State of Alaska

Elected Public Officers' Retirement System

Actuarial Valuation Report

As of June 30, 2021

March 2022

March 8, 2022

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, 2021 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, 2021. 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, 2021.

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 or 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 actuarial assumptions, changes 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 for the State's retirement systems 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 effective June 30, 2018 to better reflect expected future experience. The new assumptions from that experience study that apply to the Teachers' Retirement System were assumed to apply to EPORS. Based on our annual analysis of recent claims experience, changes were made to the per capita claim cost rates effective June 30, 2021 to better reflect expected future healthcare experience. A summary of the actuarial assumptions and methods used in this valuation is shown in Section 4. We certify that the assumptions and methods described in Section 4 of this report meet the requirements of all applicable Actuarial Standards of Practice.

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.

Use of Models

Actuarial Standard of Practice No. 56 (ASOP 56) provides guidance to actuaries when performing actuarial services with respect to designing, developing, selecting, modifying, using, reviewing, or evaluating models. Buck uses third-party software in the performance of annual actuarial valuations and projections. The model is intended to calculate the liabilities associated with the provisions of the plan using data and assumptions as of the measurement date under the funding methods specified in this report. The output from the third-party vendor software is used as input to internally developed models that apply applicable funding methods and policies to the derived liabilities and other inputs, such as plan assets and contributions, to generate many of the exhibits found in this report. Buck has an extensive review process in which the results of the liability calculations are checked using detailed sample life output, changes from year to year are summarized by source, and significant deviations from expectations are investigated. Other funding outputs and the internal models are similarly reviewed in detail and at a higher level for accuracy, reasonability, and consistency with prior results. Buck also reviews the third-party model when significant changes are made to the software. This review is performed by experts within Buck who are familiar with applicable funding methods, as well as the manner in which the model generates its output. If significant changes are made to the internal models, extra checking and review are completed. Significant changes to the internal models that are applicable to multiple clients are generally developed, checked, and reviewed by multiple experts within Buck who are familiar with the details of the required changes.

Additional models used in valuing health benefits are described later in the report.

COVID-19

The potential impact of the ongoing COVID-19 pandemic on costs and liabilities was considered and an adjustment was made in setting the medical per capita claims cost assumption. FY20 medical claims were adjusted for a COVID-19 related decline in claims during the last four months (March – June) of FY20. FY21 medical claims were adjusted for a COVID-19 related decline in those claims during the fiscal year. A more detailed explanation on these adjustments is shown in Section 4.2.

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,

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 hereby affirms his qualification to render opinions in such matters in accordance with the Qualification Standards of the American Academy of Actuaries.

Scott Young

Scott Young, FSA, EA, MAAA
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, 2021.

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 liabilities 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, 2021 and June 30, 2019 valuations are shown below.

Funded Status as of June 30	2019	2021
Pension		
a. Actuarial Accrued Liability	$ 15,951,624	$ 12,513,948
b. Valuation Assets	0	0
c. Unfunded Actuarial Accrued Liability, (a) – (b)	$ 15,951,624	$ 12,513,948
d. Funding Ratio, (b) ÷ (a)	0%	0%
Healthcare		
a. Actuarial Accrued Liability	$ 1,875,915	$ 1,499,487
b. Valuation Assets	0	0
c. Unfunded Actuarial Accrued Liability, (a) – (b)	$ 1,875,915	$ 1,499,487
d. Funding Ratio, (b) ÷ (a)	0%	0%
Total		
a. Actuarial Accrued Liability	$ 17,827,539	$ 14,013,435
b. Valuation Assets	0	0
c. Unfunded Actuarial Accrued Liability, (a) – (b)	$ 17,827,539	$ 14,013,435
d. Funding Ratio, (b) ÷ (a)	0%	0%
Total Contribution	**FY20**	**FY22**
Total		
a. Normal Cost	$ 0	$ 0
b. Past Service Cost	1,233,401	969,521
c. Actuarially Determined Contribution, (a) + (b)	$ 1,233,401	$ 969,521
d. Expected Annual Benefit Payments and Claims	$ 1,463,824	$ 1,230,279
e. Total Contribution [Greater of (c) and (d)]	$ 1,463,824	$ 1,230,279

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 $1,230,000 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.

Expected benefit payments exceed the past service cost for the upcoming year.

2. Demographic Experience (Pension)

Section 3 provides statistics on active and inactive participants. The number of active participants remained at zero as of June 30, 2021.

The number of retirees and beneficiaries decreased 10.3% from 29 to 26, and their average age increased from 80.20 to 81.23. The number of vested terminated participants remained at zero.

Actual increases in variable benefits and COLA were less than expected, which generated a gain of approximately $647,000. There was also a gain of approximately $1,045,000 due to demographic experience, primarily more deaths than expected.

3. Retiree Medical Experience

As described in Section 4.2, recent claims experience has been favorable, which created an actuarial gain of approximately $147,000. There was also a demographic experience (medical) loss of approximately $374,000, mostly due to the difference between actual and expected benefits. The net loss was approximately $227,000.

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 variable benefit increase assumption was changed from 3.62% to 3.00%, which is equal to the current inflation assumption of 2.50% plus 50 basis points. The net effect as of June 30, 2021 of the assumption change was a decrease in pension liabilities of approximately $649,000.

7. Changes in Benefit Provisions Since the Prior Valuation

Starting in 2022, prior authorization will be required for certain specialty medications for all participants. This change created an actuarial gain of approximately $15,000.

There have been no other changes in benefit provisions since the prior valuation.

Section 1: Actuarial Funding Results

Section 1.1 Actuarial Liabilities and Normal Cost

	Normal Cost	Actuarial Accrued Liability
Active Participants		
Retirement Benefits	$ 0	$ 0
Health Benefits	0	0
Subtotal	$ 0	$ 0
Retirees and Survivors		
Retirement Benefits		$ 12,513,948
Health Benefits		1,499,487
Subtotal		$ 14,013,435
Vested Terminations		
Retirement Benefits		$ 0
Health Benefits		0
Subtotal		$ 0
Total		$ 14,013,435

Section 1.2: Actuarial Contributions as of June 30, 2021

1.	Total Normal Cost	$ 0
2.	Actuarial Accrued Liability	14,013,435
3.	Valuation Assets	0
4.	Total Unfunded Actuarial Accrued Liability, (2) – (3)	$ 14,013,435
5.	Funded Ratio, (3) ÷ (2)	0.00%
6.	Past Service Cost Amortization Payment[1]	925,557
7.	Actuarially Determined Contribution at Beginning of Year, (1) + (6)	925,557
8.	Interest at 4.75%	43,964
9.	Actuarially Determined Contribution at End of Year, (7) + (8)	$ 969,521
10.	Expected Benefit Payments and Claims for the Upcoming Year	$ 1,230,279
11.	Total Contribution [Greater of (9) and (10)]	$ 1,230,279

[1] Calculated as a level dollar amount over a 25-year period as of June 30, 2021.

Section 1.3: Actuarial Gain/(Loss) for FY20 and FY21

		Pension	Healthcare	Total
1.	Expected Actuarial Accrued Liability			
	a. Actuarial Accrued Liability, June 30, 2019	$ 15,951,624	$ 1,875,915	$ 17,827,539
	b. Normal Cost for FY20	0	0	0
	c. Interest on (a) and (b) at 4.75%	757,702	89,106	846,808
	d. Actual Benefit Payments for FY20	1,305,289	387,129	1,692,418
	e. Interest on (d) at 4.75%, adjusted for timing	33,227	9,088	42,315
	f. Expected Actuarial Accrued Liability, June 30, 2020, (a) + (b) + (c) – (d) – (e)	$15,370,810	$ 1,568,804	$16,939,614
	g. Normal Cost for FY21	0	0	0
	h. Interest on (f) and (g) at 4.75%	730,113	74,518	804,631
	i. Actual Benefit Payments for FY21	1,213,984	347,916	1,561,900
	j. Interest on (i) at 4.75%, adjusted for timing	30,902	8,167	39,069
	k. Change in Actuarial Assumptions/Methods	(649,259)	0	(649,259)
	l. Change in actual increases versus expected increases in variable benefits and COLA	(647,489)	0	(647,489)
	m. Prior Authorization Plan Change	0	(14,928)	(14,928)
	n. Expected Actuarial Accrued Liability, June 30, 2021, (f) + (g) + (h) – (i) – (j) + (k) + (l) + (m)	$ 13,559,289	$ 1,272,311	$14,831,600
2.	Actual Actuarial Accrued Liability, June 30, 2021	12,513,948	1,499,487	14,013,435
3.	**Liability Gain/(Loss), (1)(n) – (2)**	**$ 1,045,341**	**$ (227,176)**	**$ 818,165**

Section 2: Cash Flows

Section 2.1: Estimated Cash Flows

Year Starting July 1	Estimated Annual Payments
2021	$ 1,230,279
2022	1,207,138
2023	1,181,470
2024	1,153,940
2025	1,124,931
2026	1,094,801
2027	1,063,883
2028	1,032,195
2029	999,524
2030	965,621
2031	930,336
2032	893,401
2033	854,660
2034	814,203
2035	772,009
2036	728,216
2037	683,472
2038	638,158
2039	592,509
2040	547,078
2041	502,106
2042	457,798
2043	414,711
2044	373,179
2045	333,485
2046	295,788
2047	260,189
2048	226,861
2049	195,948
2050	167,478
2051	141,562
2052	118,247
2053	97,455
2054	79,171
2055	63,316
2056	49,794

Section 3: Member Data

Section 3.1: Summary of Members Included

	June 30, 2019	June 30, 2021
Active Members		
1. Number	0	0
2. Average Age	0.00	0.00
3. Average Service Years	0.00	0.00
4. Average Annual Pay	$0	$0
Vested Terminated Members		
1. Number	0	0
2. Average Age	0.00	0.00
3. Average Service	0.00	0.00
Retirees and Beneficiaries		
1. Number	29	26
2. Average Age	80.20	81.23
3. Average Monthly Retirement Benefits	$3,837	$3,623

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.

d. 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.

Starting in 2022, prior authorization will be required for certain specialty medications for all participants. There is no change to the medications that are covered by the plan.

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

Starting in 2022, prior authorization will be required for certain specialty medications for all participants. There were no other changes in benefit provisions since the prior valuation.

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.

Changes in Methods Since the Prior Valuation

There were no changes in the asset or valuation methods since the prior valuation.

Valuation of Retiree Medical and Prescription Drug Benefits

This section outlines the detailed methodology used in the internal model developed by Buck to calculate the initial per capita claims cost rates for the Public Employees' Retirement System (PERS) and Teachers' Retirement System (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, 2020 to June 30, 2021.

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.

<u>Benefits</u>

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.

<u>Administration and Data Sources</u>

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 2019 through June 2021 (FY20 through FY21) 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, 2021 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 FY22 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 FY20 through FY21.
   - 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 FY22).
   - 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, 2020, and July 1, 2021, 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 Optum, rebates were assumed to be 19.5% of prescription drug claims for FY20, 16.2% of pre-Medicare, and 14.3% of Medicare prescription drug claims for FY21.

2. Develop estimated EGWP reimbursements – Segal provided estimated 2022 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. FY19 and FY20 experience were compared to assess the impact of COVID-19 and whether an adjustment to FY20 claims was indicated for use in the June 30, 2020 valuation. A material decrease in medical claims during March 2020 to June 2020 was experienced due to COVID-19. Therefore, an adjustment was made for those months to adjust for the decrease that is not expected to continue in future years. There was an observed spike in prescription drug claims in March 2020; however, the FY20 prescription drug experience appears reasonable to use without adjustment for COVID-19. To adjust for the decrease in medical claims due to COVID-19 during the last 4 months of FY20, the per capita cost during the first 8 months was used as the basis for estimating claims that would have occurred in the absence of COVID-19. FY21 experience was also thoroughly reviewed to assess the impact of COVID-19 and whether an adjustment to FY21 claims was appropriate for use in the June 30, 2021 valuation. FY21 medical per capita claims were noticeably lower than expected, so a 4% load was added to the FY21 medical claims used in the per capita claims cost development to better reflect future expected long-term costs of the plan. Total prescription drug claims experience for FY21 was reasonable and consistent with FY19 and FY20 experience. Therefore, no adjustment was made to FY21 prescription drug claims. Due to group size and demographics, we did not make any additional 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 FY22 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 for FY20 to FY21, medical and both years of prescription drugs 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. For FY21 to FY22 medical we applied 100% weight to national trends because the Alaska-specific trends were impacted by COVID-19:

Alaska-Specific and National Average Weighted Trend from Experience Period to Valuation Year

Experience Period	Medical	Prescription	Weighting Factors
FY20 to FY21	6.3% Pre-Medicare / 5.2% Medicare	7.6%	50%
FY21 to FY22	8.1% Pre-Medicare / 4.8% Medicare	8.0%	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. Starting in 2022, prior authorization will be required for certain specialty medications. There is no change to the medications that are covered by the plan. Segal provided an estimate of the impact of this change to the DB retiree health plan cost for calendar year 2022. The DB base claims costs for

pre-Medicare prescription drug, Medicare prescription drug, and EGWP were adjusted to reflect this change.

7. Develop separate administration costs – no adjustments were made for internal administrative costs. Third party retiree plan administration fees for FY22 are based upon total fees projected to 2022 by Segal based on actual FY21 fees. The annual per participant per year administrative cost rate for medical and prescription benefits is $493.

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 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:

- 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**	**Pre-Medicare**	**Medicare**
A. Fiscal 2020				
1. Incurred Claims	$ 229,531,664	$ 89,497,345	$ 64,442,660	$ 188,022,328
2. Adjustments for Rx Rebates	0	0	(12,566,319)	(36,664,354)
3. Net incurred claims	$ 229,531,664	$ 89,497,345	$ 51,876,341	$ 151,357,974
4. Average Enrollment	19,354	44,965	19,354	44,965
5. Claim Cost Rate (3) / (4)	11,860	1,990	2,680	3,366
6. Trend to Fiscal 2022	1.149	1.103	1.162	1.162
7. Fiscal 2022 Incurred Cost Rate (5) x (6)	$ 13,630	$ 2,195	$ 3,116	$ 3,912
B. Fiscal 2021				
1. Incurred Claims	$ 196,566,470	$ 86,512,435	$ 60,691,609	$ 207,822,858
2. Adjustments for Rx Rebates and COVID (Medical only)	7,862,659	3,460,497	(9,832,041)	(29,718,669)
3. Net incurred claims	$ 204,429,129	$ 89,972,933	$ 50,859,568	$ 178,104,189
4. Average Enrollment	18,106	47,025	18,106	47,025
5. Claim Cost Rate (3) / (4)	11,291	1,913	2,809	3,787
6. Trend to Fiscal 2022	1.081	1.048	1.080	1.080
7. Fiscal 2022 Incurred Cost Rate (5) x (6)	$ 12,205	$ 2,005	$ 3,034	$ 4,090

	Medical		Prescription Drugs (Rx)	
	Pre-Medicare	**Medicare**	**Pre-Medicare**	**Medicare**
C. Incurred Cost Rate by Fiscal Year				
1. Fiscal 2020 A.(7)	13,630	2,195	3,116	3,912
2. Fiscal 2021 B.(7)	12,205	2,005	3,034	4,090
D. Weighting by Fiscal Year				
1. Fiscal 2020	50%	50%	50%	50%
2. Fiscal 2021	50%	50%	50%	50%
E. Fiscal 2022 Incurred Cost Rate				
1. Rate at Average Age C x D	$ 12,918	$ 2,100	$ 3,075	$ 4,001
2. Average Aging Factor	0.822	1.271	0.832	1.124
3. Rate at Age 65 (1) / (2)	$ 15,708	$ 1,652	$ 3,695	$ 3,560
F. Development of Part A&B and Part B Only Cost from Pooled Rate Above				
1. Part A&B Average Enrollment		46,602		
2. Part B Only Average Enrollment		423		
3. Total Medicare Average Enrollment B(4)		47,025		
4. Cost ratio for those with Part B only to those with Parts A&B		3.300		
5. Factor to determine cost for those with Parts A&B (2) / (3) x (4) + (1) / (3) x 1.00		1.021		
6. Medicare per capita cost for all participants: E(3)		$ 1,652		
7. Cost for those eligible for Parts A&B: (6) / (5)		$ 1,619		
8. Cost for those eligible for Part B only: (7) x (4)		$ 5,341		

	Medical		Prescription Drugs (Rx)	
	Pre-Medicare	**Medicare**	**Pre-Medicare**	**Medicare**
1. Rate at Age 65	$ 15,708	$ 1,619	$ 3,695	$ 3,560
2. Adjustment factor for plan changes	1.39%	0.00%	-8.67%	-2.41%
3. Adjusted Rate at Age 65 (1) x [1 + (2)]	$ 15,926	$ 1,619	$ 3,375	$ 3,474

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, 2021 through June 30, 2022

Age	Medical and Medicare Parts A & B	Medical and Medicare Part B Only	Prescription Drug	Medicare EGWP Subsidy
45	$ 9,719	$ 9,719	$ 2,062	$ 0
50	10,996	10,996	2,449	0
55	12,441	12,441	2,908	0
60	14,076	14,076	3,133	0
65	1,619	5,341	3,474	1,131
70	1,877	6,192	3,836	1,249
75	2,176	7,178	4,235	1,379
80	2,402	7,925	4,130	1,345

Section 4.3: Summary of Actuarial Assumptions

Investment Return/Discount Rate

4.75% per year, net of investment 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% per year.

Mortality (Pre-Commencement)

N/A

Mortality (Post-Commencement)

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.

Per Capita Claims Cost

Sample claims cost rates adjusted to age 65 for FY22 medical and prescription are shown below. The prescription drug costs reflect the plan change to require prior authorization for certain specialty medication.

	Medical	Prescription Drugs
Pre-Medicare	$ 15,926	$ 3,375
Medicare Parts A & B	$ 1,619	$ 3,474
Medicare Part D	N/A	$ 1,131

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.

Third Party Administrator Fees

$493 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.

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, 6.3% is applied to the FY21 pre-Medicare medical claims cost to get the FY22 medical claims cost.

	Medical Pre-65	Medical Post-65	Prescription Drugs / EGWP
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

Healthcare claim costs are updated annually as described in Section 4.2. The variable benefit increase assumption was changed from 3.62% to 3.00%, which is equal to the current inflation assumption of 2.50% plus 50 basis points.

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.

Actuarial Standard of Practice No. 51 (ASOP 51)[1] 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% increases 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.