decrease 5.65%	Current Single Discount Rate Assumption 6.65%	1% Increase 7.65%
$ 159,559,746	$ (29,734,708)	$ (186,903,110)

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

Sensitivity of Net OPEB Liability as of June 30, 2021, to the Healthcare Cost Trend Rate Assumption

1% Decrease	Current Healthcare Cost Trend Rates Assumption	1% Increase
$ (219,545,277)	$ (29,734,708)	$ 201,476,232

GASB Statement No. 74 Information

Schedule of Net OPEB Liability Multiyear

FY Ending June 30,	Total OPEB Liability	Fiduciary Net Position	Net OPEB Liability	Net Position as a % of Total OPEB Liability	Covered Payroll	Net OPEB Liability as a % of Covered Payroll
2017	$ 3,282,900,408	$ 823,911,315	$ 2,458,989,094	25.10%	$ 2,199,037,019	111.82%
2018	3,385,684,300	963,114,601	2,422,569,699	28.45%	2,286,998,500	105.93%
2019	3,030,762,254	1,091,660,803	1,939,101,451	36.02%	1,892,941,244	102.44%
2020	2,813,048,891	1,224,642,000	1,588,406,891	43.53%	1,768,975,119	89.79%
2021	1,643,289,292	1,673,024,000	(29,734,708)	101.81%	1,662,544,357	-1.79%

GASB Statement No. 74 Information

Schedule of Contributions Multiyear

FY Ending June 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2017	224,710,406	204,908,111	19,802,295	2,199,037,019	9.32%
2018	224,009,170	204,234,825	19,774,345	2,286,998,500	8.93%
2019	200,444,338	206,028,203	(5,583,865)	1,892,941,244	10.88%
2020	164,599,978	193,406,000	(28,806,022)	1,768,975,119	10.93%
2021	58,962,339	182,142,000	(123,179,661)	1,662,544,357	10.96%

Notes to Schedule of Contributions

Valuation Date	June 30, 2020
Measurement Date	June 30, 2021
Plan Year End	June 30, 2021

Methods and Assumptions Used to Develop Actuarially Determined Contribution:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level percentage of payroll, closed
Amortization Period	20-year closed period as of June 30, 2017
Asset Valuation Method	Market value
Investment Rate of Return	6.65%, net of OPEB plan investment expense, including inflation
Inflation	2.25%
Wage Inflation	2.75% for PERS and TRS, 3.25% for Troopers
Salary Increases	Rates based on 2015-2020 OPEB Experience Study and depend on pension plan participation and attained age, and range from 2.75% to 5.18%, including inflation. Rates were first applied to the 2020 valuation.
Rates of Retirement with OPEB Benefits	Rates based on 2015-2020 OPEB Experience Study and vary by pension plan participation and age/service at retirement . Rates were first applied to the 2020 valuation.
Mortality	**Post-Retirement:** Pub-2010 General Healthy Retiree Mortality Tables (100% males, 108% females) projected with Scale MP-2019 for TRS . Pub-2010 General Below Median Healthy Retiree Mortality Tables (106% male, 113% female) projected with Scale MP-2019 for PERS. Pub-2010 Public Safety Healthy Retiree Mortality Tables (100% male, 100% female) projected with Scale MP-2019 for Troopers A and B. **Pre-Retirement:** Pub-2010 General Employee Mortality Tables (100% male, 100% female) projected with Scale MP-2019 for TRS. Pub-2010 Below-Median Income General Employee Mortality Tables projected with Scale MP-2019 for PERS. Pub-2010 Public Safety Employee Mortality Tables projected with Scale MP-2019 for Troopers A and B.
Healthcare Cost Trend Rates	Trend rate for pre-Medicare per capita costs of 7.0% for plan year end 2020, decreasing by 0.5% for one year then by 0.25% each year thereafter, until ultimate trend rate of 4.25% is reached in plan year end 2032. Trend rate for Medicare per capita costs of -33.11% for plan year end 2022, 9.15% for plan year end 2023, decreasing ratably each year thereafter, until ultimate trend rate of 4.25% is reached in plan year end 2036.
Aging Factors	Based on the 2013 SOA Study "Health Care Costs - From Birth to Death"

Single Discount Rate

A Single Discount Rate of 6.65% was used to measure the total OPEB liability. This Single Discount Rate was based on the expected rate of return on OPEB plan investments of 6.65%. The projection of cash flows used to determine this Single Discount Rate assumed that employer contributions will be made in accordance with the prefunding and investment policies. See Appendix A for a projection supporting the development of the Single Discount Rate. Based on these assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected future benefit payments of 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.

Summary of Membership Information

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

Members or Beneficiaries Currently Receiving Benefits	43,269
Waived Annuitants [a]	11,913
Active Plan Members	34,319
Total Plan Members	89,501

[a] The actuarial valuation assumes 2.5% of eligible waived annuitants under the age of 75 will select retiree healthcare coverage on the valuation date. As of June 30, 2020, there were 11,913 waived annuitants under the age of 75 who were included in the actuarial valuation, and so approximately 298 were assumed to elect coverage as of June 30, 2020. Also, 5,013 waived annuitants over the age 75 were excluded from the actuarial valuation.

SECTION E

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Summary of Actuarial Assumptions and Methods

Development of Per Capita Claim Costs

Per capita claim costs for the self-insured PPB plans were developed using the following information:

- Incurred medical and prescription drug claims, enrollment, and administrative expense data for calendar years 2018, 2019, and 2020, as provided by WV-RHBT.

Costs for plan year end June 30, 2021, were based on:

- Average costs for calendar years 2018, 2019, and 2020 projected to the 12-month rating period ending June 30, 2021, using historical annual trend rates of 5% for medical experience and 8% for prescription drug experience; and
- Overall average costs for plan year end June 30, 2021, using trend adjusted historical costs weighted by 16.7% for 2018 experience, 33.3% for 2019 experience, and 50.0% for 2020 experience.

Per capita claim costs for the fully-insured Humana MAPD plans were developed using the following information:

- Incurred medical and prescription drug claims, prescription drug rebates, and enrollment data for calendar years 2017 and 2018, as provided WV-RHBT;
- Humana's renewal premium rating reports applicable to calendar years 2017, 2018, 2019, and 2020 (including not to exceed rates for calendar year 2021), which provide projected: medical and prescription drug costs, CMS reimbursement rates for medical and prescription drug costs, administrative/profit margins, and other adjustments; and
- Humana's gain sharing reports applicable to calendar years 2017 and 2018, which compare renewal premium rates against actual experience, and provide gain sharing adjustments for favorable claim and CMS reimbursement rates experience.
- Humana's not-to-exceed rates for calendar years 2022 through 2025. MAPD premium rates are updated as of January 1.

Average MAPD costs for calendar years 2019, 2020 and 2021 were based on:

- Calendar year 2018 incurred claims increased by 3% for medical cost and 4% for prescription drug costs;
- Drug rebate rate of 37% of projected drug claims;
- CMS reimbursement rate of 100% of projected medical costs and 38% of projected prescription drug costs net of rebates;
- Administrative/profit margins based on historical rates through calendar year 2019 before any gain sharing or "business decision" adjustments;

- Elimination of ACA Health Insurance Tax; and
- Average MAPD per capita costs on and after 2022 were based on 40% of projected experience-based rates plus 60% of projected not-to-exceed rates.

Medicare per capita costs were based on 97% of MAPD per capita costs plus 3% of Medicare PPB per capita costs.

Future per capita costs were trended from the mid-point of the current rating period to the mid-point of the following rating period.

Cost Method and Expense Calculations for Retiree Healthcare Benefits

The retiree healthcare actuarial valuation was based on the entry age normal cost method. Under this method, each participant's projected benefit is allocated on a level percent of pay basis from entry age to assumed exit age. Under GASB Statements No. 74 and 75, the entry age normal method is the required cost method.

The Actuarial Accrued Liability is the portion of the present value associated with pay prior to the actuarial valuation date. The Normal Cost is the portion of the present value associated with pay during the current plan year.

The Actuarially Determined Contribution equals the normal cost plus the amortization of the unfunded actuarial accrued liability. The actuarial valuation is based on a level-percentage-of-pay closed amortization period with 17 years remaining as of June 30, 2020.

Summary of Actuarial Assumptions and Methods

Actuarial Assumptions

The actuarial assumptions used in our actuarial valuation are outlined on the following pages.

Actuarial Valuation Date	June 30, 2020
Discount Rate	6.65%
Return on Assets Invested with WVIMB	7.00%
Return on Assets Invested with WVBTI	2.50%
Inflation	2.25%
Wage Inflation	2.75% for PERS and TRS, and 3.25% for Troopers

OPEB Assumptions

		Healthcare Trend Pre-Medicare			Healthcare Trend Post-Medicare		
PYE 6/30		Per Capita Costs	Premium	Capped Subsidy	Per Capita Costs	Premium	Capped Subsidy
2022		7.00%	0.00%	-30.00%	-31.11%	0.00%	-55.00%
2023		6.50%	0.00%	5.00%	9.15%	-14.00%	-50.00%
2024		6.25%	4.50%	4.50%	8.40%	0.00%	28.00%
2025		6.00%	4.00%	4.00%	7.75%	0.00%	25.00%
2026		5.75%	3.50%	3.50%	6.94%	2.00%	20.00%
2027		5.50%	3.00%	3.00%	6.32%	3.00%	15.00%
2028		5.25%	3.00%	3.00%	5.69%	4.00%	4.00%
2029		5.00%	3.00%	3.00%	5.03%	3.00%	3.00%
2030		4.75%	3.00%	3.00%	4.47%	3.00%	3.00%
2031		4.50%	3.25%	3.25%	4.43%	3.25%	3.25%
2032		4.25%	3.50%	3.50%	4.40%	3.50%	3.50%
2033		4.25%	3.75%	3.75%	4.36%	3.75%	3.75%
2034		4.25%	4.00%	4.00%	4.33%	4.00%	4.00%
2035		4.25%	4.25%	4.25%	4.29%	4.25%	4.25%
2036	+	4.25%	4.25%	4.25%	4.25%	4.25%	4.25%

Costs were trended from the mid-point of current period to the mid-point of following period.

Our projection of capped subsidy costs assumes:

- The sponsor's capped aggregate contribution limit of $75 million for PY 2022, $60 million for PY 2023, $70 million for PY 2024, and $80 million for PY 2025.
- The sponsor's contributions equal the sum of State appropriations, capped aggregate subsidy, and expected employer contributions from the SAL program.
- The plan year 2021 per retiree per month capped subsidy of $681.05 for non-Medicare coverage and $185.61 for Medicare coverage. Projected capped rates change at the assumed trend rates applicable to capped subsidies.
- After 2025, the program is projected to be fully funded and the sponsor is assumed to contribute the residual portion of normal cost and operational expenses needed to maintain a funded ratio of 100% in future years.
- After 2029, the member's share of total plan costs is assumed to remain stable at approximately 44% of total plan costs.

Projections measured as of June 30, 2020, also assume (i) the plan sponsor contributes one percent of expected costs towards the Retired Employee Assistance Program, (ii) the sponsor's operating expenses are approximately 1.25% of expected employer payments; and (iii) the Plan receives pre-funding contributions of $30 million per year until plan year end 2025.

Average Morbidity Factor		
Age	Male	Female
20 to 24	-3.24%	5.77%
30 to 34	4.50%	1.71%
35 to 39	4.54%	-0.25%
40 to 44	4.48%	1.12%
45 to 49	5.42%	3.05%
50 to 54	5.64%	3.12%
55 to 59	5.25%	3.10%
60 to 64	4.68%	3.78%
65 to 69	1.73%	2.25%
70 to 74	1.44%	1.61%
75 to 79	0.98%	1.12%
80 to 84	0.15%	0.73%
85 to 89	-0.37%	0.20%
90 to 94	-0.28%	-0.81%

PYE 2021 Annual Per Capita Claims Costs for Pre-65, Non-Medicare Eligible Members

PPB Plans A, B and Capitated Plans

Medical and Rx

Age	Male	Female
20	$ 1,932	$ 2,529
25	1,636	3,344
30	2,003	4,714
35	2,496	5,128
40	3,117	5,064
45	3,880	5,355
50	5,052	6,224
51	5,345	6,439
52	5,651	6,650
53	5,969	6,856
54	6,301	7,057
55	6,648	7,259
56	7,009	7,465
57	7,385	7,682
58	7,773	7,916
59	8,173	8,173
60	8,586	8,454
61	9,017	8,764
62	9,469	9,101
63	9,944	9,465
64	10,441	9,853

PYE 2021 Annual Per Capita Claims Costs for Medicare Eligible Members

MAPD Plans 1, 2 and Special Medicare Plans

Medical and Rx

Age	Male	Female
65	$ 1,689	$ 1,593
66	1,718	1,633
67	1,747	1,671
68	1,777	1,709
69	1,808	1,745
70	1,840	1,781
71	1,872	1,814
72	1,902	1,846
73	1,929	1,876
74	1,954	1,904
75	1,977	1,929
76	1,998	1,952
77	2,018	1,974
78	2,039	1,996
79	2,058	2,017
80	2,075	2,039
81	2,088	2,058
82	2,096	2,076
83	2,098	2,091
84	2,096	2,104
85	2,090	2,115
86	2,082	2,122
87	2,074	2,128
88	2,066	2,132
89	2,058	2,135
90	2,051	2,136
91	2,046	2,133
92	2,040	2,124
93	2,035	2,109
94	2,029	2,084
95	2,023	2,050
96	2,015	2,005
97	2,006	1,948
98 +	1,996	1,879

Coverage and Continuance Assumption: The percentage of members that elect spousal healthcare coverage is shown below. Of the members electing two-person coverage, it is assumed that 100% of the surviving spouses would continue coverage after the death of the retiree.

Coverage Type	Coverage Type Rate		
	PERS	TRS	Troopers A and B
Single	47.0%	35.0%	25.0%
Two-Person/Family	53.0%	65.0%	75.0%

Retired Employee Assistance Program: The liability for the Retired Employee Assistance program was assumed to equal one percent of the present value of future self-insured claims and fully-insured premiums.

Data: Members hired on or after July 1, 2010, pay 100% of the costs of providing retiree healthcare benefits, resulting in no implicit or explicit subsidies from the plan sponsor, and have been excluded from the actuarial valuation.

The data provided included retirement systems for approximately 80% of retired members. All retired members specifically designated as belonging to Teachers' Retirement System were valued with the corresponding mortality assumptions. Retired members specifically designated as belonging to the Deputy Sheriffs Retirement System, Emergency Medical Service Retirement System, Troopers Plan A, or Troopers Plan B, were valued using mortality tables specific to public safety members. Remaining retired members were valued under the Public Employees' Retirement System post-retirement mortality assumption.

If pay for an active member was not provided, the member's pay was estimated using the average pay of the member's assigned pension system.

The actuarial valuation assumes 2.5% of all waived annuitants under the age of 75 will select retiree healthcare coverage as of the actuarial valuation date. As of June 30, 2020, there are 11,913 waived annuitants under the age of 75, and so approximately 298 were assumed to elect coverage as of June 30, 2020. Also, as of June 30, 2020, 5,013 waived annuitants over the age 75 were excluded from the actuarial valuation.

Gender codes were not available for TRS waived annuitants with records only in TIAA CREF information. 30% of these records were assigned an assumed gender code of male. For waived annuitants, healthcare benefits were assumed to commence at the later of attained age or age 60.

Service amounts were adjusted if the member's calculated entry age, using the length of employment, was unreasonable.

Other Assumptions

Local Agencies used the other assumptions that pertained to PERS.

OPEB Assumptions

TRS OPEB Retirement Rates

Years of Service	Age																
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	Ult
10	0.00%	0.50%	1.00%	1.50%	2.00%	2.50%	3.00%	3.50%	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	25.00%
11	0.75%	1.25%	1.75%	2.25%	2.75%	3.25%	3.75%	4.25%	4.75%	5.25%	5.75%	6.25%	6.75%	7.25%	7.75%	8.25%	27.50%
12	1.75%	2.25%	2.75%	3.25%	3.75%	4.25%	4.75%	5.25%	5.75%	6.25%	6.75%	7.25%	7.75%	8.25%	8.75%	9.25%	30.00%
13	2.50%	3.00%	3.50%	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%	8.50%	9.00%	9.50%	10.00%	32.50%
14	3.50%	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%	8.50%	9.00%	9.50%	10.00%	10.50%	11.00%	35.00%
15	4.25%	4.75%	5.25%	5.75%	6.25%	6.75%	7.25%	7.75%	8.25%	8.75%	9.25%	9.75%	10.25%	10.75%	11.25%	11.75%	37.50%
16	5.25%	5.75%	6.25%	6.75%	7.25%	7.75%	8.25%	8.75%	9.25%	9.75%	10.25%	10.75%	11.25%	11.75%	12.25%	12.75%	40.00%
17	6.00%	6.50%	7.00%	7.50%	8.00%	8.50%	9.00%	9.50%	10.00%	10.50%	11.00%	11.50%	12.00%	12.50%	13.00%	13.50%	42.50%
18	7.00%	7.50%	8.00%	8.50%	9.00%	9.50%	10.00%	10.50%	11.00%	11.50%	12.00%	12.50%	13.00%	13.50%	14.00%	14.50%	45.00%
19	7.75%	8.25%	8.75%	9.25%	9.75%	10.25%	10.75%	11.25%	11.75%	12.25%	12.75%	13.25%	13.75%	14.25%	14.75%	15.25%	47.50%
20	8.75%	9.25%	13.75%	10.25%	10.75%	17.25%	15.75%	12.25%	12.75%	13.25%	13.75%	14.25%	14.75%	15.25%	15.75%	16.25%	50.00%
21	9.50%	10.00%	14.50%	11.00%	11.50%	18.00%	16.50%	13.00%	13.50%	14.00%	14.50%	15.00%	15.50%	16.00%	16.50%	17.00%	52.50%
22	10.50%	11.00%	15.50%	12.00%	12.50%	19.00%	17.50%	14.00%	14.50%	15.00%	15.50%	16.00%	16.50%	17.00%	17.50%	18.00%	55.00%
23	11.25%	11.75%	16.25%	12.75%	13.25%	19.75%	18.25%	14.75%	15.25%	15.75%	16.25%	16.75%	17.25%	17.75%	18.25%	18.75%	57.50%
24	12.25%	12.75%	17.25%	13.75%	14.25%	20.75%	19.25%	15.75%	16.25%	16.75%	17.25%	17.75%	18.25%	18.75%	19.25%	19.75%	60.00%
25	13.00%	13.50%	18.00%	14.50%	15.00%	21.50%	20.00%	16.50%	17.00%	17.50%	18.00%	18.50%	19.00%	19.50%	20.00%	20.50%	62.50%
26	14.00%	14.50%	19.00%	15.50%	16.00%	22.50%	21.00%	17.50%	18.00%	18.50%	19.00%	19.50%	20.00%	20.50%	21.00%	21.50%	65.00%
27	14.75%	15.25%	19.75%	16.25%	16.75%	23.25%	21.75%	18.25%	18.75%	19.25%	19.75%	20.25%	20.75%	21.25%	21.75%	22.25%	67.50%
28	15.75%	16.25%	20.75%	17.25%	17.75%	24.25%	22.75%	19.25%	19.75%	20.25%	20.75%	21.25%	21.75%	22.25%	22.75%	23.25%	70.00%
29	16.50%	17.00%	21.50%	18.00%	18.50%	25.00%	23.50%	20.00%	20.50%	21.00%	21.50%	22.00%	22.50%	23.00%	23.50%	24.00%	72.50%
30	17.50%	18.00%	22.50%	19.00%	19.50%	26.00%	24.50%	21.00%	21.50%	22.00%	22.50%	23.00%	23.50%	24.00%	24.50%	25.00%	75.00%

Years of Service	Age				
	55	56	57	58	59
30+	9.50%	10.00%	10.75%	11.50%	12.25%

OPEB Assumptions

PERS OPEB Retirement Rates

Years of Service	Age																					
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	Ult
10	0.00%	0.50%	1.00%	1.50%	2.00%	2.50%	3.00%	3.50%	4.00%	4.50%	5.00%	5.50%	5.75%	6.25%	6.75%	7.25%	7.75%	8.25%	8.75%	9.25%	9.75%	25.00%
11	0.75%	1.25%	1.75%	2.00%	2.50%	3.00%	3.50%	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%	8.50%	9.00%	9.25%	9.75%	10.25%	27.50%
12	1.25%	1.75%	2.25%	2.75%	3.25%	3.75%	4.25%	4.75%	5.25%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%	8.50%	9.00%	9.50%	10.00%	10.50%	11.00%	30.00%
13	1.75%	2.25%	2.75%	3.25%	3.75%	4.25%	4.75%	5.25%	5.75%	6.25%	6.75%	7.25%	7.75%	8.25%	8.75%	9.00%	9.50%	10.00%	10.50%	11.00%	11.50%	32.50%
14	2.50%	3.00%	3.50%	4.00%	4.50%	5.00%	5.25%	5.75%	6.25%	6.75%	7.25%	7.75%	8.25%	8.75%	9.25%	9.75%	10.25%	10.75%	11.25%	11.75%	12.25%	35.00%
15	3.00%	3.50%	4.00%	4.50%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%	8.50%	8.75%	9.25%	9.75%	10.25%	10.75%	11.25%	11.75%	12.25%	12.75%	37.50%
16	3.75%	4.25%	4.75%	5.00%	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%	8.50%	9.00%	9.50%	10.00%	10.50%	11.00%	11.50%	12.00%	12.50%	12.75%	13.25%	40.00%
17	4.25%	4.75%	5.25%	5.75%	6.25%	6.75%	7.25%	7.75%	8.25%	8.50%	9.00%	9.50%	10.00%	10.50%	11.00%	11.50%	12.00%	12.50%	13.00%	13.50%	14.00%	42.50%
18	4.75%	5.25%	5.75%	6.25%	6.75%	7.25%	7.75%	8.25%	8.75%	9.25%	9.75%	10.25%	10.75%	11.25%	11.75%	12.25%	12.50%	13.00%	13.50%	14.00%	14.50%	45.00%
19	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%	8.25%	8.75%	9.25%	9.75%	10.25%	10.75%	11.25%	11.75%	12.25%	12.75%	13.25%	13.75%	14.25%	14.75%	15.25%	47.50%
20	6.00%	6.50%	7.00%	7.50%	8.00%	8.50%	9.00%	13.50%	10.00%	10.50%	17.00%	15.50%	12.00%	12.25%	12.75%	13.25%	13.75%	14.25%	14.75%	15.25%	15.75%	50.00%
21	6.75%	7.25%	7.75%	8.00%	8.50%	9.00%	9.50%	14.00%	10.50%	11.00%	17.50%	16.00%	12.50%	13.00%	13.50%	14.00%	14.50%	15.00%	15.50%	15.75%	16.25%	52.50%
22	7.25%	7.75%	8.25%	8.75%	9.25%	9.75%	10.25%	14.75%	11.25%	11.75%	18.00%	16.50%	13.00%	13.50%	14.00%	14.50%	15.00%	15.50%	16.00%	16.50%	17.00%	55.00%
23	7.75%	8.25%	8.75%	9.25%	9.75%	10.25%	10.75%	15.25%	11.75%	12.25%	18.75%	17.25%	13.75%	14.25%	14.75%	15.25%	15.50%	16.00%	16.50%	17.00%	17.50%	57.50%
24	8.50%	9.00%	9.50%	10.00%	10.50%	11.00%	11.50%	15.75%	12.25%	12.75%	19.25%	17.75%	14.25%	14.75%	15.25%	15.75%	16.25%	16.75%	17.25%	17.75%	18.25%	60.00%
25	9.00%	9.50%	10.00%	10.50%	11.00%	11.50%	12.00%	18.50%	13.00%	13.50%	20.00%	18.50%	15.00%	15.25%	15.75%	16.25%	16.75%	17.25%	17.75%	18.25%	18.75%	62.50%
26	9.75%	10.25%	10.75%	11.25%	11.50%	12.00%	12.50%	19.00%	13.50%	14.00%	20.50%	19.00%	15.50%	16.00%	16.50%	17.00%	17.50%	18.00%	18.50%	18.75%	19.25%	65.00%
27	10.25%	10.75%	11.25%	11.75%	12.25%	12.75%	13.25%	19.75%	14.25%	14.75%	21.00%	19.50%	16.00%	16.50%	17.00%	17.50%	18.00%	18.50%	19.00%	19.50%	20.00%	67.50%
28	11.00%	11.25%	11.75%	12.25%	12.75%	13.25%	13.75%	20.25%	14.75%	15.25%	21.75%	20.25%	16.75%	17.25%	17.75%	18.25%	18.50%	19.00%	19.50%	20.00%	20.50%	70.00%
29	15.50%	16.00%	12.50%	13.00%	13.50%	14.00%	14.50%	20.75%	15.25%	15.75%	22.25%	20.75%	17.25%	17.75%	18.25%	18.75%	19.25%	19.75%	20.25%	20.75%	21.25%	72.50%
30	16.00%	16.50%	13.00%	13.50%	14.00%	14.50%	15.00%	21.50%	16.00%	16.50%	23.00%	21.50%	18.00%	18.25%	18.75%	19.25%	19.75%	20.25%	20.75%	21.25%	21.25%	75.00%

Waived Annuitant Termination Rates

Years of Service	TRS Rates	PERS Rates
10	7.50%	6.25%
11	7.00%	6.00%
12	6.75%	5.75%
13	6.50%	5.75%
14	6.00%	5.50%
15	5.75%	5.25%
16	5.50%	5.00%
17	5.25%	4.75%
18	5.00%	4.75%
19	4.75%	4.50%
20	4.50%	4.25%
21	4.25%	4.25%
22	4.00%	4.00%
23	3.75%	3.75%
24	3.75%	3.75%
25	3.50%	3.50%
26	3.25%	3.50%
27	3.00%	3.25%
28	3.00%	3.25%
29	2.75%	3.00%
30+	2.75%	3.00%

OPEB Assumptions

Troopers OPEB Retirement Rates and Waived Annuitant Termination Rates

	Age								
Troopers A and B[1]	50	51	52	53	54	55	56	57	58
Troopers B[2]	52	53	54	55	56	57	58	59	60
OPEB Ret	20.00%	30.00%	40.00%	50.00%	60.00%	70.00%	80.00%	90.00%	100.00%
Waived	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

[1] *Applicable normal retirement rate if Troopers A member has attained age 50 with at least 20 years of service or Troopers B member has attained age 50 with at least 25 years of service.*

[2] *Applicable normal retirement rate if Troopers B member has attained age 52 with at least 20 years.*

Normal retirement eligibility is at least 20 years of service and at least age 50 for Troopers A, and at least 25 years of service and at least age 50 or at least 20 years of service and at least age 52 for Troopers B. Early retirement eligibility is at least 25 years of service and under age 50 for Troopers A, and at least 20 years of service and under age 52 for Troopers B. The early retirement rate equals 3 percent if the member is eligible for early retirement. The waived rate was set to 2 percent if the member was eligible for early retirement. 100 percent retirement is assumed at age 55.

OPEB Assumptions

TRS SAL Conversion Rates

Years of Service	Age															
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
20	35.25%	34.00%	34.00%	32.00%	30.75%	30.75%	29.75%	27.75%	26.50%	25.50%	24.50%	23.50%	22.25%	21.25%	20.25%	19.25%
21	37.00%	36.00%	36.00%	34.00%	32.75%	32.75%	31.75%	29.50%	28.50%	27.50%	26.50%	25.25%	24.25%	23.25%	22.25%	21.00%
22	39.00%	38.00%	38.00%	35.75%	34.75%	34.75%	33.75%	31.50%	30.50%	29.50%	28.25%	27.25%	26.25%	25.25%	24.00%	23.00%
23	41.00%	40.00%	39.75%	37.75%	36.75%	36.75%	35.50%	33.50%	32.50%	31.50%	30.25%	29.25%	28.25%	27.00%	26.00%	25.00%
24	43.00%	42.00%	41.75%	39.75%	38.75%	38.50%	37.50%	35.50%	34.50%	33.25%	32.25%	31.25%	30.25%	29.00%	28.00%	27.00%
25	45.00%	43.75%	43.75%	41.75%	40.75%	40.50%	39.50%	37.50%	36.25%	35.25%	34.25%	33.25%	32.00%	31.00%	30.00%	29.00%
26	46.75%	45.75%	45.75%	43.75%	42.50%	42.50%	41.50%	39.50%	38.25%	37.25%	36.25%	35.00%	34.00%	33.00%	32.00%	30.75%
27	48.75%	47.75%	47.75%	45.50%	44.50%	44.50%	43.50%	41.25%	40.25%	39.25%	38.00%	37.00%	36.00%	35.00%	33.75%	32.75%
28	50.75%	49.75%	49.50%	47.50%	46.50%	46.50%	45.25%	43.25%	42.25%	41.25%	40.00%	39.00%	38.00%	36.75%	35.75%	34.75%
29	52.75%	51.75%	51.50%	49.50%	48.50%	48.25%	47.25%	45.25%	44.25%	43.00%	42.00%	41.00%	40.00%	38.75%	37.75%	36.75%
30	54.75%	53.50%	53.50%	51.50%	50.50%	50.25%	49.25%	47.25%	46.00%	45.00%	44.00%	43.00%	41.75%	40.75%	39.75%	38.75%

Years of Service	Age				
	55	56	57	58	59
30+	50.00%	52.25%	54.75%	57.25%	59.75%

PERS SAL Conversion Rates

Age										
55	56	58	59	60	61	62	63	64	65-75
67.86%	65.50%	60.79%	58.43%	56.07%	53.71%	51.35%	48.99%	46.63%	19.25%

Troopers SAL Conversion rates at any retirement age is 10 percent.

Net Lapse and Re-Entry Rates

Age	Net Lapse and Re-Entry Rate			
	TRS		PERS	
	Male	Female	Male	Female
55	0.000%	0.392%	0.000%	0.000%
56	0.000%	0.470%	0.000%	0.219%
57	0.000%	0.522%	0.000%	0.506%
58	0.000%	0.549%	0.030%	0.780%
59	0.033%	0.556%	0.140%	1.053%
60	0.140%	0.543%	0.260%	1.317%
61	0.207%	0.510%	0.391%	1.572%
62	0.238%	0.462%	0.531%	1.817%
63	0.239%	0.400%	0.679%	2.051%
64	2.212%	5.325%	2.833%	7.275%
65	0.164%	0.238%	0.991%	2.485%
66	0.095%	0.142%	1.101%	2.657%
67	0.010%	0.036%	1.202%	2.810%
68	0.000%	0.000%	1.292%	2.942%
69	0.000%	0.000%	1.368%	3.053%
70	0.000%	0.000%	1.431%	3.142%
71	0.000%	0.000%	1.477%	3.208%
72	0.000%	0.000%	1.505%	3.248%
73	0.000%	0.000%	1.509%	3.262%
74	0.000%	0.000%	1.488%	3.247%
75	0.000%	0.000%	1.435%	3.094%
76	0.000%	0.000%	1.285%	2.904%
77	0.000%	0.000%	1.069%	2.674%
78	0.000%	0.000%	0.810%	2.399%
79	0.000%	0.000%	0.503%	2.075%
80	0.000%	0.000%	0.140%	1.696%

** Troopers Lapse rates are 50 percent of PERS rates.*

Termination Rates

Age	Termination Rates		
	TRS	PERS	Troopers
25	5.75%	12.50%	0.00%
26	5.50%	12.50%	0.00%
27	5.50%	12.50%	0.00%
28	5.25%	11.75%	0.00%
29	5.25%	11.25%	0.00%
30	5.00%	10.75%	6.50%
31	4.75%	10.25%	6.00%
32	4.75%	9.75%	5.75%
33	4.50%	9.25%	5.50%
34	4.50%	8.75%	5.25%
35	4.25%	8.25%	4.75%
36	4.00%	8.00%	4.50%
37	4.00%	7.50%	4.25%
38	3.75%	7.00%	4.00%
39	3.75%	6.75%	3.50%
40	3.50%	6.50%	3.25%
41	3.50%	6.00%	3.00%
42	3.25%	5.75%	2.75%
43	3.00%	5.50%	2.25%
44	3.00%	5.25%	2.00%
45	2.75%	4.75%	1.75%
46	2.75%	4.50%	1.50%
47	2.50%	4.25%	1.00%
48	2.50%	4.00%	0.75%
49	2.25%	3.75%	0.50%
50	2.00%	3.75%	0.25%
51	2.00%	3.50%	0.25%
52	1.75%	3.25%	0.25%
53	1.75%	3.00%	0.25%
54	1.50%	2.75%	0.25%

OPEB Assumptions

Disability Rates

Age	Disability Rates		
	TRS	PERS	Troopers
25	0.02%	0.02%	0.04%
26	0.02%	0.02%	0.06%
27	0.02%	0.02%	0.08%
28	0.02%	0.02%	0.11%
29	0.02%	0.02%	0.13%
30	0.02%	0.02%	0.15%
31	0.02%	0.02%	0.18%
32	0.02%	0.02%	0.21%
33	0.02%	0.03%	0.24%
34	0.02%	0.04%	0.27%
35	0.02%	0.05%	0.30%
36	0.03%	0.06%	0.33%
37	0.04%	0.07%	0.36%
38	0.04%	0.08%	0.39%
39	0.05%	0.09%	0.42%
40	0.06%	0.10%	0.45%
41	0.07%	0.11%	0.45%
42	0.08%	0.12%	0.45%
43	0.09%	0.13%	0.60%
44	0.10%	0.14%	0.60%
45	0.11%	0.15%	0.60%
46	0.12%	0.17%	0.56%
47	0.14%	0.18%	0.52%
48	0.15%	0.19%	0.48%
49	0.16%	0.21%	0.44%
50	0.18%	0.22%	0.40%
51	0.19%	0.23%	0.40%
52	0.21%	0.25%	0.40%
53	0.23%	0.26%	0.40%
54	0.24%	0.28%	0.40%
55	0.26%	0.29%	0.40%
56	0.28%	0.31%	0.40%
57	0.30%	0.33%	0.40%
58	0.32%	0.34%	0.40%
59	0.34%	0.36%	0.40%
60	0.36%	0.38%	0.40%
61	0.38%	0.40%	0.40%
62	0.40%	0.41%	0.40%
63	0.43%	0.43%	0.40%
64	0.45%	0.45%	0.40%

OPEB Assumptions

Salary Increase Rates

Age	Salary Rates		
	TRS	PERS	Troopers
Under 20			
20-24	5.18%	4.88%	5.00%
25-29	4.95%	4.69%	3.75%
30-34	4.72%	4.50%	3.75%
35-39	4.49%	4.31%	3.50%
40-44	4.26%	4.12%	3.50%
45-49	4.04%	3.92%	3.50%
50-54	3.81%	3.73%	3.50%
55-59	3.58%	3.54%	3.25%
60-64	3.35%	3.35%	3.25%
65-69	3.12%	3.15%	3.25%
70-74	2.89%	2.96%	3.25%
75 & Over	2.75%	2.75%	3.25%

Reflects general inflation assumption of 2.25 percent and wage inflation assumption of 2.75 percent for TRS and PERS and 3.25 percent for Troopers.

TEACHERS' RETIREMENT SYSTEM

Post-Retirement Mortality:

Males — 100 percent of Pub-2010 General Healthy Retiree Mortality Tables, projected with Scale MP-2019

Females — 108 percent of Pub-2010 General Healthy Retiree Mortality Tables, projected with Scale MP-2019

Disabled Retirees — 100 percent of respective Pub-2010 General Disabled Retiree Mortality Tables, projected with scale MP-2019

Pre-Retirement Mortality:

Males — 100 percent of Pub-2010 General Employee Mortality Tables, projected with Scale MP-2019

Females — 100 percent of Pub-2010 General Employee Mortality Tables, projected with Scale MP-2019

PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Post-Retirement Mortality:

Males — 106 percent of Pub-2010 Below-Median Income General Healthy Retiree Mortality Tables, projected with scale MP-2019

Females — 113 percent of Pub-2010 Below-Median Income General Healthy Retiree Mortality Tables, projected with scale MP-2019

Disabled Retirees — 100 percent of respective Pub-2010 General Disabled Retiree Mortality Tables, projected with scale MP-2019

Pre-Retirement Mortality:

Males — 100 percent of Pub-2010 Below-Median Income General Employee Mortality Tables, projected with scale MP-2019

Females — 100 percent of Pub-2010 Below-Median Income General Employee Mortality Tables, projected with scale MP-2019

TROOPERS PLAN A AND B

Post-Retirement Mortality:

Males — 100 percent of Pub-2010 Public Safety Healthy Retiree Mortality Tables, projected with Scale MP-2019

Females — 100 percent of Pub-2010 Public Safety Healthy Retiree Mortality Tables, projected with Scale MP-2019

Disabled Retirees — 100 percent of respective Pub-2010 Public Safety Disabled Retiree Mortality Tables, projected with scale MP-2019

Pre-Retirement Mortality:

Males — 100 percent of Pub-2010 Public Safety Employee Mortality Tables, projected with Scale MP-2019

Females — 100 percent of Pub-2010 Public Safety Employee Mortality Tables, projected with Scale MP-2019

SECTION F

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Summary of Principal Plan Provisions
Plan Year 2021 Benefits

PLAN MEMBERS

Members receiving retirement benefits from certain pension systems administered by CPRB are eligible to receive postretirement healthcare benefits. The retirement systems include: Public Employees' Retirement System (PERS), Teachers' Retirement System (TRS), Teachers' Defined Contribution Retirement System (TDCRS), Great West (Plan G), West Virginia Death, Disability, and Retirement Fund (Troopers Plan A), West Virginia State Police Retirement System (Troopers Plan B), Deputy Sheriffs' Retirement System (DSRS), Emergency Medical Services Retirement System (EMSRS), and Judges' Retirement System (JRS). Certain members receiving annuities through the Teachers' Insurance and Annuity Association and College Retirement System (TIAA-CREF) are also eligible to receive postretirement healthcare benefits.

Following are the retirement eligibility provisions for pension benefits for Tier 1 members (hired prior to July 1, 2015). Members hired on or after July 1, 2010 (Including Tier 2 members), pay 100% of the costs of providing retiree healthcare benefits, resulting in no implicit or explicit subsidies from the plan sponsor, and have been excluded from the actuarial valuation. The following retirement eligibility requirements are based on information contained in the most recent pension actuarial valuation report.

PENSION ELIGIBILITY PROVISIONS

PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Normal Retirement

Members who have reached or attained age 60 and earned 5 or more years of contributing service are eligible for a normal retirement benefit.

Early Retirement

Members with at least 3 years of contributing service, who have attained age 55 and the sum of age plus years of contributing service is 80 or more, are eligible for an unreduced early retirement benefit. Terminating members with at least 3 years of contributing service who either (i) have attained age 55 and completed 10 years of credited service, or (ii) have completed 20 years of credited service, are eligible for a reduced early retirement benefit beginning at age 55. Terminating members with 30 years of credited service, which includes at least 3 years of contributing service, may also retire at any age for a reduced early retirement benefit.

Disability Retirement

Members who have completed 10 years of credited service, including 3 years of contributing service, who are found to be totally and permanently disabled are eligible for a disability benefit. Members with less than 10 years of credited service, or less than 3 years of contributing service, who incur service-connected total and permanent disability and are receiving worker's compensation for this disability are eligible for a disability benefit.

TEACHERS' RETIREMENT SYSTEM

Normal Retirement

Members with 35 years credited service or age 60 and 5 years credited service may retire with an unreduced pension.

Early Retirement

Members with 30 years of credited service may retire at any age, with the pension reduced for members retiring before age 55.

Disability Retirement

Members with 10 years of credited service may be eligible to receive a disability retirement benefit if disabled for 6 months, unable to perform his or her regular occupation and the Retirement Board expects the disability to be permanent.

DEPARTMENT OF PUBLIC SAFETY DEATH, DISABILITY, AND RETIREMENT FUND (PLAN A)

Normal Retirement

Members having attained age 50 and 20 or more years of contributory service, or are any age and have earned 25 or more years of contributory and military service, are eligible for a normal retirement benefit.

Duty-Related Disability Retirement

Members disabled in the line of duty and are rendered unable to perform their duties are eligible for a duty-related disability retirement. The member is partially disabled if he can hold other employment and totally disabled if he cannot.

Nonduty-Related Disability Retirement

Members disabled other than in the line of duty and rendered unable to perform their duties as a member of the Department are eligible for disability retirement.

STATE POLICE RETIREMENT SYSTEM (PLAN B)

Normal Retirement

Members who have attained age 50 and earned 25 or more years of contributory service, or have attained age 52 and earned 20 or more years of contributory service, are eligible for a normal retirement benefit.

Early Retirement

Members with 20 or more years of contributory service may retire early at any age.

Disability Retirement

Members disabled in the line of duty and are rendered unable to perform their duties are eligible for a duty-related disability retirement. The member is partially disabled if he can hold other employment and totally disabled if he cannot.

Non-Duty-Related Disability Retirement

Members disabled other than in the line of duty and rendered unable to perform their duties as a member of the Department are eligible for disability retirement.

DEPENDENTS ELIGIBLE FOR COVERAGE

Plan members who enroll in PEIA may also enroll the following dependents: legal spouse, biological children, adopted children or stepchildren under the age of 26, or other children for whom the member is the court-appointed guardian up to the age of 18.

ENROLLMENT TIMING

Members not previously enrolled in a PEIA Plan are eligible to enroll at the time of retirement provided the last employer immediately prior to retirement is a participating employer in the PEIA Plan and State retirement system or a PEIA approved retirement system.

SURVIVING SPOUSE COVERAGE

Spouses of employees/retirees who die and were insured as a spouse or dependent under the policyholder's coverage by PEIA at the time of death are eligible to continue health coverage as a policyholder in their own right under their health plan. Coverage is terminated if the surviving spouse remarries.

Dependents of employees/retirees who die and were insured as a dependent under the policyholder's coverage by PEIA at the time of death are eligible to continue health coverage as a policyholder in their own right under their health plan. Dependent children are subject to the same age restrictions as other dependent children in the PEIA plan. A married surviving dependent child may not enroll their spouse for PEIA coverage.

Beginning July 1, 2015, surviving spouses/dependents enrolling in the PEIA plan pay premiums based on the years of service earned by the deceased policyholder. Current surviving spouses/dependents, and those who were enrolled before July 1, 2015, were grandfathered under the previous benefit and continue to pay premiums based on 25 or more years of service.

MEDICARE

Coverage through PEIA becomes secondary to Medicare after Medicare eligibility has been reached. When eligible for Medicare, members must enroll in Medicare Parts A and B in order to be eligible for PEIA's Medicare Advantage Plan or the Special Medicare Plan.

Summary of Principal Plan Provisions
Plan Year 2021 Benefits

OPEB PROGRAMS

Following are the premium rates assumed for future pre-Medicare and post-Medicare retirees. Premiums rates for current pre-Medicare and post-Medicare retirees were provided by WV-RHBT and are based on the plan elected by the member. Premiums are assumed to increase by the trend assumption. Members retiring before June 30, 1997, pay premiums based on 25 or more years of service regardless of actual service at retirement.

Plan Year 2021 Monthly PPO PPB Plan A Premium	Pre-Medicare PPB Plan A[a, b]		Pre/Post Medicare PPB Plan A[a, b]
	Single	Family	Family
Hired on or after July 1, 2010	$1,160	$2,760	$1,934
5 to 9 years service	929	2,209	1,548
10 to 14 years service	716	1,665	1,153
15 to 19 years service	501	1,124	760
20 to 24 years service	375	799	526
25 or more years service	291	582	367

Plan Year 2021 Monthly MAPD Plan 1 Premium	Post-Medicare MAPD Plan 1[a, b]		Pre/Post Medicare MAPD Plan 1[a, b]
	Single	Family	Family
Hired on or after July 1, 2010	$473	$974	$1,583
5 to 9 years service	431	886	1,440
10 to 14 years service	317	640	1,083
15 to 19 years service	204	395	727
20 to 24 years service	136	246	512
25 or more years service	91	150	370

[a] Premium rates are standard rates. Retirees receive a monthly discount of $25 per tobacco-free covered member. It is assumed that 88% of future retirees and dependents are eligible for the preferred rates.

[b] Beginning July 1, 2015, surviving dependents enrolling in the PEIA plan pay premiums based on the years of service earned by the deceased policyholder. Current surviving dependents, and those who enrolled prior to July 1, 2015, are grandfathered under the previous benefit provisions and continue to pay premiums based on 25 or more years of service.

Summary of Principal Plan Provisions
Plan Year 2021 Benefits

PEIA PPB Plan A – Non-Medicare Retired Policyholder

Plan Feature	*In Network*	*Out of Network* [1]
Annual Deductible	$525	Twice the in-network deductible
Annual Out of Pocket Limit	$1,500	Twice the in network out of pocket limit
Covered Services	Co-insurance	Co-insurance
-Office Visits	$20 co-pay per visit	Not covered, unless approved in advance by HealthSmart
-Emergency Services	20% after deductible	30% after deductible
-Inpatient Services	$100 co-pay, then 20% after deductible	Not covered, unless approved in advance by HealthSmart
-Outpatient Services - Ambulatory/Surgery	$100 co-pay, then 20% after deductible	Not covered, unless approved in advance by HealthSmart
-Lab/X-ray	20% after deductible	
-Other	20% after deductible	
Prescription Drug Co-pays	Annual Deductible: $75 individual/$150 family Annual Out of Pocket Maximum: $1,750 individual/$3,500 family Generic $10 Formulary Brand $25 Non-Formulary Brand 75% co-insurance Maintenance Network or Mail Order Pharmacy at 90-day supply for in network claims Two months' co-pay for generic and formulary brand.	
Maximum Lifetime Benefit	Unlimited	

[1] Out of network claims covered only up to amounts stated in the PEIA's fee schedule.

Summary of Principal Plan Provisions
Plan Year 2021 Benefits

PEIA PPB Plan B – Non-Medicare Retired Policyholder

Plan Feature	*In Network*	*Out of Network* [1]
Annual Deductible	$925	Twice the in-network deductible
Annual Out of Pocket Limit	$3,000	Twice the in network out of pocket limit
Covered Services	Co-insurance	Co-insurance
-Office Visits	$20 co-pay per visit	Not covered, unless approved in advance by HealthSmart
-Emergency Services	30% after deductible	30% after deductible
-Inpatient Services	$100 co-pay, then 30% after deductible	Not covered, unless approved in advance by HealthSmart
-Outpatient Services Ambulatory/Surgery	$100 co-pay, then 30% after deductible	Not covered, unless approved in advance by HealthSmart
-Lab/X-ray	30% after deductible	
-Other	30% after deductible	
Prescription Drug Co-pays	Annual Deductible: $150 individual/$300 family Annual Out of Pocket Maximum: $1,750 individual/$3,500 family Generic $10 Formulary Brand $30 Non-Formulary Brand 75% co-insurance Maximum Network or Mail Order Pharmacy at 90-day supply for in network claims Two months' co-pay for generic and formulary brand.	
Maximum Lifetime Benefit	Unlimited	

[1] Out of network claims covered only up to amounts stated in the PEIA's fee schedule.

MAPD – Plan 1 – Medicare Retired Policyholder

Plan Feature	
Annual Deductible	$150 per enrollee
Out of Pocket Maximum	$1,200 per enrollee
Covered Services -Physicians Visits -Emergency Care -Inpatient Services -Outpatient Services	Co-insurance $20 Co-pay, then 100% $50 Co-pay, then 100% $100 Co-pay, then 100% $100 Co-pay, then 100%
Prescription Drug Co-pays	After annual prescription deductible of $75 Retail at 30-day supply Generic $5 Formulary Brand $15 Non-Formulary Brand 50% Coinsurance
Maximum Lifetime Benefit	Unlimited

MAPD – Plan 2 – Medicare Retired Policyholder

Plan Feature	
Annual Deductible	$375 per enrollee
Out of Pocket Maximum	$1,950 per enrollee
Covered Services -Physicians Visits -Emergency Care -Inpatient Services -Outpatient Services	Co-insurance $20 Co-pay, then 100% $65 Co-pay, then 100% $150 Co-pay, then 100% $115 Co-pay, then 100%
Prescription Drug Co-pays	After annual prescription deductible of $150 Retail at 30-day supply Generic $5 Formulary Brand $20 Non-Formulary Brand 50% Coinsurance
Maximum Lifetime Benefit	Unlimited

SICK LEAVE BENEFITS – HEALTHCARE COVERAGE EXTENSION

The Sick and Annual Leave Program (SAL) allows members hired prior to July 1, 2001, to convert accrued sick leave and accrued annual leave balances at retirement into either retiree healthcare benefits or pension benefits. Members hired before July 1, 1988, may convert accrued sick or leave days into 100% of the required retiree healthcare contribution. Members hired from July 1, 1988, to June 30, 2001, may convert accrued sick or leave days into 50% of the required retiree healthcare contribution. The conversion rate is:

- Two days of unused sick and annual leave days per month of single healthcare coverage; and
- Three days of unused sick and annual leave days per month of family healthcare coverage.

HIGHER EDUCATION FACULTY – HEALTHCARE COVERAGE EXTENSION

Full-time higher education faculty members hired before July 1, 2009, who are employed on an annual contract basis for a period other than 12 months, upon retirement may extend years of teaching service into 100% of the employer-paid healthcare insurance coverage. The conversion rate is:

- 3.3 years of teaching service for one year of single healthcare coverage; and
- 5.0 years of teaching service for one year of family healthcare coverage.

RETIRED EMPLOYEE ASSISTANCE PROGRAM

Under the Retired Employee Assistance Program, the Plan provides premium subsidies to certain retirees if their income falls below 250% of the federal poverty level.

SECTION G

GLOSSARY

Glossary

Accrued Service	Service credited under the system that was rendered before the date of the actuarial valuation.
Actuarial Accrued Liability (AAL)	The AAL is the difference between the actuarial present value of all benefits and the actuarial value of future normal costs. The definition comes from the fundamental equation of funding which states that the present value of all benefits is the sum of the Actuarial Accrued Liability and the present value of future normal costs. The AAL may also be referred to as "accrued liability" or "actuarial liability."
Actuarial Assumptions	These assumptions are estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and compensation increases. Actuarial assumptions are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (compensation increases, payroll growth, inflation, and investment return) consist of an underlying real rate of return plus an assumption for a long-term average rate of inflation.
Actuarial Cost Method	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the OPEB trust benefits between future normal cost and actuarial accrued liability. The actuarial cost method may also be referred to as the actuarial funding method.
Actuarial Equivalent	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.
Actuarial Gain (Loss)	The difference in liabilities between actual experience and expected experience during the period between two actuarial valuations is the gain (loss) on the accrued liabilities.
Actuarial Present Value (APV)	The amount of funds currently required to provide a payment or series of payments in the future. The present value is determined by discounting future payments at predetermined rates of interest and probabilities of payment.
Actuarial Valuation	The actuarial valuation report determines, as of the actuarial valuation date, the service cost, total OPEB liability, and related actuarial present value of projected benefit payments for OPEB.
Actuarial Valuation Assets	The actuarial valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of GASB Statements No. 74 and 75, the actuarial valuation assets are equal to the market value of assets.
Actuarial Valuation Date	The date as of which an actuarial valuation is performed.
Actuarially Determined Contribution (ADC)	A calculated contribution into an OPEB plan for the reporting period, most often determined based on the funding policy of the plan. Typically, the Actuarially Determined Contribution has a normal cost payment and an amortization payment.

Glossary

Amortization Method

The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be "open" (meaning, reset each year) or "closed" (the number of years remaining will decline each year).

Amortization Payment

The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.

Cost-of-Living Adjustments

Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.

Cost-Sharing Multiple-Employer Defined Benefit OPEB Plan (cost-sharing OPEB plan)

A multiple-employer defined benefit OPEB plan in which the OPEB obligations to the employees of more than one employer are pooled and OPEB plan assets can be used to pay the benefits of the employees of any employer that provides benefits through the OPEB plan.

Covered-Employee Payroll

The payroll of employees that are provided with benefits through the OPEB plan.

Deferred Inflows and Outflows

The deferred inflows and outflows of OPEB resources are amounts used under GASB Statement No. 75 in developing the annual OPEB expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in the OPEB expense should be included in the deferred inflows or outflows of resources.

Discount Rate

For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically:

1. The benefit payments to be made while the OPEB plans' fiduciary net position is projected to be greater than the benefit payments that are projected to be made in the period; and
2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.

Entry Age Actuarial Cost Method (EAN)

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

Fiduciary Net Position

The fiduciary net position is the market value of the assets of the trust dedicated to the defined benefit provisions.

Glossary

GASB	The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.
Long-Term Expected Rate of Return	The long-term rate of return is the expected return to be earned over the entire trust portfolio based on the asset allocation of the portfolio.
Money-Weighted Rate of Return	The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For purposes of GASB Statement No. 74, the money-weighted rate of return is calculated as the internal rate of return on OPEB plan investments, net of OPEB plan investment expense.
Multiple-Employer Defined Benefit OPEB Plan	A multiple-employer plan is a defined benefit OPEB plan that is used to provide OPEB payments to the employees of more than one employer.
Municipal Bond Rate	The Municipal Bond Rate is the discount rate to be used for those benefit payments that occur after the assets of the trust have been depleted.
Net OPEB Liability (NOL)	The NOL is the liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit OPEB plan.
Non-Employer Contributing Entities	Non-employer contributing entities are entities that make contributions to an OPEB plan that is used to provide OPEB payments to the employees of other entities. For purposes of the GASB accounting statements, plan members are not considered non-employer contributing entities.
Normal Cost	The portion of the actuarial present value allocated to an actuarial valuation year is called the normal cost. For purposes of application to the requirements of this Statement, the term normal cost is the equivalent of service cost.
Other Postemployment Benefits (OPEB)	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.
Real Rate of Return	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
Service Cost	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to an actuarial valuation year.

Glossary

Total OPEB Expense

The total OPEB expense is the sum of the following items that are recognized at the end of the employer's fiscal year:

1. Service Cost
2. Interest on the Total OPEB Liability
3. Current-Period Benefit Changes
4. Employee Contributions (made negative for addition here)
5. Projected Earnings on Plan Investments (made negative for addition here)
6. OPEB Plan Administrative Expense
7. Other Changes in Plan Fiduciary Net Position
8. Recognition of Outflow (Inflow) of Resources due to Liabilities
9. Recognition of Outflow (Inflow) of Resources due to Assets

Total OPEB Liability (TOL)

The TOL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.

Unfunded Actuarial Accrued Liability (UAAL)

The UAAL is the difference between actuarial accrued liability and actuarial valuation assets.

APPENDIX A

Appendix A

WV-RHBT GASB Statements No. 74 and 75 OPEB Projections

Discount Rate	6.65%
General Inflation	2.25%
WVIMB Long-Term Investment Return Assumption	7.00%
WVBTI Short-Term Investment Return Assumption	2.50%
Percent of Annual Expenditures Invested in Short-Term Account	50.00%
Fixed Excess Contribution	$30,000,000
Operating Expenses Annual Increase	2.25%

Fiscal Year Beginning (7/1)	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Present Value of Benefits	$ 1,819,726,174	$ 1,784,522,492	$ 1,793,252,765	$ 1,804,574,322	$ 1,812,262,361	$ 1,813,102,716	$ 1,807,029,521	$ 1,795,672,947	$ 1,781,493,339	$ 1,765,741,694	$ 1,748,284,290
Actuarial Accrued Liability	1,666,333,746	1,643,289,291	1,663,727,440	1,686,322,024	1,704,800,458	1,715,909,460	1,719,565,219	1,717,388,461	1,711,813,105	1,704,089,141	1,694,068,011
Normal Cost	21,649,978	20,432,390	19,257,905	18,059,365	16,864,445	15,681,290	14,517,933	13,376,001	12,257,764	11,172,312	10,122,886
Expected Employer Capped Subsidy Benefit Payments	$ 137,523,798	$ 94,188,830	$ 93,856,287	$ 98,895,328	$ 106,748,713	$ 114,196,822	$ 119,490,766	$ 121,966,834	$ 122,980,474	$ 123,954,741	$ 125,444,081
Other Expected Employer Benefit Payments	13,667,043	12,219,115	10,607,674	9,818,272	9,092,684	8,395,103	7,827,811	7,355,534	6,952,320	6,616,573	6,327,712
Total Expected Employer Benefit Payments	151,190,841	106,407,945	104,463,960	108,713,600	115,841,397	122,591,925	127,318,577	129,322,369	129,932,794	130,571,314	131,771,793
Market Value of Assets[a]	$ 1,224,642,000	$ 1,359,146,579	$ 1,480,878,996	$ 1,584,369,354	$ 1,692,249,850	$ 1,807,691,560	$ 1,924,112,661	$ 1,920,153,639	$ 1,913,644,650	$ 1,905,908,510	$ 1,896,859,464
Unfunded Actuarial Accrued Liability	441,691,746	284,142,713	182,848,444	101,952,670	12,550,608	(91,782,100)	(204,547,443)	(202,765,178)	(201,831,544)	(201,819,370)	(202,791,453)
Funded Ratio	73.49%	82.71%	89.01%	93.95%	99.26%	105.35%	111.90%	111.81%	111.79%	111.84%	111.97%
Projected Assets											
Market Value of Assets BTI	$ 43,447,000	$ 75,595,421	$ 53,203,972	$ 52,231,980	$ 54,356,800	$ 57,920,698	$ 61,295,963	$ 63,659,288	$ 64,661,184	$ 64,966,397	$ 65,285,657
Market Value of Assets WVIMB (with accrual)	1,181,195,000	1,283,551,158	1,427,675,023	1,532,137,373	1,637,893,050	1,749,770,862	1,862,816,699	1,856,494,351	1,848,983,465	1,840,942,113	1,831,573,807
Total Market Value of Assets	1,224,642,000	1,359,146,579	1,480,878,996	1,584,369,354	1,692,249,850	1,807,691,560	1,924,112,661	1,920,153,639	1,913,644,650	1,905,908,510	1,896,859,464
Operating Expenses	$ (3,478,000)	$ (3,556,255)	$ (3,636,271)	$ (3,718,087)	$ (3,801,744)	$ (3,887,283)	$ (3,974,747)	$ (4,064,179)	$ (4,155,623)	$ (4,249,124)	$ (4,344,730)
Employer Benefit Payments and Expenses	(151,190,841)	(106,407,945)	(104,463,960)	(108,713,600)	(115,841,397)	(122,591,925)	(127,318,577)	(129,322,369)	(129,932,794)	(130,571,314)	(131,771,793)
Employer Contributions	150,793,359	87,219,115	70,607,674	79,818,272	89,092,684	-	-	-	-	-	-
Employer Excess Contributions	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	-	-	-	-	-	-
Investment Income	84,684,183	91,992,389	101,005,111	108,463,946	115,992,167	119,505,206	127,334,302	126,877,558	126,352,278	125,771,393	125,078,230
Capped PAYGO and Premium Margin	23,695,878	22,485,113	9,977,804	2,029,965	-	-	-	-	-	-	-
Market Value of Assets end of year	$ 1,359,146,579	$ 1,480,878,996	$ 1,584,369,354	$ 1,692,249,850	$ 1,807,691,560	$ 1,924,112,661	$ 1,920,153,639	$ 1,913,644,650	$ 1,905,908,510	$ 1,896,859,464	$ 1,885,821,171
Average Return on Assets	6.84%	6.75%	6.84%	6.85%	6.86%	6.85%	6.85%	6.85%	6.84%	6.84%	6.84%
Annual Expenditure Sharing and Premium Margins											
Employer Benefit Payments	$ 151,190,841	$ 106,407,945	$ 104,463,960	$ 108,713,600	$ 115,841,397	$ 122,591,925	$ 127,318,577	$ 129,322,369	$ 129,932,794	$ 130,571,314	$ 131,771,793
Retired Member Contributions and Premium Margins	67,027,253	76,342,540	76,185,268	75,365,781	77,232,402	80,075,403	83,666,204	89,187,538	94,812,487	99,468,120	103,393,898
Total Annual Expenditures and Margins	$ 218,218,094	$ 182,750,485	$ 170,671,424	$ 182,049,416	$ 193,073,799	$ 202,667,328	$ 210,984,781	$ 218,509,906	$ 224,745,281	$ 230,039,434	$ 235,165,691
Percent of Expenditures Paid by Retired Members	30.72%	41.77%	42.17%	40.94%	40.00%	39.51%	39.66%	40.82%	42.19%	43.24%	43.97%
Active Members	34,319	31,222	28,498	25,940	23,557	21,331	19,250	17,317	15,508	13,826	12,268
Pre-Medicare Retirees	5,337	6,896	7,199	7,315	7,298	7,197	7,019	6,679	6,407	6,055	5,751
Pre-Medicare Waived Annuitants[a]	80	59	47	36	25	20	16	13	10	8	6
Post-Medicare Retirees	37,717	36,893	37,224	37,657	38,119	38,567	38,996	39,478	39,797	40,091	40,227
Post-Medicare Waived Annuitants[a]	217	230	240	248	256	258	258	258	255	253	249
Pre-Medicare Capped Rate Per Member Per Month	$ 681.05	$ 476.74	$ 500.57	$ 523.10	$ 544.02	$ 563.07	$ 579.96	$ 597.36	$ 615.28	$ 633.74	$ 654.33
Post-Medicare Capped Rate Per Member Per Month	$ 185.61	$ 83.53	$ 41.76	$ 53.46	$ 66.82	$ 80.18	$ 92.21	$ 95.90	$ 98.78	$ 101.74	$ 105.05
Assumed Aggregate Fixed Subsidy Contribution Limit	$ 137,126,316	$ 75,000,000	$ 60,000,000	$ 70,000,000	$ 80,000,000	$ 85,000,000	$ -	$ -	$ -	$ -	$ -

[a] *The actuarial valuation assumes 2.5 percent of eligible waived annuitants under the age of 75 will select retiree healthcare coverage in the future. As of June 30, 2020, there are 11,913 eligible waived annuitants under age 75.*

Appendix A

WV-RHBT GASB Statement Nos. 74 and 75 OPEB Projections

Discount Rate	6.65%
General Inflation	2.25%
WVIMB Long-Term Investment Return Assumption	7.00%
WVBTI Short-Term Investment Return Assumption	2.50%
Percent of Annual Expenditures Invested in Short-Term Account	50.00%
Fixed Excess Contribution	$30,000,000
Operating Expenses Annual Increase	2.25%

Fiscal Year Beginning (7/1)	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**	**2042**
Present Value of Benefits	$ 1,728,427,086	$ 1,705,837,213	$ 1,680,745,167	$ 1,653,056,995	$ 1,622,351,500	$ 1,588,738,005	$ 1,552,430,995	$ 1,513,282,387	$ 1,471,167,173	$ 1,426,197,819	$ 1,378,763,983	$ 1,329,446,296
Actuarial Accrued Liability	1,681,059,978	1,664,740,812	1,645,358,315	1,622,848,022	1,596,803,113	1,567,344,015	1,534,705,023	1,498,755,171	1,459,384,687	1,416,734,895	1,371,235,110	1,323,514,129
Normal Cost	9,120,361	8,176,595	7,292,336	6,456,837	5,668,205	4,929,251	4,237,543	3,593,402	3,004,664	2,482,289	2,029,406	1,642,902
Expected Employer Capped Subsidy Benefit Payments	$ 127,076,788	$ 128,332,382	$ 129,524,096	$ 130,936,492	$ 132,075,224	$ 132,845,884	$ 133,562,047	$ 134,204,732	$ 134,522,545	$ 134,260,200	$ 133,263,225	$ 131,642,161
Other Expected Employer Benefit Payments	6,063,179	5,776,603	5,483,745	5,210,859	4,911,526	4,585,424	4,283,860	3,993,930	3,729,039	3,483,274	3,251,293	3,039,841
Total Expected Employer Benefit Payments	133,139,967	134,108,985	135,007,841	136,147,351	136,986,750	137,431,307	137,845,907	138,198,662	138,251,583	137,743,474	136,514,517	134,682,002
Market Value of Assets	$ 1,885,821,171	$ 1,872,465,949	$ 1,857,038,689	$ 1,839,473,620	$ 1,819,371,218	$ 1,796,856,634	$ 1,772,173,941	$ 1,745,208,719	$ 1,715,863,270	$ 1,684,280,039	$ 1,650,887,074	$ 1,616,313,612
Unfunded Actuarial Accrued Liability	(204,761,193)	(207,725,136)	(211,680,374)	(216,625,599)	(222,568,104)	(229,512,618)	(237,468,919)	(246,453,548)	(256,478,583)	(267,545,145)	(279,651,965)	(292,799,483)
Funded Ratio	112.18%	112.48%	112.87%	113.35%	113.94%	114.64%	115.47%	116.44%	117.57%	118.88%	120.39%	122.12%
Projected Assets												
Market Value of Assets BTI	$ 65,885,897	$ 66,569,984	$ 67,054,492	$ 67,503,921	$ 68,073,675	$ 68,493,375	$ 68,715,654	$ 68,922,953	$ 69,099,331	$ 69,125,792	$ 68,871,737	$ 68,257,259
Market Value of Assets WVIMB	1,819,935,275	1,805,895,965	1,789,984,197	1,771,969,700	1,751,297,542	1,728,363,258	1,703,458,288	1,676,285,766	1,646,763,939	1,615,154,248	1,582,015,337	1,548,056,353
Total Market Value of Assets	1,885,821,171	1,872,465,949	1,857,038,689	1,839,473,620	1,819,371,218	1,796,856,634	1,772,173,941	1,745,208,719	1,715,863,270	1,684,280,039	1,650,887,074	1,616,313,612
Operating Expenses	$ (4,442,486)	$ (4,542,442)	$ (4,644,647)	$ (4,749,151)	$ (4,856,007)	$ (4,965,267)	$ (5,076,986)	$ (5,191,218)	$ (5,308,021)	$ (5,427,451)	$ (5,549,569)	$ (5,674,434)
Employer Benefit Payments and Expenses	(133,139,967)	(134,108,985)	(135,007,841)	(136,147,351)	(136,986,750)	(137,431,307)	(137,845,907)	(138,198,662)	(138,251,583)	(137,743,474)	(136,514,517)	(134,682,002)
Employer Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Employer Excess Contributions	-	-	-	-	-	-	-	-	-	-	-	-
Investment Income	124,227,231	123,224,167	122,087,419	120,794,099	119,328,173	117,713,882	115,957,670	114,044,432	111,976,373	109,777,960	107,490,624	105,157,901
Capped PAYGO and Premium Margin	-	-	-	-	-	-	-	-	-	-	-	-
Market Value of Assets end of year	$ 1,872,465,949	$ 1,857,038,689	$ 1,839,473,620	$ 1,819,371,218	$ 1,796,856,634	$ 1,772,173,941	$ 1,745,208,719	$ 1,715,863,270	$ 1,684,280,039	$ 1,650,887,074	$ 1,616,313,612	$ 1,581,115,077
Average Return on Assets	6.84%	6.83%	6.83%	6.83%	6.82%	6.82%	6.82%	6.81%	6.81%	6.81%	6.80%	6.80%
Annual Expenditure Sharing and Premium Margins												
Employer Benefit Payments	$ 133,139,967	$ 134,108,985	$ 135,007,841	$ 136,147,351	$ 136,986,750	$ 137,431,307	$ 137,845,907	$ 138,198,662	$ 138,251,583	$ 137,743,474	$ 136,514,517	$ 134,682,002
Retired Member Contributions and Premium Margins	106,677,736	108,842,312	109,876,027	110,292,844	110,130,179	109,522,072	108,956,775	108,212,582	107,169,819	105,587,705	102,900,337	99,343,480
Total Annual Expenditures and Margins	$ 239,817,703	$ 242,951,297	$ 244,883,869	$ 246,440,195	$ 247,116,929	$ 246,953,379	$ 246,802,681	$ 246,411,244	$ 245,421,402	$ 243,331,179	$ 239,414,855	$ 234,025,482
Percent of Expenditures Paid by Retired Members	44.48%	44.80%	44.87%	44.75%	44.57%	44.35%	44.15%	43.92%	43.67%	43.39%	42.98%	42.45%
Active Members	10,821	9,501	8,303	7,214	6,210	5,300	4,473	3,728	3,061	2,480	1,985	1,573
Pre-Medicare Retirees	5,433	5,194	4,934	4,613	4,331	4,038	3,701	3,408	3,171	2,961	2,735	2,485
Pre-Medicare Waived Annuitants [a]	5	4	4	3	2	2	2	1	1	1	1	1
Post-Medicare Retirees	40,274	40,118	39,860	39,547	39,100	38,559	37,966	37,235	36,362	35,371	34,310	33,195
Pre-Medicare Waived Annuitants [a]	244	238	231	223	215	205	196	185	174	162	150	138
Pre-Medicare Capped Rate Per Member Per Month	$ 677.23	$ 702.63	$ 730.73	$ 761.79	$ 794.17	$ 827.92	$ 863.11	$ 899.79	$ 938.03	$ 977.89	$ 1,019.46	$ 1,062.78
Post-Medicare Capped Rate Per Member Per Month	$ 108.72	$ 112.80	$ 117.31	$ 122.30	$ 127.50	$ 132.92	$ 138.57	$ 144.45	$ 150.59	$ 156.99	$ 163.67	$ 170.62
Assumed Aggregate Fixed Subsidy Contribution Limit	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

[a] *The actuarial valuation assumes 2.5 percent of eligible waived annuitants under the age of 75 will select retiree healthcare coverage in the future. As of June 30, 2020, there are 11,913 eligible waived annuitants under age 75.*

APPENDIX B

Appendix B

Total Lives and Average Sick/Leave Days by Age and Years of Service as of June 30, 2020 for Active Members Hired Before July 1, 1988, with Sick and Annual Leave Balances as of June 30, 2020

Attained Age	Completed Years of Service									
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total
Under 20	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	*87*	*10*	*97*
	-	-	-	-	-	-	-	**238**	**171**	**231**
55-59	-	-	-	-	-	-	-	*542*	*306*	*848*
	-	-	-	-	-	-	-	**233**	**269**	**246**
60-64	-	-	-	-	-	-	-	*237*	*602*	*839*
	-	-	-	-	-	-	-	**251**	**303**	**288**
65-69	-	-	-	-	-	-	-	*71*	*284*	*355*
	-	-	-	-	-	-	-	**308**	**365**	**353**
70-74	-	-	-	-	-	-	-	*23*	*97*	*120*
	-	-	-	-	-	-	-	**333**	**376**	**368**
75 & Over	-	-	-	-	-	-	-	*11*	*40*	*51*
	-	-	-	-	-	-	-	**289**	**483**	**441**
Total Members	-	-	-	-	-	-	-	*971*	*1,339*	*2,310*
Average Sick/Leave Days	-	-	-	-	-	-	-	**246**	**318**	**288**

Italics represents total members and bold represents average sick/leave days.

Appendix B

Total Lives and Average Sick/Leave Days by Age and Years of Service as of June 30, 2020 for Active Members Hired Between July 1, 1988, and June 30, 2001, with Sick and Annual Leave Balances as of June 30, 2020

Attained Age	Completed Years of Service									
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	Total
Under 20	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	*11*	-	-	-	-	*11*
	-	-	-	-	**151**	-	-	-	-	**151**
40-44	-	-	-	-	*145*	*207*	*5*	-	-	*357*
	-	-	-	-	**117**	**168**	**217**	-	-	**148**
45-49	-	-	-	-	*211*	*1,127*	*197*	*11*	-	*1,546*
	-	-	-	-	**128**	**157**	**192**	**175**	-	**158**
50-54	-	-	-	-	*214*	*1,109*	*824*	*223*	-	*2,370*
	-	-	-	-	**134**	**154**	**188**	**199**	-	**168**
55-59	-	-	-	-	*199*	*968*	*560*	*445*	-	*2,172*
	-	-	-	-	**139**	**152**	**196**	**204**	-	**173**
60-64	-	-	-	-	*180*	*760*	*417*	*190*	-	*1,547*
	-	-	-	-	**148**	**162**	**214**	**227**	-	**182**
65-69	-	-	-	-	*50*	*297*	*206*	*90*	-	*643*
	-	-	-	-	**143**	**190**	**235**	**264**	-	**211**
70-74	-	-	-	-	*16*	*66*	*36*	*31*	-	*149*
	-	-	-	-	**167**	**179**	**223**	**288**	-	**211**
75 & Over	-	-	-	-	*6*	*19*	*17*	*5*	-	*47*
	-	-	-	-	**314**	**175**	**279**	**208**	-	**234**
Total Members	-	-	-	-	*1,032*	*4,553*	*2,262*	*995*	-	*8,842*
Average Sick/Leave Days	-	-	-	-	**136**	**159**	**201**	**215**	-	**173**

Italics represents total members and bold represents average sick/leave days.

Appendix B

Age and Years of Service as of June 30, 2020 for
Active Members Hired Before July 1, 2010

Attained Age	Years of Service									
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
Under 20	-	-	-	-	-	-	-	-	-	**-**
20-24	-	-	-	-	-	-	-	-	-	**-**
25-29	-	-	-	4	-	-	-	-	-	**4**
30-34	-	-	-	439	3	-	-	-	-	**442**
35-39	-	-	-	2,282	277	-	-	-	-	**2,559**
40-44	-	-	-	2,186	1,552	279	7	-	-	**4,024**
45-49	-	-	-	1,842	1,525	1,418	299	15	-	**5,099**
50-54	-	-	-	1,883	1,513	1,437	1,068	418	16	**6,335**
55-59	-	-	-	1,759	1,475	1,279	785	1,221	406	**6,925**
60-64	-	-	-	1,314	1,202	1,012	605	597	805	**5,535**
65-69	-	-	-	542	476	402	312	253	423	**2,408**
70-74	-	-	-	157	156	113	61	88	164	**739**
75 & Over	-	-	-	29	54	34	30	27	75	**249**
Total	**-**	**-**	**-**	**12,437**	**8,233**	**5,974**	**3,167**	**2,619**	**1,889**	**34,319**

Appendix B

Age and Years of Service as of June 30, 2020 for
Active Members Declining Healthcare Coverage Hired Before July 1, 2010

Attained Age	Years of Service									
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
Under 20	-	-	-	-	-	-	-	-	-	**-**
20-24	-	-	-	-	-	-	-	-	-	**-**
25-29	-	-	-	-	-	-	-	-	-	**-**
30-34	-	-	-	43	-	-	-	-	-	**43**
35-39	-	-	-	225	58	-	-	-	-	**283**
40-44	-	-	-	185	165	33	-	-	-	**383**
45-49	-	-	-	186	166	130	28	-	2	**512**
50-54	-	-	-	186	125	101	69	39	3	**523**
55-59	-	-	-	164	176	93	25	46	18	**522**
60-64	-	-	-	99	104	53	31	26	26	**339**
65-69	-	-	-	45	35	28	13	8	13	**142**
70-74	-	-	-	27	14	6	8	3	2	**60**
75 & Over	-	-	-	13	8	6	1	1	2	**31**
Total	**-**	**-**	**-**	**1,173**	**851**	**450**	**175**	**123**	**66**	**2,838**

Appendix B

Age and Years of Service as of June 30, 2020 for
Active Members Hired After July 1, 2010 with PEIA Health Care Coverage
(Service calculated based on hire date)

Attained Age	Years of Service									Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	
Under 20	31	2	-	-	-	-	-	-	-	33
20-24	474	639	5	-	-	-	-	-	-	1,118
25-29	874	3,298	760	-	-	-	-	-	-	4,932
30-34	711	2,628	2,879	3	-	-	-	-	-	6,221
35-39	527	2,020	2,223	8	-	-	-	-	-	4,778
40-44	476	1,925	2,067	5	-	-	-	-	-	4,473
45-49	421	1,744	2,016	2	-	-	-	-	-	4,183
50-54	416	1,586	1,832	6	-	-	-	-	-	3,840
55-59	329	1,407	1,593	8	-	-	-	-	-	3,337
60-64	175	905	1,212	4	-	-	-	-	-	2,296
65-69	37	285	505	4	-	-	-	-	-	831
70-74	7	68	115	1	-	-	-	-	-	191
75 & Over	3	7	33	-	-	-	-	-	-	43
Total	**4,481**	**16,514**	**15,240**	**41**	**-**	**-**	**-**	**-**	**-**	**36,276**

Appendix B

Retirees and Surviving Spouses
Age and Gender Distribution as of June 30, 2020

Age	Female	Male	Total
Under 20	2	-	**2**
20-24	2	1	**3**
25-29	3	2	**5**
30-34	1	1	**2**
35-39	2	-	**2**
40-44	6	8	**14**
45-49	28	40	**68**
50-54	101	129	**230**
55-59	825	658	**1,483**
60-64	3,317	1,954	**5,271**
65-69	6,305	3,465	**9,770**
70-74	6,339	3,818	**10,157**
75-79	4,205	2,636	**6,841**
80-84	2,969	1,642	**4,611**
85-89	2,010	909	**2,919**
90-94	1,111	375	**1,486**
95-99	280	85	**365**
100 & Over	34	6	**40**
Total	**27,540**	**15,729**	**43,269**

Appendix B

Waived Annuitants[a]
Age and Gender Distribution as of June 30, 2020

Age	Female	Male	Total
Under 20	-	-	**-**
20-24	-	-	**-**
25-29	-	-	**-**
30-34	1	1	**2**
35-39	7	4	**11**
40-44	13	14	**27**
45-49	34	52	**86**
50-54	88	102	**190**
55-59	313	307	**620**
60-64	1,329	918	**2,247**
65-69	2,823	1,830	**4,653**
70-74	2,468	1,609	**4,077**
75-79	1,392	868	**2,260**
80-84	1,013	501	**1,514**
85-89	555	240	**795**
90-94	253	89	**342**
95-99	62	21	**83**
100 & Over	14	5	**19**
Total	**10,365**	**6,561**	**16,926**

[a] *The actuarial valuation assumes 2.5 percent of eligible waived annuitants under the age of 75 will select retiree healthcare coverage in the future. As of June 30, 2020, there are 11,913 eligible waived annuitants under age 75.*