

NEW SHOREHAM SCHOOL DISTRICT NEW SHOREHAM SCHOOL DISTRICT

ACTUARIAL VALUATION REPORT

JULY 1, 2019







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Certification

This report presents the results of the July 1, 2019 Actuarial Valuation for the New Shoreham School District post-retirement benefit other than pension (OPEB) Plan (the Plan) for the purpose of estimating the funded status of the Plan and determining the Actuarially Determined Employer Contribution (ADEC) for the fiscal years ending June 30, 2021 and June 30, 2022. This report may not be appropriate for any other purpose.

The valuation has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with all applicable Actuarial Standards of Practice.

I certify that the actuarial assumptions and methods that were selected by me and represent my best estimate of anticipated actuarial experience under the Plan.

In preparing this valuation, I have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the District. I have audited neither the employee data nor the financial information, although I have reviewed them for reasonableness.

The results in this valuation report are based on the Plan as summarized in the Plan Provisions section of this report and the actuarial assumptions and methods detailed in the Description of Actuarial Methods and Assumptions section of this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

I have no relationship with the employer or the Plan that would impair, or appear to impair, my objectivity in performing the work presented in this report. I am a member of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Steve A. Lemanski, FSA, FCA, MAAA Enrolled Actuary 17-05506

March 20, 2020



Executive Summary

The July 1, 2019 accrued liability of \$440,365 is lower than anticipated. The gain is primarily due to premium rates increasing less than expected from the 2017 valuation, combined with demographic changes. In addition, we made some assumption changes including Mortality, Medical Trend, and Spousal Coverage. The changes in assumptions decreased the liability by approximately 2%.

Schedule of Funding Status and Funding Progress						
Valuation Value of Accrued Accrued Accrued Percent Date Assets Liability Liability (UAL) Actuarial Actuarial Unfunded Funded Covered Percent Ratio Payroll of Cove						UAL as a Percentage of Covered Payroll
7/1/2017	168,482	694,914	526,432	24%	2,063,140	26%
7/1/2019	240,390	440,365	199,975	55%	2,150,555	9%

History of Actuarially Determined Employer Contribution (ADEC)		
Year Ended June 30 Actuarially Determined Employer Contribution (ADEC)		
2019	25,882	
2020	23,466	
2021	3,053	
2022	3,164	



Unfunded Accrued Liability and Actuarially Determined Employer Contribution

Unfunded Accrued Liability (UAL)		
Actuarial Accrued Liability 7/1/2019	ВОЕ	
Actives Retirees Total	\$422,766 <u>17,599</u> 440,365	
Assets 7/1/2019	240,390	
Unfunded Accrued Liability (UAL) 7/1/2019 Funded Ratio	199,975 54.6%	

Actuarially Determined Employer Contribution (ADEC)		
2020 / 2021 Fixed Voor ADEC	POF	
2020 / 2021 Fiscal Year ADEC	ВОЕ	
Normal Cost	\$24,087	
Employee Contributions	(40,000)	
Amortization of UAL	18,884	
Interest	<u>82</u>	
Total ADEC 2020 / 2021	3,053	
2021 / 2022 Fiscal Year ADEC	BOE	
Normal Cost	\$25,195	
	• •	
Employee Contributions	(41,000)	
Amortization of UAL	18,884	
Interest	<u>85</u>	



Participant Counts and Average Attained Age As of July 1, 2019

Participant Counts				
Group Active Participants Retirees* Total				
BOE	27	1	28	

^{*}Does not include spouses of existing retirees.

Average Age				
Group	Active Average Age	Retiree Average Age		
BOE	50.3	63.0		



As of July 1, 2017

Participant Counts				
Group Active Participants Retirees* Total				
BOE	29	2	31	

^{*}Does not include spouses of existing retirees.

Average Age				
Group	Active Average Age	Retiree Average Age		
BOE	49.0	62.5		



Projected Benefit Payments

Fiscal Year Beginning July 1st	Currently Active Employees	Currently Retired Employees	Total
2020	\$4,929	\$10,220	\$15,149
2021	8,033	0	8,033
2022	0	0	0
2023	3,328	0	3,328
2024	16,493	0	16,493
2025	31,818	0	31,818
2026	57,244	0	57,244
2027	75,328	0	75,328
2028	78,523	0	78,523
2029	104,357	0	104,357
2030	94,402	0	94,402
2031	67,251	0	67,251
2032	67,117	0	67,117
2033	69,011	0	69,011
2034	48,206	0	48,206
2035	17,839	0	17,839
2036	31,098	0	31,098
2037	47,057	0	47,057
2038	57,504	0	57,504
2039	44,474	0	44,474



Target Allocation and Expected Rates of Return

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*	Weighting
U.S. Equity	24.50%	5.20%	1.27%
Non-U.S. Equity	10.50%	7.00%	0.74%
U.S. Aggregate Bonds	21.00%	2.00%	0.42%
Intermediate-Term Credit	12.60%	2.60%	0.33%
Short-Term Credit	8.40%	2.20%	0.18%
Intermediate-Term TIPS	15.00%	1.10%	0.17%
REITs	8.00%	4.70%	0.38%
	100.00%		3.49%
Long-Term Inflation Expectation			1.90%
Long-Term Expected Nominal Return			5.39%

^{*}Long-Term Returns are provided by Vanguard. The returns are geometric means.

The long-term expected rate of return on OPEB plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return are developed. Best estimates of the real rates of return for each major asset class are included in the OPEB plan's target asset allocation.

The information above is based on geometric means and does not reflect additional returns through investment selection, asset allocation and rebalancing. The results support a rate between 5.25% and 5.75%. An expected rate of return of 5.50% was used.



Description of Actuarial Methods

Asset Valuation Method

Plan Assets equal the Market Value of assets.

Actuarial Cost Method

Changes in Actuarial Cost Method: None.

Description of Current Actuarial Cost Method: Entry Age Normal (level percentage of salary)

<u>Normal Cost:</u> Under this method, the total normal cost is the sum of amounts necessary to fund each active member's normal retirement benefit if paid annually from entry age to assumed retirement age. Entry age is the age at which the employee would have been first eligible for the plan, if it had always been in effect. The normal cost for each participant is expected to remain a level percentage of the employee's salary. The normal cost for the plan is the difference between the total normal cost for the year and the anticipated member contributions for that year.

<u>Past Service Liability</u>: The present value of future benefits that relates to service before the valuation date is the total past service liability. The unfunded past service liability is the difference between the total past service liability and any assets (including accumulated member contributions). The Unfunded Accrued Liability is amortized over 15 years (was 23 years), as a level dollar amount.



Description of Actuarial Assumptions

Changes in Actuarial Assumptions as of July 1, 2019

The valuation reflects changes in the actuarial assumptions listed below. (The assumptions used before and after these changes are more fully described in the next section.)

- Mortality
- Healthcare Cost Trend Rates
- Spousal Coverage

The assumptions indicated were changed to represent the Enrolled Actuary's current best estimate of anticipated experience of the plan.

Interest

5.50%.

Rate of compensation increase (including inflation)

2.60%.

The plan does not have statistically credible data on which to form a rate of compensation increase assumption.

Inflation

2.60%.

This assumption is consistent with the Social Security Administration's current best estimate of the ultimate long-term (75-year horizon) annual percentage increase in CPI, as published in the 2019 OASDI Trustees Report.

Mortality

Pub-2010 Public Retirement Plans Amount-Weighted Mortality Tables projected to the valuation date with Scale MP-2019.

(Prior: RP-2014 Adjusted to 2006 Total Dataset Mortality Table projected to valuation date with Scale MP-2017.)

Mortality Improvement

Projected to date of decrement using Scale MP-2019 (generational).

(Prior: Projected to date of decrement using Scale MP-2017 (generational).)

We have selected this mortality assumption because it is based on the latest published public retirement mortality study released by the Society of Actuaries.

Retirement

25% for 10 or more years of service, 60% for age 60 with 25 years of service, and 60% for age 65 with 10 or more years of service.



Termination prior to retirement

Sample Age-Based Withdrawal Rates (until eligible to retire)

Service	Rate
0	.0000
1	.1800
5	.4816
10	.0209
15	.0132
20	.0096
>= 25	.0076

The actuarial assumptions in regards to rates of decrements are based on the rates used by the *State of Rhode Island Teachers' Retirement Plan* actuaries modified for certain plan features such as eligibility for full and early retirement where applicable.

Utilization

100% of current active members will elect medical coverage at retirement.

Spousal Coverage

65% of active members are assumed to be married and elect spousal benefits at retirement with wives 3 years younger than husbands.

(Prior: 85% of active members are assumed to be married and elect spousal benefits at retirement with wives 3 years young than husbands.)

Healthcare Cost Trend Rates

6.50% in 2019, reducing by 0.2% each year to an ultimate rate of 4.60% per year rate for 2029 and later.

(Prior: 7.50% in 2017, reducing by 0.5% each year to an ultimate rate of 4.60% per year rate for 2023 and later.)

Healthcare cost trend rates reflect both the current and long-term outlook for increases in healthcare costs. The short term rates are based on recent industry surveys, plan experience and near-term expectations. The long term trend rate is based on our general inflation assumption plus an adjustment to reflect expectations for long-term medical inflation.

Premiums/Allocation rates

	Employee	Employee Plus Spouse
Pre-65	\$8,118.84	\$19,026.72
Post-65	4,588.56	9,177.12

Premiums were used as the basis for per capita costs.



Expected Claim Costs

Sample Age	Expected Claim (Male)	Expected Claim (Female)
45	\$5,437	\$7,578
50	7,100	8,830
55	9,317	10,287
60	12,003	11,998
65	15,282	14,543
70	18,384	17,010
75	21,097	19,094

The sample per capita claim for plans not integrated with Medicare was developed as follows: Using the total count of active participants eligible for post-retirement medical benefits and retirees currently electing medical coverage in a non-Medicare supplement plan, we calculate the total projected claims by multiplying the total count by the average annual premium. Using the cost increases derived from a study sponsored by the Society of Actuaries prepared by Dale H. Yamamoto from May 2013: "Health Care Costs from Birth to Death", we allocate the total projected claims by age and gender.

Patient Protection and Affordable Care Act (PPACA)

For purposes of this valuation, extended coverage for adult children and 100% coverage of preventive care are assumed to be reflected in per capita costs.

For purposes of this valuation, elimination of lifetime maximum benefits and removal of the limits on essential healthcare are assumed to have no impact on plan liabilities.



Summary of Plan Provisions

Plan identification

Single-employer OPEB plan

Teachers and Principal

Eligibility for Medical Coverage

20 years of service

Retiree/Spouse Cost of Medical Coverage

No cost to retiree or spouse (if applicable) for medical coverage for five (5) contract years or until age 65, whichever occurs first. 100% of premium thereafter.

Contribution for active employees toward future retiree Medical Coverage

All active employees contribute six (6) percent of the annual premium. Effective July 1, 2016, all active employees contribute eight (8) percent of the annual premium. Effective July 1, 2019, all active employees contribute 9.41% of the annual premium.