State of Alaska Elected Public Officers' Retirement System

Actuarial Valuation Report As of June 30, 2019

April 2020





April 21, 2020

State of Alaska
The Alaska Retirement Management Board
The Department of Revenue, Treasury Division
The Department of Administration, Division of Retirement and Benefits
P.O. Box 110203
Juneau, AK 99811-0203

Certification of Actuarial Valuation

Dear Members of The Alaska Retirement Management Board, The Department of Revenue and The Department of Administration:

This report summarizes the actuarial valuation results of the State of Alaska Elected Public Officers' Retirement System (EPORS) as of June 30, 2019 performed by Buck Global, LLC (Buck).

The actuarial valuation is based on member data provided by the Division of Retirement and Benefits and medical enrollment data provided by the healthcare claims administrator (Aetna), as summarized in this report. The benefits considered are those delineated in Alaska statutes effective June 30, 2019. The actuary did not verify the data submitted but did perform tests for consistency and reasonableness.

All costs, liabilities and other factors under EPORS were determined in accordance with generally accepted actuarial principles and procedures. An actuarial cost method is used to measure the actuarial liabilities which we believe is reasonable. Buck is solely responsible for the actuarial data and actuarial results presented in this report. This report fully and fairly discloses the actuarial position of EPORS as of June 30, 2019.

The contribution requirements are determined as a level dollar amount based on amortization of the unfunded liability over a fixed 25-year period.

The Alaska Retirement Management Board (Board) and staff of the State of Alaska may use this report for the review of the operations of EPORS. Use of this report, for any other purpose or by anyone other than the Board and staff of the State of Alaska may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, you should ask Buck to review any statement you wish to make on the results contained in this report. Buck will not accept any liability for any such statement made without the review by Buck.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. In particular, retiree group benefits models necessarily rely on the use of approximations and estimates and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements. An analysis of the potential range of such future differences is beyond the scope of this valuation.

In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the plan and reasonable long-term expectations, and represent our best estimate of the anticipated long-term experience under the plan. The actuary performs an analysis of plan experience periodically and recommends changes if, in the opinion of the actuary, assumption changes are needed to more accurately reflect expected future experience. The last full experience analysis was performed for the period July 1, 2013 to June 30, 2017. Based on that experience study, the Board adopted new assumptions to be used effective for the June 30, 2018 valuations. The new assumptions from that experience study that apply to TRS were assumed to apply to EPORS and are reflected in the June 30, 2019 EPORS valuation. Based on our annual analysis of recent claims experience, changes were made to the per capita claim cost rates effective June 30, 2019 to better reflect expected future healthcare experience. Based on recent experience, the healthcare cost trend assumptions were also updated since the prior valuation. A summary of the actuarial assumptions and methods used in this valuation are shown in Section 4.

Assessment of Risks

Actuarial Standard of Practice No. 51 ("ASOP 51") applies to actuaries performing funding calculations related to a pension plan. ASOP 51 does not apply to actuaries performing services in connection with other post-employment benefits, such as medical benefits. Accordingly, ASOP 51 does not apply to the retiree medical portion of EPORS. See Section 5 of this report for further details regarding ASOP 51.

This report was prepared under my supervision and in accordance with all applicable Actuarial Standards of Practice. I am a Fellow of the Society of Actuaries, an Enrolled Actuary, a Fellow of the Conference of Consulting Actuaries and a Member of the American Academy of Actuaries. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

I am available to discuss this report with you at your convenience. I can be reached at 602-803-6174.

Respectfully submitted,

II KI

David J. Kershner, FSA, EA, MAAA, FCA

Principal

Buck

The undersigned actuary is responsible for all assumptions related to the average annual per capita health claims cost and the health care cost trend rates, and herby affirms his qualification to render opinions in such matters in accordance with the Qualification Standards of the American Academy of Actuaries.

Scott Young, FSA, EA, MAAA

Scott Young

Director Buck

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Executive Summary

Overview

The State of Alaska Elected Public Officers' Retirement System (EPORS) provides pension and postemployment healthcare benefits to eligible members. The Commissioner of the Department of Administration is responsible for administering EPORS. This report presents the results of the actuarial valuation of EPORS as of the valuation date of June 30, 2019.

Purpose

An actuarial valuation is performed on the plan when requested by the State of Alaska, generally every two years, as of the end of the fiscal year. The main purposes of the actuarial valuation detailed in this report are:

- 1. To determine the State contribution necessary to meet the Department's funding policy for the plan;
- 2. To disclose the liability measures as of the valuation date;
- 3. To review the current funded status of the plan and assess the funded status as an appropriate measure for determining future actuarially determined contributions;
- 4. To compare actual and expected experience under the plan; and
- 5. To report trends in contributions and liabilities over the last several years.

Since inception in 1976, benefits under EPORS have been paid for on a pay-as-you-go basis. This means that just enough money is appropriated each year to pay the benefits as they come due. Under this method, no fund is built up and therefore, no investment earnings offset the State's cost. In Section 2.1 of this report, we have projected the total benefit payments under EPORS for the next 35 years.

The actuarial valuation provides a "snapshot" of the funded position of the EPORS based on the plan provisions, membership, and actuarial assumptions as of the valuation date. Retiree group benefits models necessarily rely on the use of approximations and estimates and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements.

The key results of the June 30, 2019 and June 30, 2016 valuations are shown below.

Funded Status as of June 30			2016	2019		
Pensio	n					
a.	Actuarial Accrued Liability	\$	15,922,933	\$	15,951,624	
b.	Valuation Assets		0		0	
C.	Unfunded Actuarial Accrued Liability, (a) - (b)	\$	15,922,933	\$	15,951,624	
d.	Funding Ratio, (b) ÷ (a)		0%		0%	
Health	care					
a.	Actuarial Accrued Liability	\$	2,210,360	\$	1,875,915	
b.	Valuation Assets		0		0	
C.	Unfunded Actuarial Accrued Liability, (a) - (b)	\$	2,210,360	\$	1,875,915	
d.	Funding Ratio, (b) ÷ (a)		0%		0%	
Total						
a.	Actuarial Accrued Liability	\$	18,133,293	\$	17,827,539	
b.	Valuation Assets		0		0	
C.	Unfunded Actuarial Accrued Liability, (a) - (b)	\$	18,133,293	\$	17,827,539	
d.	Funding Ratio, (b) ÷ (a)		0%		0%	
Recom	mended Contribution		FY17		FY20	
Total						
a.	Normal Cost	\$	0	\$	0	
b.	Past Service Cost		1,254,554		1,233,401	
C.	Total Annual Cost, (a) + (b)	\$	1,254,554	\$	1,233,401	
d.	Expected Annual Benefit Payments and Claim Costs	\$	1,456,205	\$	1,463,824	
e.	Total Annual Recommended Contribution [Greater of (c) and (d)]	\$	1,456,205	\$	1,463,824	

1. Actuarial vs. Pay-As-You-Go Funding

Since inception in 1976, benefits under EPORS have been paid for on a pay-as-you-go basis. This means that just enough money is appropriated each year to pay the benefits as they come due. Under this method, no fund is built up and, therefore, no investment earnings offset the State's cost. In Section 2.1 of this report, we have projected the total benefit payments under EPORS for the next 35 years. Annual benefit payments are projected to gradually decrease from their current levels, which are approximately \$1,464,000 per year.

This valuation uses the Entry Age Normal Cost Method to determine costs and liabilities. The actuarial funding method amortizes all unfunded liabilities over 25 years in level dollar payments. There is no normal cost component because there are no active participants. Accordingly, the actuarial costs associated with EPORS are past service costs only.

2. Demographic Experience (Pension)

Section 3 provides statistics on active and inactive participants. The number of active participants decreased from one at June 30, 2016 to zero at June 30, 2019.

The number of retirees and beneficiaries decreased 9.4% from 32 to 29, and their average age increased from 78.54 to 80.20. The number of vested terminated participants remained at zero.

As shown in Section 1.3, actual increases in variable benefits and COLA were less than expected. Overall, the demographic experience produced a loss of approximately \$735,000.

3. Retiree Medical Experience

As described in Section 4.2, recent claims experience created an actuarial gain of approximately \$275,000. There was also a demographic experience (medical) loss of approximately \$762,000. Therefore, the net loss was approximately \$487,000. Beginning January 1, 2019, Rx benefits were provided through a new contract with Optum, and Rx benefits provided to Medicare participants will be through a Medicare Part D EGWP arrangement.

4. Members Included

The governor, lieutenant governor, and members of the Alaska State Legislature holding office between January 1, 1976 and October 14, 1976.

5. Changes in Methods Since the Prior Valuation

There were no changes in actuarial methods since the prior valuation.

6. Changes in Assumptions Since the Prior Valuation

The last full experience analysis was performed for the period July 1, 2013 to June 30, 2017. That study did not include experience for EPORS. The new assumptions that were adopted for TRS were assumed to apply to EPORS and are reflected in the June 30, 2019 EPORS valuation. Based on recent experience, the healthcare cost trend assumptions that were updated for the PERS and TRS June 30, 2019 valuations were applied for the June 30, 2019 EPORS valuation. Healthcare claim costs are updated annually as described in Section 4.2. The net effect as of June 30, 2019 of the assumption changes was an increase in pension liabilities of approximately \$1,569,000 and an increase in healthcare liabilities of approximately \$337,000.

7. Changes in Benefit Provisions Since the Prior Valuation

There have been no changes in benefit provisions since the prior valuation. However, an Employer Group Waiver Plan (EGWP) became effective as of January 1, 2019. This arrangement replaced the Retiree Drug Subsidy under Medicare Part D and resulted in larger projected subsidies to offset the cost of prescription drug coverage. This change, which is further described in Section 4.1, decreased the healthcare liabilities as of June 30, 2019 by approximately \$91,000.

Section 1: Actuarial Funding Results

Section 1.1 Actuarial Liabilities and Normal Cost

	Norma	l Cost	Actu	arial Accrued Liability
Active Participants				
Retirement Benefits	\$	0	\$	0
Health Benefits		0		0
Subtotal	\$	0	\$	0
Retirees and Survivors				
Retirement Benefits			\$	15,951,624
Health Benefits				1,875,915
Subtotal			\$	17,827,539
Vested Terminations				
Retirement Benefits			\$	0
Health Benefits				0
Subtotal			\$	0
Total			\$	17,827,539

The implementation of EGWP effective January 1, 2019 was reflected in the calculation of the postemployment healthcare actuarial accrued liability shown above.

Section 1.2: Actuarial Contributions as of June 30, 2019

1.	Total Normal Cost	\$ 0	
2.	Actuarial Accrued Liability	17,827,539	
3.	Valuation Assets	 0	
4.	Total Unfunded Actuarial Accrued Liability, (2) - (3)	\$ 17,827,539	
5.	Funded Ratio, (3) ÷ (2)	0.00%	
6.	Past Service Cost Amortization Payment ¹	1,177,471	
7.	Actuarial Contribution at Beginning of Year, (1) + (6)	1,177,471	
8.	Interest at 4.75%	 55,930	
9.	Actuarial Contribution at End of Year, (7) + (8)	\$ 1,233,401	
10.	Expected Benefit Payments and Claim Costs for the Upcoming Year	\$ 1,463,824	
11.	Recommended Contribution [Greater of (9) and (10)]	\$ 1,463,824	

¹ Calculated as a level dollar amount over a 25-year period as of June 30, 2019.

Section 1.3: Actuarial Gain/(Loss) for FY17, FY18, and FY19

			Pension	Healthcare	Total
1.	Ex	pected Actuarial Accrued Liability			
	a.	Actuarial Accrued Liability, June 30, 2016	\$15,922,933	\$ 2,210,360	\$ 18,133,293
	b.	Normal Cost for FY17	0	0	0
	c.	Interest on (a) and (b) at 4.75%	756,339	104,992	861,331
	d.	Actual Benefit Payments for FY17	1,249,957	441,503	1,691,460
	e. f.	Interest on (d) at 4.75%, adjusted for timing Expected Actuarial Accrued Liability,	31,818	10,364	42,182
		June 30, 2017, (a) + (b) + (c) – (d) – (e) Normal Cost for FY18	15,397,497	1,863,485	17,260,982
	g. h.		0	0	0
	i.	Interest on (f) and (g) at 4.75%	731,381	88,516	819,897
		Actual Benefit Payments for FY18	1,198,310	430,496	1,628,806
	j. k.	Interest on (i) at 4.75%, adjusted for timing Expected Actuarial Accrued Liability,	30,503	10,106	40,609
		June 30, 2018, $(f) + (g) + (h) - (i) - (j)$	14,900,065	1,511,399	16,411,464
	l.	Normal Cost for FY19	0	0	0
	m.	Interest on (k) and (l) at 4.75%	707,753	71,791	779,544
	n.	Actual Benefit Payments for FY19	1,616,439	430,496	2,046,935
	0.	Interest on (n) at 4.75%, adjusted for timing Change in Actuarial	41,147	10,106	51,253
	p. q.	Assumptions/Methods and EGWP Change in actual increases versus	1,569,332	246,480	1,815,812
	_	expected increases in variable benefits and COLA	(302,924)	0	(302,924)
	r.	Expected Accrued Liability as of June 30, 2019, $(k) + (l) + (m) - (n) - (o)$ + (p) + (q)	\$ 15,216,640	\$ 1,389,068	\$ 16,605,708
2.	Act 201	ual Actuarial Accrued Liability, June 30,	15,951,624	<u>1,875,915</u>	17,827,539
3.	Lia	bility Gain/(Loss), (1)(r) – (2)	\$ (734,984)	\$ (486,847)	\$ (1,221,831)

Section 2: Cash Flows

Section 2.1: Estimated Cash Flows

V 0:	
Year Starting July 1	Estimated Annual Payments
2019	\$ 1,463,824
2020	1,453,677
2021	1,422,688
2022	1,401,501
2023	1,376,616
2024	1,348,919
2024	1,346,919
2026	1,286,689
2026	
	1,253,042
2028	1,217,993
2029	1,181,329
2030	1,142,712
2031	1,102,144
2032	1,059,365
2033	1,014,242
2034	966,840
2035	917,159
2036	865,410
2037	812,392
2038	758,616
2039	704,418
2040	650,477
2041	597,036
2042	544,387
2043	493,212
2044	443,951
2045	396,969
2046	352,438
2047	310,454
2048	271,193
2049	234,798
2050	201,270
2051	170,712
2052	143,166
2053	118,517
2054	96,749

Section 3: Member Data

Section 3.1: Summary of Members Included

		As of June 30, 2016	As of June 30, 2019
Active	Members		
1.	Number	1	0
2.	Average Age	68.96	0.00
3.	Average Service Years	25.72	0.00
4.	Average Annual Pay	\$99,986	\$0
Vested	Terminated Members		
1.	Number	0	0
2.	Average Age	0.00	0.00
3.	Average Service	0.00	0.00
Retiree	es and Beneficiaries		
1.	Number	32	29
2.	Average Age	78.54	80.20
3.	Average Monthly Retirement Benefits	\$3,385	\$3,837

Section 4: Basis of the Actuarial Valuation

Section 4.1: Summary of Plan Provisions

1. Members Included

The governor, lieutenant governor, and members of the Alaska State Legislature holding office between January 1, 1976 and October 14, 1976.

2. Member Contributions

- a. Mandatory employee contribution: 7% of salary.
- b. Interest Credited: 4.5% compounded semi-annually on June 30 and December 31.
- c. Voluntary Refund at Termination: Return of contributions with interest.
- Refund at Death: If no eligible survivors, return of contribution with interest to designated beneficiary or beneficiaries.

3. Normal Retirement Benefit

- a. Eligibility: Age 60 with 5 or more years of paid service.
- b. Type: Life with automatic 50% joint and survivor benefit if married at least one year prior to date of death. If the accrued benefit formula percentage is less than 60% at the time of death, the survivor benefit may not be less than 30% of the monthly salary authorized for the office at the time or 30% of average monthly compensation.
- c. Amount: Members may irrevocably choose between two types of benefit calculations at the time of retirement: variable Alaska Statute (AS) 39.37.050(a)(1) and fixed AS 39.37.050(a)(2). Under the variable method, benefits are calculated based on the active salary of the office from which the member retired. Benefits may raise or lower depending on the change in the active salary. The fixed method bases the calculation on the average monthly compensation as defined in AS 39.35.680. Benefits calculated under the fixed method do not change when the active salary changes. Benefit calculation is 5% for each year of elected public officer service plus 2% for any other PERS service performed to a maximum of 75% times either the salary of the office from which the member retired or the average monthly salary depending on which option is chosen.
- d. Variable Benefit Increases/Decreases: Members who elect a variable benefit will have their benefit recalculated when the active salary of the position they retired from changes. If the salary lowers, retirement benefits will also be lowered.
- e. Cost of Living Increases: Retired members who select the variable option are eligible for post-retirement pension increases (Chapter 91, Section 1 SLA 2001) if they have been receiving benefits without an increase for at least 10 years. Benefits will be increased by 75% of the cost of living increase calculated from the date of the last benefit adjustment or the date when the member retired, whichever is later. The member may not receive another adjustment based on the salary and, if appropriate, allowances established under AS 24.10.110, authorized for the office from which the member retired until the resultant increase in benefits equals or exceeds the increase based on the post-retirement pension adjustments. Increases in benefit payments under the post-retirement pension adjustment are effective July 1 of each calendar year.

4. Early Retirement Benefit

- a. Eligibility: At least age 55 with 5 or more years of paid service or any age with 20 or more years of paid service.
- b. Type: Life benefit with automatic 50% joint and survivor benefit if married at least one year prior to date of death. If the accrued benefit formula percentage is less than 60% at the time of death, the survivor benefit may not be less than 30% of the monthly salary authorized for the office at the time or 30% of average monthly compensation.
- c. Amount: Normal retirement benefit based on service to early retirement date reduced 0.5% per month for each month which precedes normal retirement date. Members may irrevocably choose between two types of benefit calculations at the time of retirement: variable AS 39.37.050(a)(1) and fixed AS 39.37.050(a)(2). Under the variable method, benefits are calculated based on the active salary of the office from which the member retired. Benefits may raise or lower depending on the change in the active salary. The fixed method bases the calculation on the average monthly compensation as defined in AS 39.35.680. Benefits calculated under the fixed method do not change when the active salary changes. Benefit calculation is 5% for each year of elected public officer service plus 2% for any other PERS service times either the salary of the office from which the member retired or the average monthly salary depending on which option is chosen.
- d. Variable Benefit Increases/Decreases: Members who elect a variable benefit will have their benefit recalculated when the active salary of the position they retired from changes. If the salary lowers, retirement benefits will also be lowered.
- e. Cost of Living Increases: Retired members who select the variable option are eligible for post-retirement pension increases (Chapter 91, Section 1 SLA 2001) if they have been receiving benefits without an increase for at least 10 years. Benefits will be increased by 75% of the cost of living increase calculated from the date of the last benefit adjustment or the date when the member retired, whichever is later. The member may not receive another adjustment based on the salary and, if appropriate, allowances established under AS 24.10.110, authorized for the office from which the member retired until the resultant increase in benefits equals or exceeds the increase based on the post-retirement pension adjustments. Increases in benefit payments under the post-retirement pension adjustment are effective July 1 of each calendar year.

5. Deferred Vested Benefit

- a. Eligibility: Vested with 5 or more years of paid service. Benefits may commence at Early or Normal retirement.
- b. Type: Normal or Early retirement benefit.
- c. Amount: Calculated in the same manner as a Normal or Early retirement benefit.
- d. Variable Benefit Increases/Decreases: Same provisions as Normal or Early retirement.
- e. Cost of Living Increases: Same provisions as Normal or Early retirement.

6. Retirement for Incapacity Benefit

- a. Eligibility: Incapacitated from performing the duties of their position at any age with five or more years of paid service.
- b. Type: Monthly benefit received until death.
- c. Amount: Calculated in the same manner as a Normal retirement except benefits commence the first of the month following an approved recommendation of the review board.

- d. Variable Benefit Increases/Decreases: Same provisions as Normal retirement.
- e. Cost of Living Increases: Same provisions as Normal retirement.

7. Death Benefit Before Retirement

Provided the deceased member accrued at least 2 years of credited service and had been married for at least 1 year, the spouse is entitled to an automatic survivor benefit of 50% of the accrued benefit at the time of death. If the accrued benefit formula percentage is less than 60% at the time of death, the survivor benefit may not be less than 30% of the monthly salary authorized for the office at the time or 30% of average monthly compensation. If there is no surviving spouse but there are dependent children at the time of death, 50% of the above benefit may be divided in equal shares to the dependent children for the duration of their dependency. If there is no spouse or dependent children, the contribution account balance, plus interest, will be paid to the designated beneficiary or beneficiaries.

8. Medical Benefits

Each retiree is provided with medical and prescription drug benefits with no premium payment required. These benefits are available for the lifetime of the retiree and for the lifetime of the spouse if a survivor benefit is payable. Benefits are also available to eligible dependents for the duration of their dependency.

Medical, prescription drug, dental, vision and audio coverage is provided through the AlaskaCare Retiree Health Plan. Health plan provisions do not vary by retirement tier or age, except for Medicare coordination. Participants in dental, vision, and audio coverage pay a full self-supporting rate and those benefits are not included in this valuation.

Participants are covered under the following benefit design:

Plan Feature	Amounts
Deductible (single/family)	\$150 / \$450
Coinsurance - most services	20%
Outpatient surgery/testing	0%
Maximum Out-of-Pocket (single/family, excl. deductible)	\$800 / \$2,400
Rx Copays (generic/ brand/mail-order), does not apply to OOP max	\$4 / \$8 / \$0
Lifetime Maximum	\$2,000,000

The plan coordinates with Medicare on a traditional Coordination of Benefits Method. Starting in 2019, the prescription drug coverage will be through a Medicare Part D EGWP arrangement.

Changes in Benefit Provisions Valued Since the Prior Valuation

The EPORS medical benefit provisions were changed since the prior valuation to reflect the implementation of EGWP as of January 1, 2019.

Section 4.2: Descriptions of Actuarial Methods and Valuation Procedures

Actuarial Method

Liabilities and contributions shown in the report are computed using the Entry Age Normal Actuarial Cost Method. Any funding surplus or unfunded accrued liability is amortized over 25 years on a level dollar basis.

The actuarial accrued liability for retired members and their beneficiaries currently receiving benefits was determined as the actuarial present value of the benefits expected to be paid. No future normal costs are payable for these members.

Valuation of Assets

Not applicable since there are no plan assets.

Valuation of Retiree Medical and Prescription Drug Benefits

This section outlines the detailed methodology used to develop the initial per capita claims cost rates for the PERS and TRS postemployment healthcare plans, which were also used for EPORS. Note that the methodology reflects the results of our annual experience rate update for the period from July 1, 2018 to June 30, 2019.

Base claims cost rates are incurred healthcare costs expressed as a rate per member per year. Ideally, claims cost rates should be derived for each significant component of cost that can be expected to require differing projection assumptions or methods (i.e., medical claims, prescription drug claims, administrative costs, etc). Separate analysis is limited by the availability and historical credibility of cost and enrollment data for each component of cost. This valuation reflects non-prescription claims separated by Medicare status, including eligibility for free Part A coverage. Prescription costs are analyzed separately as in prior valuations. Administrative costs are assumed in the final per capita claims cost rates used for valuation purposes, as described below. Analysis to date on Medicare Part A coverage is limited since Part A claim data is not available by individual, nor is this status incorporated into historical claim data.

Benefits

Medical, prescription drug, dental, vision and audio coverage is provided through the AlaskaCare Retiree Health Plan and is available to employees of the State and subdivisions who meet retirement criteria based on the retirement plan tier in effect at their date of hire. Health plan provisions do not vary by retirement tier or age, except for Medicare coordination for those Medicare-eligible. Dental, vision and audio claims (DVA) are excluded from data analyzed for this valuation because those are retiree-pay all benefits where rates are assumed to be self-supporting. Buck relies upon rates set by a third-party for the DVA benefits. Buck reviewed historical rate-setting information and views contribution rate adjustments made are not unreasonable.

Administration and Data Sources

The plan was administered by Wells Fargo Insurance Services (acquired by HealthSmart, in January 2012) from July 1, 2009 through December 31, 2013 and by Aetna effective January 1, 2014.

Claims incurred for the period from July 2017 through June 2019 (FY18 through FY19) were provided by the State of Alaska from reports extracted from their data warehouse, which separated claims by Medicare status. Monthly enrollment data for the same period was provided by Aetna.

Aetna also provided census information identifying Medicare Part B only participants. These participants are identified when hospital claims are denied by Medicare; Aetna then flags that participant as a Part B only participant. Buck added newly identified participants to our list of Medicare Part B only participants. Buck assumes that once identified as Part B only, that participant remains in that status until we are notified otherwise.

Aetna provided a snapshot file as of July 1, 2019 of retirees and dependents that included a coverage level indicator. The monthly enrollment data includes double coverage participants. These are participants whereby both the retiree and spouse are retirees from the State and both are reflected with Couple coverage in the enrollment. In this case, such a couple would show up as four members in the monthly enrollment (each would be both a retiree and a spouse). As a result, the snapshot census file was used to adjust the total member counts in the monthly enrollment reports to estimate that number of unique participants enrolled in coverage. Based on the snapshot files from the last two valuations, the total member count in the monthly enrollment reports needs to be reduced by approximately 13% to account for the number of participants with double coverage.

Aetna does not provide separate experience by Medicare status in standard reporting so the special reports mentioned above from the data warehouse were used this year to obtain that information and incorporate it into the per capita rate development for each year of experience (with corresponding weights applied in the final per capita cost).

Methodology

Buck projected historical claim data to FY20 for retirees using the following summarized steps:

- 1. Develop historical annual incurred claim cost rates an analysis of medical costs was completed based on claims information and enrollment data provided by the State of Alaska and Aetna for each year in the experience period of FY18 through FY19.
 - Costs for medical services and prescriptions were analyzed separately, and separate trend rates were developed to project expected future medical and prescription costs for the valuation year (e.g. from the experience period up through FY20).
 - Because the reports provided this year reflected incurred claims, no additional adjustment was needed to determine incurred claims to be used in the valuation.
 - An offset for costs expected to be reimbursed by Medicare was incorporated beginning at age 65. Alaska retirees who do not have 40 quarters of Medicare-covered compensation do not qualify for Medicare Part A coverage free of charge. This is a relatively small and closed group. Medicare was applied to State employment for all employees hired after March 31, 1986. For the "no-Part A" individuals who are required to enroll in Medicare Part B, the State is the primary payer for hospital bills and other Part A services. Claim experience is not available separately for participants with both Medicare Parts A and B and those with Part B only. For Medicare Part B only participants, a lower average claims cost was applied to retirees covered by both Medicare Part A and B vs. retirees covered only by Medicare Part B based upon manual rate models that estimate the Medicare covered proportion of medical costs. To the extent that no-Part A claims can be isolated and applied strictly to the appropriate closed group, actuarial accrued liability will be more accurate.

- Based on census data received from Aetna, less than 1% of the current retiree population was identified as having coverage only under Medicare Part B. We assume that 5% of actives hired before April 1, 1986 and current retirees who are not yet Medicare eligible will not be eligible for Medicare Part A.
- Based upon a reconciliation of valuation census data to the snapshot eligibility files provided by Aetna as of July 1, 2018, and July 1, 2019, Buck adjusted member counts used for duplicate records where participants have double coverage; i.e. primary coverage as a retiree and secondary coverage as the covered spouse of another retiree. This is to reflect the total cost per distinct individual/member which is then applied to distinct members in the valuation census.
- Buck understands that pharmacy claims reported do not reflect rebates. Based on actual pharmacy rebate information provided by Aetna for years through 2018 and Optum for January-June 2019, rebates were assumed to be 12% of prescription drug claims for FY18 and 17% of prescription drug claims for FY19.
- 2. Develop estimated EGWP reimbursements Segal provided estimated 2019 EGWP subsidies, developed with the assistance of OptumRx. These amounts are applicable only to Medicare-eligible participants.
- 3. Adjust for claim fluctuation, anomalous experience, etc. explicit adjustments are often made for anticipated large claims or other anomalous experience. Due to group size and demographics, we did not make any large claim adjustments. We do blend both Alaska plan-specific and national trend factors as described below. Buck compared data utilized to lag reports and quarterly plan experience presentations provided by the State and Aetna to assess accuracy and reasonableness of data.
- 4. Trend all data points to the projection period project prior years' experience forward to FY20 for retiree benefits on an incurred claim basis. Trend factors derived from historical Alaska-specific experience and national trend factors are shown in the table in item 5 below.
- 5. Apply credibility to prior experience adjust prior year's data by assigning weight to recent periods, as shown at the right of the table below. The Board approved a change in the weighting of experience periods beginning with the June 30, 2017 valuation as outlined below. Note also that we averaged projected plan costs using Alaska-specific trend factors and national trend factors, assigning 75% weight to Alaska-specific trends and 25% to national trends:

Alaska-Specific and National Average Weighted Trend from Experience Period to Valuation Year				
Experience Period	Medical	Prescription	Weighting Factors	
FY18 to FY19	6.2% Pre-Medicare / 4.0% Medicare	8.0%	50%	
FY19 to FY20	7.3% Pre-Medicare / 4.6% Medicare	1.2%	50%	

Trend assumptions used for rate development are assessed annually and as additional/improved reporting becomes available, we will incorporate into rate development as appropriate.

6. Develop separate administration costs – no adjustments were made for internal administrative costs. Third party retiree plan administration fees for FY20 are based upon total fees projected to 2020 by Segal based on actual FY19 fees. The annual per participant per year administrative cost rate for medical and prescription benefits is \$348.

Healthcare Reform

Healthcare Reform legislation passed on March 23, 2010 included several provisions with potential implications for the State of Alaska Retiree Health Plan liability. Buck evaluated the impact of the following provisions.

Because the State plan is retiree-only, and was in effect at the time the legislation was enacted, not all provisions of the health reform legislation apply to the State plan. Unlimited lifetime benefits and dependent coverage to age 26 are two of these provisions. We reviewed the impact of including these provisions, but there was no decision made to adopt them, and no requirement to do so.

Because Transitional Reinsurance fees are only in effect until 2016, we excluded these for valuation purposes.

The Further Consolidated Appropriations Act, 2020 passed in December 2019 repealed several healthcare-related taxes, including the Cadillac Tax. The valuation results included in the report reflect the repeal of this tax.

The Tax Cuts and Jobs Act passed in December 2017 included the elimination of the individual mandate penalty and changed the inflation measure for purposes of determining the limits for the High Cost Excise Tax to use chained CPI. It is our understanding the law does not directly impact other provisions of the ACA. While the nullification of the ACA's individual mandate penalty does not directly impact employer group health plans, it could contribute to the destabilization of the individual market and increase the number of uninsured. Such destabilization could translate to increased costs for employers. We have considered this when setting our healthcare cost trend assumptions and will continue to monitor this issue.

We have not identified any other specific provision of health care reform or its potential repeal that would be expected to have a significant impact on the measured obligation. We will continue to monitor legislative activity.

Data

In accordance with actuarial standards, we note the following specific data sources and steps taken to value retiree medical benefits:

The Division of Retirement and Benefits provided pension valuation census data, which for people currently in receipt of healthcare benefits was supplemented by coverage data from the healthcare claims administrator (Aetna).

Certain adjustments and assumptions were made to prepare the data for valuation:

- Some records provided on the Aetna data were associated with a participant social security number
 not listed on the RIN-to-SSN translation file. We reconciled those participants with the pension
 valuation data as either a surviving spouse or a retiree in the appropriate plan based on account
 structure information in the Aetna data.
- All records provided with retiree medical coverage on the Aetna data were included in this valuation and we relied on the Aetna data as the source of medical coverage for current retirees and their dependents.
- Some records in the Aetna data were duplicates due to the double coverage (i.e. coverage as a retiree
 and as a spouse of another retiree) allowed under the plan. Records were adjusted for these members
 so that each member was only valued once. Any additional value of the double coverage (due to
 coordination of benefits) is small and reflected in the per capita costs.
- Covered children included in the Aetna data were valued until age 23, unless disabled. We assumed that those dependents over 23 were only eligible and valued due to being disabled.
- For individuals included in the pension data expecting a future pension, we valued health benefits starting at the same point that the pension benefit is assumed to start.

We are not aware of any other data issues that would be expected to have a material impact on the results and there are no unresolved matters related to the data.

The chart below shows the basis of setting the per capita claims cost assumption, which includes both PERS and TRS.

	Medical		Prescription Drugs (Rx)					
	Pre	-Medicare		Medicare	P	re-Medicare		Medicare
A. Fiscal 2018								
1. Incurred Claims	\$ 22	28,572,782	\$	72,875,570	\$	65,406,973	\$ 1	78,763,430
2. Adjustments for Rx Rebates		<u>0</u>		<u>0</u>		(7,848,837)	1	(21,451,612 <u>)</u>
3. Net incurred claims	\$ 22	28,572,782	\$	72,875,570	\$	57,558,136	\$ 1	57,311,819
4. Average Enrollment		21,920		40,560		21,920		40,560
5. Claim Cost Rate (3) / (4)		10,428		1,797		2,626		3,878
6. Trend to Fiscal 2020		1.140		1.088		1.093		1.093
7. Fiscal 2020 Incurred Cost Rate (5) x (6)	\$	11,883	\$	1,955	\$	2,870	\$	4,239
B. Fiscal 2019								
1. Incurred Claims	\$ 23	30,731,518	\$	80,855,220	\$	63,846,605	\$ 1	83,281,273
2. Adjustments for Rx Rebates		<u>0</u>		<u>0</u>		(10,853,923)	1	31,157,816 <u>)</u>
3. Net incurred claims	\$ 23	30,731,518	\$	80,855,220	\$	52,992,682	\$ 1	52,123,456
4. Average Enrollment		20,625		42,843		20,625		42,843
5. Claim Cost Rate (3) / (4)		11,187		1,887		2,569		3,551
6. Trend to Fiscal 2020		1.073		1.046		1.012		1.012
7. Fiscal 2020 Incurred Cost Rate (5) x (6)	\$	12,003	\$	1,974	\$	2,600	\$	3,593
		Med	lica	I		Prescription	Dru	ıgs (Rx)
	Pre	-Medicare		Medicare	P	re-Medicare		Medicare
C. Incurred Cost Rate by Fiscal Year								
1. Fiscal 2018 A.(7)		11,883		1,955		2,870		4,239
2. Fiscal 2019 B.(7)		12,003		1,974		2,600		3,593
D. Weighting by Fiscal Year								
1. Fiscal 2018		50%		50%		50%		50%
2. Fiscal 2019		50%		50%		50%		50%
2.1130412013		3070		3070		3070		3070
E. Fiscal 2020 Incurred Cost Rate								
1. Rate at Average Age C x D	\$	11,943	\$	1,964	\$	2,735	\$	3,916
2. Average Aging Factor		0.826		1.256		0.838		1.119
3. Rate at Age 65 (1) / (2)	\$	14,464	\$	1,564	\$	3,263	\$	3,501
F. Development of Part A&B and Part B								
Only Cost from Pooled Rate Above								
Part A&B Average Enrollment				42,469				
Part B Only Average Enrollment				374				
3. Total Medicare Average Enrollment B(4)				42,843				
4. Cost ratio for those with Part B only to								
those with Parts A&B				3.180				
5. Factor to determine cost for those with								
Parts A&B				1.019				
$(2) / (3) \times (4) + (1) / (3) \times 1.00$				\downarrow				
Medicare per capita cost for all participants: E(3)			\$	1 564				
7. Cost for those eligible for Parts A&B: (6)	/ (5)	Ī	\$	1,564 1,534	Ī			
8. Cost for those eligible for Part B only: (7)			Ф \$	4,880				
o. Cost for those eligible for Part B Utily. (7)	^ (4)	Ĺ	φ	4,000	<u>l</u>			

Following the development of total projected costs, a distribution of per capita claims cost was developed. This was accomplished by allocating total projected costs to the population census used in the valuation. The allocation was done separately for each of prescription drugs and medical costs for the Medicare eligible and pre-Medicare populations. The allocation weights were developed using participant counts by age and assumed morbidity and aging factors. Results were tested for reasonableness based on historical trend and external benchmarks for costs paid by Medicare.

Below are the results of this analysis:

Distribution of Per Capita Claims Cost by Age for the Period July 1, 2019 through June 30, 2020

Age	Medical and Medicare Parts A & B	Medical and Medicare Part B Only	Prescription Drug	Medicare EGWP Subsidy
45	\$ 8,827	\$ 8,827	\$ 1,993	\$ 0
50	9,987	9,987	2,368	0
55	11,299	11,299	2,812	0
60	12,784	12,784	3,029	0
65	1,534	4,880	3,501	1,044
70	1,779	5,657	3,865	1,152
75	2,062	6,558	4,267	1,272
80	2,277	7,240	4,162	1,241

Section 4.3: Summary of Actuarial Assumptions

Investment Return/Discount Rate

4.75% per year, net of expenses.

Salary Scale

N/A

Inflation Rate

Total inflation as measured by the Consumer Price Index for urban and clerical workers for Anchorage is assumed to increase 2.50% annually.

Variable Benefit Increases

3.62% per year.

Mortality (Pre-Commencement)

N/A

Mortality (Post-Commencement)

Mortality rates based upon the 2013-2017 actual experience.

93% of male and 90% of female rates of RP-2014 white-collar healthy annuitant table, benefit-weighted, rolled back to 2006, and projected with MP-2017 generational improvement.

Turnover

N/A

Disability

N/A

Retirement

N/A

Marriage and Age Difference

Marriage status and age difference are based on the valuation data.

Third Party Administrator Fees

\$348 per person per year; assumed to increase at 4.5% per year.

Medicare Part B Only

N/A - All participants are eligible for Medicare Parts A and B.

Per Capita Claims Cost

Sample claims cost rates adjusted to age 65 for FY20 medical and prescription are shown below:

	Medical	Prescription Drugs
Pre-Medicare	\$ 14,464	\$ 3,263
Medicare Parts A & B	\$ 1,534	\$ 3,501
Medicare Part D	N/A	\$ 1,044

The EGWP subsidy is assumed to increase in future years by the trend rates shown below. No future legislative changes or other events are anticipated to impact the EGWP subsidy. If any legislative or other changes occur in the future that impact the EGWP subsidy (which could either increase or decrease the plan's Actuarial Accrued Liability), those changes will be evaluated and quantified when they occur.

Health Cost Trend

The table below shows the rate used to project the cost from the shown fiscal year to the next fiscal year. For example, 7.0% is applied to the FY20 pre-Medicare medical claims cost to get the FY21 medical claims cost.

	Medical Pre-65	Medical Post-65	Prescription Drugs / EGWP
FY20	7.0%	5.4%	8.0%
FY21	6.5%	5.4%	7.5%
FY22	6.3%	5.4%	7.1%
FY23	6.1%	5.4%	6.8%
FY24	5.9%	5.4%	6.4%
FY25	5.8%	5.4%	6.1%
FY26	5.6%	5.4%	5.7%
FY27-FY40	5.4%	5.4%	5.4%
FY41	5.3%	5.3%	5.3%
FY42	5.2%	5.2%	5.2%
FY43	5.1%	5.1%	5.1%
FY44	5.1%	5.1%	5.1%
FY45	5.0%	5.0%	5.0%
FY46	4.9%	4.9%	4.9%
FY47	4.8%	4.8%	4.8%
FY48	4.7%	4.7%	4.7%
FY49	4.6%	4.6%	4.6%
FY50+	4.5%	4.5%	4.5%

For the June 30, 2014 valuation and later, the updated Society of Actuaries' Healthcare Cost Trend Model is used to project medical and prescription drug costs. This model estimates trend amounts that are projected out for 80 years. The model has been populated with assumptions that are specific to the State of Alaska.

Aging Factors

Age	Medical	Prescription Drugs
0 - 44	2.0%	4.5%
45 – 54	2.5%	3.5%
55 - 64	2.5%	1.5%
65 - 74	3.0%	2.0%
75 – 84	2.0%	-0.5%
85 – 94	0.3%	-2.5%
95+	0.0%	0.0%

Medical Participation

Because medical benefits are provided at no cost to the retiree, 100% participation is assumed.

Changes in Assumptions Since the Prior Valuation

The last full experience analysis was performed for the period July 1, 2013 to June 30, 2017. That study did not include experience for EPORS. The new assumptions that were adopted for TRS were assumed to apply to EPORS and are reflected in the June 30, 2019 EPORS valuation. Based on recent experience, the healthcare cost trend assumptions that were updated for the PERS and TRS June 30, 2019 valuations were applied for the June 30, 2019 EPORS valuation. Healthcare claim costs are updated annually as described in Section 4.2.

Section 5: Actuarial Standard of Practice No. 51

Funding future retirement benefits prior to when those benefits become due involves assumptions regarding future economic and demographic experience. These assumptions are applied to calculate actuarial liabilities, current contribution requirements, and the funded status of the plan. However, to the extent future experience deviates from the assumptions used, variations will occur in these calculated values. These variations create risk to the plan. Understanding the risks to the funding of the plan is important.

A new Actuarial Standard of Practice (ASOP) has been adopted for measurements on or after November 1, 2018 - Actuarial Standard of Practice No. 51 ("ASOP 51")¹. ASOP 51 requires certain disclosures of potential risks to the plan and provides useful information for intended users of actuarial reports that determine plan contributions or evaluate the adequacy of specified contribution levels to support benefit provisions.

Under ASOP 51, risk is defined as the potential of actual future measurements deviating from expected future measurements resulting from actual future experience deviating from actuarially assumed experience.

It is important to note that not all risk is negative, but all risk should be understood and accepted based on knowledge, judgement and educated decisions. Future measurements may deviate in ways that produce positive or negative financial impacts to the plan.

In the actuary's professional judgment, the following risks may reasonably be anticipated to significantly affect the pension plan's future financial condition and contribution requirements. Due to pay-as-you-go funding of the plan, these risks are those that could cause future benefit payments to be different than expected.

- Longevity Risk potential that participants live longer than expected compared to the valuation mortality assumptions
- Benefit Increase Risk potential that future increases in variable benefits are different than what is assumed in the valuation

Pay-as-you-go funding may increase the solvency risk of the plan as there is not a protected fund from which to make benefit payments should the State become unable to make the payments.

The following information is provided to comply with ASOP 51 and furnish beneficial information on potential risks to the plan. **This list is not all-inclusive**; it is an attempt to identify the more significant risks and how those risks might affect the results shown in this report.

Note that ASOP 51 does not require the actuary to evaluate the ability or willingness of the plan sponsor to make contributions to the plan when due, or to assess the likelihood or consequences of potential future changes in law. In addition, this valuation report is not intended to provide investment advice or to provide guidance on the management or reduction of risk.

¹ ASOP 51 does not apply to the healthcare portion of the plan. Accordingly, all comments in this section relate to the pension portion of the plan.

Assessment of Risks

Longevity Risk

Plan costs will be increased as participants are expected to live longer.

- Benefits are paid over a longer lifetime when life expectancy is expected to increase. The longer duration of payments leads to higher liabilities.
- Health care has been improving, which affects the life expectancy of participants. As health care improves, leading to longer life expectancies, costs to the plan will increase.
- The mortality assumption for the plan mitigates this risk by assuming future improvement in mortality. However, any improvement in future mortality greater than that expected by the current mortality assumption would lead to increased costs for the plan.
- The Cost of Living Adjustment increases longevity risk because members who live longer than expected will incur more benefit payment increases than expected and therefore increase costs.

Benefit Increase Risk

Plan costs will be increased if the actual increases in variable benefits are greater than the 3.62% assumed in the valuation.

Glossary of Terms

Actuarial Accrued Liability

Total accumulated cost to fund pension or postemployment benefits arising from service in all prior years.

Actuarial Cost Method

Technique used to assign or allocate, in a systematic and consistent manner, the expected cost of a pension or postemployment plan for a group of plan members to the years of service that give rise to that cost.

Actuarial Present Value of Projected Benefits

Amount which, together with future interest, is expected to be sufficient to pay all future benefits.

Actuarial Valuation

Study of probable amounts of future pension or postemployment benefits and the necessary amount of contributions to fund those benefits.

Actuary

Person who performs mathematical calculations pertaining to pension and insurance benefits based on specific procedures and assumptions.

Normal Cost

That portion of the actuarial present value of benefits assigned to a particular year in respect to an individual participant or the plan as a whole.

Unfunded Actuarial Accrued Liability (UAAL)

The portion of the actuarial accrued liability not offset by plan assets.

Vested Benefits

Benefits which are unconditionally guaranteed regardless of employment.