ALASKA RETIREMENT MANAGEMENT BOARD

SEPT
13, 2023

ACTUARIAL COMMITTEE

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD

ACTUARIAL COMMITTEE MEETING

September 13, 2023 – 9:15 a.m.

Location:	Atwood Conference Center Rooms 102/104 550 West 7th Ave., Anchorage, AK	**Teleconference:**	**Call-In #:** 1-907-202-7104 **Code:** 236 295 83#

I. Call to Order

II. Roll Call

III. Public Meeting Notice

IV. A. Approval of Agenda
B. Approval of Minutes – June 14, 2023

V. Public / Member Participation, Communications and Appearances
*(Three Minute Limit. Callers may need to select *6 to unmute.)*

VI. Actuarial Review & Certification and Acceptance of FY2022 Valuations and Reports

A. Introduction
Sandra Ryan, Chair

B. Update on JRS June 30, 2022 Valuation
David Kershner, Principal, Consulting Actuary, Buck

C. Actuarial Review of JRS/NGNMRS
Paul Wood, Actuary, Senior Consultant & Team Leader, GRS
Bill Detweiler, Consultant, GRS

D. Action Items
Sandra Ryan, Chair

1. Committee Recommendation of Board Acceptance of GRS Certification for FY22 NGNMRS and JRS Valuations

2. Committee Recommendation of Board Acceptance of Buck Valuations for FY22 NGNMRS and JRS Valuations

VII. FY2025 Contribution Rate Setting

A. Discussion of FY2025 PERS/TRS/JRS Additional State Contributions
Kevin Worley, Chief Financial Officer, Division of Retirement & Benefits
David Kershner, Principal, Consulting Actuary, Buck

B. FY2025 Contribution Review

1. Employer Contribution Rates/Amount
   Action: Resolution 2023-05 – FY25 PERS Contribution Rate
   Action: Resolution 2023-06 – FY25 PERS RMMI Contribution Rate
   Action: Resolution 2023-07 – FY25 PERS ODD Contribution Rate
   Action: Resolution 2023-08 – FY25 TRS Contribution Rate
   Action: Resolution 2023-09 – FY25 TRS RMMI Contribution Rate
   Action: Resolution 2023-10 – FY25 TRS ODD Contribution Rate
   Action: Resolution 2023-11 – FY25 NGNMRS Contribution Amount

2. JRS Contribution (Informational)

VIII. Discussion of FY2024 Valuation Timeline

Kevin Worley, Chief Financial Officer, Division of Retirement & Benefits
David Kershner, Principal, Consulting Actuary, Buck
Bob Besenhofer, Director, Health Actuary, Buck
Paul Wood, Actuary, Senior Consultant & Team Leader, GRS
Bill Detweiler, Consultant, GRS

IX. Future Meetings

A. Calendar Review
B. Agenda Items
C. Requests / Follow-Ups

X. Other Matters to Properly Come Before the Committee

XI. Public / Members Comments

XII. Adjournment

ALASKA RETIREMENT MANAGEMENT BOARD
ACTUARIAL COMMITTEE MEETING
HYBRID/TEAMS

June 14, 2023
1:30 p.m.

Originating at:
Robert B. Atwood Building
550 West 7th Avenue, Rooms 102/104
Anchorage, Alaska 99501

Trustees Present:
Sandra Ryan, Chair
Donald Krohn
Lorne Bretz
Adam Crum
Bob Williams
Dennis Moen
Michael Williams
Commissioner Paula Vrana

Department of Revenue Staff Present:
Zachary Hanna, Chief Investment Officer
Shane Carson, State Investment Officer
Hunter Romberg, Senior Compliance Officer
Grant Ficek, Business Analyst
Alysia Jones, Board Liaison
Robert Vicario, Administrative Assistant II
Ryan Williams, Debt Manager/AMBBA Executive Director
Pamela Leary, Director, Treasury Division
Ryan Kauzlarich, Assistant Comptroller
Scott Jones, Head of Investment Operation Performance & Analytics
Chris Madsen, Administrative Operations Manager

Department of Law Staff Present:
Ben Hofmeister, Assistant Attorney General

Investment Advisory Council Present:
Ruth Traylor
Dr. William Jennings

Department of Administration – Division of Retirement & Benefits Staff Present:
Ajay Desai, Director, DRB
Mindy Voigt, Assistant Chief Pension Officer
Roberto Aceveda, Counseling & Education Manager
Kevin Worley, Chief Financial Officer
Brandon Roomsburg, Retirement & Benefits Specialist

Department of Administration Staff Present:
Deputy Commissioner Dave Donley

Guests/Presenters:
David Kershner, Principal, Consulting Actuary, Buck
Paul Wood, Actuary, Senior Consultant & Team Leader, GRS
Bill Detweiler, Consultant, GRS

Public:
Randall Bruns, RPEA

PROCEEDINGS

CALL TO ORDER
CHAIR BOB WILLIAMS called the Actuarial Committee meeting to order and asked for a roll call.

MS. JONES called the roll.

PUBLIC METING NOTICE
CHAIR BOB WILLIAMS asked to confirm that the public meeting notice was met.

MS. JONES replied, yes, it had.

CHAIR BOB WILLIAMS stated that he would read a letter of appreciation into the record at the board meeting thanking Trustee Hippler for chairing the Actuarial Committee for a good length of time. He continued that there was an opening for actuarial chair, and formally designated Trustee Ryan. With that, she could take over chairing the meeting.

APPROVE THE AGENDA
CHAIR RYAN thanked Chair Williams, and asked for a motion to approve the agenda.

> **MOTION:** A motion to approve the agenda was made by TRUSTEE MIKE WILLIAMS; seconded by TRUSTEE KROHN.
>
> *There being no objections, the MOTION was APPROVED.*

APPROVAL OF MINUTES
CHAIR RYAN moved to the minutes of March 15, 2023, and entertained a motion.

> **MOTION:** A motion to accept the minutes of March 15, 2023, was made by TRUSTEE MIKE WILLIAMS; seconded by TRUSTEE BOB WILLIAMS.

CHAIR RYAN asked for any corrections or amendments to the minutes as presented.

> *There being no objections, the MOTION was APPROVED.*

PUBLIC/MEMBER PARTICIPATION, COMMUNICATIONS AND APPEARANCES
CHAIR RYAN asked if there was any public member participation at this time, if anyone wished to speak. She asked Ms. Jones if anyone indicated a desire to present.

MS. JONES replied, no.

ACTUARIAL REVIEW & CERTIFICATION AND ACCEPTANCE OF FY2022 VALUATIONS AND REPORTS
CHAIR RYAN stated that annually in June there is the opportunity to look at the actuarial review and certification acceptance of the year's valuations and reports. She asked for a Buck representative to present.

CFO WORLEY introduced David Kershner, the principal and lead on the actuarial reports for

PERS, TRS, defined benefit, as well as the defined contribution retirement systems. He stated that Mr. Kershner would go over a summary of changes that were requested by the committee in March regarding the summary totals, as well as the PERS and TRS projection additions that were included at this time. He welcomed David Kershner.

EXPLANATION OF PERS & TRS PROJECTIONS

MR. KERSHNER stated that they had prepared and provided the draft reports for PERS and TRS in March, for the defined benefit, DB, and the defined contribution, DCR, plans. At that meeting, they were asked to make several changes to those reports; primarily removing all of the totals. In the DB reports, they calculated separately, per statutes, the contributions for pension and contributions for healthcare. Then, for illustration purposes, everything was added together. He explained that those totals appeared throughout the report, and there were a lot of changes. He continued that most of the changes for PERS and TRS DB were similar, and also for the two DCR plans. He added that most of the changes were related to elimination of all the totals from exhibits, tables, charts, and graphs. DRB staff also requested the addition of a section at the end for historical information. That came from the GFOA (Government Finance Officers Association) recommended changes which related more to financial statement information and accounting information, as opposed to funding. He continued that the old GASB statements were amended back in 2014, 2015 to the current GASB statements for the pension. When those changes came out, a lot of that historical information was eliminated, around 2017, 2018. GFOA suggested continuing to show those even though they were in those old statements. He stated that the historical information section was added at the end. The last change was the PERS and TRS projections found in Section 3 of the DB reports. A second set of projections were added to the one from March. He stated that the statutes were rewritten in 2014, and they required that the unfunded liability be amortized over a fixed 25-year period, using level of percentage of pay amortization. The \ 2018 experience study, which was finalized in 2019, had layered amortization instead of amortizing the entire unfunded liability over that closed period, which decreased by one every year. They kept the period for each layer at 25 years, to be consistent with the statutes. He noted that there were some pending legislative bills to reopen DB plans. The DB plans were closed to new entrants in 2006, and all new entrants after 2006 go into the DCR plans. In looking beyond FY39, the path toward the ending of the plans would be a lot closer to the ending horizon, and it may be desirable to shorten the amortization period to recognize that fact, if the DB plans were not reopened. A second set of projections were provided, which he explained. He continued that the impact was bigger for PERS than for TRS: One reason was because the additional State contributions were generally paid at the beginning of the year, and they get a full year of interest credited to them. The additional State contributions were a bigger percentage of the total in TRS than for PERS because the employer contribution limit was much lower in TRS. He stated that alternative amortization period was strictly for projection purposes. It did not impact the calculation of contribution rates in the near term because the statutes require 25 years. He added that this was strictly for projection illustration purposes that were included in the valuation reports. He added to keep in mind the proposed bills to reopen the defined benefit plans. If passed, this would be a moot issue.

ACTUARIAL REVIEW

CHAIR RYAN asked for an introduction for GRS.

DIRECTOR LEARY stated that Paul Wood and Bill Detweiler from Gabriel, Roeder, Smith would present some of the actuarial review findings that they had.

MR. WOOD thanked all and stated that it was great to be back in Anchorage. He continued that there were two presentations: the first was a quick review of what was talked about in March, the result of the review for PERS and TRS and the second was test life results for the JRS plan.

MR. DETWEILER stated that a few items were identified when looking at the PERS and TRS test lives, and they did match all of the test lives closely. The overall result was that the findings were immaterial, according to their standards of practice. The belief is that these findings could be implemented in the June 30th, 2023, valuations. He explained the five findings. He added that the recommendation was to implement the findings, as well as a few other small comments for their report to improve communications and disclosures. He believed that they were implemented in the final reports that Buck would be presenting. He moved on to the summary of their matching on the test lives that were sent for JRS about a month ago. The numbers all matched very closely, well under 1 percent. He stated that they had no findings. They were comfortable with all the calculations and how closely they were matched on the JRS plan. When this presentation was sent, the National Guard test lives and any information had not been received. He noted that the information had been received and the review of the National Guard test lives had started. He continued that they would issue the combined JRS, National Guard review report that GRS puts together every other year when these valuations are done for the committee to review at their September meeting.

MR. WOOD was asked to opine on the 15-year versus 25-year amortization. In looking at the results, when the layered amortization period was changed, there was a slight, small technical loss generated a long time out. He stated that there would be more contribution volatility if there was a shorter amortization period. Longer amortization period takes a bit of that out. He explained more fully, and encouraged looking at some additional analysis and really considering what the population looks like at that time. He continued that an actual big gain or loss could be generated. If there was a big loss generated over a 10-year period, it would make you pay it off faster and therefore increase the contribution quicker. A longer period would be the opposite of that. He added that the shorter the period, the more volatility. At that point, there may be the need to take on that type of volatility because a lot of the liabilities were being paid out in a very short period of time. There is a real need to get an idea of the actual difference in that contribution volatility between those two.

CIO HANNA stated that they had talked about asset allocation from a timeframe perspective for the investment of the assets. The weighted average life of the benefit stream was calculated. That was done on a nominal and a real basis. On a nominal basis it was 25 years. Fast-forward about 20 years into the future and it would be down to about 15 years. He explained that unifying the thinking for both the assets and the liabilities could be done, if desired. He continued that changing statute is always a challenge. It is easier on the asset side than on the liability side.

UPDATE ON NATIONAL GUARD AND JRS VALUATIONS

CFO WORLEY stated that David Kershner would give an update on the National Guard and valuation. He continued that they had talked about some of the data collection issues with the National Guard, and they were also experiencing that with the Air Guard this year. He explained that someone new came in who was not able to pull the data. He reached out monthly for a few months; and then every other week for another few months. The ’21 data was received, and

gladly accepted. He rolled it forward an additional year to make it '22. Those results would be presented with his update for the National Guard. JRS was presented in March, and this would be the final update.

MR. KERSHNER stated that the valuation results for JRS were provided in March, but we did not have the draft report. That report is in the packet for this meeting. He continued that all the totals were removed, the same as was done for PERS and TRS; and the National Guard valuation results are being presented for the first time. He added that there had been some historical issues collecting data for the National Guard. In 2018, it was discovered that people were still being valued that had already been paid out in a lump sum. There was a significant number of people that were still being reported as active or deferred vested that, in fact, had been paid out. When those were removed in 2018, there was a significant drop in the liability, which is why the National Guard plan is now overfunded. The liability, after 2018 had over a $10 million decrease. He continued that the data received for the Air Guard group is about half of the National Guard group, not a small group. The data that was reported to DRB and passed along was actually as of 6/30/21, not 6/30/22. There were three options, and we had to make a decision. They could have gone back to the Air Guard and asked for the data as of 6/30/22, which was a bad option because we had waited so long, which is why the results did not happen in March. Option 2 was to do another roll-forward valuation, which would have been less than ideal because a roll-forward valuation had just been done. That would have been ignoring the 6/30/22 data received for the other groups. Option 3, which was what was settled on, was to accept the data provided as of 6/30/21 and just assume that data was as of 6/30/22. The assumption that everyone who was active for the Air Guard group as of 6/30/21 was active as of 6/30/22; and everyone retired as of 6/30/21 were assumed to be retired as of 6/30/22. He added that because of the overfunded status of the National Guard plan, there was no way that the simplification would cause a material impact of the overall results. The actuarially determined contribution, with or without the simplification, would still result in a zero contribution. He explained that if they waited and received all the actual data, it would still be overfunded with a contribution of zero. That is why it was concluded that there would not have been a material impact. He went through the National Guard results.

TRUSTEE BOB WILLIAMS stated that he was uncomfortable with this situation. He asked if there was anything changing to ensure getting the data next year or the year after. The second question was if they had the exact data, how confident that it will be within a range.

MR. KERSHNER went through the numbers and noted that he had a range to work with. Even if it were on the high side of that range, there would still be a contribution of zero, and will still be well overfunded. That was why they concluded the simplifications for some data points. To make an oversimplification for too large of a group could materially impact the valuation results if the assumption was off the reality. Judgment is always used when the data is less than perfect. The final column was the effect on liabilities for the assumption changes and were the valuation results for National Guard.

CHAIR RYAN asked how many members were they talking about, and what was changed annually between the members, approximately.

MR. KERSHNER replied that in the Air Guard they only had the split on the active side and did not have the inactives. There were a total 3900 actives; and 2300, a little over half, are Air

Guard. In 2020, Air Guard was a little over 2200; and the total was a little over 3900. It was relatively stable.

ACTION ITEMS

CHAIR RYAN stated that there were a couple of action items next on the agenda. The first one was the committee recommendation to the Board for acceptance of GRS.

> **MOTION:** The Actuarial Committee recommends that the Alaska Retirement Management Board accepts the review and the certification of Fiscal Year 2022 Actuarial Report by GRS. The motion was made by TRUSTEE KROHN; seconded by TRUSTEE WILLIAMS.
>
> *After the roll-call vote, the MOTION was APPROVED. (Trustee Bretz, yes; Trustee Krohn, yes; Commissioner Crum, yes; Trustee Moen, yes; Trustee Bob Williams, yes; Trustee Michael Williams, yes; Commissioner Vrana, no response; Chair Ryan, yes.)*

CHAIR RYAN stated that the second one was the Actuarial Committee's acceptance of actuarial valuation reports for PERS, TRS, DB, and DCR.

> **MOTION:** The Actuarial Committee recommends that the Alaska Retirement Management Board accepts the actuarial valuation reports prepared by Buck for the public employees, teachers, public employees defined contribution, for occupational death and disability, and retired medical benefits, and the teachers' defined contribution for occupational death and disability and retired medical benefits, the retirement system as of June 30th, 2022. The motion was made by TRUSTEE MICHAEL WILLIAMS; seconded by TRUSTEE BOB WILLIAMS.
>
> *After the roll-call vote, the MOTION was APPROVED. (Trustee Michael Williams, yes; Trustee Moen, yes; Trustee Krohn, yes; Trustee Bretz, yes; Commissioner Vrana, no response; Commissioner Crum, yes; Trustee Bob Williams, yes; Chair Ryan, yes.)*

REPLICATION AUDIT

CHAIR RYAN stated next on the agenda was the replication audit, and she recognized Mr. Wood and company.

MR. WOOD recalled that last year they did the full replication audit of the June 30, 2021, valuation, which was based on the old assumptions. Part of the work they committed to as far as scope, was to redo that full replication audit on the new assumptions. He stated that this was done for a couple of reasons: First, they did not want to wait another four years to see if those assumptions were implemented properly and wanted to get that out of the way early. It would also help them choose test lives going forward. He continued that Buck provided a list of every single individual that they value, and now we have a set of individuals that they valued. They could also see what the differences were and narrow in on exactly what was being valued. He asked Mr. Detweiler to continue.

MR. DETWEILER stated that the plans that they did a full replication for were PERS and TRS DB and DCR plans, as well as the JRS DB plan. The National Guard would be completed after

looking at the test lives over the next month or so. He reminded all that the review that is done every year only looked at a sample of test lives. It handpicked a few individuals and also looked at people with different characteristics to try and reach different aspects of the plan. The full replication looked at everyone, and we were valuing liability for every single person and then aggregating all those liabilities, just like Buck does every year. He continued that they looked at the present value, future benefits, which were all projected cash flows discounted back to today, as well as the actual or accrued liability, which was the portion of the PVB (present value of benefits) that had been accrued so far. They also looked at the normal costs. The most important number was the actuarially determined employer contribution that was recommended to be put into the plan. He reminded all that actuarial science was not necessarily black and white. What is important is that the results that any actuarial firm came up with was considered reasonable according to the actuarial standards of practice that actuaries were required to follow. He added that, overall, the bottom-line number, which is what was cared about most, had gotten a valuation with all the same inputs. They would have said $539 million was the recommended contribution, where Buck had $537 million. That would be considered to be very close for such a large plan as this.

MR. WOOD stated that they had different valuation systems, as well, and this particular replication was done with the same system called ProVal. They also had a proprietary system that was used for other clients that would calculate normal costs differently. He continued that there were a lot of nuances, and there may be some differences on an individual basis; but in the aggregate, it may round up sometimes and round down other times. It will all work itself out in the end.

MR. DETWEILER continued through his presentation and compared the liability numbers on the different slides. He stated that this was considered to be a highly successful replication, and it gave GRS confidence and comfort that the calculations and the methodologies Buck was using were good, which should also give the Board that same comfort and confidence. He added that in their review next year, when they decide which test lives to pull, they would look at the people in the far ranges out there. He stated that, in conclusion, they had completed the test life review this year for every plan except the National Guard. This full replication was done to give more confidence and to help pick better test lives in future years going forward. He added that they were comfortable with all of Buck's results this year, and they were accurately portraying the actuarial status of the systems included in those contribution rates.

CHAIR RYAN thanked them and asked for any questions. She moved to the committee self-assessment.

COMMITTEE PERFORMANCE – SELF ASSESSMENT

CHAIR RYAN looked at the questions and reviewed the charter. She asked that they look at the calendar and if there was something that needed to be moved around for various reasons, to let her know. She asked for any requests for follow-up. She asked for anything else to look at in a future meeting, and then asked for any other matters to come before this committee. She asked for any public comments and any member comments. There being nothing further, she adjourned the meeting.

(The Actuarial Committee meeting adjourned at 2:38 p.m.)

BUCK
A Gallagher Company

State of Alaska Retirement Systems

Presentation to ARMB Actuarial Committee

Updated JRS June 30, 2022 Valuation Results

September 13, 2023

Updated JRS June 30, 2022 Valuation Results
($000's)

	Original	Updated
Salary Increase Assumption	0% thru FY24, 3% thereafter	5% for FY23, 3% thereafter
Pension Benefit Increase Assumption	0% thru FY24, 3% thereafter	5% for FY23, 3% thereafter
Actuarial Accrued Liability / Funded Ratio		
- Pension	$ 211,705 / 109.0%	$ 227,228 / 101.6%
- Healthcare	$ 18,036 / 226.5%	$ 17,864 / 228.7%
FY25 Contribution Rate – Pension		
- Employer Normal Cost Rate	33.59%	35.32%
- Past Service Rate	10.62%	17.17%
- Total Rate	44.21%	52.49%
FY25 Contribution Rate – Healthcare	7.32%	6.75%

Note: Although healthcare benefits are not tied to salaries, the allocation of liabilities to past and future periods under the Entry Age Normal actuarial cost method changes when the salary assumption changes. The healthcare contribution rate is Normal Cost only since the healthcare total unfunded liability amortization amount is negative in both cases. Funded ratio is based on the Actuarial Value of Assets.

Actuarial Certification

The purpose of this presentation is to provide the ARMB Actuarial Committee with updated JRS June 30, 2022 valuation results due to changes in the salary and pension benefit increase assumptions that were requested by the plan sponsor. All calculations are based on the data, assumptions, methods, and plan provisions described in the updated JRS June 30, 2022 actuarial valuation report dated August 15, 2023.

Please see the updated JRS June 30, 2022 actuarial valuation report for a detailed description of (i) Buck's valuation models (ASOP 56), (ii) risk factors related to future funding of the plan (ASOP 51), and (iii) the assumption-setting process (ASOP 27 and ASOP 35).

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.

The results were prepared under the direction of David Kershner and Bob Besenhofer, both of whom meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. These results have been prepared in accordance with all applicable Actuarial Standards of Practice.

David Kershner
FSA, EA, MAAA, FCA
Principal, Retirement

Robert Besenhofer
ASA, MAAA, FCA
Director, Health

Alaska Retirement Management Board

Actuarial Review of the Judicial Retirement System Pension and Health Plans

Actuarial Review of the National Guard and Naval Militia Retirement System Pension Plan

August 25, 2023

P: 720.274.7270 | www.grsconsulting.com

August 25, 2023

Mr. Zach Hanna
Chief Investment Officer
Department of Revenue, Treasury Division
Alaska Retirement Management Board
P.O. Box 110405
Juneau, AK 99811-0405

Subject: **Actuarial Review of June 30, 2022 valuations for the State of Alaska Judicial Retirement System (JRS) and National Guard and Naval Militia Retirement System (NGNMRS)**

Dear Zach:

We have performed an actuarial review of the June 30, 2022 Actuarial Valuations for JRS and NGNMRS.

This report includes a review of:

- Pension Assumptions and Benefits
- Actuarial Valuation Methods and Procedures
- Contribution Rate Determination
- Actuarial Valuation Report
- Potential Areas for Future Review

This report should be considered supplemental to the Actuarial Review of Pension and Post-Employment Healthcare Plans for PERS and TRS dated March 7, 2023. Only items unique to these plans were reviewed and discussed in this report.

A major part of our review is a thorough analysis of the test lives provided by Buck. We have included exhibits in our report that summarize the detailed analysis of these sample test cases for JRS and NGNMRS, as well as a comparison of the results between Buck and GRS. We wish to thank the staff of the State of Alaska Treasury Division and Buck, without whose willing cooperation this review could not have been completed.

Sincerely,

Gabriel, Roeder, Smith & Company

Paul Wood, ASA, FCA, MAAA
Senior Consultant

Bill Detweiler, ASA, EA, FCA, MAAA
Consultant

cc: Ms. Pamela Leary
Ms. Alysia Jones

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SECTION 1

EXECUTIVE SUMMARY

Executive Summary

Gabriel, Roeder, Smith & Co. was engaged by the Alaska Retirement Management Board (ARMB) to review the June 30, 2022 Actuarial Valuations of the State of Alaska Judicial Retirement System (JRS) and the National Guard and Naval Militia Retirement System (NGNMRS).

This report presents our findings in the following areas:

- General Approach
- Review of Assumptions
- Review of Actuarial Valuation Methods and Procedures (including the test lives review)
- Review of Contribution Rate Determination
- Review of Actuarial Valuation Report
- Potential Areas for Future Review
- Summary and Conclusions

In general, we found that the Buck's actuarial results and reports were reasonable and find the assumptions consistent with generally accepted actuarial practice.

Monthly conference calls conducted between Buck and GRS were made this year and contributed greatly to resolving issues more quickly and thoroughly. Those issues, even if resolved, are highlighted in this report.

Key Findings From The Audit Of The June 30, 2022 Valuations

- We recommend Buck continue to carefully monitor the newly adopted assumptions going forward to determine if they are working as intended.
- We recommend Buck review with the Board whether to implement a new entrant assumption for the JRS plan.
- We recommend Buck continue to disclose the nature and impact of all programming changes included in the valuation.
- We recommend consideration of a longer period over which to amortize the NGNMRS surpluses. This could help manage rate volatility, which could be especially useful in a plan exhibiting data quality and volatility issues.

Buck's Implementation of Recommendations From prior Review Report

As part of the June 30, 2020 actuarial review, we made some recommendations that were implemented by Buck in the June 30, 2022 valuation. These recommendations included the following:

- We recommend Buck clarify and disclose the actuarial assumptions used for JRS ERFs in the appropriate section of the JRS report.

- Buck is currently assuming the death benefit for NGNMRS retirees is being valued using a $1,200 annual benefit for everyone, including those who have an annual benefit amount other than the standard $1,200, such as the test life we received. We provided this finding to Buck and they agreed it should be updated.

Summary Of Test Life Review

We have included as a part of this report a detailed test life results summary.

- We matched the present value of benefits closely in total on all test lives submitted. We have included exhibits in Section 6 of the report that summarize the differences in calculations by decrement for the test lives analyzed. Differences between actuarial firms will always occur due to system differences and other nuances in the calculations.

- We discovered an inconsistency in how Buck was applying salary and benefit increases for revised results with a new assumption. Buck updated these revised results and provided us with additional detail showing the salary and benefit increases are now being applied consistently.

SECTION 2

GENERAL APPROACH

General Approach

Gabriel, Roeder, Smith & Co. was charged with reviewing the actuarial assumptions of the pension actuarial valuations of JRS and NGNMRS and the health care actuarial valuation of JRS.

We requested a number of items from Buck Consultants in order to perform the actuarial review and health cost assumption review:

1. We received the initial draft report for JRS in April of 2023, and subsequent revised reports in July and August of 2023. We received the initial test lives in April of 2023 for pension and retiree health, and subsequent revised test lives in August of 2023.
2. We received the draft report for NGNMRS in May of 2023. We received the pension test lives in May of 2023.
3. Monthly conference calls between Buck and GRS occurred, with the agenda items including timing of deliverables and the discussion of audit matters.

In performing our review, we:

4. Reviewed actuarial assumptions – we checked to see if they were consistent, comprehensive, and appeared reasonable.
5. Reviewed the actuarial valuation reports as of June 30, 2022, for completeness and a review of financial determinations.
6. Reviewed, in detail, the sample members provided us – This provided us with a perspective on the actuarial process utilized by Buck with respect to the plan and allowed us to review the valuation methods and procedures.
7. Reviewed the health care plan cost assumptions and trend for JRS.

KEY ACTUARIAL CONCEPTS

An actuarial valuation is a detailed statistical simulation of the future operation of a retirement system using the set of actuarial assumptions adopted by the Board. It is designed to simulate all of the dynamics of such a system for each current system member including:

1. Earning future service and making contributions,
2. Receiving changes in compensation,
3. Leaving the system through job change, disablement, death, or retirement, and
4. Determination of and payment of benefits from the System.

This simulated dynamic is applied to each active member of the System. It results in a set of expected future benefit payments to that member. Bringing those expected payments to present value, at the assumed rate of investment return, produces the Actuarial Present Value (“APV”) of future benefits for that member. In like manner, an APV of future salaries is determined.

The actuarial present value of future benefits and the actuarial present value of future salaries for the entire System are the total of these values across all members. The remainder of the actuarial valuation process depends upon these building blocks.

Once the basic results are derived, an actuarial method is applied in order to develop information on contribution levels and funding status. An actuarial method splits the APV of future benefits into two components:

1. Present Value of Future Normal Costs, and
2. Actuarial Accrued Liability ("AAL")

The actuarial method in use by the State of Alaska is known as the Entry Age Normal (EAN) method. Under entry age normal funding method, the Normal Cost for a member is that portion of the Actuarial Present Value of the increase in the value of that member's benefit for service during the upcoming year. The actuarial accrued liability is the difference between the total actuarial present value and the present value of all future normal costs.

For JRS and NGNMRS, the present value of future benefits applies to the following benefits:

- Retirement benefits
- Withdrawal benefits
- Disability benefits
- Death benefits
- Return of contributions
- Medical benefits (JRS only)

The retiree medical benefits are based on potential future health care benefits, while the others are a type of post-employment income replacement benefit, based on salary. For the medical benefits, estimates must be made of the future health care costs. This is done by determining current per capita health care claim costs by age of retiree, and projecting them into the future based on anticipated future health care inflation. Per capita claims used were those used in the PERS and TRS valuations as of June 30, 2022 and the methodology used to determine those claims was found to be appropriate in the audit of those plans. Please refer to the PERS and TRS audit report for further information pertaining to the claims cost development.

SECTION 3

REVIEW OF GAINS AND LOSSES

Review of Gains and Losses

As a part of the annual audit, we take a historical look at the gains and losses on the accrued liability. Gains and losses may measure "how closely" experience matches the actuarial assumption. Recurring gains or losses may indicate an assumption that is not meeting the actual experience for this population. In the tables below, we detail the historical gains and losses for each plan. In addition, we have shown the gain or loss as a percent of the beginning of year (BOY) accrued liability (AL).

JRS Pension Gains and (Losses) by Source (000's)

Source	2022 Valuation	2020 Valuation	2018 Valuation
Retirement	$ (941)	$ (1,596)	$ 1,239
Termination	(328)	535	(790)
Mortality	(972)	1,467	(889)
Disability	8	8	7
New Entrants	(991)	(2,857)	(998)
Other	948	(879)	485
Salary	(29)	(392)	4,581
COLA	(322)	(361)	8,482
Total G/L	**$ (2,627)**	**$ (4,075)**	**$ 12,117**
Total AL at BOY	**$ 211,742**	**$ 226,560**	**$ 205,548**
G/L as a % of AL	**-1.24%**	**-1.80%**	**5.89%**

The $2.6 million loss in the most recent valuation is predominantly made up of new entrants, less deaths than expected, and more retirements than expected. There were also less terminations than expected and COLA was higher than expected.

Buck does not make any assumption for new active members entering the plan, so there will always be new entrant losses. We recommend Buck review with the Board whether to implement a new entrant assumption for this plan.

The other gains and losses will need to be continuously and carefully monitored going forward to determine if the current assumptions are working as intended.

JRS Healthcare Gains and (Losses) by Source (000's)

Source	2022 Valuation	2020 Valuation	2018 Valuation
Retirement	$ 20	$ 342	$ (188)
Termination	(29)	(4)	(2)
Mortality	(107)	421	27
Disability	14	10	7
New Entrants	(213)	(271)	(317)
Other	(496)	(488)	319
Medical Claims	1,363	2,287	1,843
Modified Part B Assumption	5	9	(41)
Cadillac Tax	0	234	(233)
Total	**$ 557**	**$ 2,540**	**$ 1,415**
Total AL at BOY	**$ 16,764**	**$ 16,847**	**$ 15,731**
G/L as a % of AL	**3.32%**	**15.08%**	**8.99%**

Overall, there was a $600 thousand gain on the JRS DB Healthcare results. This is mostly due to positive experience on the medical claims and is consistent with the experience from the PERS and TRS healthcare plans. The gain from claims is offset by new entrant losses and less deaths than expected. All of our discussion and recommendations on the retiree healthcare plans from the PERS and TRS report holds for the JRS retiree healthcare plan as well.

NGNMRS Pension Gains and (Losses) by Source (000's)

Buck does not show gain/loss detail for NGNMRS. As shown on page 6 of the NGNMRS valuation report, the plan experienced a $1 million liability loss during fiscal year 2022. Buck did note there was a $27 thousand gain attributable to programming changes, which was made based on comments from GRS during the June 30, 2020 actuarial review.

Buck should continue to monitor the gains/loss for this plan to make sure the assumptions are working as intended and show more detail if necessary.

Summary of recommendations Resulting from a Review of Gains and Losses

Based on our review above, we recommend the following be considered by Buck:

- Continue to carefully monitor the current assumptions going forward to determine if they are working as intended.
- Disclose the nature and impact of all programming changes included in the valuation.
- Discuss with the Board whether to include a new entrant assumption for the JRS plan.

SECTION 4

REVIEW OF ASSUMPTIONS

Review of Actuarial Assumptions

Buck released an experience study in 2022 and the Board approved a new assumption set to be used beginning with the actuarial valuations as of June 30, 2022. GRS issued a supplemental report that reviewed this new experience study and the adopted assumptions. General conclusions for the new assumptions are included in this report.

Although this audit examines many assumptions and methods, not all of them are equal in terms of their ultimate impact on contribution rates. It is not the intention of this audit to imply that all proposed changes would have a similar impact on the liabilities. For example, the investment return assumption may be the greatest lever in influencing contribution rates. Thus, where options exist for spending time and resources studying assumptions, we recommend studying those with the largest impact first.

Economic Assumptions

General

These assumptions simulate the impact of economic forces on the amounts and values of future benefits. Key economic assumptions are the assumed rate of investment return and assumed rates of future salary increase.

Economic assumptions are normally defined by an underlying inflation assumption. Buck has cited 2.50% as the inflation assumption. In recent years, long-term inflation forecasts have been declining, but are now starting to rise again. We do find the assumption to be reasonable at this time, but expect a significant amount of scrutiny to be paid to this particular assumption over the short term.

Investment Return Assumption

The nominal investment return assumption for JRS is 7.25%, which is the same as PERS and TRS. Our discussion on this assumption from that review report holds for JRS as well.

The nominal investment return assumption for NGNMRS is 5.75%. We find this assumption to be reasonable, based on the different, more conservative asset allocation for this particular plan.

Member Pay Increase Assumption

The pay increase assumption for JRS is 5.00% for FY23 and 3.00% per year thereafter. The long-term assumption of 3.00% was lowered from 3.62% during the most recent experience study. This assumption should be carefully monitored going forward to make sure it is reasonable.

COLA

We find the 3.00% assumption for JRS to be reasonable. The rate is directly tied to pay increases.

Healthy mortality during active service and after termination

For JRS, the Pub-2010 General Employee tables with MP-2021 generational improvement are reasonable.

For NGNMRS, the Pub-2010 Safety Employee tables with MP-2021 generational improvement are reasonable.

Healthy mortality after retirement

For JRS, the Pub-2010 General Retiree tables with MP-2021 generational improvement are reasonable.

For NGNMRS, the Pub-2010 Safety Retiree tables with MP-2021 generational improvement are reasonable.

For beneficiaries, the Pub-2010 Contingent Survivor tables with MP-2021 generational improvement are also reasonable.

Disabled mortality

For JRS, the Pub-2010 Non-Safety Disabled Retiree tables with MP-2021 generational improvement are reasonable.

For NGNMRS, the Pub-2010 Safety Disabled Retiree tables with MP-2021 generational improvement are reasonable.

Withdrawal from service before retirement (termination)

The rates look reasonable based on the data presented in the experience study report.

Retirement

The rates look reasonable based on the data presented in the experience study report.

Disability

The rates look reasonable based on the data presented in the experience study report.

Form of Payment

The form of payment assumptions for NGNMRS look reasonable based on the data presented in the experience study report. The assumption for the percentage of actives and terminated vested members assuming to elect a lump sum was lowered from 70% to 50%.

Payroll Growth

Contribution rates are based on a percent of total payroll for JRS. The assumption used in the valuation is that payroll will grow at a rate of 2.75 percent per year. This is comprised of 2.50 percent for inflation and 0.25 percent for productivity.

Payroll growth is significant because the unfunded accrued liability (UAL) is amortized as a level percentage of pay. That is the same as expecting all future amortization payments to grow at the same rate as total payroll. When payroll does not grow as assumed then the UAL is not going to be paid off as assumed. In order for the UAL to be paid off according to the current amortization schedule, payroll must grow at the assumed payroll growth rate. If payroll does not grow at that rate, as was the case for the past couple years, there will be upward pressure on the contribution rate because contributions that are less than anticipated are flowing in the plan.

Data

Buck spends a significant amount of time and effort reconciling the NGNMRS data and has to make a series of assumptions regarding the data due to its quality. The major assumptions related to the NGNMRS data were to assume that the status for Air Guard members as of June 30, 2021 was the same as of June 30, 2022, and each Air Guard active member's service was increased by one year as of June 30, 2021. In light of the difficulties in collecting actual data, these assumptions are reasonable.

We would recommend that Buck include some additional detail showing proportion of data that has imputed elements.

Healthcare Cost Assumptions

The health care cost assumptions for JRS are the same as PERS and TRS. Our discussion on these assumptions from that review report holds for JRS as well.

SUMMARY

With this being the first valuation of experience under the new assumptions, it is too soon to ascertain their effectiveness, although we can start to monitor any developing trends. Based on the experience study data presented, the assumptions and methods are reasonable. We will continue to monitor the results to track the effectiveness of the assumptions with regards to valuing plan costs.

SECTION 5

REVIEW OF ACTUARIAL VALUATION METHODS AND PROCEDURES

Review of Actuarial Valuation Methods and Procedures

I. ***Background***

An actuarial valuation is a detailed statistical simulation of the future operation of a retirement system using the set of actuarial assumptions adopted by the Board.

The actuarial values generated from this process are based not only on these assumptions, but also on the additional assumptions built into each actuarial firm's pension valuation software.

Our scope for performing the review did not include a complete replication of the valuation results as determined by Buck at June 30, 2022. Rather, we reviewed a number of sample test lives from Buck in great detail, and made our determinations as to whether the methods and assumptions being employed were being done so properly. We also reviewed the report in order to examine the aggregate results and conclusions of this actuarial valuation.

Though this approach is not intended to meet the rigors of a full scale replication of results – it still serves as a strong indicator of the appropriateness of the assumptions and methods being used to value the liabilities and determine the costs for these plans.

II. ***Process:***

Our review process can be summarized as follows:

Computation: Valuation Liabilities

We analyzed test cases to compare the Actuarial Liability under the EAN funding method for the test cases of the JRS and NGNMRS Systems. As a starting point, we first replicate Buck test case liabilities by using their assumptions and methods to ensure that the computations were in sync with the descriptions listed in the valuation report.

When conducting an actuarial audit, and reviewing the testlives, we look at the projected benefits at each age for each decrement type. We also look at the component of the benefit (final average earnings and years of service). This is critical to understanding what the valuation system is actually valuing and making sure that the valuation is not "right for the wrong reasons", (meaning, errors could occur in two different directions making total liabilities approximate a correct value.)

We also review the construction of the commutation functions- the varying probabilities for each decrement and the discounting to the valuation date.

A more detailed analysis of the test lives we reviewed and our findings is shown in the next section.

Tying Test Lives to Total Liabilities

The basis of the audit is that the test lives reviewed tie directly to the liabilities being submitted in the valuation. As a result of learning of a discrepancy discovered a few years ago, we now request

that Buck also supply a list of every member with their total liability. We check that the total liability on the test life matches that from the larger group, and the larger group matches the total in the valuation report. That way we can be certain that the test life we review is directly tied to the final liabilities.

Actuarial Method:

Findings:

An actuarial cost method is a mathematical process for allocating the dollar amount of the total present value of plan benefits (PVB) between future normal costs and actuarial accrued liability (AAL). The retained actuary uses the Entry Age Normal actuarial cost method (EAN Method), characterized by:

(1) Normal Cost – the level percent of payroll contribution for JRS and level dollar contribution for NGNMRS, paid from each participant's date of hire to date of retirement, which will accumulate enough assets at retirement to fund the participant's projected benefits from retirement to death.

(2) Actuarial Accrued Liability – the assets which would have accumulated to date had contributions been made at the level of the normal cost since the date of the first benefit accrual, if all actuarial assumptions had been exactly realized, and there had been no benefit changes.

The EAN Method is the most prevalent funding method in the public sector. It is appropriate for the public sector because it produces costs that remain stable, either as a percentage of payroll or as a level dollar amount, over time, resulting in intergenerational equity for taxpayers and budget predictability. The recent Public Fund Survey included 199 retirement systems (mostly statewide). Over 82% of the plans reported using the EAN Method. Therefore, the retained actuary's stated funding methods for JRS and NGNMRS are certainly in line with national trends.

Application of Cost Method

In order to determine the normal cost as a level percentage of pay for JRS, the valuation must first determine the future compensation that each individual member is expected to receive over the course of their career (which is also the compensation used to generate contributions). The projection of the future compensation should be based on the salary that the participant is expected to receive according to the timing of the expected departures from active service (or, decrements). For NGNMRS, the method is similar, but based on a level dollar amount.

Conclusion:

For JRS, the level percent of pay method for both amortization of the unfunded accrued liability and the normal cost are both appropriate as a funding policy, considering that the payroll is not closed. For NGNMRS, the level dollar method for both amortization of the unfunded accrued liability and the normal cost are both appropriate as a funding policy since the benefits are not pay related.

SECTION 6

SAMPLE LIFE REVIEW

Sample Life Review

Background

We reviewed sample test cases used for the June 30, 2022 valuation draft reports. In order to perform the review, we requested a number of sample cases from Buck. We combined this with our understanding of the plan provisions and reviewed the liability values produced by Buck for these sample cases only.

Note that the active test lives analyzed are not necessarily exposed to all of the possible benefits under the plans (i.e. already beyond the eligibility period for certain benefits, or not eligible for particular benefits). Therefore, findings may occur for these other benefits in future audits depending on the set of test lives chosen for review at that time. However, the vast majority of the liability for each plan is due to the retirement benefits (included for all active test lives), and retirement-related withdrawal benefits (one active test life included per plan), so any future findings are also expected to be de minimus. Also, the impact for any one test life may not be representative of the impact on the total plan.

When employing Buck's methods and assumptions, we matched the present value of benefits in total closely for the test cases submitted under the Pension plans for JRS and NGNMRS, and present value of retirement benefits under the JRS Retiree Health plan. In addition, we have analyzed the calculations of the ancillary benefits and have provided a summary of this detailed analysis at the end of this section. These exhibits provide a comparison of the calculations by decrement provided to us from Buck against our replication of those benefits as we interpret them from the plan provisions and assumptions.

In matching the present value of benefits, it is being determined that all benefits are being valued, and that the valuation of the liability for those benefits is consistent with the stated assumptions and methods.

Findings

Pension Plan - JRS

The initial test lives provided to us in April assumed the salary and benefit increases would be 0% through FY24 and 3% per year thereafter. We matched these test lives closely and were comfortable with the results. In July, Buck informed us that the JRS results needed to be revised after learning from Alaska staff that all JRS members would receive a 5% salary and benefit increase in 2023, and the assumption of 3% per year thereafter would remain reasonable. When we received the revised test lives reflecting this new assumption, we discovered an inconsistency between the timing of salary increases and benefit increases. After discussing with Buck and them following-up with Alaska staff, Buck revised these new results further to value the timing of this new assumption consistently between salary increases and benefit increases. They also provided us with additional detail explaining the timing being used and an additional active test life that helped show those calculations. We are now comfortable with the final results using this additional information.

The final test life PVB match was within 0.0% on the active test case shown. The retiree matches to within 0.0%. The deferred vested member matches to within 0.2%. This is considered a reasonable overall match for purposes of the valuation.

Retiree Health Plan – JRS

For JRS retiree health, the test life PVB match on the active test case was within 0.1%. The retiree matches to within 3.3%. The deferred vested member matches to within 0.4%. This is considered a reasonable overall match for purposes of the valuation.

We have surmised there are no significant issues to report for the Retiree Health Plan under JRS.

Pension Plan - NGNMRS

For NGNMRS pension, the test life PVB match was within 0.0% on the active test case shown. The retiree matches to within 0.0%. The deferred vested member matches to within 0.6%. For all three of the cases, this would be considered as an overall match for purposes of the valuation.

NOTE

Ancillary or non-retirement benefits such as death and disability tend to be low probability events (and hence low liability) and they also tend to have many "bells and whistles" which can be valued in different ways by different actuaries. When looking at the test life results, it may be most informative to review the decrement (retirement, termination, disability, death) totals rather than each particular segment of the decrement (married non-occupational death, etc.). For all ancillary benefits comprising less than 0.1% of the total PVB for that individual, we checked the amounts for reasonableness, but did not always replicate.

ALASKA RETIREMENT MANAGEMENT BOARD

Actuarial Review of Pension and Health Plans - June 30, 2022

Comparison of Present Value of Benefits - **JRS**

Actives	**Test Case 1 - Pension**		
Basic Data:			
Sex	Female		
Current Age	37.30		
Current Credited Service	1.22		
Present Value of Benefits (PVB)	**GRS***	**Buck**	**% Diff**
Retirement:			
Normal Retirement Benefit	416,796.46	416,796.28	0.0%
Early Retirement Benefit	130,844.72	130,844.75	0.0%
Total Retirement PVB	**547,641.18**	**547,641.03**	**0.0%**
Disability:			
Disability Benefit	7,423.52	7,423.54	0.0%
Disability Benefit < 2	6.04	6.04	0.0%
Total Disability PVB	**7,429.56**	**7,429.58**	**0.0%**
Death:			
Married and Eligible	1,043.33	1,043.28	0.0%
Married and Not Eligible	4,367.81	4,367.52	0.0%
Single	460.74	456.48	0.9%
Death Benefit < 2	7.69	7.69	0.0%
Total Death PVB	**5,879.57**	**5,874.97**	**0.1%**
Withdrawal:			
Nonvested	4,632.78	4,632.78	0.0%
Normal DV Benefit	122,866.94	122,867.38	0.0%
Normal DV Death Benefit	484.10	484.25	0.0%
Total Withdrawal PVB	**127,983.82**	**127,984.41**	**0.0%**
GRAND TOTAL PVB	**688,934.13**	**688,929.99**	**0.0%**
	Test Case 1 - Health		
Present Value of Benefits (PVB)	**GRS***	**Buck**	**% Diff**
Retirement:			
Benefit - Member	68,320.35	68,481.97	-0.2%
Benefit - Spouse	29,870.07	29,867.98	0.0%
Post 65 Part D Contribution - Member	(10,268.20)	(10,306.52)	-0.4%
Post 65 Part D Contribution - Spouse	(5,846.17)	(5,858.54)	-0.2%
Total Retirement PVB	**82,076.06**	**82,184.89**	**-0.1%**

Inactives - PVB	**GRS***	**Buck**	**% Diff**
Retiree - Pension	910,635.78	910,636.00	0.0%
Retiree - Health	93,761.42	96,986.00	-3.3%
Deferred Vested - Pension	697,378.02	698,753.00	-0.2%
Deferred Vested - Health	317,413.68	318,651.00	-0.4%
Total Retirement PVB	**2,019,188.90**	**2,025,026.00**	**-0.3%**

** GRS' audit of Buck's calculation includes review of the benefit amounts, annuity values, assumptions and other factors related to the PVB calculation at each projected age. Differences may exist due to different interpretations of the statutes, as well as additional items as discussed throughout this audit report.*

Comparison of Present Value of Benefits - JRS Pension & Health

JRS - Pension

Benefits - Buck Valuation Terminology	Description*
Retirement:	
Normal Retirement Benefit	Normal Retirement (base) Benefit
Early Retirement Benefit	Early Retirement (base) Benefit
Disability:	
Disability Benefit	Disability Benefit
Disability Benefit < 2	Disability Benefit for Employees With Less Than Two Years of Service
Death:	
Married and Eligible	Death Benefit for Married Participants Who are Eligible for Unreduced Benefits
Married and Not Eligible	Death Benefit for Married Participants Who are Not Eligible for Unreduced Benefits
Single	Refund of Contributions for Participants With no Beneficiary
Death Benefit < 2	Death (base) Benefit for Employees With Less Than Two Years of Service
Withdrawal:	
Nonvested	Nonvested Term Benefit
Normal DV Benefit	Normal Deferred Vested Benefit
Normal DV Death Benefit	Normal Deferred Vested Death benefit for Married Employees

JRS - Health

Benefits - Buck Valuation Terminology	Description*
Retirement:	
Pre 65 <Member>	Base Benefit Paid to Employee While Employee is Under 65
Pre 65 <Spouse>	Base Benefit Paid to Spouse While Employee is Under 65
Post 65 <Member>	Base Benefit Paid to Employee While Employee is at Least 65
Post 65 <Spouse>	Base Benefit Paid to Spouse While Employee is at Least 65
Post 65 Part D <Member>	Employee Post-Age 65 Medicare Part D Reimbursement
Post 65 Part D <Spouse>	Spouse Post-Age 65 Medicare Part D Reimbursement
Disability:	
Pre 65 <Member>	Base Benefit Paid to Disabled Employee While Employee is Under 65
Pre 65 <Spouse>	Base Benefit Paid to Spouse of Disabled Employee While Employee is Under 65
Pre 65 Contribution <Member>	Member Contributions Made While Employee is Under 65
Pre 65 Contribution <Spouse>	Spouse Contributions Made While Employee is Under 65
Post 65 <Member>	Base Benefit Paid to Disabled Employee While Employee is at Least 65
Post 65 <Spouse>	Base Benefit Paid to Spouse of Disabled Employee While Employee is at Least 65
Post 65 Contribution <Member>	Member Contributions Made While Employee is at Least 65
Post 65 Contribution <Spouse>	Spouse Contributions Made While Employee is at Least 65
Post 65 Part D <Member>	Disabled Employee Post-Age 65 Medicare Part D Reimbursement
Post 65 Part D <Spouse>	Spouse of Disabled Employee Post-Age 65 Medicare Part D Reimbursement
Post 65 Part D Contribution <Member>	Member Reimbursement for Medicare Part D
Post 65 Part D Contribution <Spouse>	Spouse Reimbursement for Medicare Part D
Death:	
Pre 65	Base Benefit Paid to Spouse While Employee would have been Under 65
Post 65	Base Benefit Paid to Spouse While Employee would have been at Least 65
Post 65 Part D	Spouse Post-Age 65 Medicare Part D Reimbursement
Withdrawal:	
Pre 65 <Member>	Base Benefit Paid to Terminated Employee While Employee is Under 65
Pre 65 <Spouse>	Base Benefit Paid to Spouse of Terminated Employee While Employee is Under 65
Post 65 <Member>	Base Benefit Paid to Terminated Employee While Employee is at Least 65
Post 65 <Spouse>	Base Benefit Paid to Spouse of Terminated Employee While Employee is at Least 65
Post 65 Part D <Member>	Terminated Employee Post-Age 65 Medicare Part D Reimbursement
Post 65 Part D <Spouse>	Spouse of Terminated Employee Post-Age 65 Medicare Part D Reimbursement

ALASKA RETIREMENT MANAGEMENT BOARD

Actuarial Review of Pension Plans - June 30, 2022

Comparison of Present Value of Benefits - **NGNMRS**

Actives	**Test Case 1**			
Basic Data:				
Sex	Female			
Current Age	38.46			
Current Credited Service	0.00			
Present Value of Benefits (PVB)	**GRS**	**Buck**	**% Diff**	**Description***
Retirement:				*Retirement:*
Normal Retirement Benefit - LS	621.03	621.03	0.0%	Normal Retirement (base) Benefit Payable if Lump Sum Elected
Normal Retirement Benefit - Annuity	602.07	602.07	0.0%	Normal Retirement (base) Benefit Payable if Annuity Elected
Normal Retirement Benefit - Annuity - Death	28.57	28.57	0.0%	Base Benefit Payable to the Spouse if the Participant Elects the Annuity and Dies
Total Retirement PVB	**1,251.67**	**1,251.67**	**0.0%**	
Disability:				*Disability:*
Disability Benefit - LS	4.60	4.60	0.0%	Disability Retirement Benefit Payable to the Participant if Lump Sum Elected
Disability Benefit - Annuity	4.39	4.39	0.0%	Disability Retirement Benefit Payable to the Participant if Annuity Elected
Disability Benefit - Annuity - Death	0.32	0.32	0.0%	Disability Benefit Payable to the Spouse if the Participant Elects the Annuity and Dies
Total Disability PVB	**9.31**	**9.31**	**0.0%**	
Death:				*Death:*
Death Benefit	25.07	25.07	0.0%	Benefit Payable if the Participant Dies Before Retirement
Total Death PVB	**25.07**	**25.07**	**0.0%**	
Withdrawal:				*Withdrawal:*
Term Benefit	-	-		Termination Benefit Payable to the Participant at Retirement
Total Withdrawal PVB	**-**	**-**	**0.0%**	
GRAND TOTAL PVB	**1,286.05**	**1,286.05**	**0.0%**	

Inactives - PVB	**GRS**	**Buck**	**% Diff**
Retiree	5,679	5,679	0.0%
Deferred Vested	12,595	12,670	-0.6%

** GRS' audit of Buck's calculation includes review of the benefit amounts, annuity values, assumptions and other factors related to the PVB calculation at each projected age. Differences may exist due to different interpretations of the statutes, as well as additional items as discussed throughout this audit report.*

SECTION 7

REVIEW OF CONTRIBUTION RATE DETERMINATION

Review of Contribution Rate Determination

GRS was to analyze the funding method being used and verify its computation (as shown in page 8 of the JRS valuation report and page 5 of the NGNMRS valuation report). The goal here is to start with the Actuarial Accrued Liabilities and the Normal Costs that are developed from the data and valuation software and compare this to the assets in the system. The difference between the two, the Unfunded Actuarial Accrued Liability (UAAL) in conjunction with the Normal Cost forms the basis of the contributions that the actuary recommends the system make in order to ensure that benefits can be provided for current and future retirees.

FINDINGS

The calculations were reasonable and consistent with actuarial practice.

We recommend consideration of a longer period over which to amortize surpluses for NGNMRS. This could help manage rate volatility, which could be especially useful in a plan exhibiting data quality and volatility issues. However, we understand this will not have any impact on the total contribution amount as long as the plan remains significantly overfunded.

SECTION 8

REVIEW OF ACTUARIAL VALUATION REPORT

Review of Actuarial Valuation Report

GRS reviewed the June 30, 2022 valuation reports for scope as well as content to determine if actuarial statistics were being reflected fairly and if the details of the plan were being correctly communicated. GRS did not review GASB 67/68/74/75 Accounting information, which was provided in a separate report.

In general, we consider the scope and content of Buck's report to be effective in communicating the financial position and contribution requirements of JRS and NGNMRS.

BUCK
A Gallagher Company

State of Alaska Judicial Retirement System

Actuarial Valuation Report
as of June 30, 2022

August 2023

August 15, 2023

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 (updated)[1]

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 Judicial Retirement System (JRS) as of June 30, 2022 performed by Buck Global, LLC (Buck).

The actuarial valuation is based on financial information provided in the financial statements audited by KPMG LLP, 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, 2022. The actuary did not verify the data submitted, but did perform tests for consistency and reasonableness.

All costs, liabilities, and other factors under JRS 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 JRS as of June 30, 2022.

JRS is funded by Employer, State, and Member Contributions in accordance with the funding policy adopted by the Alaska Retirement Management Board (Board) and as required by Alaska state statutes. The funding objective for JRS is to pay required contributions that remain level as a percent of total JRS compensation. The Board has also established a funding policy objective that the required contributions be sufficient to pay the Normal Costs of active plan members, plan expenses, and amortize the annual changes in Unfunded Actuarial Accrued Liability as a level percentage of payroll over closed 25-year periods. The compensation used to determine required contributions is the total compensation of all active members in JRS. This objective is currently being met and is projected to continue to be met. Absent future gains/losses, actuarially determined contributions are expected to remain level as a percent of pay and the funded status of the pension trust and the healthcare trust are expected to remain at or above 100%.

[1] This report is an update to the valuation report dated July 31, 2023, reflecting a change in the timing of the pensioner benefit increases to the beginning of each fiscal year. Previously, the increases were assumed to be effective at the end of each fiscal year.

The Board and staff of the State of Alaska may use this report for the review of the operations of JRS. 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 due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, Buck recommends requesting its advanced review of any statement to be based on information contained in this report. Buck will accept no liability for any such statement made without its prior review.

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 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, 2017 to June 30, 2021. Based on that experience study, the Board adopted new assumptions effective beginning with the June 30, 2022 valuation to better reflect expected future experience. For the June 30, 2022 valuation, the salary increase and pensioner benefit increase assumptions were further modified to be 5.00% for FY23, and 3.00% per year thereafter to better reflect expected short-term experience.

Based on our analysis of recent claims experience, changes were made to the healthcare per capita claims cost rates effective June 30, 2022 to better reflect expected future healthcare experience. A summary of the actuarial assumptions and methods used in this actuarial valuation is shown in Sections 4.2 and 4.3. We certify that the assumptions and methods described in Sections 4.2 and 4.3 of this report meet the requirements of all applicable Actuarial Standards of Practice.

Actuarial Standards of Practice No. 27 (ASOP 27) and No. 35 (ASOP 35) require the actuary to disclose the information and analysis used to support the actuary's determination that the assumptions selected by the plan sponsor do not significantly conflict with what, in the actuary's professional judgment, are reasonable for the purpose of the measurement. Buck provides advice on reasonable assumptions when performing periodic experience studies. The Board selects the assumptions used and the signing actuary reviews the assumptions through discussions with the Board staff and analyzing actuarial gain/loss experience. In the case of the Board's selection of the expected return on assets (EROA), the signing actuary has used economic information and tools provided by Buck's Financial Risk Management (FRM) practice. A spreadsheet tool created by the FRM practice converts averages, standard deviations, and correlations from Buck's Capital Markets Assumptions that are used for stochastic forecasting into approximate percentile ranges for the arithmetic and geometric average returns. It is intended to suggest possible reasonable ranges for EROA without attempting to predict or select a specific best estimate rate of return. It takes into account the duration (horizon) of investment and the target allocation of assets in the portfolio to various asset classes. Based on the actuary's analysis, including consistency with other assumptions used in the valuation, the percentiles generated by the spreadsheet tool described above, and review of actuarial gain/loss analysis, the actuary believes the assumptions do not significantly conflict with what, in the actuary's professional judgment, are reasonable for the purpose of the measurement.

ACFR Information

We have prepared the following information in this report for the Actuarial Section and Statistical Section of the ACFR: (i) member data tables in Section 3; (ii) changes in contribution rates in the Executive Summary; and (iii) summary of actuarial assumptions in Section 4.3.

Governmental Accounting Standards Board (GASB) Statement No. 67 (GASB 67) was effective for JRS beginning with fiscal year ending June 30, 2014, and Statement No. 74 (GASB 74) was effective for JRS beginning with fiscal year ending June 30, 2017. Please see our separate GASB 67 and GASB 74 reports for other information needed for the ACFR.

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 healthcare portion of JRS. 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. In addition to the EROA analysis spreadsheet model disclosed above, Buck uses third-party software in the performance of 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.

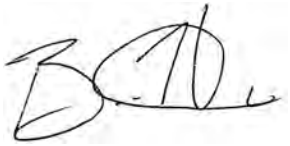
COVID-19

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. FY21 medical claims were adjusted for a COVID-19 related decline in those claims during the fiscal year. FY22 medical claims were not adjusted. A more detailed explanation on these adjustments is shown in Section 4.2.

This report was prepared under the overall direction of David Kershner, who meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. He is a Fellow of the Society of Actuaries, an Enrolled Actuary, a Member of the American Academy of Actuaries, and a Fellow of the Conference of Consulting Actuaries.

We are available to discuss this report with you at your convenience. David can be reached at 602-803-6174 and Brett can be reached at 260-423-1072.

Respectfully submitted,



David J. Kershner, FSA, EA, MAAA, FCA
Principal
Buck, A Gallagher Company

Brett Hunter, ASA, EA, MAAA
Senior Consultant
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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.

Robert Besenhofer, ASA, MAAA, FCA
Director
Buck, A Gallagher Company

Contents

Executive Summary

Overview

The State of Alaska Judicial Retirement System (JRS) provides pension and postemployment healthcare benefits to judicial and other eligible participants. The Commissioner of the Department of Administration is responsible for administering the plan. The Alaska Retirement Management Board has fiduciary responsibility over the assets of the plan. This report presents the results of the actuarial valuation of JRS as of the valuation date of June 30, 2022.

Purpose

An actuarial valuation is performed on the plan once every two years as of the end of the fiscal year, and roll-forward valuations are performed every other year. The main purposes of the actuarial valuation detailed in this report are:

1. To determine the Employer/State contribution necessary to meet the Board's funding policy for the plan;
2. To disclose the funding assets and 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 during the fiscal year; and
5. To report trends in contributions, assets, liabilities, and funded status over the last several years.

The actuarial valuation provides a "snapshot" of the funded position of JRS based on the plan provisions, membership data, assets, and actuarial methods and 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.

Funded Status

Where presented, references to "funded ratio" and "unfunded actuarial accrued liability" typically are measured on an actuarial value of assets basis. It should be noted that the same measurements using market value of assets would result in different funded ratios and unfunded accrued liabilities. Moreover, the funded ratio presented is appropriate for evaluating the need and level of future contributions but makes no assessment regarding the funded status of the plan if the plan were to settle (i.e. purchase annuities) for a portion or all of its liabilities.

Funded Status as of June 30		2020	2022
Pension			
a.	Actuarial Accrued Liability	$ 211,742,043	$ 227,227,808
b.	Valuation Assets	194,788,043	230,801,847
c.	Unfunded Actuarial Accrued Liability, (a) - (b)	$ 16,954,000	$ (3,574,039)
d.	Funded Ratio based on Valuation Assets, (b) ÷ (a)	92.0%	101.6%
e.	Fair Value of Assets	$ 189,844,025	$ 227,181,866
f.	Funded Ratio based on Fair Value of Assets, (e) ÷ (a)	89.7%	100.0%

Funded Status as of June 30		2020	2022
Healthcare			
a.	Actuarial Accrued Liability	$ 16,763,770	$ 17,864,257
b.	Valuation Assets	34,805,639	40,855,819
c.	Unfunded Actuarial Accrued Liability, (a) - (b)	$ (18,041,869)	$ (22,991,562)
d.	Funded Ratio based on Valuation Assets, (b) ÷ (a)	207.6%	228.7%
e.	Fair Value of Assets	$ 34,036,503	$ 40,267,620
f.	Funded Ratio based on Fair Value of Assets, (e) ÷ (a)	203.0%	225.4%

The key reasons for the change in the funded status are explained below. The funded status for healthcare benefits is not necessarily an appropriate measure to confirm that assets are sufficient to settle health plan obligations as there are no available financial instruments for purchase. Future experience is likely to vary from assumptions so there is potential for actuarial gains or losses.

1. Investment Experience

The asset valuation method recognizes 20% of the investment gain or loss each year, for a period of five years. The investment returns based on fair value of assets were approximately 30.0% for FY21 and (6.0%) for FY22, compared to the expected investment return of 7.38% per year (net of investment expenses). This resulted in a market asset gain of approximately $42.6 million (pension) and $7.6 million (healthcare) for FY21, and a market asset loss of approximately $32.8 million (pension) and $5.8 million (healthcare) for FY22. Due to the recognition of investment gains and losses over a 5-year period, the investment returns based on actuarial value of assets were approximately 11.5% for FY21 and 8.6% for FY22, which resulted in an FY21 actuarial asset gain of approximately $7.9 million (pension) and $1.4 million (healthcare) and an FY22 actuarial asset gain of approximately $2.4 million (pension) and $0.5 million (healthcare).

2. Salary Increases

Salaries for active judges remained constant between June 30, 2020 and June 30, 2022. However, there was a small liability loss of approximately $29,000 due to judges moving to higher courts. The following table shows the annual base salaries for each of the court appointments:

	June 30, 2020	June 30, 2022
District Court	$ 160,848	$ 160,848
Superior Court	189,720	189,720
Appellate Court	193,836	193,836
Supreme Court	205,176	205,176
Administrative Director	189,720	189,720
Chief Justice	205,776	205,776
Pro Tem	N/A	N/A

3. Demographic Experience

Section 3 provides statistics on active and inactive members. The number of active members increased from 72 at June 30, 2020 to 73 at June 30, 2022. There were 11 new entrants, 1 non-vested termination, and 9 retirements during this 2-year period. The average age of active members decreased from 55.03 to 53.74, their average service increased from 6.83 to 6.85 years, and their average entry age decreased from 48.20 to 46.89.

The number of benefit recipients increased from 144 to 149, and their average age increased from 73.98 to 74.88. The number of vested terminated participants decreased from 2 to 1, and their average age decreased from 55.87 to 55.17.

The overall effect of the demographic experience was a liability loss of approximately $2.2 million (pension) and $0.1[1] million (healthcare).

4. Retiree Medical Claims Experience

As described in Section 4.2, recent medical claims experience and changes in healthcare enrollment data provided to us for the June 30, 2022 valuation generated a liability gain of approximately $1.4 million. Healthcare benefits paid during FY21 and FY22 generated a liability gain of approximately $0.2 million. The EGWP subsidy received by the plan during FY22 was approximately $165,000; the expected EGWP subsidy for FY22 was approximately $137,000.

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

Effective for the June 30, 2022 valuation, the Board adopted the changes to the demographic and economic assumptions recommended by the actuary, based on the results of an experience study performed on the plan experience from July 1, 2017 to June 30, 2021. The changes in assumptions were adopted at the June 2022 Board meeting. For the June 30, 2022 valuation, the salary increase and pensioner benefit increase assumptions were further modified to be 5.00% for FY23, and 3.00% per year thereafter to better reflect expected short-term experience. The effect of the new assumptions was to decrease the Actuarial Accrued Liability as of June 30, 2022 by approximately $1.2 million (pension) and $0.8 million (healthcare).

Healthcare claim costs are updated for each valuation as described in Section 4.2. The amounts included in the Normal Cost for administrative expenses were updated based on the last two years of actual administrative expenses paid from plan assets.

7. Changes in Benefit Provisions Since the Prior Valuation

Starting in 2022, prior authorization is required for certain specialty medications for all participants, and certain preventive benefits for pre-Medicare participants are covered by the plan. These changes created an actuarial gain of approximately $0.2 million. There have been no other changes in benefit provisions valued since the prior valuation.

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[1] Includes the effect of changes in Medicare Part B only experience.

Comparative Summary of Contribution Rates

	FY 2023	FY 2025
Pension		
a. Normal Cost Rate Net of Member Contributions	38.85%	35.32%
b. Past Service Cost Rate	24.74%	17.17%
c. Total Employer/State Contribution Rate, (a) + (b), not less than (a)	63.59%	52.49%
Healthcare		
a. Normal Cost Rate	6.49%	6.75%
b. Past Service Cost Rate	(8.24%)	(10.19%)
c. Total Employer/State Contribution Rate, (a) + (b), not less than (a)	6.49%	6.75%
Total		
a. Normal Cost Rate Net of Member Contributions	45.34%	42.07%
b. Past Service Cost Rate	24.74%	17.17%
c. Total Employer/State Contribution Rate, (a) + (b)	70.08%	59.24%

The contribution rates for FY24 based on the June 30, 2021 roll-forward valuation were 58.70% (pension) and 6.54% (healthcare).

Summary of Actuarial Accrued Liability Gain/(Loss) and Other Changes

The following table summarizes the sources of change in the total Employer/State contribution rates as of June 30, 2020, June 30, 2021, and June 30, 2022:

	Pension	Healthcare
1. Total Employer/State Contribution Rate as of June 30, 2020	63.59%	6.49%
2. Change during FY21	(4.89%)	0.05%
3. Total Employer/State Contribution Rate as of June 30, 2021 from Roll-Forward Valuation	58.70%	6.54%
4. Change due to:		
a. Investment Experience	(1.18%)	0.00%
b. Demographic Experience, Health Claims Experience, and New Entrants[1]	2.52%	1.15%
c. State Appropriation	(2.02%)	0.00%
d. Actual vs Expected Contributions	(1.49%)	0.00%
e. Assumption/Method Changes	(4.04%)	(0.86%)
f. Plan Changes	0.00%	(0.08%)
g. Total Change, (a) + (b) + (c) + (d) + (e) + (f)	(6.21%)	0.21%
5. Total Employer/State Contribution Rate as of June 30, 2022, (3) + (4)(g)	52.49%	6.75%

[1] Includes changes in future healthcare claims costs.

The following table shows the 2-year gain/(loss) on actuarial accrued liability as of June 30, 2022:

	Pension	Healthcare
Retirement Experience	$ (940,863)	$ 19,922
Termination Experience	(327,764)	(28,809)
Disability Experience	8,026	14,101
Active Mortality Experience	(89,037)	10,884
Inactive Mortality Experience	(883,123)	(117,823)
Salary Increases	(29,107)	N/A
New Entrants	(990,663)	(213,301)
Inactive Benefit Increases	(322,451)	N/A
Benefit Payments Different than Expected	133,424	174,856
Per Capita Claims Cost	N/A	1,363,271
Medical and Prescription Drug Plan Changes	N/A	223,750
Medicare Part B Only Experience	N/A	4,887
Miscellaneous[1]	814,211	(894,560)
Total	$ (2,627,347)	$ 557,178

Other items that increased/(decreased) the actuarial accrued liability as of June 30, 2022 are shown below:

	Pension	Healthcare
Experience Study Assumption Changes	$ (16,712,342)	$ (630,859)
New Salary/Pensioner Benefit Increase Assumptions	15,522,714	(171,985)
Total	$ (1,189,628)	$ (802,844)

[1] Includes the effects of various data changes that are typical when new census data is received for the valuation, as well as other items that do not fit neatly into any of the other categories.

Section 1: Actuarial Funding Results

Section 1.1: Actuarial Liabilities and Normal Cost

As of June 30, 2022	Present Value of Projected Benefits	Actuarial Accrued (Past Service) Liability
Active Members		
Retirement Benefits	$ 84,099,215	$ 47,091,634
Disability Benefits	172,547	801
Death Benefits	871,084	283,602
Termination Benefits[1]	3,382,002	83,400
Medical and Prescription Drug Benefits	15,266,645	6,910,882
Medicare Part D Subsidy	(2,363,068)	(1,142,717)
Subtotal	$ 101,428,425	$ 53,227,602
Benefit Recipients		
Retiree Benefits	$ 162,117,792	$ 162,117,792
Survivor Benefits	16,840,350	16,840,350
Disability Benefits	0	0
Medical and Prescription Drug Benefits	14,524,454	14,524,454
Medicare Part D Subsidy	(2,752,847)	(2,752,847)
Subtotal	$ 190,729,749	$ 190,729,749
Vested Terminations		
Deferred Retirement Benefits	$ 698,753	$ 698,753
Medical and Prescription Drug Benefits	363,030	363,030
Medicare Part D Subsidy	(38,545)	(38,545)
Subtotal	$ 1,023,238	$ 1,023,238
Non-Vested Terminations	$ 111,476	$ 111,476
Total	**$ 293,292,888**	**$ 245,092,065**
Total Pension	**$ 268,293,219**	**$ 227,227,808**
Total Medical, Net of Part D Subsidy	**$ 24,999,669**	**$ 17,864,257**
Total Medical, Gross of Part D Subsidy	**$ 30,154,129**	**$ 21,798,366**

[1] Includes return of contributions.

As of June 30, 2022		Normal Cost
Active Members		
Retirement Benefits	$	5,294,324
Disability Benefits		19,573
Death Benefits		85,792
Termination Benefits[1]		346,367
Medical and Prescription Drug Benefits		1,074,309
Medicare Part D Subsidy		(161,624)
Administrative Expenses (Pension)		102,000
Administrative Expenses (Medical)		34,000
Total	**$**	**6,794,741**
Total Pension	**$**	**5,848,056**
Total Medical, Net of Part D Subsidy	**$**	**946,685**
Total Medical, Gross of Part D Subsidy	**$**	**1,108,309**

[1] Includes return of contributions.

Section 1.2: Actuarial Contributions as of June 30, 2022 (for FY25)

Normal Cost Rate	Pension	Healthcare
1. Total Normal Cost	$ 5,848,056	$ 946,685
2. Base Salaries for Upcoming Fiscal Year	14,035,020	14,035,020
3. Normal Cost Rate, (1) ÷ (2)	41.67%	6.75%
4. Average Member Contribution Rate	6.35%	0.00%
5. Employer Normal Cost Rate, (3) - (4)	35.32%	6.75%

Past Service Rate	Pension	Healthcare
1. Actuarial Accrued Liability	$ 227,227,808	$ 17,864,257
2. Valuation Assets	230,801,847	40,855,819
3. Unfunded Actuarial Accrued Liability, (1) - (2)	$ (3,574,039)	$ (22,991,562)
4. Funded Ratio, (2) ÷ (1)	101.6%	228.7%
5. Past Service Cost Amortization Payment	2,410,004	(1,429,646)
6. Base Salaries for Upcoming Fiscal Year	14,035,020	14,035,020
7. Past Service Rate, (5) ÷ (6)	17.17%	(10.19%)
Total Employer / State Contribution Rate, not less than Normal Cost Rate	**52.49%**	**6.75%**

Schedule of Past Service Cost Amortizations - Pension

Layer	Amortization Period		Balances		Beginning-of-Year Payment
	Date Created	Years Remaining	Initial	Outstanding	
Initial Unfunded Liability[1]	6/30/2002	5	$ 5,864,449	$ 3,448,446	$ 750,044
FY03/04 Loss[1]	6/30/2004	7	855,068	625,333	101,220
Revaluation of Liabilities[1]	6/30/2005	8	9,115,451	7,182,220	1,038,079
FY05/06 Loss[1]	6/30/2006	9	18,186,558	15,199,068	1,992,415
FY07 Loss	6/30/2007	10	1,364,721	1,195,627	143,906
FY08 Gain	6/30/2008	11	(29,014,739)	(26,412,277)	(2,947,870)
FY09 Loss	6/30/2009	12	21,273,454	19,958,028	2,082,465
Change in Assumptions	6/30/2010	13	13,976,981	13,422,120	1,318,255
FY10 Loss	6/30/2010	13	6,474,780	6,217,742	610,676
FY11 Loss	6/30/2011	14	7,397,917	7,245,520	673,718
FY12 Loss	6/30/2012	15	11,916,371	11,843,943	1,047,832
FY13 Loss	6/30/2013	16	7,033,497	6,825,867	577,044
Change in Assumptions	6/30/2014	17	4,219,851	4,266,263	345,931
FY14 Gain	6/30/2014	17	(14,458,986)	(14,618,026)	(1,185,306)
FY15 Gain	6/30/2015	18	(3,325,706)	(3,373,418)	(263,235)
FY16 Gain	6/30/2016	19	(9,932,623)	(10,078,673)	(759,077)
FY17 Gain	6/30/2017	20	(1,137,538)	(1,151,634)	(83,936)
Change in Assumptions	6/30/2018	21	10,343,783	10,423,412	736,910
FY18 Gain	6/30/2018	21	(12,096,419)	(12,189,542)	(861,771)
Change in Assumptions	6/30/2019	22	(14,775,890)	(14,901,307)	(1,024,055)
FY19 Loss	6/30/2019	22	3,344,559	3,372,948	231,797
Change in Assumptions	6/30/2020	23	(21,604,253)	(21,763,015)	(1,456,623)
FY20 Loss	6/30/2020	23	5,424,705	5,464,568	365,750
FY21 Gain	6/30/2021	24	(11,633,233)	(11,685,152)	(763,045)
Change in Assumptions	6/30/2022	25	(1,189,628)	(1,189,628)	(75,911)
FY22 Gain	6/30/2022	25	(2,902,472)	(2,902,472)	(185,209)
Total				**$ (3,574,039)**	**$ 2,410,004**

[1] The pension and healthcare split was done based on the ratio of unfunded actuarial accrued liability as of June 30, 2006.

Schedule of Past Service Cost Amortizations - Healthcare

Layer	Amortization Period		Balances		Beginning-of-Year Payment
	Date Created	Years Remaining	Initial	Outstanding	
Initial Unfunded Liability[1]	6/30/2002	5	$ 2,295,257	$ 1,349,672	$ 293,556
FY03/04 Loss[1]	6/30/2004	7	334,660	244,745	39,616
Revaluation of Liabilities[1]	6/30/2005	8	3,567,649	2,811,010	406,288
FY05/06 Loss[1]	6/30/2006	9	7,117,943	5,948,684	779,801
FY07 Gain	6/30/2007	10	(810,073)	(709,702)	(85,420)
Change in Assumptions	6/30/2008	11	789,072	718,298	80,169
FY08 Gain	6/30/2008	11	(14,011,596)	(12,754,834)	(1,423,565)
FY09 Loss	6/30/2009	12	901,355	845,622	88,234
Change in Assumptions	6/30/2010	13	2,006,196	1,926,553	189,217
FY10 Gain	6/30/2010	13	(1,930,656)	(1,854,010)	(182,092)
FY11 Loss	6/30/2011	14	550,376	539,038	50,122
Change in Assumptions	6/30/2012	15	353,605	351,454	31,093
FY12 Gain	6/30/2012	15	(5,516,210)	(5,482,685)	(485,052)
FY13 Loss	6/30/2013	16	226,259	227,238	19,210
Change in Assumptions	6/30/2014	17	772,305	780,799	63,311
FY14 Gain	6/30/2014	17	(3,342,464)	(3,379,230)	(274,006)
FY15 Gain	6/30/2015	18	(1,416,996)	(1,437,324)	(112,157)
Change in Method	6/30/2016	19	(3,567,789)	(3,620,251)	(272,660)
FY16 Gain	6/30/2016	19	(425,711)	(431,971)	(32,534)
FY17 Gain	6/30/2017	20	(586,113)	(593,377)	(43,248)
Change in Assumptions/Methods/EGWP	6/30/2018	21	1,009,960	1,017,735	71,951
FY18 Gain	6/30/2018	21	(2,148,478)	(2,165,016)	(153,061)
Change in Assumptions	6/30/2019	22	126,754	127,828	8,785
FY19 Gain	6/30/2019	22	(155,028)	(156,343)	(10,744)
Change in Assumptions	6/30/2020	23	200,955	202,432	13,549
FY20 Gain	6/30/2020	23	(2,842,610)	(2,863,498)	(191,657)
FY21 Gain	6/30/2021	24	(1,754,192)	(1,762,021)	(115,061)
Change in Assumptions	6/30/2022	25	(802,844)	(802,844)	(51,230)
Medical/Prescription Drug Plan Changes	6/30/2022	25	(223,750)	(223,750)	(14,278)
FY22 Gain	6/30/2022	25	(1,845,814)	(1,845,814)	(117,783)
Total				**$(22,991,562)**	**$ (1,429,646)**

[1] The pension and healthcare split was done based on the ratio of unfunded actuarial accrued liability as of June 30, 2006.

Section 1.3: Actuarial Gain/(Loss) for FY22

	Pension	Healthcare
1. Expected Actuarial Accrued Liability		
a. Actuarial Accrued Liability as of June 30, 2021	$ 218,717,460	$ 17,920,646
b. Normal Cost	5,850,927	829,927
c. Interest on (a) and (b) at 7.38%	16,573,147	1,383,792
d. Employer Group Waiver Plan	0	344,091
e. Benefit Payments	(14,770,632)	(1,222,346)
f. Refund of Contributions	0	0
g. Interest on (d) thru (f) at 7.38%, adjusted for timing	(580,813)	(31,831)
h. Assumptions/Methods Changes	(1,189,628)	(802,844)
i. Expected Actuarial Accrued Liability as of June 30, 2022 (a) + (b) + (c) + (d) + (e) + (f) + (g) + (h)	$ 224,600,461	$ 18,421,435
2. Actual Actuarial Accrued Liability as of June 30, 2022	227,227,808	17,864,257
3. Liability Gain/(Loss), (1)(i) - (2)	**$ (2,627,347)**	**$ 557,178**
4. Expected Actuarial Asset Value		
a. Actuarial Value of Assets as of June 30, 2021	$ 215,641,198	$ 37,884,167
b. Interest on (a) at 7.38%	15,914,320	2,795,852
c. Employee Contributions	862,028	0
d. Employer Contributions	6,638,140	622,469
e. State Appropriation	4,185,000	0
f. Employer Group Waiver Plan	0	344,091
g. Interest on (c) thru (f) at 7.38%, adjusted for timing	580,683	35,031
h. Benefit Payments	(14,770,632)	(1,222,346)
i. Refund of Contributions	0	0
j. Administrative Expenses	(107,041)	(34,990)
k. Interest on (h) thru (j) at 7.38%, adjusted for timing	(584,692)	(45,570)
l. Expected Actuarial Asset Value as of June 30, 2022 (a) + (b) + (c) + (d) + (e) + (f) + (g) + (h) + (i) + (j) + (k)	$ 228,359,004	$ 40,378,704
5. Actual Actuarial Asset Value as of June 30, 2022	230,801,847	40,855,819
6. Actuarial Asset Value Gain/(Loss), (5) - (4)(l)	**$ 2,442,843**	**$ 477,115**
7. Total Actuarial Gain/(Loss), (3) + (6)	**$ (184,504)**	**$ 1,034,293**
8. Contribution Gain/(Loss)	**$ 3,088,369**	**$ 1,038,241**
9. Administrative Expense Gain/(Loss)	**$ (1,393)**	**$ (2,970)**
10. FY22 Gain/(Loss), (7) + (8) + (9)	**$ 2,902,472**	**$ 2,069,564**

Section 1.4: Development of Change in Unfunded Liability During FY22

	Pension	Healthcare
1. 2021 Unfunded Liability	$ 3,076,262	$ (19,963,521)
a. Interest on Unfunded Liability at 7.38%	$ 227,028	$ (1,473,308)
b. Normal Cost	5,850,927	829,927
c. Employee Contributions	(862,028)	0
d. Employer Contributions	(6,638,140)	(622,469)
e. State Appropriation	(4,185,000)	0
f. Administrative Expenses	107,041	34,990
g. Interest on (b) thru (f) at 7.38%, adjusted for timing	(145,005)	39,956
h. Assumptions/Methods Changes	(1,189,628)	(802,844)
i. Expected Change in Unfunded Liability During FY22 (a) + (b) + (c) + (d) + (e) + (f) + (g) + (h)	$ (6,834,805)	$ (1,993,748)
2. Expected 2022 Unfunded Liability, (1) + (1)(i)	$ (3,758,543)	$ (21,957,269)
a. Liability (Gain)/Loss During FY22	$ 2,627,347	$ (557,178)
b. Actuarial Assets (Gain)/Loss During FY22	(2,442,843)	(477,115)
c. Total Actuarial (Gain)/Loss During FY22	$ 184,504	$ (1,034,293)
3. Actual 2022 Unfunded Liability, (2) + (2)(c)	$ (3,574,039)	$ (22,991,562)

Section 1.5: History of Unfunded Liability and Funded Ratio

Pension

Valuation Date	Total Actuarial Accrued Liability	Valuation Assets	Assets as a Percent of Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL)
June 30, 2006	$ 111,819,972	$ 77,310,716	69.1%	$ 34,509,256
June 30, 2007	117,378,824	81,041,009	69.0%	36,337,815
June 30, 2008	130,596,048	122,882,726	94.1%	7,713,322
June 30, 2009	137,586,315	108,691,018	79.0%	28,895,297
June 30, 2010	164,523,775	115,000,226	69.9%	49,523,549
June 30, 2011	173,424,484	116,213,133	67.0%	57,211,351
June 30, 2012	182,267,524	112,870,360	61.9%	69,397,164
June 30, 2013	191,505,115	115,032,531	60.1%	76,472,584
June 30, 2014	194,430,266	128,004,452	65.8%	66,425,814
June 30, 2015	205,160,847	142,191,071	69.3%	62,969,776
June 30, 2016	205,547,759	152,888,596	74.4%	52,659,163
June 30, 2017	216,673,191	165,875,722	76.6%	50,797,469
June 30, 2018	226,559,580	178,489,284	78.8%	48,070,296
June 30, 2019	221,159,289	186,117,830	84.2%	35,041,459
June 30, 2020	211,742,043	194,788,043	92.0%	16,954,000
June 30, 2021	218,717,460	215,641,198	98.6%	3,076,262
June 30, 2022	227,227,808	230,801,847	101.6%	(3,574,039)

Healthcare

Valuation Date	Total Actuarial Accrued Liability	Valuation Assets	Assets as a Percent of Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL)
June 30, 2006	$ 15,905,786	$ 2,399,387	15.1%	$ 13,506,399
June 30, 2007	16,610,082	3,732,217	22.5%	12,877,865
June 30, 2008	18,141,832	18,352,929	101.2%	(211,097)
June 30, 2009	19,093,191	18,482,598	96.8%	610,593
June 30, 2010	20,304,331	19,693,969	97.0%	610,362
June 30, 2011	21,406,833	20,333,071	95.0%	1,073,762
June 30, 2012	16,654,623	20,835,672	125.1%	(4,181,049)
June 30, 2013	17,583,031	21,706,165	123.4%	(4,123,134)
June 30, 2014	17,207,952	24,074,313	139.9%	(6,866,361)
June 30, 2015	18,304,497	26,800,113	146.4%	(8,495,616)
June 30, 2016	15,731,490	28,454,747	180.9%	(12,723,257)
June 30, 2017	16,874,200	30,468,517	180.6%	(13,594,317)
June 30, 2018	16,846,959	31,868,079	189.2%	(15,021,120)
June 30, 2019	18,089,100	33,319,896	184.2%	(15,230,796)
June 30, 2020	16,763,770	34,805,639	207.6%	(18,041,869)
June 30, 2021	17,920,646	37,884,167	211.4%	(19,963,521)
June 30, 2022	17,864,257	40,855,819	228.7%	(22,991,562)

Section 2: Plan Assets

Section 2.1: Summary of Fair Value of Assets

As of June 30, 2022	Pension	Healthcare	Allocation Percent
Cash and Short-Term Investments			
- Cash and Cash Equivalents	$ 3,247,418	$ 552,364	1.4%
- Subtotal	$ 3,247,418	$ 552,364	1.4%
Fixed Income Investments			
- Domestic Fixed Income Pool	$ 48,047,351	$ 8,599,005	21.3%
- International Fixed Income Pool	0	0	0.0%
- Tactical Fixed Income Pool	0	0	0.0%
- High Yield Pool	0	0	0.0%
- Treasury Inflation Protection Pool	0	0	0.0%
- Emerging Debt Pool	0	0	0.0%
- Subtotal	$ 48,047,351	$ 8,599,005	21.3%
Equity Investments			
- Domestic Equity Pool	$ 54,683,501	$ 9,786,700	24.2%
- International Equity Pool	29,684,190	5,312,200	13.2%
- Private Equity Pool	37,168,110	6,652,003	16.5%
- Emerging Markets Equity Pool	6,642,988	1,188,930	2.9%
- Alternative Equity Strategies	13,154,234	2,354,151	5.8%
- Subtotal	$ 141,333,023	$ 25,293,984	62.6%
Other Investments			
- Real Estate Pool	$ 16,986,777	$ 3,045,093	7.5%
- Other Investments Pool	16,268,492	2,911,603	7.2%
- Absolute Return Pool	0	0	0.0%
- Other Assets	0	3,076	0.0%
- Subtotal	$ 33,255,269	$ 5,959,772	14.7%
Total Cash and Investments	$ 225,883,061	$ 40,405,125	100.0%
Net Accrued Receivables	1,298,805	(137,505)	
Net Assets	$ 227,181,866	$ 40,267,620	

Section 2.2: Changes in Fair Value of Assets During FY21

Fiscal Year 2021	Pension	Healthcare
1. Fair Value of Assets as of June 30, 2020	$ 189,844,025	$ 34,036,503
2. Additions:		
a. Employee Contributions	$ 837,686	$ 0
b. Employer Contributions	6,962,607	654,383
c. State Appropriation	5,145,000	0
d. Interest and Dividend Income	2,691,703	479,199
e. Net Appreciation / Depreciation in Fair Value of Investments	54,569,848	9,640,529
f. Employer Group Waiver Plan	0	168,159
g. Other	7,891	14,345
h. Total Additions	$ 70,214,735	$ 10,956,615
3. Deductions:		
a. Medical Benefits	$ 0	$ 1,692,383
b. Retirement Benefits	14,368,857	0
c. Refund of Contributions	0	0
d. Investment Expenses	544,884	95,170
e. Administrative Expenses	97,022	32,216
f. Total Deductions	$ 15,010,763	$ 1,819,769
4. Fair Value of Assets as of June 30, 2021	$ 245,047,997	$ 43,173,349
5. Approximate Fair Value Investment Return Rate during FY21 Net of Investment Expenses	30.0%	29.9%

Section 2.3: Changes in Fair Value of Assets During FY22

Fiscal Year 2022	Pension	Healthcare
1. Fair Value of Assets as of June 30, 2021	$ 245,047,997	$ 43,173,349
2. Additions:		
a. Employee Contributions	$ 862,028	$ 0
b. Employer Contributions	6,638,140	622,469
c. State Appropriation	4,185,000	0
d. Interest and Dividend Income	3,193,800	567,838
e. Net Appreciation / Depreciation in Fair Value of Investments	(17,274,177)	(3,079,123)
f. Employer Group Waiver Plan	0	344,091
g. Other	0	101
h. Total Additions	$ (2,395,209)	$ (1,544,624)
3. Deductions:		
a. Medical Benefits	$ 0	$ 1,222,346
b. Retirement Benefits	14,770,632	0
c. Refund of Contributions	0	0
d. Investment Expenses	593,249	103,769
e. Administrative Expenses	107,041	34,990
f. Total Deductions	$ 15,470,922	$ 1,361,105
4. Fair Value of Assets as of June 30, 2022	$ 227,181,866	$ 40,267,620
5. Approximate Fair Value Investment Return Rate during FY22 Net of Investment Expenses	(6.0%)	(6.1%)

Section 2.4: Development of Actuarial Value of Assets

Investment gains and losses are recognized 20% per year over 5 years. In no event may valuation assets be less than 80% or more than 120% of fair value as of the current valuation date.

	Pension	Healthcare
1. Deferral of Investment Gain / (Loss) for FY22		
a. Fair Value of Assets as of June 30, 2021	$ 245,047,997	$ 43,173,349
b. Contributions	11,685,168	622,469
c. Employer Group Waiver Plan	0	344,091
d. Benefit Payments	14,770,632	1,222,346
e. Administrative Expenses	107,041	34,990
f. Actual Investment Return (net of investment expenses)	(14,673,626)	(2,614,953)
g. Expected Return Rate (net of investment expenses)	7.38%	7.38%
h. Expected Return, Weighted for Timing	18,080,533	3,175,654
i. Investment Gain / (Loss) for the Year, (f) - (h)	(32,754,159)	(5,790,607)
2. Actuarial Value as of June 30, 2022		
a. Fair Value as of June 30, 2022	$ 227,181,866	$ 40,267,620
b. Deferred Investment Gain / (Loss)	(3,619,981)	(588,199)
c. Preliminary Actuarial Value as of June 30, 2022, (a) - (b)	230,801,847	40,855,819
d. Upper Limit: 120% of Fair Value as of June 30, 2022	272,618,239	48,321,144
e. Lower Limit: 80% of Fair Value as of June 30, 2022	181,745,493	32,214,096
f. Actuarial Value at June 30, 2022, (c) limited by (d) and (e)	230,801,847	40,855,819
3. Ratio of Actuarial Value of Assets to Fair Value of Assets	101.6%	101.5%
4. Approximate Actuarial Value Investment Return Rate during FY22 Net of Investment Expenses	8.6%	8.6%

The tables below show the development of the gains/(losses) to be recognized in the current year:

Pension				
Fiscal Year Ending	Asset Gain / (Loss)	Gain / (Loss) Recognized in Prior Years	Gain / (Loss) Recognized This Year	Gain / (Loss) Deferred to Future Years
June 30, 2018	$ 292,590	$ 234,072	$ 58,518	$ 0
June 30, 2019	(2,647,188)	(1,588,313)	(529,438)	(529,437)
June 30, 2020	(6,148,327)	(2,459,330)	(1,229,665)	(2,459,332)
June 30, 2021	42,620,191	8,524,038	8,524,038	25,572,115
June 30, 2022	(32,754,159)	0	(6,550,832)	(26,203,327)
Total	**$ 1,363,107**	**$ 4,710,467**	**$ 272,621**	**$ (3,619,981)**

Healthcare				
Fiscal Year Ending	Asset Gain / (Loss)	Gain / (Loss) Recognized in Prior Years	Gain / (Loss) Recognized This Year	Gain / (Loss) Deferred to Future Years
June 30, 2018	$ 98,500	$ 78,800	$ 19,700	$ 0
June 30, 2019	(409,783)	(245,870)	(81,957)	(81,956)
June 30, 2020	(1,023,945)	(409,578)	(204,789)	(409,578)
June 30, 2021	7,559,703	1,511,941	1,511,941	4,535,821
June 30, 2022	(5,790,607)	0	(1,158,121)	(4,632,486)
Total	**$ 433,868**	**$ 935,293**	**$ 86,774**	**$ (588,199)**

Section 2.5: Historical Asset Rates of Return

	Actuarial Value		Fair Value	
Year Ending	Annual	Cumulative	Annual	Cumulative
June 30, 2005	8.0%	8.0%	8.0%	8.0%
June 30, 2006	11.0%	9.5%	11.0%	9.5%
June 30, 2007	10.2%	9.7%	18.1%	12.3%
June 30, 2008	7.4%	9.1%	(4.8%)	7.7%
June 30, 2009	(9.7%)	5.1%	(20.6%)	1.4%
June 30, 2010	8.7%	5.7%	10.6%	2.8%
June 30, 2011	5.0%	5.6%	20.8%	5.2%
June 30, 2012	0.7%	5.0%	0.1%	4.6%
June 30, 2013	3.6%	4.8%	12.3%	5.4%
June 30, 2014	12.2%	5.5%	18.3%	6.6%
June 30, 2015	10.8%	6.0%	3.0%	6.3%
June 30, 2016	6.6%	6.0%	(0.5%)	5.7%
June 30, 2017	8.3%	6.2%	13.0%	6.3%
June 30, 2018	8.1%	6.3%	8.3%	6.4%
June 30, 2019	5.7%	6.3%	6.0%	6.4%
June 30, 2020	5.9%	6.3%	4.1%	6.2%
June 30, 2021	11.5%	6.6%	30.0%	7.5%
June 30, 2022	8.6%	6.7%	(6.0%)	6.7%

Rates of return are shown based on combined assets for Pension and Healthcare.

Cumulative returns are since fiscal year ending June 30, 2005.

Section 3: Member Data

Section 3.1: Summary of Members Included

As of June 30	2014	2016	2018	2020	2022
Active Members					
1. Number	76	76	71	72	73
2. Average Age	57.65	58.80	57.53	55.03	53.74
3. Average Service	8.70	9.39	9.49	6.83	6.85
4. Average Entry Age	48.95	49.41	48.04	48.20	46.89
5. Average Annual Earnings	$ 175,964	$ 178,903	$ 182,045	$ 182,739	$ 183,102
6. Number Vested	48	54	51	36	35
7. Percent Who Are Vested	63.2%	71.1%	71.8%	50.0%	47.9%
Retirees, Disabilitants, and Beneficiaries					
1. Number	108	109	125	144	149
2. Average Age	72.09	73.34	73.71	73.98	74.88
3. Average Monthly Pension Benefit	$ 8,141	$ 8,529	$ 8,291	$ 8,305	$ 8,395
Vested Terminations (vested at termination, not refunded contributions, and not commenced benefit)					
1. Number	4	3	3	2	1
2. Average Age	53.53	57.35	59.05	55.87	55.17
3. Average Monthly Pension Benefit	$ 5,704	$ 7,017	$ 7,623	$ 6,305	$ 4,049
Non-Vested Terminations (not vested at termination and not refunded contributions)					
1. Number	0	0	0	1	2
2. Average Account Balance	$ 0	$ 0	$ 0	$ 66,828	$ 55,738
Total Number of Members	**188**	**188**	**199**	**219**	**225**

As of June 30, 2022	Retirees
Summary of Retiree Medical Data Received	
1. Retiree records on pension data	149
2. Remove duplicates on pension data	(4)
3. Valued in a different retiree healthcare plan	(48)
4. Records without medical coverage	(1)
5. Total	96

Section 3.2: Age and Service Distribution of Active Members

Annual Earnings by Age

Age	Number	Total Annual Earnings	Average Annual Earnings
0 - 19	0	$ 0	$ 0
20 - 24	0	0	0
25 - 29	0	0	0
30 - 34	1	189,720	189,720
35 - 39	3	540,288	180,096
40 - 44	7	1,285,752	183,679
45 - 49	13	2,399,316	184,563
50 - 54	15	2,767,416	184,494
55 - 59	18	3,188,100	177,117
60 - 64	9	1,636,320	181,813
65 - 69	7	1,359,552	194,222
70 - 74	0	0	0
75+	0	0	0
Total	**73**	**$ 13,366,464**	**$ 183,102**

Annual Earnings by Service

Years of Service	Number	Total Annual Earnings	Average Annual Earnings
0	5	$ 919,728	$ 183,946
1	6	1,100,148	183,358
2	8	1,460,016	182,502
3	13	2,408,616	185,278
4	6	1,051,704	175,284
0 - 4	**38**	**$ 6,940,212**	**$ 182,637**
5 - 9	17	3,197,340	188,079
10 - 14	11	1,987,488	180,681
15 - 19	5	890,856	178,171
20 - 24	2	350,568	175,284
25 - 29	0	0	0
30 - 34	0	0	0
35 - 39	0	0	0
40+	0	0	0
Total	**73**	**$ 13,366,464**	**$ 183,102**

Years of Service by Age

	Years of Service									
Age	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	Total
0 - 19	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	0	0	0	0	0
30 - 34	1	0	0	0	0	0	0	0	0	1
35 - 39	3	0	0	0	0	0	0	0	0	3
40 - 44	7	0	0	0	0	0	0	0	0	7
45 - 49	7	5	1	0	0	0	0	0	0	13
50 - 54	7	6	1	1	0	0	0	0	0	15
55 - 59	9	2	2	4	1	0	0	0	0	18
60 - 64	4	3	2	0	0	0	0	0	0	9
65 - 69	0	1	5	0	1	0	0	0	0	7
70 - 74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
Total	**38**	**17**	**11**	**5**	**2**	**0**	**0**	**0**	**0**	**73**

Section 3.3: Member Data Reconciliation

Pension

		Inactive Members			
	Active Members	Due a Refund	Deferred Benefits	Benefit Recipients	Total
As of June 30, 2020	**72**	**1**	**2**	**144**	**219**
New Entrants	11	0	0	0	11
Rehires	0	0	0	0	0
Vested Terminations	0	0	0	0	0
Non-Vested Terminations	(1)	1	0	0	0
Refund of Contributions	0	0	0	0	0
Retirements	(9)	0	(1)	10	0
Deceased	0	0	0	(8)	(8)
New Beneficiaries	0	0	0	3	3
New QDROs	0	0	0	0	0
Transfers In/Out	0	0	0	0	0
Data Corrections	0	0	0	0	0
Net Change	**1**	**1**	**(1)**	**5**	**6**
As of June 30, 2022	**73**	**2**	**1**	**149**	**225**

Healthcare

		Inactive Members				
	Active Members	Retirees	Covered Spouses	Covered Children / Dependents	Deferred	Total Inactive Members
As of June 30, 2020	**56**	**89**	**39**	**4**	**2**	**134**
New Entrants	11	0	0	0	0	0
Rehires	0	0	0	0	0	0
Vested Terminations	0	0	0	0	0	0
Non-Vested Terminations	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0
Disability Retirements	0	0	0	0	0	0
Age Retirements	(6)	6	4	3	0	13
Deferred Retirements	0	1	1	0	(1)	1
Deceased	0	(5)	0	0	0	(5)
New Beneficiaries	0	1	(1)	0	0	0
Added Retiree Medical Coverage	0	0	0	0	0	0
Added Dependent Coverage	0	0	1	0	0	1
Dropped Retiree Medical Coverage	0	0	0	0	0	0
Dropped Dependent Coverage	0	0	0	(2)	0	(2)
Transfers In/Out	8	4	1	0	0	5
Net Change	**13**	**7**	**6**	**1**	**(1)**	**13**
As of June 30, 2022	**69**	**96**	**45**	**5**	**1**	**147**

Section 4: Basis of the Actuarial Valuation

Section 4.1: Summary of Plan Provisions

Effective Date

May 4, 1963, with amendments through June 30, 2022.

Administration of Plan

The Commissioner of Administration is responsible for administering the Judicial Retirement System (JRS). The Alaska Retirement Management Board is responsible for managing and investing the fund.

Membership

Membership in JRS is mandatory for all Supreme Court justices and Superior, District, and Appellate Court judges. The administrative director of the Court System may elect to participate in either JRS or Public Employees' Retirement System (PERS).

Credited Service

Members receive credit for each day of JRS employment. Earlier service as a magistrate or deputy magistrate before July 1, 1967 is covered under JRS. JRS members become vested in the plan after completing five years of credited service.

Member Contributions

Mandatory Contributions: Members hired after July 1, 1978, are required to contribute 7% of their base salaries. Contributions are required for a maximum of 15 years. Members hired before July 1, 1978 are not required to contribute.

Interest: Members' contributions earn 4.5% interest, compounded semiannually on June 30 and December 31.

Refund of Contributions: Non-vested members may receive a refund of their contributions and interest earned if they terminate employment. Refunded contributions, plus 7% indebtedness interest, must be repaid before appointment to retirement.

JRS contributions for terminated members may be attached to satisfy claims under Alaska Statute 09.38.065 or federal tax levies. Contributions that are attached to satisfy claims or tax levies may be reinstated at any time. The member is not required to return to JRS employment.

Retirement Benefits

Normal Retirement: Members are eligible for normal retirement at age 60 if they have at least five years of JRS service. Terminated vested members may defer retirement and begin receiving normal retirement benefits when they reach age 60. Vesting is completion of at least five years of JRS service.

Early Retirement: Members are eligible for early retirement at any age if they have at least 20 years of service. Terminated vested members may defer retirement and begin receiving early retirement benefits when they reach age 55. Under early retirement, members receive reduced benefits equal to the actuarial equivalent of their normal retirement benefits. Early benefits are based on the member's service and early retirement date.

Benefit Type: Lifetime monthly benefits are paid to the member. Upon the member's death, a survivor's benefit (see below) may be payable if the member has an eligible spouse or dependent children.

Benefit Calculations for Normal Retirement: 5% of authorized monthly base salary for each year of JRS service up to a maximum of 15 years. JRS retirement benefit payments are recalculated when the salary for the office held by the member at the time of retirement changes. The maximum JRS benefit payable to a member is 75% of the authorized salary.

Disability Benefits

Members are eligible to receive monthly disability benefits at any age if they become incapacitated and they have at least two years of JRS service. Disability benefits are calculated the same as normal retirement benefits.

Survivor's Benefits

Survivor's benefits are payable to the spouse of a member if they have been married for at least one year immediately preceding the member's death and the member has at least two years of JRS service. The monthly survivor's benefit is equal to the greater of:

a. 50% of the monthly benefit that the member would have received if retired at the time of death; or

b. 30% of the authorized monthly base salary if the member was not eligible to retire, or was entitled to less than 60% of the authorized monthly base salary.

If there is no eligible surviving spouse, the member's dependent children receive, in equal shares, 50% of the benefit under (a) or (b) until age 19, or age 23 and attending an accredited educational or technical institution on a full-time basis.

When there is both an eligible surviving spouse and dependent children residing in separate households, the spouse and children share equally the benefit under (a) or (b) while the children are under age 19, or age 23 and attending an accredited educational or technical institution on a full-time basis.

When there is no surviving spouse or dependent children, the member's contribution account balance, including interest earned, will be paid to the designated beneficiary.

Postemployment Healthcare Benefits

Medical benefits are provided at no cost to JRS members, their spouses, and dependents while monthly retirement, disability, and survivor benefits are being paid.

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

Starting in 2022, certain preventive benefits for pre-Medicare participants are covered by the plan.

Participants in the defined benefit plan 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, excluding 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 is through a Medicare Part D EGWP arrangement.

Changes in Benefit Provisions Valued Since the Prior Valuation

Starting in 2022, prior authorization is required for certain specialty medications for all participants, and certain preventive benefits for pre-Medicare participants are now covered by the plan. There were no other changes in benefit provisions since the prior valuation.

Section 4.2: Description of Actuarial Methods and Valuation Procedures

The funding method used in this valuation was adopted by the Board in October 2006. Changes in methods were adopted by the Board in January 2019 based on the experience study for the period July 1, 2013 to June 30, 2017. The asset smoothing method used to determine valuation assets was changed effective June 30, 2014.

Benefits valued are those delineated in Alaska State statutes as of the valuation date. Changes in State statutes effective after the valuation date are not taken into consideration in setting the assumptions and methods.

Actuarial Cost Method

Liabilities and contributions shown in the report are computed using the Entry Age Normal Actuarial Cost Method, level percent of pay.

Each year's difference between actual and expected unfunded actuarial accrued liability is amortized over 25 years as a level percent of expected payroll.

Projected pension and postemployment healthcare benefits were determined for all active members. Cost factors designed to produce annual costs as a constant percentage of each member's expected compensation in each year from the assumed entry age to the assumed retirement age were applied to the projected benefits to determine the normal cost (the portion of the total cost of the plan allocated to the current year under the method). The normal cost is determined by summing intermediate results for active members and determining an average normal cost rate which is then related to the total payroll of active members. The actuarial accrued liability for active members (the portion of the total cost of the plan allocated to prior years under the method) was determined as the excess of the actuarial present value of projected benefits over the actuarial present value of future normal costs.

The actuarial accrued liability for retired members and their beneficiaries currently receiving benefits, terminated vested members and disabled members not yet 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.

The actuarial accrued liability under this method at any point in time is the theoretical amount of the fund that would have been accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of plan assets measured on the valuation date.

Under this method, experience gains or losses, i.e., decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

Valuation of Assets

The actuarial asset value was initialized to equal Fair Value of Assets as of June 30, 2006. Beginning in FY07, the asset valuation method recognizes 20% of the gain or loss each year, for a period of five years. All assets are valued at fair value. Assets are accounted for on an accrued basis and are taken directly from financial statements audited by KPMG LLP. Valuation assets are constrained to a range of 80% to 120% of the fair value of 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 JRS postemployment healthcare plan. Note that the methodology reflects the results of our experience rate update for the period from July 1, 2021 to June 30, 2022.

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 2020 through June 2022 (FY21 through FY22) 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, 2022 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 the 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 FY23 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 FY21 through FY22.
    - 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 FY23).
    - Because the reports provided 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 2% 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, 2021, and July 1, 2022, 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 16.2% of pre-Medicare, and 14.3% of Medicare prescription drug claims for FY21; and 20.1% of pre-Medicare, and 13.5% of Medicare prescription drug claims for FY22.
2. Develop estimated EGWP reimbursements – Segal provided estimated 2023 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. FY21 and FY22 experience was thoroughly reviewed to assess the impact of COVID-19 and whether an adjustment to FY21 and FY22 claims was appropriate for use in the June 30, 2022 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. FY22 medical per capita claims were reasonable when compared to pre-COVID levels, so no adjustments were made to the FY22 medical claims used in the per capita claims cost development. Total prescription drug claims experience for FY21 and FY22 was reasonable and consistent with FY19 and FY20 experience. Therefore, no adjustment was made to FY21 and FY22 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 FY23 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 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 both years of 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**
FY21 to FY22	8.1% Pre-Medicare / 4.8% Medicare	8.0%	50%
FY22 to FY23	7.4% Pre-Medicare / 5.6% Medicare	9.5%	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 is 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 resulting adjustment factors for pre-Medicare prescription drug, Medicare prescription drug, and EGWP costs were applied to claims experience incurred before January 1, 2022. Additionally, starting in 2022, certain preventive benefits for pre-Medicare participants 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 resulting adjustment factor for pre-Medicare medical costs was applied to claims experience incurred before January 1, 2022.

7. Develop separate administration costs – no adjustments were made for internal administrative costs. Third party retiree plan administration fees for FY23 are based upon total fees projected to 2023 by Segal based on actual FY22 fees. The annual per participant per year administrative cost rate for medical and prescription benefits is $449.

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 due to these 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.

The Inflation Reduction Act was signed into law on August 16, 2022. The law contains several provisions that are expected to impact Alaska's Medicare prescription drug plan (EGWP), which will be considered at the next measurement date.

We have not identified any other specific provisions of healthcare 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 PERS, TRS, and JRS.

	Medical		Prescription Drugs (Rx)	
	Pre-Medicare	**Medicare**	**Pre-Medicare**	**Medicare**
A. 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 2023	1.161	1.107	1.183	1.183
7. Fiscal 2023 Incurred Cost Rate (5) x (6)	$ 13,108	$ 2,117	$ 3,322	$ 4,479
8. Adjustment Factor for 2022 Plan Changes	1.014	1.000	0.913	0.976
9. Adjusted Fiscal 2023 Incurred Cost Rate (7) x (8)	$ 13,290	$ 2,117	$ 3,034	$ 4,371
B. Fiscal 2022				
1. Incurred Claims	$ 197,733,173	$ 98,249,082	$ 64,076,270	$ 230,832,315
2. Adjustments for Rx Rebates	0	0	(12,879,330)	(31,162,363)
3. Net incurred claims	$ 197,733,173	$ 98,249,082	$ 51,196,940	$ 199,669,953
4. Average Enrollment	17,072	48,698	17,072	48,698
5. Claim Cost Rate (3) / (4)	11,582	2,018	2,999	4,100
6. Trend to Fiscal 2023	1.074	1.056	1.095	1.095
7. Fiscal 2023 Incurred Cost Rate (5) x (6)	$ 12,439	$ 2,131	$ 3,284	$ 4,490
8. Adjustment Factor for 2022 Plan Changes	1.007	1.000	0.957	0.988
9. Adjusted Fiscal 2023 Incurred Cost Rate (7) x (8)	$ 12,526	$ 2,131	$ 3,141	$ 4,436

	Medical		Prescription Drugs (Rx)	
	Pre-Medicare	**Medicare**	**Pre-Medicare**	**Medicare**
C. Adjusted Incurred Cost Rate by Fiscal Year				
1. Fiscal 2021 A.(9)	13,290	2,117	3,034	4,371
2. Fiscal 2022 B.(9)	12,526	2,131	3,141	4,436
D. Weighting by Fiscal Year				
1. Fiscal 2021	50%	50%	50%	50%
2. Fiscal 2022	50%	50%	50%	50%
E. Fiscal 2023 Incurred Cost Rate				
1. Rate at Average Age C x D	$ 12,908	$ 2,124	$ 3,088	$ 4,403
2. Average Aging Factor	0.822	1.279	0.832	1.127
3. Rate at Age 65 (1) / (2)	$ 15,706	$ 1,661	$ 3,712	$ 3,907
F. Development of Part A&B and Part B Only Cost from Pooled Rate Above				
1. Part A&B Average Enrollment		48,233		
2. Part B Only Average Enrollment		465		
3. Total Medicare Average Enrollment B(4)		48,698		
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		1.022		
6. Medicare per capita cost for all participants: E(3)		$ 1,661		
7. Cost for those eligible for Parts A&B: (6) / (5)		$ 1,625		
8. Cost for those eligible for Part B only: (7) x (4)		$ 5,363		

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, 2022 through June 30, 2023

Age	Medical and Medicare Parts A & B	Medical and Medicare Part B Only	Prescription Drug	Medicare EGWP Subsidy
45	$ 9,585	$ 9,585	$ 2,382	$ 0
50	10,844	10,844	2,829	0
55	12,270	12,270	3,369	0
60	13,882	13,882	3,532	0
65	1,625	5,363	3,907	1,309
70	1,794	5,921	4,335	1,452
75	1,981	6,537	4,810	1,611
80	2,209	7,289	4,738	1,587

Section 4.3: Summary of Actuarial Assumptions

The demographic and economic assumptions used in the June 30, 2022 valuation are described below. Unless noted otherwise, these assumptions were adopted by the Board at the June 2022 meeting based on the experience study for the period July 1, 2017 to June 30, 2021. For the June 30, 2022 valuation, the salary increase and pensioner benefit increase assumptions were further modified to be 5.00% for FY23, and 3.00% per year thereafter to better reflect expected short-term experience.

Investment Return

7.25% per year, net of investment expenses.

Salary Scale

5.00% for FY23, and 3.00% per year thereafter.

Payroll Growth

2.75% per year (2.50% inflation + 0.25% productivity).

Total Inflation

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

Compensation and Benefit Limit Increases

Compensation is limited to the IRC 401(a)(17) amount, which was $305,000 for 2022. This limit is assumed to increase 2.50% each year thereafter.

Benefits are limited to the IRC 415 amount, which was $245,000 for 2022. This limit is assumed to increase 2.50% each year thereafter.

Benefit Payment Increases

Benefits for retired members are assumed to increase 5.00% for FY23, and 3.00% per year thereafter. Increases are assumed to be effective at the beginning of each fiscal year.

Mortality (Pre-Commencement)

Mortality rates based on the 2017-2021 actual experience, to the extent the experience was statistically credible.

- Pension: Pub-2010 General Employee table, above-median, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 General Employee table, above-median, headcount-weighted, and projected with MP-2021 generational improvement.

Mortality (Post-Commencement)

Mortality rates based on the 2017-2021 actual experience, to the extent the experience was statistically credible.

Retiree mortality in accordance with the following tables:

- Pension: Pub-2010 General Retiree table, above-median, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 General Retiree table, above-median, headcount-weighted, and projected with MP-2021 generational improvement.

Beneficiary mortality in accordance with the following tables. These tables are applied only after the death of the original member.

- Pension: Pub-2010 Contingent Survivor table, above-median, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Contingent Survivor table, above-median, headcount-weighted, and projected with MP-2021 generational improvement.

Turnover

Select and ultimate rates as shown in Table 1. Turnover rates cease once a member is eligible for retirement.

Disability

Incidence rates as shown in Table 2. Disability rates cease once a member is eligible for retirement.

Post-disability mortality in accordance with the following tables:

- Pension: Pub-2010 Non-Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement.
- Healthcare: Pub-2010 Non-Safety Disabled Retiree table, headcount-weighted, and projected with MP-2021 generational improvement.

Retirement

Retirement rates as shown in Table 3.

Deferred vested members are assumed to retire at age 60.

Spouse Age Difference

Males are assumed to be four years older than their wives. Females are assumed to be four years younger than their husbands.

Percent Married for Pension

90% of male members and 70% of female members are assumed to be married at termination from active service.

Dependent Spouse Medical Coverage Election

Applies to members who do not have double medical coverage. 80% of male members and 60% of female members are assumed to be married and cover a dependent spouse.

Dependent Children

- Pension: None.
- Healthcare: Benefits for dependent children have been valued only for members currently covering their dependent children. These benefits are only valued through the dependent children's age 23 (unless the child is disabled).

Imputed Data

Data changes from the prior year which are deemed to have an immaterial impact on liabilities and contribution rates are assumed to be correct in the current year's client data.

Non-vested terminations with appropriate refund dates are assumed to have received a full refund of contributions. Active members with missing salary and service are assumed to be terminated with status based on their vesting percentage.

Administrative Expenses

The Normal Cost as of June 30, 2022 was increased by the following amounts. These amounts are based on the average of actual administrative expenses during the last two fiscal years.

- Pension: $ 102,000
- Healthcare: $ 34,000

Contribution Refunds

0% of terminating members with vested benefits are assumed to have their contributions refunded. 100% of those with non-vested benefits are assumed to have their contributions refunded.

Early Retirement Factors

State of Alaska staff provided the early retirement factors, which reflect grandfathered factors.

Form of Payment

Married members are assumed to elect the 50% Joint and Survivor benefit option. Single members are assumed to elect the Modified Cash Refund Annuity.

Healthcare Participation

100% of system paid members and their spouses are assumed to elect healthcare benefits as soon as they are eligible.

Medicare Part B Only

We assume that 2% of actives hired before April 1, 1986 and current retirees who are not yet Medicare eligible will not be eligible for Medicare Part A.

Healthcare Per Capita Claims Cost

Sample claims cost rates adjusted to age 65 for FY23 medical and prescription drugs are shown below. The prescription drug costs reflect the plan change to require prior authorization for certain specialty medications. The pre-Medicare medical cost reflects the coverage of additional preventive benefits.

	Medical	Prescription Drugs
Pre-Medicare	$ 15,706	$ 3,712
Medicare Parts A & B	$ 1,625	$ 3,907
Medicare Part B Only	$ 5,363	$ 3,907
Medicare Part D – EGWP	N/A	$ 1,309

Members are assumed to attain Medicare eligibility at age 65. All costs are for the 2023 fiscal year (July 1, 2022 – June 30, 2023).

The EGWP subsidy is assumed to increase in future years by the trend rates shown on the following pages. 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.

Healthcare Morbidity

Morbidity rates (also called aging factors) are used to estimate utilization of healthcare benefits at each age to reflect the fact that healthcare utilization typically increases with age. Separate morbidity rates are used for medical and prescription drug benefits. These rates are based on the 2017-2021 actual experience.

Age	Medical	Prescription Drugs
0 - 44	2.0%	4.5%
45 - 54	2.5%	3.5%
55 - 64	2.5%	1.0%
65 - 74	2.0%	2.1%
75 - 84	2.2%	(0.3%)
85 - 94	0.5%	(2.5%)
95+	0.0%	0.0%

Healthcare Third Party Administrator Fees

$449 per person per year; assumed to increase at 4.50% per year.

Healthcare 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, 7.00% is applied to the FY23 pre-Medicare medical claims costs to get the FY24 medical claims costs.

	Medical Pre-65	Medical Post-65	Prescription Drugs / EGWP
FY23	7.00%	5.50%	7.50%
FY24	6.70%	5.50%	7.20%
FY25	6.40%	5.40%	6.90%
FY26	6.20%	5.40%	6.65%
FY27	6.05%	5.35%	6.35%
FY28	5.85%	5.35%	6.10%
FY29	5.65%	5.30%	5.80%
FY30	5.45%	5.30%	5.55%
FY31-FY38	5.30%	5.30%	5.30%
FY39	5.25%	5.25%	5.25%
FY40	5.20%	5.20%	5.20%
FY41	5.10%	5.10%	5.10%
FY42	5.05%	5.05%	5.05%
FY43	4.95%	4.95%	4.95%
FY44	4.90%	4.90%	4.90%
FY45	4.80%	4.80%	4.80%
FY46	4.75%	4.75%	4.75%
FY47	4.70%	4.70%	4.70%
FY48	4.60%	4.60%	4.60%
FY49	4.55%	4.55%	4.55%
FY50+	4.50%	4.50%	4.50%

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.

Changes in Assumptions Since the Prior Valuation

Effective for the June 30, 2022 valuation, the Board adopted the changes to the demographic and economic assumptions recommended by the actuary, based on the results of an experience study performed on the plan experience from July 1, 2017 to June 30, 2021. The changes in assumptions were adopted at the June 2022 Board meeting. For the June 30, 2022 valuation, the salary increase and pensioner benefit increase assumptions were further modified to be 5.00% for FY23, and 3.00% per year thereafter to better reflect expected short-term experience.

The healthcare per capita claims cost assumption is updated for each valuation as described in Section 4.2. The amounts included in the Normal Cost for administrative expenses were changed from $83,000 to $102,000 for pension, and from $24,000 to $34,000 for healthcare (based on the most recent two years of actual administrative expenses paid from plan assets).

Table 1: Turnover Rates

Years of Service	Rate
< 1	3%
1	3%
2	3%
3	3%
4	3%
5	3%
6	3%
7	3%
8	3%
9	3%
10+	1%

Table 2: Disability Rates

Age	Rate	Age	Rate
20	0.017%	40	0.029%
21	0.017%	41	0.030%
22	0.018%	42	0.032%
23	0.018%	43	0.034%
24	0.018%	44	0.037%
25	0.019%	45	0.041%
26	0.019%	46	0.044%
27	0.019%	47	0.048%
28	0.020%	48	0.052%
29	0.020%	49	0.056%
30	0.021%	50	0.060%
31	0.021%	51	0.065%
32	0.022%	52	0.072%
33	0.022%	53	0.080%
34	0.023%	54	0.089%
35	0.024%	55	0.100%
36	0.025%	56	0.115%
37	0.026%	57	0.134%
38	0.027%	58	0.153%
39	0.028%	59	0.180%
		60+	0.000%

Table 3: Retirement Rates

Age	Rate
< 59	3%
59	10%
60	20%
61	20%
62	10%
63	10%
64	10%
65	20%
66	20%
67	10%
68	10%
69	10%
70+	100%

Section 5: Assessment of Risks (ASOP 51 Disclosures)

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.

- Investment Risk – potential that the investment return will be different than the 7.25% expected in the actuarial valuation
- Contribution Risk – potential that the contribution actually made will be different than the actuarially determined contribution
- Long-Term Return on Investment Risk – potential that changes in long-term capital market assumptions or the plan's asset allocation will create the need to update the long-term return on investment assumption
- Longevity Risk – potential that participants live longer than expected compared to the valuation mortality assumptions
- Salary Increase Risk – potential that future salaries will be different than expected in the actuarial valuation
- Inflation Risk – potential that the consumer price index (CPI) for urban wage earners and clerical workers for Anchorage is different than the 2.5% assumed in the valuation
- Other Demographic Risk – potential that other demographic experience will be different than expected

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.

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

Assessment of Risks

Investment Risk

Plan costs are very sensitive to the market return.

- Any return on assets lower than assumed will increase costs.
- The plan uses an actuarial value of assets that smooths gains and losses on market returns over a five-year period to help control some of the volatility in costs due to investment risk.
- Historical experience of actual returns is shown in Section 2.5 of this report. This historical experience illustrates how returns can vary over time.

Contribution Risk

There is a risk to the plan when the employer's and/or State's actual contribution amount and the actuarially determined contribution differ.

- If the actual contribution is lower than the actuarially determined contribution, the plan may not be sustainable in the long term.
- Any underpayment of the contribution will increase future contribution amounts to help pay off the additional Unfunded Actuarial Accrued Liability associated with the underpayment(s).
- As long as the Board consistently adopts the actuarially determined contributions, this risk is mitigated due to Alaska statutes requiring the State to contribute additional funds necessary to pay the total contributions adopted by the Board.

Long-Term Return on Investment Risk

Inherent in the long-term return on investment assumption is the expectation that the current rate will be used until the last benefit payment of the plan is made. There is a risk that sustained changes in economic conditions, changes in long-term future capital market assumptions, or changes to the plan's asset allocation will necessitate an update to the long-term return on investment assumption used.

- Under a lower long-term return on investment assumption, less investment return is available to pay plan benefits. This may lead to a need for increased employer contributions.
- The liabilities will be higher at a lower assumed rate of return because future benefits will have a lower discount rate applied when calculating the present value.
- A 1% decrease in the long-term return on investment assumption will increase actuarial accrued liability by approximately 10%.

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 could 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 plan provides cost-of-living adjustments on retirement benefits (based on salary changes of sitting judges) that increase longevity risk because members who live longer than expected will incur more benefit payment increases than expected and therefore increase costs.

Salary Increase Risk

Plan costs will be increased if actual salary increases are larger than expected.

- Higher-than-expected salary increases will produce higher benefits.
- The higher benefits may be partially offset by increased employee contributions due to higher salaries.
- If future payroll grows at a rate different than assumed, contributions as a percentage of payroll will be affected.

Inflation Risk

Inflation risk may be associated with the interaction of inflation with other assumptions, but this is not significant as a standalone assumption, and therefore is considered as part of the associated assumption risk instead of being discussed here.

Other Demographic Risk

The plan is subject to risks associated with other demographic assumptions (e.g., retirement and termination). Differences between actual and expected experience for these assumptions tend to have less impact on the overall costs of the plan. The demographic assumptions used in the valuation are re-evaluated regularly as part of the four-year experience studies to ensure the assumptions are consistent with long-term expectations.

Historical Information

Monitoring certain information over time may help understand risks faced by the plan. Historical information is included throughout this report. Some examples are:

- Section 1.5 shows how the plan's funded status (comparison of actuarial accrued liabilities to actuarial value of assets) has changed over time.
- Section 2.5 shows the volatility of asset returns over time.
- Section 3 includes various historical information showing how member census data has changed over time.

Plan Maturity Measures

There are certain measures that may aid in understanding the significant risks to the plan.

Ratio of Retired Liability to Total Liability

As of June 30	2018	2020	2022
1. Retiree and Beneficiary Accrued Liability	$ 156,622,684	$ 164,454,193	$ 178,958,142
2. Total Accrued Liability	$ 226,559,580	$ 211,742,043	$ 227,227,808
3. Ratio, (1) ÷ (2)	69.1%	77.7%	78.8%

A high percentage of liability concentrated on participants in pay status indicates a mature plan (often a ratio above 60% - 65%). An increasing percentage may indicate a need for a less risky asset allocation, which may lead to a lower long-term return on asset assumption and increased costs. Higher percentages may also indicate greater investment risk as benefit payments may be greater than contributions creating an increased reliance on investment returns. This ratio should be monitored each year in the future.

Ratio of Cash Flow to Assets

During FYE June 30	2018	2020	2022
1. Contributions	$ 11,360,677	$ 11,965,820	$ 11,685,168
2. Benefit Payments	12,125,563	14,178,500	14,770,632
3. Cash Flow, (1) - (2)	$ (764,886)	$ (2,212,680)	$ (3,085,464)
4. Fair Value of Assets	$ 176,794,969	$ 189,844,025	$ 227,181,866
5. Ratio, (3) ÷ (4)	(0.4%)	(1.2%)	(1.4%)

When this cash flow ratio is negative, more cash is being paid out than deposited in the trust. Negative cash flow indicates the trust needs to rely on investment returns to cover benefit payments and / or may need to invest in more liquid assets to cover the benefit payments. More liquid assets may not generate the same returns as less liquid assets, which can increase the investment risk. Currently, the low magnitude of the ratio implies there may already be enough liquid assets to cover the benefit payments, less investment return is needed to cover the shortfall, or only a small portion of assets will need to be converted to cash. Therefore, the investment risk is likely not amplified at this time. This maturity measure should be monitored in the future.

Contribution Volatility

As of June 30	2018	2020	2022
1. Fair Value of Assets	$ 176,794,969	$ 189,844,025	$ 227,181,866
2. Payroll	$ 13,392,864	$ 13,157,172	$ 14,035,020
3. Asset to Payroll Ratio, (1) ÷ (2)	1,320.1%	1,442.9%	1,618.7%
4. Accrued Liability	$ 226,559,580	$ 211,742,043	$ 227,227,808
5. Liability to Payroll Ratio, (4) ÷ (2)	1,691.6%	1,609.3%	1,619.0%

Plans that have higher asset-to-payroll ratios experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with an asset-to-payroll ratio of 10% may experience twice the contribution volatility due to investment return volatility than a plan with an asset-to-payroll ratio of 5%. Plans that have higher liability-to-payroll ratios experience more volatile employer contributions (as a percentage of payroll) due to changes in liability. For example, if an assumption change increases the liability of two plans by the same percent, the plan with a liability-to-payroll ratio of 10% may experience twice the contribution volatility than a plan with a liability-to-payroll ratio of 5%.

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.

GASB 67 and 68

Governmental Accounting Standards Board Statement Number 67 amends Number 25 effective for the fiscal year beginning after June 15, 2013 and defines new financial reporting requirements for public pension plans.

Governmental Accounting Standards Board Statement Number 68 amends Number 27 effective for fiscal years beginning after June 15, 2014 and defines new accounting and financial reporting requirements for employers sponsoring public pension plans.

GASB 74 and 75

Governmental Accounting Standards Board Statement Number 74 amends Number 43 effective for the fiscal year beginning after June 15, 2016 and defines new financial reporting requirements for public postemployment benefit plans.

Governmental Accounting Standards Board Statement Number 75 amends Number 45 effective for fiscal years beginning after June 15, 2017 and defines new accounting and financial reporting requirements for employers sponsoring public postemployment benefit plans.

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.

BUCK

State of Alaska

National Guard and Naval Militia Retirement System

Actuarial Valuation Report

As of June 30, 2022

May 2023

May 31, 2023

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 National Guard and Naval Militia Retirement System (NGNMRS) as of June 30, 2022 performed by Buck Global, LLC (Buck).

The actuarial valuation is based on financial information provided in the financial statements audited by KPMG LLP, and member data provided by the Division of Retirement and Benefits as summarized in this report. The benefits considered are those delineated in Alaska statutes effective June 30, 2022. The actuary did not verify the data submitted, but did perform tests for consistency and reasonableness.

All costs, liabilities and other factors under NGNMRS 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 NGNMRS as of June 30, 2022.

The contribution requirements reflect the cost of benefits accruing in the upcoming year, administrative expenses expected to be paid from the trust, and a level dollar amortization of the initial unfunded actuarial accrued liability and subsequent gains/losses over a period of 20 years less average military service of active members. The contribution levels are recommended by the actuary and adopted by the Board each year. This objective is currently being met and is projected to continue to be met. Absent future gains/losses, actuarially determined contributions are expected to remain zero and the funded status is expected to remain at or above 100%.

The Board and staff of the State of Alaska may use this report for the review of the operations of NGNMRS. 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 due to failure to understand applicable assumptions, methodologies, or inapplicability of the report for that purpose. Because of the risk of misinterpretation of actuarial results, Buck recommends requesting its advanced review of any statement to be based on information contained in this report. Buck will accept no liability for any such statement made without its prior review.

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. 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, 2017 to June 30, 2021. Based on that experience study, the Board adopted new assumptions effective beginning with the June 30, 2022 valuation to better reflect expected future experience. A summary of the actuarial assumptions and methods used in this actuarial valuation is shown in Sections 4.2 and 4.3. We certify that the assumptions and methods described in Sections 4.2 and 4.3 of this report meet the requirements of all applicable Actuarial Standards of Practice.

Actuarial Standards of Practice No. 27 (ASOP 27) and No. 35 (ASOP 35) require the actuary to disclose the information and analysis used to support the actuary's determination that the assumptions selected by the plan sponsor do not significantly conflict with what, in the actuary's professional judgment, are reasonable for the purpose of the measurement. Buck provides advice on reasonable assumptions when performing periodic experience studies. The Board selects the assumptions used and the signing actuary reviews the assumptions through discussions with the Board staff and analyzing actuarial gain/loss experience. In the case of the Board's selection of the expected return on assets (EROA), the signing actuary has used economic information and tools provided by Buck's Financial Risk Management (FRM) practice. A spreadsheet tool created by the FRM practice converts averages, standard deviations, and correlations from Buck's Capital Markets Assumptions that are used for stochastic forecasting into approximate percentile ranges for the arithmetic and geometric average returns. It is intended to suggest possible reasonable ranges for EROA without attempting to predict or select a specific best estimate rate of return. It takes into account the duration (horizon) of investment and the target allocation of assets in the portfolio to various asset classes. Based on the actuary's analysis, including consistency with other assumptions used in the valuation, the percentiles generated by the spreadsheet tool described above, and review of actuarial gain/loss analysis, the actuary believes the assumptions do not significantly conflict with what, in the actuary's professional judgment, are reasonable for the purpose of the measurement.

ACFR Information

We have prepared the following information in this report for the Actuarial Section and Statistical Section of the ACFR: (i) member data tables in Section 3; (ii) changes in contribution rates in the Executive Summary; and (iii) summary of actuarial assumptions in Section 4.3.

Governmental Accounting Standards Board (GASB) Statement No. 67 (GASB 67) was effective for NGNMRS beginning with fiscal year ending June 30, 2014. Please see our separate GASB 67 report for other information needed for the ACFR.

Assessment of Risks

Actuarial Standard of Practice No. 51 (ASOP 51) applies to actuaries performing funding calculations related to a pension plan. See Section 5 of this report for further details regarding ASOP 51.

Use of Models

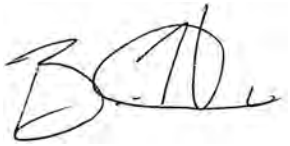
Actuarial Standard of Practice No. 56 (ASOP 56) provides guidance to actuaries when performing actuarial services with respect to designing, developing, selecting, modifying, using, reviewing, or evaluating models. Buck uses third-party software in the performance of annual actuarial valuations and projections. 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.

This report was prepared under the overall direction of David Kershner, who meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. He is a Fellow of the Society of Actuaries, an Enrolled Actuary, a Member of the American Academy of Actuaries, and a Fellow of the Conference of Consulting Actuaries.

We are available to discuss this report with you at your convenience. David can be reached at 602-803-6174 and Brett can be reached at 260-423-1072.

Respectfully submitted,



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

Brett Hunter, ASA, EA, MAAA
Senior Consultant
Buck

Contents

Executive Summary

Overview

The State of Alaska National Guard and Naval Militia Retirement System (NGNMRS) provides pension benefits to the National Guard, naval militia and other eligible members. The Commissioner of the Department of Administration is responsible for administering the plan. The Alaska Retirement Management Board has fiduciary responsibility over the assets of the plan. This report presents the results of the actuarial valuation of NGNMRS as of the valuation date of June 30, 2022.

Purpose

An actuarial valuation is performed on the plan once every two years as of the end of the fiscal year, and roll-forward valuations are performed every other year. The main purposes of the actuarial valuation detailed in this report are:

1. To determine the Employer contribution necessary to meet the Board's funding policy for the plan;
2. To disclose the funding assets and 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 during the fiscal year; and
5. To report trends in contributions, assets, liabilities, and funded status over the last several years.

The actuarial valuation provides a "snapshot" of the funded position of NGNMRS based on the plan provisions, membership data, assets, and actuarial methods and assumptions as of the valuation date.

Funded Status

Where presented, references to “funded ratio” and “unfunded actuarial accrued liability” typically are measured on an actuarial value of assets basis. It should be noted that the same measurements using market value of assets would result in different funded ratios and unfunded actuarial accrued liabilities. Moreover, the funded ratio presented is appropriate for evaluating the need and level of future contributions but makes no assessment regarding the funded status of the plan if the plan were to settle (i.e. purchase annuities) for a portion or all of its liabilities.

Funded Status as of June 30		2020		2022
a. Actuarial Accrued Liability	$	22,417,247	$	28,366,668
b. Valuation Assets		43,020,393		46,215,854
c. Unfunded Actuarial Accrued Liability, (a) – (b)	$	(20,603,146)	$	(17,849,186)
d. Funded Ratio based on Valuation Assets, (b) ÷ (a)		191.9%		162.9%
e. Fair Value of Assets	$	42,095,708	$	44,088,041
f. Funding Ratio based on Fair Value of Assets, (e) ÷ (a)		187.8%		155.4%

Actuarially Determined Contribution Amounts		FY23		FY25
a. Normal Cost	$	503,140	$	690,172
b. Past Service Cost		(3,224,638)		(2,691,240)
c. Expense Load		256,000		331,000
d. Total Annual Contribution, (a) + (b) + (c), not less than 0	$	0	$	0

The Actuarially Determined Contribution amount for FY24 based on a roll-forward valuation as of June 30, 2021 was $0.

The key reasons for the change in funded status are described below:

1. Investment Experience

The approximate investment returns based on fair value of assets were 23.0% for FY21 and (7.7)% for FY22, compared to the expected investment return of 7.00% (net of investment expenses). This resulted in market asset gains of approximately $6.6 million for FY21 and market asset losses of approximately $7.2 million for FY22. Due to the recognition of investment gains and losses over a 5-year period, the investment returns based on actuarial value of assets were 9.5% for FY21 and 6.7% for FY22.

2. Demographic Experience[1]

Section 3 provides statistics on active and inactive participants. The number of active participants decreased from 3,934 at June 30, 2020 to 3,909 at June 30, 2022. The average age of active participants increased from 34.20 to 35.15, and average credited service increased from 6.87 years to 7.99 years.

The number of retirees and QDROs decreased from 708 to 691, and their average age increased from 58.83 to 59.58.

The number of vested terminated participants increased from 649 to 702, and their average age increased from 57.00 to 57.82.

The overall effect of the demographic experience was a liability loss of approximately $1.0 million (approximately 3.8% of the expected liability). This loss is mainly attributed to new entrants and rehires that have service accrued prior to June 30, 2022.

3. Changes in Methods Since the Prior Valuation

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

4. Changes in Assumptions Since the Prior Valuation

Effective for the June 30, 2022 valuation, the Board adopted the changes to the demographic and economic assumptions recommended by the actuary, based on the results of an experience study performed on the plan experience from July 1, 2017 to June 30, 2021. The changes in assumptions were adopted at the June 2022 Board meeting. The effect of the new assumptions was to increase the Actuarial Accrued Liability as of June 30, 2022 by approximately $3.9 million.

The amount included in the Normal Cost for administrative expenses was changed from $256,000 at June 30, 2020 to $331,000 at June 30, 2022.

5. Changes in Benefit Provisions Since the Prior Valuation

There were no changes in benefit provisions since the prior valuation.

[1] The data for the Air Guard group was available as of June 30, 2021 only. We assumed the status of each Air Guard member as of June 30, 2021 was the same as of June 30, 2022, and we increased each Air Guard active member's service as of June 30, 2021 by 1 year. Approximating the June 30, 2022 Air Guard data in this way did not materially impact the overall valuation results.

Section 1: Actuarial Funding Results

Section 1.1: Actuarial Liabilities and Normal Cost

As of June 30, 2022	Present Value of Projected Benefits	Actuarial Accrued Liability
Active Members		
Retirement Benefits	$ 17,874,565	$ 14,074,254
Termination Benefits	0	0
Death Benefits	285,330	195,690
Disability Benefits	157,632	125,839
Subtotal	$ 18,317,527	$ 14,395,783
Inactive Members		
Vested Terminated	$ 7,806,050	$ 7,806,050
Retirees (including QDROs)	6,164,835	6,164,835
Subtotal	$ 13,970,885	$ 13,970,885
Total	**$ 32,288,412**	**$ 28,366,668**

As of June 30, 2022	Normal Cost
Active Members	
Retirement Benefits	$ 669,283
Termination Benefits	0
Death Benefits	15,199
Disability Benefits	5,690
Subtotal	$ 690,172
Expense Load	
Administrative Expense	$ 331,000
Total	**$ 1,021,172**

Section 1.2: Actuarial Contributions as of June 30, 2022 (for FY25)

1.	Actuarial Accrued Liability	$ 28,366,668
2.	Valuation Assets	46,215,854
3.	Total Unfunded Actuarial Accrued Liability, (1) – (2)	$ (17,849,186)
4.	Past Service Cost Amortization Payment[1]	(2,691,240)
5.	Normal Cost, including Expense Load	1,021,172
6.	**Total Contribution, (4) + (5), not less than 0**	**$ 0**

[1] Calculated on a level dollar basis over an 8-year period as of June 30, 2022.

Section 1.3: Actuarial Gain/(Loss) for FY22

1.	Expected Actuarial Accrued Liability		
	a. Actuarial Accrued Liability, June 30, 2021	$	22,975,269
	b. Normal Cost for FY22		503,140
	c. Interest on (a) and (b) at 7.00%		1,643,488
	d. Benefit Payments for FY22		(1,620,749)
	e. Interest on (d) at 7.00%, adjusted for timing		(60,500)
	f. Change in Actuarial Assumptions		3,890,292
	g. Expected Actuarial Accrued Liability as of June 30, 2022, (a) + (b) + (c) + (d) + (e) + (f)	$	27,330,940
2.	Actual Actuarial Accrued Liability, June 30, 2022		28,366,668
3.	**Liability Gain/(Loss), (1)(g) – (2)**	**$**	**(1,035,728)**[1]
4.	Expected Actuarial Asset Value		
	a. Actuarial Asset Value, June 30, 2021	$	45,248,391
	b. Interest on (a) at 7.00%		3,167,387
	c. Employer Contributions for FY22		0
	d. Interest on (c) at 7.00%, adjusted for timing		0
	e. Benefit Payments for FY22		(1,620,749)
	f. Interest on (e) at 7.00%, adjusted for timing		(60,500)
	g. Administrative Expenses for FY22		(357,740)
	h. Interest on (g) at 7.00%, adjusted for timing		(12,309)
	i. Expected Actuarial Asset Value as of June 30, 2022, (a) + (b) + (c) + (d) + (e) + (f) + (g) + (h)	$	46,364,480
5.	Actuarial Asset Value, June 30, 2022		46,215,854
6.	**Actuarial Asset Gain/(Loss), (5) – (4)(i)**	**$**	**(148,626)**
7.	**Actuarial Gain/(Loss), (3) + (6)**	**$**	**(1,184,354)**

[1] Includes a liability reduction of $26,547 due to a programming adjustment for calculation of the retiree death benefit of remaining payments. The FY22 liability experience loss excluding the $26,547 programming effect is $1,062,275.

Section 1.4: Development of Change in Unfunded Liability during FY22

1.	June 30, 2021 Unfunded Liability	$	(22,273,122)
	a. Normal Cost		503,140
	b. Interest on (1) and (1)(a)		(1,523,899)
	c. Employer Contributions		0
	d. Interest on (c)		0
	e. Administrative Expenses		357,740
	f. Interest on (e)		12,309
	g. Change in Actuarial Assumptions		3,890,292
	h. Expected Change in Unfunded Liability during FY22	$	3,239,582
2.	Expected June 30, 2022 Unfunded Liability, (1) + (1)(h)	$	(19,033,540)
	a. Liability (gain)/ loss		1,035,728
	b. Asset (gain)/ loss		148,626
	c. Total Actuarial (gain)/ loss during FY22, (2)(a) + (2)(b)	$	1,184,354
3.	Actual June 30, 2022 Unfunded Liability, (2) + (2)(c)	$	(17,849,186)

Section 1.5: History of Unfunded Liability and Funded Ratio

Valuation Date	Actuarial Accrued Liability	Valuation Assets	Assets as a Percent of Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL)
June 30, 2000	$ 17,967,471	$ 13,734,397	76.4%	$ 4,233,074
June 30, 2002	$ 20,545,214	$ 12,114,025	59.0%	$ 8,431,189
June 30, 2004	$ 19,749,305	$ 13,391,055	67.8%	$ 6,358,250
June 30, 2006	$ 25,457,589	$ 15,587,569	61.2%	$ 9,870,020
June 30, 2007	$ 26,289,978	$ 16,882,529	64.2%	$ 9,407,449
June 30, 2008	$ 28,904,645	$ 28,370,756	98.2%	$ 533,889
June 30, 2009	$ 30,208,411	$ 30,123,348	99.7%	$ 85,063
June 30, 2010	$ 30,034,407	$ 32,000,585	106.5%	$ (1,966,178)
June 30, 2011	$ 31,324,457	$ 33,019,577	105.4%	$ (1,695,120)
June 30, 2012	$ 32,771,017	$ 33,682,091	102.8%	$ (911,074)
June 30, 2013	$ 33,907,968	$ 34,178,622	100.8%	$ (270,654)
June 30, 2014	$ 36,715,287	$ 36,271,836	98.8%	$ 443,451
June 30, 2015	$ 38,313,473	$ 37,855,133	98.8%	$ 458,340
June 30, 2016	$ 31,184,361	$ 38,439,835	123.3%	$ (7,255,474)
June 30, 2017	$ 32,483,912	$ 39,638,736	122.0%	$ (7,154,824)
June 30, 2018[1]	$ 21,934,014	$ 41,031,353	187.1%	$ (19,097,339)
June 30, 2019	$ 22,592,882	$ 41,939,204	185.6%	$ (19,346,322)
June 30, 2020	$ 22,417,247	$ 43,020,393	191.9%	$ (20,603,146)
June 30, 2021	$ 22,975,269	$ 45,248,391	196.9%	$ (22,273,122)
June 30, 2022	$ 28,366,668	$ 46,215,854	162.9%	$ (17,849,186)

[1] Approximately $10.7 million of the decrease in Actuarial Accrued Liability reflected in the June 30, 2018 valuation was due to the elimination of 798 active and vested terminated participants who had cashed out prior to June 30, 2016.

Section 2: Plan Assets

Section 2.1 Summary of Fair Value of Assets

Fair Value of Assets as of June 30	2021	2022
Assets		
1. Cash and Cash Equivalents	$ 1,385,305	$ 578,572
2. Receivables	319	79
3. Domestic Equity Pool	9,838,388	7,925,366
4. International Equity Pool	5,193,795	4,194,787
5. Tactical Fixed Income Pool	0	0
6. Domestic Fixed Income Pool	21,285,474	20,592,295
7. Emerging Market Equity Pool	1,103,370	938,701
8. Taxable Municipal Bonds	0	0
9. Tactical Allocation Strategies Pool	1,861,374	1,611,130
10. Alternative Equity	579,272	454,958
11. Alternative Beta	462,616	501,465
12. Other Opportunistic	30,366	6,200
13. Real Assets	3,325,265	3,253,406
14. Private Equity Pool	4,979,637	4,155,582
15. **Total Assets**	**$ 50,045,181**	**$ 44,212,541**
Liabilities		
16. Accrued expenses	$ 29,429	$ 25,116
17. Due to State of Alaska General Fund	88,798	18,518
18. Securities Lending Collateral Payable	113,918	80,866
19. **Total Liabilities**	**$ 232,145**	**$ 124,500**
Fair Value of Assets, (15) – (19)	**$ 49,813,036**	**$ 44,088,041**

Section 2.2: Changes in Fair Value of Assets

Fair Value of Assets as of June 30	2021	2022
1. Fair Value of Assets at beginning of year	42,095,708	49,813,036
2. Additions		
a. Employer Contributions	$ 0	$ 0
b. Investment Income	9,571,576	(3,635,461)
c. Other	1,690	0
d. Total Additions	$ 9,573,266	$ (3,635,461)
3. Disbursements		
a. Retirement Benefits	$ 1,454,330	$ 1,620,749
b. Administrative Expenses	304,439	357,740
c. Investment Expenses	97,169	111,045
d. Total Deductions	$ 1,855,938	$ 2,089,534
4. Fair Value of Assets at end of year, (1) + (2)(d) - (3)(d)	$ 49,813,036	$ 44,088,041
Approximate Fair Value Investment Return Rate Net of Investment Expenses	23.0%	(7.7)%

Section 2.3: Development of Actuarial Value of Assets

The actuarial value of assets was equal to the market value at June 30, 2006. Future investment gains and losses will be recognized 20% per year over 5 years. In no event may valuation assets be less than 80% or more than 120% of market value as of the valuation date.

1.	Investment Gain/(Loss) for FY22	
a.	Market Value, June 30, 2021	$ 49,813,036
b.	Contributions for FY22	0
c.	Benefit Payments for FY22	1,620,749
d.	Administrative Expenses for FY22	357,740
e.	Actual Investment Return (net of investment expenses)	(3,746,506)
f.	Expected Return Rate (net of investment expenses)	7.00%
g.	Expected Return - Weighted for Timing	3,414,104
h.	Investment Gain/(Loss) for the Year, (e) – (g)	(7,160,610)
2.	Actuarial Value, June 30, 2022	
a.	Market Value, June 30, 2022	$ 44,088,041
b.	Deferred Investment Gain/(Loss)	(2,127,813)
c.	Preliminary Actuarial Value, June 30, 2022, (a) – (b)	$ 46,215,854
d.	Upper Limit: 120% of Market Value, June 30, 2022	$ 52,905,649
e.	Lower Limit: 80% of Market Value, June 30, 2022	$ 35,270,433
f.	Actuarial Value, June 30, 2022, [(c) limited by (d) and (e)]	$ 46,215,854
g.	Ratio of Actuarial Value of Assets to Market Value of Assets	104.8%
h.	Approximate Actuarial Value Investment Return Rate During FY22 (net of investment expenses)	6.7%

The table below shows the development of gains/(losses) to be recognized in the current year:

Fiscal Year Ending	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
June 30, 2018	$ (681,054)	$ (544,844)	$ (136,210)	$ 0
June 30, 2019	(407,413)	(244,449)	(81,483)	(81,481)
June 30, 2020	(685,847)	(274,338)	(137,169)	(274,340)
June 30, 2021	6,594,160	1,318,832	1,318,832	3,956,496
June 30, 2022	(7,160,610)	0	(1,432,122)	(5,728,488)
Total	**$ (2,340,764)**	**$ 255,201**	**$ (468,152)**	**$ (2,127,813)**

Section 2.4: Historical Asset Rates of Return

Year Ending	Actuarial Value		Fair Value	
	Annual	Cumulative*	Annual	Cumulative*
June 30, 2005	N/A	N/A	6.4%	6.4%
June 30, 2006	N/A	N/A	5.2%	5.8%
June 30, 2007	8.4%	8.4%	13.1%	8.2%
June 30, 2008	6.4%	7.4%	(2.3)%	5.5%
June 30, 2009	2.8%	5.8%	(9.8)%	2.2%
June 30, 2010	3.0%	5.1%	11.8%	3.8%
June 30, 2011	4.6%	5.0%	13.4%	5.1%
June 30, 2012	3.4%	4.7%	0.5%	4.5%
June 30, 2013	4.6%	4.7%	7.6%	4.8%
June 30, 2014	8.8%	5.2%	13.4%	5.7%
June 30, 2015	7.0%	5.4%	0.9%	5.2%
June 30, 2016	4.2 %	5.3%	(0.2)%	4.8%
June 30, 2017	4.8 %	5.3%	8.2%	5.0%
June 30, 2018	5.3 %	5.3%	4.6%	5.0%
June 30, 2019	4.1 %	5.2%	5.9%	5.1%
June 30, 2020	5.1 %	5.2%	5.3%	5.1%
June 30, 2021	9.5 %	5.4%	23.0 %	6.0%
June 30, 2022	6.7 %	5.5%	(7.7)%	5.2%

*Cumulative since FYE June 30, 2005.

Section 3: Member Data

Section 3.1: Summary of Members Included

Census Information as of June 30	2014	2016	2018	2020	2022[1]
Active Air Guard Members					
1. Number	2,164	2,174	2,139	2,242	2,300
2. Number Vested	591	417	364	405	505
3. Average Age	36.52	35.16	34.98	35.20	36.33
4. Average Alaska Guard Service	8.95	7.55	7.24	7.26	8.94
5. Average Total Military Service	14.44	13.08	12.68	12.82	13.94
Active Army Guard Members					
1. Number	1,911	1,820	1,575	1,639	1,560
2. Number Vested	242	199	193	218	205
3. Average Age	31.72	32.00	32.45	32.85	33.47
4. Average Alaska Guard Service	5.37	5.72	6.00	6.41	6.68
5. Average Total Military Service	9.83	10.41	10.34	10.82	11.20
Active Naval Militia Members					
1. Number	64	60	63	53	49
2. Number Vested	7	6	8	6	7
3. Average Age	33.75	33.26	34.48	33.85	33.36
4. Average Alaska Guard Service	4.67	4.93	5.44	4.34	5.33
5. Average Total Military Service	10.48	10.72	11.86	10.28	11.02
Total Active Members					
1. Number	4,139	4,054	3,777	3,934	3,909
2. Number Vested	840	622	565	629	717
3. Average Age	34.26	33.71	33.92	34.20	35.15
4. Average Alaska Guard Service	7.23	6.69	6.69	6.87	7.99
5. Average Total Military Service	12.25	11.85	11.69	11.95	12.81
Vested Terminated Members					
1. Number	1,756	1,427	588	649	702
2. Average Age	56.58	58.37	56.10	57.00	57.82
3. Average Alaska Guard Service	15.58	14.41	13.84	13.84	13.90
4. Average Total Military Service	25.27	24.69	24.42	24.58	24.48
Retirees (including QDROs)					
1. Number	639	676	752	708	691
2. Average Age	58.29	58.28	59.18	58.83	59.58
3. Average Years Remaining	11.71	12.00	11.53	12.13	11.81

[1] The data for the Air Guard group was available as of June 30, 2021 only. We assumed the status of each Air Guard member as of June 30, 2021 was the same as of June 30, 2022, and we increased each Air Guard active member's service as of June 30, 2021 by 1 year.

Section 3.2(a): Age and Service Distributions of Active Members – All Actives

Total Alaska Guard Service										
Age Group	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
0-19	58	0	0	0	0	0	0	0	0	58
20-24	412	84	0	0	0	0	0	0	0	496
25-29	361	285	51	0	0	0	0	0	0	697
30-34	312	257	197	27	0	0	0	0	0	793
35-39	209	232	165	104	12	0	0	0	0	722
40-44	116	170	135	111	41	5	0	0	0	578
45-49	47	66	58	68	31	23	3	0	0	296
50-54	15	33	38	29	29	14	15	0	0	173
55-59	4	14	16	12	13	9	9	5	0	82
60-64	0	5	1	2	1	2	1	0	1	13
65-69	0	0	0	1	0	0	0	0	0	1
70-74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
Total	**1,534**	**1,146**	**661**	**354**	**127**	**53**	**28**	**5**	**1**	**3,909**

Section 3.2(b): Age and Service Distributions of Active Members – Air Actives

Total Alaska Guard Service										
Age Group	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
0-19	13	0	0	0	0	0	0	0	0	13
20-24	154	45	0	0	0	0	0	0	0	199
25-29	168	182	38	0	0	0	0	0	0	388
30-34	159	171	128	16	0	0	0	0	0	474
35-39	116	138	125	78	8	0	0	0	0	465
40-44	75	119	91	73	32	4	0	0	0	394
45-49	25	46	42	41	24	20	3	0	0	201
50-54	8	18	21	17	16	12	12	0	0	104
55-59	3	6	7	6	8	9	6	5	0	50
60-64	0	5	1	2	1	1	1	0	1	12
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
Total	721	730	453	233	89	46	22	5	1	2,300

Section 3.2(c): Age and Service Distributions of Active Members – Army Actives

Total Alaska Guard Service										
Age Group	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
0-19	44	0	0	0	0	0	0	0	0	44
20-24	250	39	0	0	0	0	0	0	0	289
25-29	187	96	13	0	0	0	0	0	0	296
30-34	148	84	66	11	0	0	0	0	0	309
35-39	88	93	40	26	4	0	0	0	0	251
40-44	40	50	42	38	9	1	0	0	0	180
45-49	20	18	16	27	7	3	0	0	0	91
50-54	7	15	17	11	12	2	3	0	0	67
55-59	1	8	9	5	5	0	3	0	0	31
60-64	0	0	0	0	0	1	0	0	0	1
65-69	0	0	0	1	0	0	0	0	0	1
70-74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
Total	785	403	203	119	37	7	6	0	0	1,560

Section 3.2(d): Age and Service Distributions of Active Members – Navy Actives

Total Alaska Guard Service										
Age Group	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40+**	**Total**
0-19	1	0	0	0	0	0	0	0	0	1
20-24	8	0	0	0	0	0	0	0	0	8
25-29	6	7	0	0	0	0	0	0	0	13
30-34	5	2	3	0	0	0	0	0	0	10
35-39	5	1	0	0	0	0	0	0	0	6
40-44	1	1	2	0	0	0	0	0	0	4
45-49	2	2	0	0	0	0	0	0	0	4
50-54	0	0	0	1	1	0	0	0	0	2
55-59	0	0	0	1	0	0	0	0	0	1
60-64	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0	0	0
Total	28	13	5	2	1	0	0	0	0	49

Section 3.3: Member Data Reconciliation

	Active Members	Vested Members	Benefit Recipients	Total
Total at June 30, 2020	3,934	649	708	5,291
New Entrants	447	0	0	447
Rehires	63	0	0	63
Non-vested Terminations	(361)	0	0	(361)
Vested Terminations	(71)	71	0	0
Retirements	(33)	(23)	56	0
New Survivors	0	0	0	0
New QDROs	0	0	0	0
Deaths	0	0	(14)	(14)
Data Changes/Expiration of Benefits	(70)[1]	5[2]	(59)[3]	(124)
Total at June 30, 2022	3,909	702	691	5,302

[1] Includes 70 participants who cashed out on or after June 30, 2020.
[2] Includes 15 participants who cashed out on or after June 30, 2020 and 20 participants who were rehired from terminated non-vested status and then terminated as vested between June 30, 2020 and June 30, 2022.
[3] Includes 65 participants with an expiration of benefits, 3 additions (data corrections), and 3 participants who were rehired from terminated non-vested status and then retired between June 30, 2020 and June 30, 2022.

Section 4: Basis of the Actuarial Valuation

Section 4.1: Summary of Plan Provisions

Effective Date

January 1, 1973, with amendments through June 30, 2022.

Members Included

Members of the Alaska National Guard who were active on or after January 1, 1973, and members of the Alaska Naval Militia who were active on or after July 1, 1980.

Eligibility Service

Eligibility service is defined as the combined Alaska guard service, guard service in any other state, active military service and the reserves of them. A member must have 20 years of eligibility service to be vested in the National Guard and Naval Militia Retirement System.

Benefit Service

Benefit service is defined as satisfactory service in any branch of the Alaska guard. A member must have 5 years of benefit service to be vested in the National Guard and Naval Militia Retirement System. Benefit service is also used to determine the length of the member's pension retirement benefit.

Retirement

Eligibility

Members are eligible for voluntary retirement after completing 20 years of satisfactory service in the Alaska National Guard, Alaska Naval Militia or U.S. Armed Forces, and the reserve of them or any combination of that service if they have at least five years of Alaska National Guard or Naval Militia service. Credit is also allowed for Territorial Guard service rendered to the former territory of Alaska.

Members are eligible for involuntary retirement at any time assuming there has been no misconduct.

Benefit

Eligible members may elect to receive:

a. monthly benefits of $100 which are payable for a period equal to the number of months that they were active members;

b. a lump sum benefit equal to the actuarial equivalent of a.; or

c. monthly payments until age 72 equal to the actuarial equivalent of a.

Vesting

Members are 100% vested after 20 years of total service in the Alaska National Guard, Alaska Naval Militia, U.S. Armed Forces or Reserves, or any combination of that service if members have at least five years of Alaska National Guard or Naval Militia service.

Survivor's Benefits

a. Active Members: If the member has at least five years of active service in the Alaska National Guard or Naval Militia, the designated beneficiary will receive a lump sum benefit equal to the retirement benefit.

b. Retired or Terminated Vested Members: The designated beneficiary will receive a lump benefit equal to the remaining benefits payable.

Disability Benefits

Members are eligible to receive monthly disability benefits of $100 (which are payable for a period equal to the number of months that they were active members) at any age if they become incapacitated and are vested in the plan.

Changes Since the Prior Valuation

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

Section 4.2: Description 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 (level dollar basis). Any funding surplus or unfunded accrued liability is amortized over 20 years less the average total military service of active members.

The actuarial accrued liability under this method at any point in time is the theoretical amount of the fund that would have been accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date).

The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of system assets measured on the valuation date.

Under this method, differences between the actual experience and that assumed in the determination of costs and liabilities will emerge as adjustments in the unfunded actuarial accrued liability, subject to amortization.

Valuation of Assets

Effective June 30, 2006, the asset valuation method recognizes 20% of the investment gain or loss in each of the current and preceding four years. This method was phased in over five years. Assets are initialized at market value as of June 30, 2006. All assets are valued at fair market value. Assets are accounted for on an accrued basis and are taken directly from financial statements audited by KPMG LLP. Valuation assets are constrained to a range of 80% to 120% of the market value of assets.

Changes in Methods Since the Prior Valuation

There have been no changes in methods since the prior valuation.

Section 4.3: Summary of Actuarial Assumptions

The demographic and economic assumptions used in the June 30, 2022 valuation are described below. Unless noted otherwise, these assumptions were adopted by the Board at the June 2022 meeting based on the experience study for the period July 1, 2017 to June 30, 2021.

Investment Return

5.75% per year, net of investment expenses.

Mortality (Pre-Commencement)

Pub-2010 Safety Employee table, amount-weighted, and projected with MP-2021 generational improvement.

Mortality (Post-Commencement)

Retiree mortality in accordance with the Pub-2010 Safety Retiree table, amount-weighted, and projected with MP-2021 generational improvement.

Beneficiary mortality in accordance with the Pub-2010 Contingent Survivor table, amount-weighted, and projected with MP-2021 generational improvement.

Turnover

Select and ultimate rates based on the 2017-2021 actual experience (see Table 1).

Disability

No changes to the incidence rates from the prior valuation due to insufficient 2017-2021 actual experience (see Table 2). Disability rates continue after a member is eligible for retirement.

Post-disability mortality in accordance with the Pub-2010 Safety Disabled Retiree table, amount-weighted, and projected with MP-2021 generational improvement.

Retirement

Retirement rates based on the 2017-2021 actual experience (see Table 3).

Vested terminated members are assumed to retire at the later of current age or age 50 when electing an annuity, and at current age when electing a lump sum.

Imputed Data

Data changes from the prior valuation which are deemed to have an immaterial impact on liabilities and contributions are assumed to be correct in the current year's client data.

Active and terminated members with a date of termination after the last date of hire are assumed to be terminated with status based on their amount of vesting service.

We assumed the status of each Air Guard member as of June 30, 2021 was the same as of June 30, 2022, and we increased each Air Guard active member's service as of June 30, 2021 by 1 year.

Form of Payment

50% of members are assumed to elect a lump sum benefit. 50% of members are assumed to elect a monthly annuity with the number of payments equal to the number of months they were active in the plan. A lump sum of the remaining payments is paid if the member should die while receiving payments. Lump sums are calculated based on a 5.75% discount rate annuity certain factor.

Administrative Expenses

The Normal Cost as of June 30, 2022 was increased by $331,000 for administrative expenses. This amount is based on the average of actual administrative expenses during the last two fiscal years.

Changes in Assumptions Since the Prior Valuation

Effective for the June 30, 2022 valuation, the Board adopted the changes to the demographic and economic assumptions recommended by the actuary, based on the results of an experience study performed on the plan experience from July 1, 2017 to June 30, 2021. The changes in assumptions were adopted at the June 2022 Board meeting. The effect of the new assumptions was to increase the Actuarial Accrued Liability as of June 30, 2022 by approximately $3.9 million.

The amount included in the Normal Cost for administrative expenses was changed from $256,000 at June 30, 2020 to $331,000 at June 30, 2022.

Table 1: Turnover Rates

Select Rates during the First 5 Years of Employment

Years of Service	Unisex
< 1	20.00%
1	10.00%
2	10.00%
3	10.00%
4	10.00%

Ultimate Rates after the First 5 Years of Employment

Age	Male	Female	Age	Male	Female
< 30	9.53%	9.94%	45	6.83%	7.13%
30	9.43%	9.84%	46	6.51%	6.79%
31	9.33%	9.74%	47	6.06%	6.32%
32	9.23%	9.63%	48	5.49%	5.73%
33	9.12%	9.51%	49	4.82%	5.03%
34	8.98%	9.37%	50	4.16%	4.33%
35	8.81%	9.20%	51	3.63%	3.79%
36	8.63%	9.00%	52	3.26%	3.40%
37	8.41%	8.77%	53	2.98%	3.12%
38	8.18%	8.53%	54	2.78%	2.91%
39	7.95%	8.29%	55	2.64%	2.75%
40	7.73%	8.06%	56	2.57%	2.67%
41	7.54%	7.87%	57	2.58%	2.69%
42	7.38%	7.70%	58	2.64%	2.76%
43	7.23%	7.55%	59	2.78%	2.90%
44	7.06%	7.37%	60	2.88%	3.00%

Table 2: Disability Rates

Age	Male	Female	Age	Male	Female
< 23	0.0179%	0.0112%	46	0.1247%	0.0780%
23	0.0244%	0.0153%	47	0.1337%	0.0836%
24	0.0310%	0.0194%	48	0.1462%	0.0914%
25	0.0374%	0.0234%	49	0.1588%	0.0993%
26	0.0440%	0.0275%	50	0.1714%	0.1071%
27	0.0505%	0.0316%	51	0.1839%	0.1150%
28	0.0526%	0.0329%	52	0.1965%	0.1228%
29	0.0548%	0.0343%	53	0.2294%	0.1434%
30	0.0570%	0.0356%	54	0.2624%	0.1640%
31	0.0591%	0.0370%	55	0.2954%	0.1846%
32	0.0612%	0.0383%	56	0.3283%	0.2052%
33	0.0634%	0.0397%	57	0.3613%	0.2258%
34	0.0657%	0.0411%	58	0.4112%	0.2570%
35	0.0679%	0.0425%	59	0.4611%	0.2882%
36	0.0702%	0.0439%	60	0.5110%	0.3194%
37	0.0724%	0.0453%	61	0.5610%	0.3506%
38	0.0757%	0.0473%	62	0.6109%	0.3818%
39	0.0789%	0.0493%	63	0.6109%	0.3818%
40	0.0822%	0.0514%	64	0.6109%	0.3818%
41	0.0854%	0.0534%	65	0.6109%	0.3818%
42	0.0886%	0.0554%	66	0.6109%	0.3818%
43	0.0977%	0.0611%	67	0.6109%	0.3818%
44	0.1066%	0.0667%	68	0.4073%	0.2546%
45	0.1157%	0.0723%	69	0.2036%	0.1273%
			70+	0.2036%	0.1273%

Table 3: Retirement Rates

Age	Male	Female
< 53	15.34%	18.20%
53	17.70%	21.00%
54	23.60%	28.00%
55	18.50%	16.25%
56	25.90%	22.75%
57	29.60%	26.00%
58	33.30%	29.25%
59	37.00%	32.50%
60	40.70%	35.75%
61	44.40%	35.75%
62	44.40%	35.75%
63	44.40%	35.75%
64	44.40%	35.75%
65+	100.00%	100.00%

Section 5: Assessment of Risks (ASOP 51 Disclosures)

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 plans. However, to the extent future experience deviates from the assumptions used, variations will occur in these calculated values. These variations create risk to the plans. Understanding the risks to the funding of the plans is important.

Actuarial Standard of Practice No. 51 ("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.

- Investment Risk – potential that the investment return will be different than the 5.75% expected in the actuarial valuation
- Contribution Risk – potential that the contribution actually made will be different than the actuarially determined contribution in the actuarial valuation
- Long-Term Return on Investment Risk – potential that changes in long-term capital market assumptions or the plan's asset allocation will create the need to update the long-term return on investment assumption
- Longevity Risk – potential that participants live longer than expected compared to the valuation mortality assumptions
- Other Demographic Risk – potential that other demographic experience will be different than expected

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.

Assessment of Risks

Investment Risk

Plan costs are very sensitive to the market return.

- Any return on assets lower than assumed will increase costs.
- The plan uses an actuarial value of assets that smooths gains and losses on market returns over a five-year period to help control some of the volatility in costs due to investment risk.
- Historical experience of actual returns is shown in Section 2.4 of this report. This historical experience illustrates how returns can vary over time.

Contribution Risk

There is a risk to the plan when the actual contribution amount and the actuarially determined amount differ.

- If the actual contribution is lower than the actuarially determined contribution, the plan may not be sustainable in the long term.
- Any underpayment of the contribution will increase future contribution amounts to help pay off the additional Unfunded Actuarial Accrued Liability associated with the underpayment(s).

Long-Term Return on Investment Risk

Inherent in the long-term return on investment assumption is the expectation that the current rate will be used until the last benefit payment of the plan is made. There is a risk that sustained changes in economic conditions, changes in long-term future capital market assumptions, or changes to the plan's asset allocations will necessitate an update to the long-term return on investment assumption used.

- Under a lower long-term return on investment assumption, less investment return is available to pay plan benefits. This may lead to a need for increased employer contributions.
- The liabilities will be higher at a lower assumed rate of return because future benefits will have a lower discount rate applied when calculating the present value.
- Historical experience of actual returns is shown in Section 2.4 of this report. The cumulative historical experience illustrates that although market returns have been above and below the assumed rate, the overall return during the time period was slightly below the 5.75%. The assumed rate, asset allocation, and future market expectations should continue to be evaluated. A 1% decrease in the long-term return on investment assumption will increase the actuarial accrued liability by approximately 9%.

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 plans could increase.
- The mortality assumption for the plan mitigates this risk by assuming future improvements 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.

Other Demographic Risk

The plan is subject to risks associated with other demographic assumptions (e.g., retirement and termination assumptions). Differences between actual and expected experience for these assumptions tend to have less impact on the overall costs of the plan. The demographic assumptions used in the valuation are re-evaluated regularly as part of the 4-year experience studies to ensure the assumptions are consistent with long-term expectations.

Historical Information

Monitoring certain information over time may help understand risks faced by the plan. Historical information is included throughout this report. Some examples are:

- Section 1.5 shows how the plan's funded status (comparison of actuarial accrued liabilities to actuarial value of assets) has changed over time.
- Section 2.4 shows the volatility of asset returns over time.
- Section 3 includes various historical information showing how member census data has changed over time.

Plan Maturity Measures

There are certain measures that may aid in understanding the significant risks to the plan.

Ratio of Retired Liability to Total Liability	June 30, 2018	June 30, 2020	June 30, 2022
1. Retiree and Beneficiary Accrued Liability	$ 6,094,900	$ 5,808,004	$ 6,164,835
2. Total Accrued Liability	$ 21,934,014	$ 22,417,247	$ 28,366,668
3. Ratio, (1) ÷ (2)	27.8%	25.9%	21.7%

A high percentage of liability concentrated on participants in pay status indicates a mature plan (often a ratio above 60% - 65%). An increasing percentage may indicate a need for a less risky asset allocation, which may lead to a lower long-term return on asset assumption and increased costs. Higher percentages may also indicate greater investment risk as benefit payments may be greater than contributions creating an increased reliance on investment returns. This ratio should be monitored each year in the future.

Ratio of Cash Flow to Assets	FYE June 30, 2018	FYE June 30, 2020	FYE June 30, 2022
1. Contributions	$ 907,231	$ 860,686	$ 0
2. Benefit Payments	1,359,467	1,641,475	1,620,749
3. Cash Flow, (1) - (2)	$ (452,236)	$ (780,789)	$ (1,620,749)
4. Fair Value of Assets	$ 39,418,117	$ 42,095,708	$ 44,088,041
5. Ratio, (3) ÷ (4)	(1.1%)	(1.9%)	(3.7%)

When this cash flow ratio is negative, more cash is being paid out than deposited in the trust. Negative cash flow indicates the trust needs to rely on investment returns to cover benefit payments and / or may need to invest in more liquid assets to cover the benefit payments. More liquid assets may not generate the same returns as less liquid assets, which can increase the investment risk. Currently, due to the funded status being significantly over 100% negative cash flow is appropriate and expected. Also, the low magnitude of the ratio implies there may already be enough liquid assets to cover the benefit payments, less investment return is needed to cover the shortfall, or only a small portion of assets will need to be converted to cash. Therefore, the investment risk is likely not amplified at this time. This maturity measure should be monitored in the future especially if the funded status decreases closer to 100%.

Glossary of Terms

Actuarial Accrued Liability

Total accumulated cost to fund pension 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 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 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.

Annual Required Contribution

Disclosure measure of annual pension cost.

GASB 67 and 68

Governmental Accounting Standards Board Statement Number 67 amends Number 25 effective for the fiscal year beginning after June 15, 2013 and defines new financial reporting requirements for public pension plans.

Governmental Accounting Standards Board Statement Number 68 amends Number 27 effective for fiscal years beginning after June 15, 2014 and defines new accounting and financial reporting requirements for employers sponsoring public pension plans

Normal Cost

That portion of the actuarial present value of benefits assigned to a particular year in respect to an individual member 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 status.

ALASKA RETIREMENT MANAGEMENT BOARD

Actuarial Committee

SUBJECT: Certification of Actuarial Review ACTION: X

DATE: September 13, 2023 INFORMATION: ____

BACKGROUND:

AS 39.10.220 (a) (9) prescribes certain duties and reports that the Alaska Retirement Management Board is responsible for securing from a member of the American Academy of Actuaries. Additionally, it contains a requirement that "the results of all actuarial assumptions prepared under this paragraph shall be reviewed and certified by a second member of the American Academy of Actuaries before presentation to the board."

AS 37.10.220(a)(9) provides that "the results of all actuarial assumptions prepared under this paragraph shall be reviewed and certified by a second member of the American Academy of Actuaries before presentation to the Board."

STATUS:

Buck, a Gallagher Company (Buck), the board's primary actuary, has completed valuation reports of the following defined benefit plans as of June 30, 2022:

- Judicial Retirement System (JRS)
- National Guard and Naval Militia Retirement System (NGNMRS)

Gabriel Roeder Smith & Company (GRS), the board's review actuary, has reviewed the valuation reports prepared by Buck and provided a letter and report describing a review of the above listed valuation reports.

GRS compiled and reviewed an audit findings list (incorporated in the report referenced above) setting out recommendations and suggestions from the GRS review reports for further discussion or action.

RECOMMENDATION:

That the Actuarial Committee recommend the Alaska Retirement Management Board accept the review and certification of the FY 2022 actuarial reports by Gabriel Roeder Smith & Company.

ALASKA RETIREMENT MANAGEMENT BOARD

Actuarial Committee

SUBJECT: Acceptance of Actuarial Valuation Reports JRS and NGNMRS

ACTION: X

DATE: September 13, 2023

INFORMATION:

BACKGROUND:

AS 37.10.220(a)(8) prescribes that the Alaska Retirement Management Board (Board) "coordinate with the retirement system administrator to have an annual actuarial valuation of each retirement system prepared to determine system assets, accrued liabilities, and funding ratios and to certify to the appropriate budgetary authority of each employer in the system."

AS 37.10.220(a)(9) provides that "the results of all actuarial assumptions prepared under this paragraph shall be reviewed and certified by a second member of the American Academy of Actuaries before presentation to the Board."

STATUS:

Buck, A Gallagher Company (Buck), the Department of Administration's and Plans' actuary, has completed and reviewed the following results and reports with the Board's Actuarial Committee on March 15, 2023, June 14, 2023 and September 13, 2023:

1) an actuarial valuation of the Judicial Retirement System (JRS) as of June 30, 2022
2) an actuarial valuation of the National Guard and Naval Militia Retirement System as of June 30, 2022

There are four assumption changes recommended and presented in the final reports:

1) At the June 2022 Board meeting, the Board adopted the changes to the demographic and economic assumptions recommended by the actuary based on the results of an experience study performed on the plan experience from July 1, 2017 to June 30, 2021;
2) JRS salary increase and pension benefit increase assumptions were changed to 5% for FY 2023 and 3% thereafter;
3) Healthcare claim costs are updated annually and described in Section 4.2 of the JRS actuarial valuation report; and
4) The Normal Cost load for administrative expenses was updated based on the most recent two years of actual amounts paid from plan assets.

Gabriel Roeder Smith & Company (GRS), the Board's actuary, has reviewed the above actuarial valuations and provided their reports and audit findings to the Actuarial Committee and the Board.

RECOMMENDATION:

The Actuarial Committee recommends that the Alaska Retirement Management Board accept the actuarial valuation reports prepared by Buck for the for the Judicial Retirement System (JRS) and National Guard and Naval Militia Retirement System (NGNMRS) as of June 30, 2022.

BUCK
A Gallagher Company

State of Alaska Retirement Systems

Presentation to ARMB Actuarial Committee

Development of FY25 Contribution Rates and Additional State Contributions
FY25-FY39 Projections for PERS and TRS

September 13, 2023

Contents

Development of FY25 Contribution Rates and Additional State Contributions

Background

- Alaska Statutes
  - AS 39.35.255(a) – Each non-State PERS employer contributes 22% of total base salaries.
  - AS 39.35.255(h) – The State-as-an-Employer contributes the PERS Actuarially Determined Contribution rate applied to total base salaries of its employees.
  - AS 14.25.070(a) – Each TRS employer contributes 12.56% of total base salaries.

- The FY25 contributions are based on the June 30, 2022 valuation results.
  - Liabilities are rolled forward two years from June 30, 2022 to June 30, 2024.
  - Assets as of June 30, 2023 are rolled forward one year to June 30, 2024 and smoothed.

Background (cont'd)

- The Actuarially Determined Contribution consists of two components:
  - Normal Cost (the cost of active members' benefit accruals in the upcoming year), and
  - 25-year layered amortizations of the unfunded liability, not less than zero.

- These components are projected to June 30, 2024 (the beginning of FY25) and divided by projected total (DB/DCR) FY25 payroll. The result is the Actuarially Determined Contribution rate.

- The Actuarially Determined Contribution rate not contributed by the employers is paid by the State via Additional State Contributions.

FY25 Contribution Rates – DB (Baseline)

($000's)	PERS Pension	PERS Healthcare	TRS Pension	TRS Healthcare
1) Total Normal Cost	$ 98,092	$ 47,841	$ 38,452	$ 16,196
2) Employee Contributions*	45,101	0	21,470	0
3) Employer Normal Cost [1 - 2]	$ 52,991	$ 47,841	$ 16,982	$ 16,196
4) 25-year Layered Amortizations, not < 0	432,996	0	146,390	0
5) FY25 DB Contribution Amount [3 + 4]	$ 485,987	$ 47,841	$ 163,372	$ 16,196
6) FY25 DB/DCR Payroll	$ 2,464,560	$ 2,464,560	$ 769,543	$ 769,543
7) **FY25 DB Contribution Rate as % of DB/DCR Pay [5 / 6]**	**19.72%**	**1.94%**	**21.23%**	**2.10%**

* Excludes indebtedness contributions.

Amounts may not add due to rounding.

FY25 Contribution Rates – PERS DCR (Baseline)

($000's)		ODD	RM	DC	HRA	Total
1)	Employer Normal Cost	$ 5,101	$ 13,708	$ 82,267	$ 49,360	$ 150,436
2)	25-year Layered Amortizations, not < 0	0	0	n/a	n/a	0
3)	DCR Contribution Amount [1 + 2]	$ 5,101	$ 13,708	$ 82,267	$ 49,360	$ 150,436
4)	FY23 DCR Payroll	$ 1,645,341	$ 1,645,341	$ 1,645,341	$ 1,645,341	$ 1,645,341
5)	DCR Contribution Rate as % of DCR Pay [3 / 4]	0.31%	0.83%	5.00%	3.00%	9.14%
6)	FY25 DCR Payroll	$ 1,815,216	$ 1,815,216	$ 1,815,216	$ 1,815,216	$ 1,815,216
7)	FY25 DCR Contribution Amount [5 x 6]	$ 5,627	$ 15,066	$ 90,761	$ 54,456	$ 165,910
8)	FY25 DB/DCR Payroll	$ 2,464,560	$ 2,464,560	$ 2,464,560	$ 2,464,560	$ 2,464,560
9)	**FY25 DCR Contribution Rate as % of DB/DCR Pay [7 / 8]**	**0.23%**	**0.61%**	**3.68%**	**2.21%**	**6.73%**

Amounts may not add due to rounding.

FY25 Contribution Rates – TRS DCR (Baseline)

($000's)		ODD	RM	DC	HRA	Total
1)	Employer Normal Cost	$ 348	$ 3,107	$ 31,915	$ 13,678	$ 49,048
2)	25-year Layered Amortizations, not < 0	0	0	n/a	n/a	0
3)	DCR Contribution Amount [1 + 2]	$ 348	$ 3,107	$ 31,915	$ 13,678	$ 49,048
4)	FY23 DCR Payroll	$ 455,927	$ 455,927	$ 455,927	$ 455,927	$ 455,927
5)	DCR Contribution Rate as % of DCR Pay [3 / 4]	0.08%	0.68%	7.00%	3.00%	10.76%
6)	FY25 DCR Payroll	$ 521,222	$ 521,222	$ 521,222	$ 521,222	$ 521,222
7)	FY25 DCR Contribution Amount [5 x 6]	$ 417	$ 3,544	$ 36,486	$ 15,637	$ 56,084
8)	FY25 DB/DCR Payroll	$ 769,543	$ 769,543	$ 769,543	$ 769,543	$ 769,543
9)	**FY25 DCR Contribution Rate as % of DB/DCR Pay [7 / 8]**	**0.05%**	**0.46%**	**4.74%**	**2.03%**	**7.29%**

Amounts may not add due to rounding.

FY25 Additional State Contributions (Baseline)

($000's)		PERS		TRS
1)	FY25 DB Contribution Rate	21.66%		23.33%
2)	FY25 DCR Contribution Rate	6.73%		7.29%
3)	FY25 DB/DCR Contribution Rate [1 + 2]	28.39%		30.62%
4)	Statutory Employer Contribution Rate	22.00%*		12.56%
5)	FY25 Additional State Contribution Rate [3 - 4]	6.39%		18.06%
6)	FY25 DB/DCR Payroll	$ 1,242,631*	$	769,543
7)	**FY25 Additional State Contribution [5 x 6]**	**$ 79,404 ***	**$**	**138,979**

* Applies to non-State PERS employers only.

Amounts may not add due to rounding.

FY25 Contribution Alternative Scenarios

FY25 Contribution Alternative Scenarios

	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
% of Healthcare Normal Cost to Healthcare Trust	100%	0%	0%	0%	0%
"Extra" State Contributions (see note)					
• Amount	n/a	n/a	$50M	$50M	n/a
• Frequency	n/a	n/a	FY25 only	FY25-FY39	n/a
Unfunded Liability Amortization Method	Layered	Layered	Layered	Layered	Single Base

Note: As shown on slide 15, the 0% healthcare Normal Cost contribution to the healthcare trust (Alternative 1) reduces the Baseline FY25 State contribution by $64M. In Alternative 1A, we have illustrated the impact if $50M of this $64M reduction is deposited to the pension trust as an "extra" State contribution in FY25. In Alternative 1B, we have illustrated the impact if an "extra" $50M is contributed each year through FY39.

Notes

- Alternative 1 is consistent with what the ARMB adopted for FY23 and FY24.

- Under each of the alternatives, the healthcare Normal Cost rates are added to the pension past service rates to maintain the statutory employer contribution rates of 22% (PERS non-State employers) and 12.56% (TRS).

- The “extra” $50M State contributions were allocated $41M to PERS and $9M to TRS, where $9M is the minimum amount needed to reach a 100% funded ratio in FY39 for the TRS pension trust.

- Under Alternative 1C, a single amortization base would be established so that the June 30, 2039 pension unfunded liability is zero. The remaining amortization period for the single base in FY25 is 15 years.

Observations

- By contributing 0% healthcare Normal Cost to the healthcare trust each year:
  - The pension actuarial rate remains the same, but there is a *shifting* of pension contributions from the State to the employers.
  - This is why we see a reduction in projected Additional State Contributions in Alternative 1 vs Baseline.

- Making “extra” State contributions is like prepaying the principal on a home mortgage. The debt is paid off faster and less interest accumulates.

- If we revert to a single amortization base (Alternative 1C), the State could face significantly higher contribution volatility if the plans were to incur adverse experience in the last few years of amortization. For example, if there is a large asset loss in 2037, the entire loss would be amortized (funded) over just 3 years. Layered amortization was introduced in 2018 to avoid this potential contribution volatility.

- The projections are based on the June 30, 2022 valuation assumptions and assume all future experience matches the valuation assumptions (other than FY23 asset experience). The projection figures would be different if the plans were to experience future gains or losses.

Summary of Projection Figures

Summary of Projection Figures – State Contributions
(in $millions)

State Contributions for FY25	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
Additional State Contributions (PERS non-State employers and TRS)	$ 218.4	$ 178.1	$ 228.1	$ 228.1	$ 182.5
State-as-an-Employer Contributions (PERS)	264.7	241.0	241.0	241.0	244.8
Total	$ 483.1	$ 419.1	$ 469.1	$ 469.1	$ 427.3
Increase/(Decrease) vs Baseline	**n/a**	**$ (64.0)**	**$ (14.0)**	**$ (14.0)**	**$ (55.8)**

State Contributions for FY25-FY39	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
Additional State Contributions (PERS non-State employers and TRS)	$ 4,192.8	$ 3,920.9	$ 3,936.6	$ 4,429.2	$ 4,230.1
State-as-an-Employer Contributions (PERS)	4,400.5	4,241.4	4,217.8	4,075.5	4,462.7
Total	$ 8,593.3	$ 8,162.3	$ 8,154.4	$ 8,504.7	$ 8,692.8
Increase/(Decrease) vs Baseline	**n/a**	**$ (431.0)**	**$ (438.9)**	**$ (88.6)**	**$ 99.5**

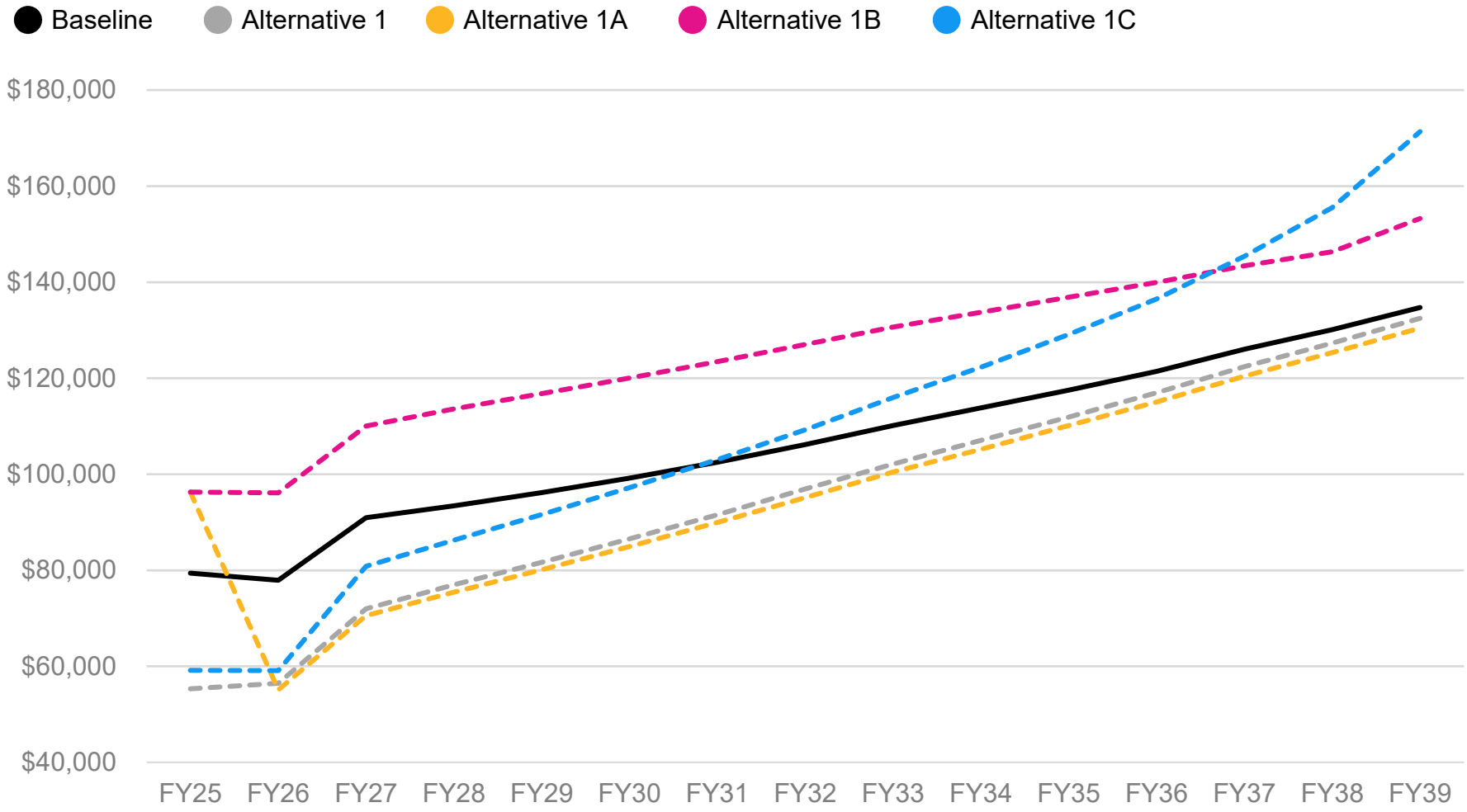
Summary of Projection Figures – Pension Funded Status
(in $millions)

June 30, 2039 Pension Unfunded Liability	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
PERS	$ 691	$ 697	$ 659	$ 52	$ 21
TRS	$ 132	$ 135	$ 127	$ 0	$ 0

June 30, 2039 Pension Funded Ratio	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
PERS	94.9%	94.8%	95.1%	99.6%	99.8%
TRS	97.8%	97.7%	97.9%	100.0%	100.0%

Projected State Contributions

Additional State Contributions – PERS
($000's)



FY25-FY39 contribution totals:

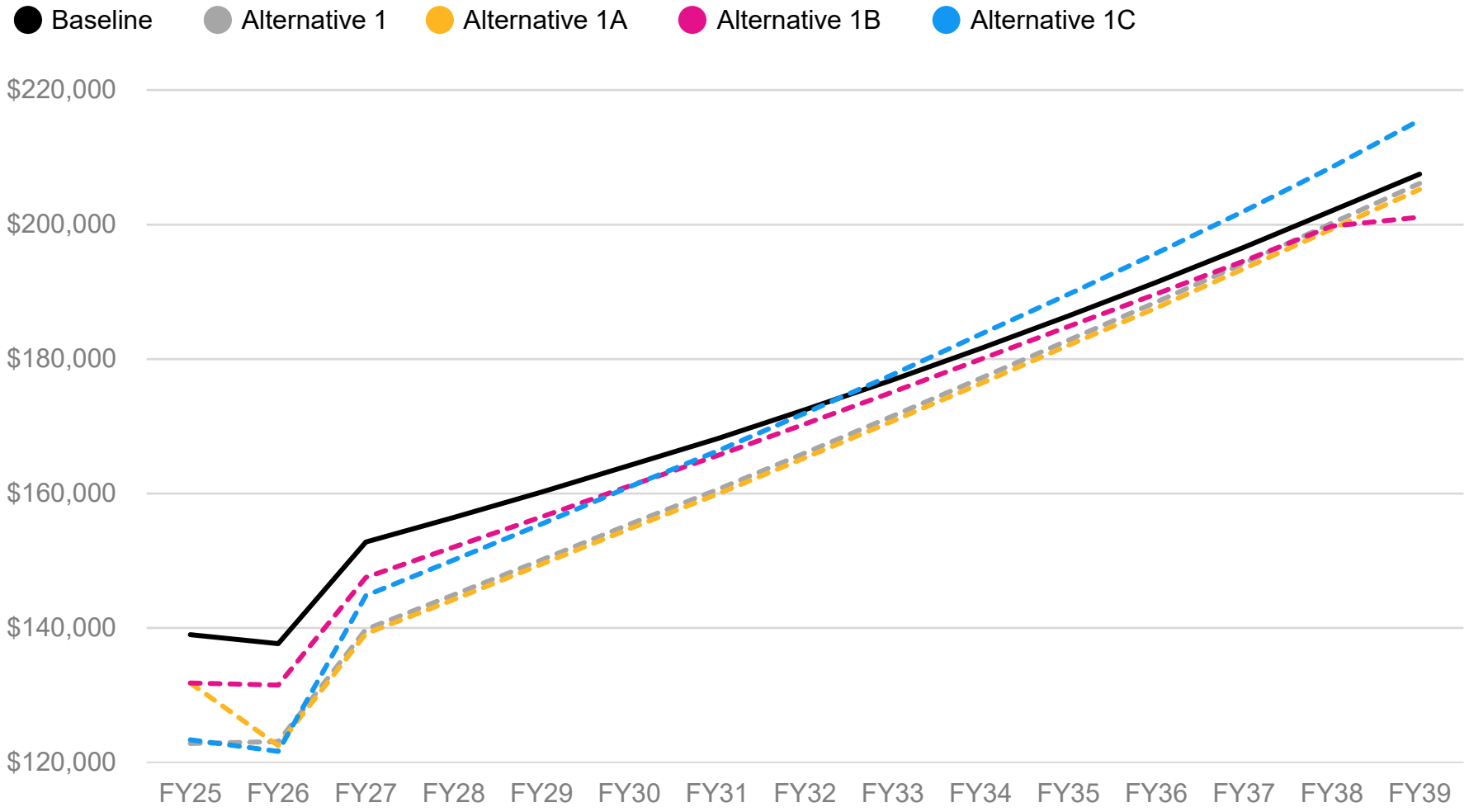
- Baseline $1.60B
- Alternative 1 $1.44B
- Alternative 1A $1.45B
- Alternative 1B $1.89B
- Alternative 1C $1.66B

Additional State Contributions – PERS
($000's)

Fiscal Year	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
2025	$ 79,404	$ 55,297	$ 96,297	$ 96,297	$ 59,149
2026	77,919	56,497	55,119	96,119	59,128
2027	90,937	71,965	70,574	110,056	80,819
2028	93,454	76,962	75,428	113,615	86,294
2029	96,173	81,656	80,101	116,824	91,636
2030	99,185	86,557	84,978	120,059	97,212
2031	102,519	91,559	89,955	123,470	103,054
2032	106,167	96,923	95,156	127,048	109,293
2033	110,170	102,143	100,482	130,686	115,983
2034	113,830	107,042	105,204	133,760	122,314
2035	117,539	111,901	110,166	136,853	129,105
2036	121,406	116,970	115,048	139,929	136,490
2037	126,029	122,398	120,431	143,427	145,395
2038	130,112	127,324	125,311	146,329	155,515
2039	134,709	132,487	130,425	153,254	171,361
Sub-Total	**$ 1,599,553**	**$ 1,437,681**	**$ 1,454,675**	**$ 1,887,726**	**$ 1,662,748**
2040-2052	0	0	0	0	0
Total	**$ 1,599,553**	**$ 1,437,681**	**$ 1,454,675**	**$ 1,887,726**	**$ 1,662,748**

Amounts under Alternatives 1A and 1B include the "extra" State contributions.

Additional State Contributions – TRS
($000's)



FY25-FY39 contribution totals:

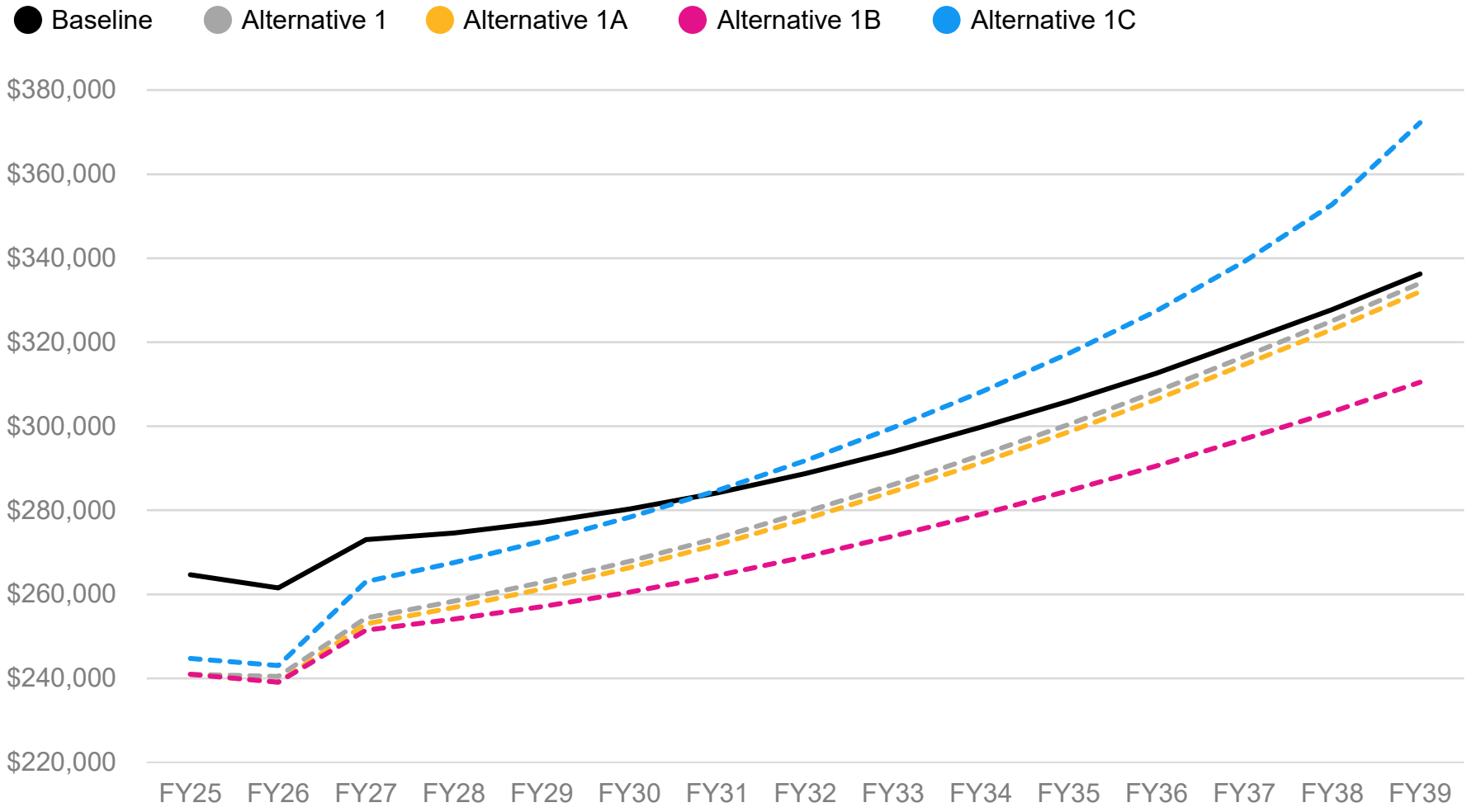
- Baseline $2.59B
- Alternative 1 $2.48B
- Alternative 1A $2.48B
- Alternative 1B $2.54B
- Alternative 1C $2.57B

Additional State Contributions – TRS
($000's)

Fiscal Year	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
2025	$ 138,979	$ 122,819	$ 131,819	$ 131,819	$ 123,358
2026	137,643	123,101	122,479	131,479	121,624
2027	152,771	139,791	139,162	147,532	144,826
2028	156,419	144,944	144,227	152,032	150,124
2029	160,210	150,111	149,464	156,525	155,443
2030	164,182	155,407	154,751	161,127	160,983
2031	168,144	160,558	159,891	165,640	166,310
2032	172,458	166,007	165,329	170,340	171,948
2033	176,902	171,538	170,760	175,089	177,680
2034	181,570	177,154	176,359	179,972	183,689
2035	186,391	182,783	182,061	184,836	189,639
2036	191,386	188,434	187,604	189,687	195,721
2037	196,635	194,276	193,427	194,596	202,013
2038	202,046	200,211	199,341	199,746	208,516
2039	207,495	206,110	205,220	201,098	215,505
Sub-Total	**$ 2,593,231**	**$ 2,483,244**	**$ 2,481,894**	**$ 2,541,518**	**$ 2,567,379**
2040-2052	13,599	14,116	12,783	0	0
Total	**$ 2,606,830**	**$ 2,497,360**	**$ 2,494,677**	**$ 2,541,518**	**$ 2,567,379**

Amounts under Alternatives 1A and 1B include the "extra" State contributions.

State-as-an-Employer Contributions – PERS ($000's)



FY25-FY39 contribution totals:

- Baseline $4.40B
- Alternative 1 $4.24B
- Alternative 1A $4.22B
- Alternative 1B $4.08B
- Alternative 1C $4.46B

State-as-an-Employer Contributions – PERS
($000's)

Fiscal Year	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
2025	$ 264,669	$ 240,965	$ 240,965	$ 240,965	$ 244,753
2026	261,519	240,455	239,100	239,100	243,042
2027	272,991	254,336	252,968	251,476	263,042
2028	274,559	258,342	256,833	254,067	267,519
2029	277,083	262,809	261,279	257,073	272,623
2030	280,310	267,892	266,340	260,519	278,370
2031	284,164	273,386	271,809	264,449	284,690
2032	288,732	279,642	277,904	268,948	291,806
2033	293,974	286,080	284,447	273,831	299,690
2034	299,786	293,112	291,304	279,068	308,129
2035	305,942	300,396	298,690	284,616	317,314
2036	312,637	308,274	306,384	290,534	327,469
2037	320,164	316,593	314,659	296,955	339,207
2038	327,782	325,040	323,060	303,411	352,761
2039	336,231	334,047	332,019	310,487	372,273
Sub-Total	**$ 4,400,543**	**$ 4,241,369**	**$ 4,217,761**	**$ 4,075,499**	**$ 4,462,688**
2040-2052	445,414	441,384	414,107	133,392	16,187
Total	**$ 4,845,957**	**$ 4,682,753**	**$ 4,631,868**	**$ 4,208,891**	**$ 4,478,875**

Projected Pension Unfunded Liability

Pension Unfunded Liability – PERS
($000's)

Date	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
6/30/2024	$ 4,981,304	$ 4,981,304	$ 4,981,304	$ 4,981,304	$ 4,981,304
6/30/2025	4,785,094	4,785,982	4,742,010	4,742,010	4,777,928
6/30/2026	5,009,754	5,011,497	4,967,218	4,923,245	4,997,358
6/30/2027	4,877,987	4,880,557	4,835,976	4,748,016	4,846,881
6/30/2028	4,722,829	4,725,931	4,681,326	4,548,898	4,670,301
6/30/2029	4,541,916	4,545,511	4,500,924	4,323,866	4,464,981
6/30/2030	4,332,919	4,336,970	4,292,452	4,070,961	4,228,323
6/30/2031	4,093,417	4,097,891	4,053,499	3,787,627	3,957,332
6/30/2032	3,820,807	3,825,388	3,781,473	3,471,396	3,648,775
6/30/2033	3,511,654	3,516,579	3,472,953	3,118,995	3,298,223
6/30/2034	3,162,416	3,167,658	3,124,713	2,727,138	2,901,540
6/30/2035	2,770,145	2,775,679	2,733,248	2,292,803	2,454,296
6/30/2036	2,331,193	2,336,685	2,295,196	1,812,549	1,951,188
6/30/2037	1,841,208	1,846,610	1,806,226	1,282,258	1,385,081
6/30/2038	1,296,233	1,301,493	1,262,391	698,242	747,560
6/30/2039	691,444	696,842	659,217	51,981	21,469

The projected June 30, 2039 pension unfunded liability under Alternative 1C is not zero like it is for TRS. This is because PERS includes State-as-an-Employer contributions that are not fully paid at the beginning of the fiscal year like Additional State Contributions. As a result, there is a small loss of 1/2 year interest on the State-as-an-Employer contributions.

Pension Unfunded Liability – TRS
($000's)

Date	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
6/30/2024	$ 1,660,901	$ 1,660,901	$ 1,660,901	$ 1,660,901	$ 1,660,901
6/30/2025	1,555,835	1,556,431	1,546,778	1,546,778	1,555,853
6/30/2026	1,700,809	1,701,904	1,692,218	1,682,566	1,702,868
6/30/2027	1,650,167	1,651,738	1,642,024	1,622,696	1,647,372
6/30/2028	1,590,888	1,592,832	1,583,183	1,554,083	1,582,594
6/30/2029	1,522,623	1,524,913	1,515,259	1,476,476	1,508,214
6/30/2030	1,444,583	1,447,193	1,437,542	1,389,109	1,423,303
6/30/2031	1,356,036	1,358,942	1,349,307	1,291,197	1,327,151
6/30/2032	1,255,967	1,259,146	1,249,540	1,181,843	1,218,679
6/30/2033	1,143,293	1,146,632	1,137,164	1,059,916	1,096,644
6/30/2034	1,016,728	1,020,199	1,010,897	924,174	959,578
6/30/2035	875,073	878,648	869,446	773,459	806,279
6/30/2036	717,174	720,832	711,853	606,673	635,401
6/30/2037	541,574	545,291	536,572	422,513	445,369
6/30/2038	346,868	350,622	342,204	219,442	234,549
6/30/2039	131,546	135,315	127,242	0	0

Projected Pension Funded Ratios

Pension Funded Ratios – PERS

Date	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
6/30/2024	69.8%	69.8%	69.8%	69.8%	69.8%
6/30/2025	71.2%	71.2%	71.4%	71.4%	71.2%
6/30/2026	69.9%	69.9%	70.2%	70.5%	70.0%
6/30/2027	70.8%	70.7%	71.0%	71.5%	70.9%
6/30/2028	71.6%	71.6%	71.9%	72.7%	72.0%
6/30/2029	72.6%	72.6%	72.9%	73.9%	73.1%
6/30/2030	73.7%	73.7%	73.9%	75.3%	74.3%
6/30/2031	74.9%	74.9%	75.1%	76.8%	75.7%
6/30/2032	76.2%	76.2%	76.5%	78.4%	77.3%
6/30/2033	77.8%	77.8%	78.1%	80.3%	79.2%
6/30/2034	79.6%	79.6%	79.9%	82.4%	81.3%
6/30/2035	81.8%	81.7%	82.0%	84.9%	83.8%
6/30/2036	84.3%	84.2%	84.5%	87.8%	86.8%
6/30/2037	87.2%	87.2%	87.5%	91.1%	90.4%
6/30/2038	90.7%	90.7%	91.0%	95.0%	94.6%
6/30/2039	94.9%	94.8%	95.1%	99.6%	99.8%

Funded Ratio equals Actuarial Value of Assets divided by Actuarial Accrued Liability.

Pension Funded Ratios – TRS

Date	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
6/30/2024	78.9%	78.9%	78.9%	78.9%	78.9%
6/30/2025	80.2%	80.2%	80.3%	80.3%	80.2%
6/30/2026	78.3%	78.3%	78.4%	78.6%	78.3%
6/30/2027	78.9%	78.9%	79.0%	79.2%	78.9%
6/30/2028	79.5%	79.5%	79.6%	80.0%	79.6%
6/30/2029	80.2%	80.1%	80.3%	80.8%	80.3%
6/30/2030	80.9%	80.9%	81.0%	81.7%	81.2%
6/30/2031	81.8%	81.8%	81.9%	82.7%	82.2%
6/30/2032	82.9%	82.8%	82.9%	83.9%	83.4%
6/30/2033	84.1%	84.0%	84.2%	85.2%	84.7%
6/30/2034	85.5%	85.4%	85.6%	86.8%	86.3%
6/30/2035	87.2%	87.1%	87.3%	88.7%	88.2%
6/30/2036	89.2%	89.1%	89.3%	90.9%	90.4%
6/30/2037	91.6%	91.5%	91.7%	93.4%	93.1%
6/30/2038	94.4%	94.4%	94.5%	96.5%	96.2%
6/30/2039	97.8%	97.7%	97.9%	100.0%	100.0%

Funded Ratio equals Actuarial Value of Assets divided by Actuarial Accrued Liability.

Projected Pension Actuarially Determined Contribution Rates

Pension Actuarially Determined Contribution Rates – PERS

Fiscal Year	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
2025	19.7%	19.7%	19.7%	19.7%	20.0%
2026	19.5%	19.5%	19.4%	19.4%	19.7%
2027	20.5%	20.5%	20.3%	20.2%	21.2%
2028	20.5%	20.6%	20.4%	20.2%	21.3%
2029	20.6%	20.6%	20.5%	20.2%	21.4%
2030	20.7%	20.7%	20.6%	20.1%	21.5%
2031	20.8%	20.8%	20.7%	20.1%	21.7%
2032	20.9%	20.9%	20.8%	20.1%	21.8%
2033	21.0%	21.0%	20.9%	20.1%	22.0%
2034	21.1%	21.1%	21.0%	20.1%	22.2%
2035	21.1%	21.1%	21.0%	20.0%	22.3%
2036	21.2%	21.2%	21.1%	20.0%	22.5%
2037	21.3%	21.3%	21.2%	20.0%	22.8%
2038	21.3%	21.3%	21.2%	19.9%	23.2%
2039	21.4%	21.4%	21.3%	19.9%	23.9%

Contribution rates are expressed as a percentage of projected DB/DCR payroll.

Pension Actuarially Determined Contribution Rates – TRS

Fiscal Year	Baseline	Alternative 1	Alternative 1A	Alternative 1B	Alternative 1C
2025	21.2%	21.2%	21.2%	21.2%	21.3%
2026	20.7%	20.7%	20.6%	20.6%	20.5%
2027	22.3%	22.3%	22.2%	22.1%	22.9%
2028	22.3%	22.4%	22.3%	22.1%	23.0%
2029	22.4%	22.4%	22.3%	22.1%	23.1%
2030	22.5%	22.5%	22.4%	22.1%	23.2%
2031	22.5%	22.5%	22.5%	22.1%	23.2%
2032	22.6%	22.6%	22.5%	22.0%	23.3%
2033	22.6%	22.7%	22.6%	22.0%	23.4%
2034	22.7%	22.7%	22.6%	22.0%	23.4%
2035	22.7%	22.7%	22.7%	22.0%	23.5%
2036	22.7%	22.8%	22.7%	21.9%	23.6%
2037	22.8%	22.8%	22.7%	21.9%	23.6%
2038	22.8%	22.9%	22.8%	21.9%	23.7%
2039	22.9%	22.9%	22.8%	21.9%	23.9%

Contribution rates are expressed as a percentage of projected DB/DCR payroll.

Historical Figures

Adopted Contribution Rates – PERS/TRS

Fiscal Year	PERS - Pension	PERS - Healthcare	TRS - Pension	TRS - Healthcare
2009	10.91%	24.31%	20.57%	23.60%
2010	10.25%	17.40%	20.95%	18.58%
2011	9.98%	17.98%	20.32%	18.24%
2012	14.65%	16.11%	26.61%	16.00%
2013	15.45%	17.38%	30.53%	19.03%
2014	16.47%	15.84%	31.40%	18.70%
2015	23.24%	16.61%	44.55%	21.76%
2016	14.43%	8.15%	15.85%	8.63%
2017	15.98%	5.80%	17.78%	5.62%
2018	17.27%	3.11%	19.16%	2.59%
2019	18.27%	4.37%	20.86%	2.70%
2020	18.29%	4.89%	20.71%	3.91%
2021	20.66%	4.27%	20.94%	3.40%
2022	20.89%	3.12%	22.51%	2.98%
2023	18.38%	0.00%	17.90%	0.00%
2024	18.47%	0.00%	18.49%	0.00%

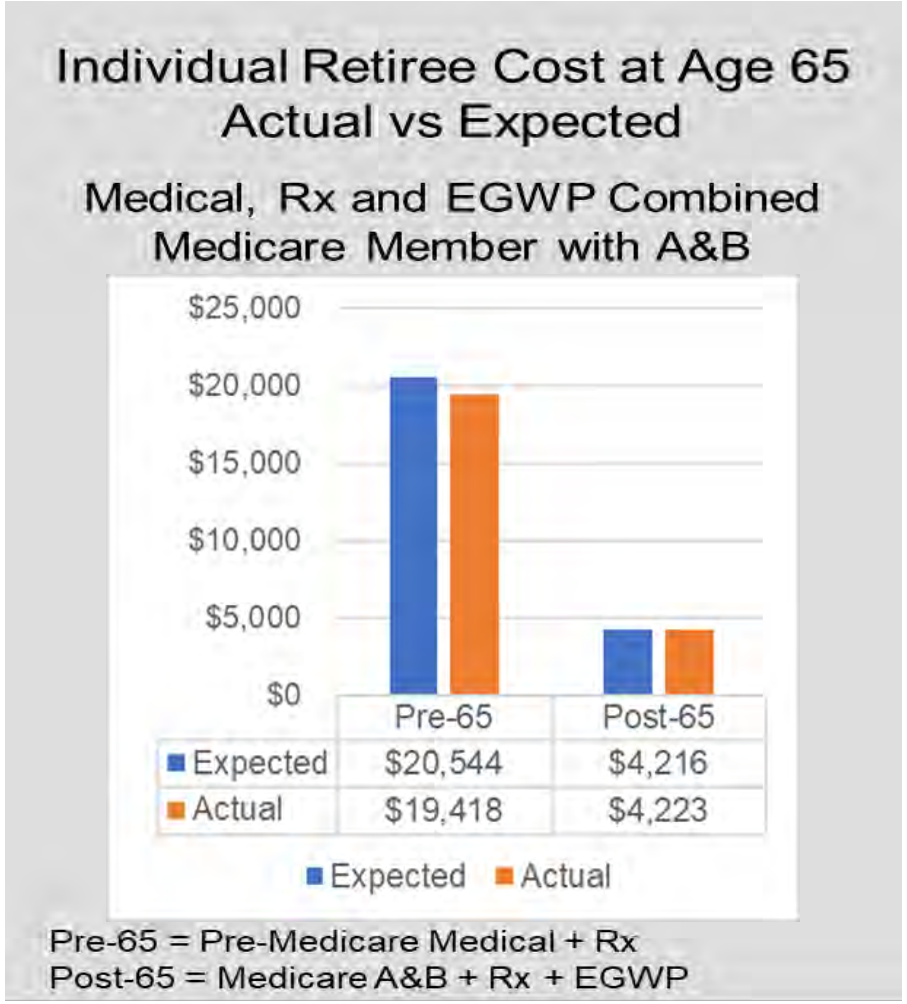
Contribution rates prior to FY09 were not determined separately by pension and healthcare.

Funded Ratios – PERS/TRS

30-Jun	PERS - Pension	PERS - Healthcare	TRS - Pension	TRS - Healthcare
2006	78.2%	43.1%	67.8%	35.6%
2007	77.8%	53.5%	68.2%	45.8%
2008	78.8%	56.9%	70.2%	53.1%
2009	63.0%	60.1%	57.0%	56.9%
2010	62.4%	60.4%	54.3%	52.1%
2011	61.9%	64.6%	54.0%	54.3%
2012	57.1%	67.4%	49.9%	56.8%
2013	54.5%	70.2%	48.1%	60.1%
2014	59.7%	87.0%	54.5%	77.0%
2015	67.0%	99.1%	76.9%	100.3%
2016	66.4%	95.8%	75.8%	100.9%
2017	66.7%	93.9%	75.9%	96.9%
2018	64.6%	100.4%	76.2%	108.0%
2019	63.7%	109.2%	75.3%	117.0%
2020	63.6%	113.5%	75.0%	121.4%
2021	67.9%	125.2%	79.1%	133.9%
2022	68.1%	134.9%	78.2%	140.7%

Appendix
(2022 Valuation Healthcare Per Capita Costs)

2022 Valuation Healthcare Per Capita Costs – PERS/TRS



Actuarial Certification

Actuarial Certification

The purpose of this presentation is to provide the ARMB Actuarial Committee with (i) the development of the FY25 contribution rates and Additional State Contributions for PERS and TRS, and (ii) FY25-FY39 projections under different scenarios. All calculations are based on the data, assumptions, methods, and plan provisions described in the June 30, 2022 actuarial valuation reports, as well as preliminary June 30, 2023 asset statements. In Alternative 1C, the amortization of the unfunded liability is based on a 25-year period that was established June 30, 2014.

Please see the June 30, 2022 actuarial valuation reports for a detailed description of (i) Buck's projection models which are the same ones used for this presentation (ASOP 56), (ii) risk factors related to future funding of the plans (ASOP 51), and (iii) the assumption-setting process (ASOP 27 and ASOP 35).

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.

The results were prepared under the direction of David Kershner and Bob Besenhofer, both of whom meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. These results have been prepared in accordance with all applicable Actuarial Standards of Practice.

David Kershner
FSA, EA, MAAA, FCA
Principal, Retirement

Robert Besenhofer
ASA, MAAA, FCA
Director, Health

August 22, 2023

Mr. Ajay Desai
Director
Alaska Department of Administration
Division of Retirement & Benefits
PO Box 110203
Juneau, AK 99811-0203

Dear Ajay,

As requested, we have calculated the allocation between the pension and healthcare trusts of the FY25 Additional State Contributions for the State of Alaska Public Employees' Retirement System (PERS), Teachers' Retirement System (TRS), and Judicial Retirement System (JRS).

All results are based on the June 30, 2022 valuation reports, except the results for PERS and TRS reflect FY23 asset performance as shown in the preliminary June 30, 2023 asset statements that were provided to us on August 18.

Summary of Results

For PERS and TRS, the FY25 Additional State Contributions are allocated 100% to pension since the healthcare trusts are projected to be more than 100% funded at June 30, 2024. Similarly, we assumed the FY24 Additional State Contributions were made 100% to pension because the healthcare trusts were projected to be more than 100% funded at June 30, 2023.

Attached to this letter are three exhibits.

- Exhibit 1 – 100% of the FY25 healthcare Normal Cost is assumed to be deposited to the healthcare trust. The Unfunded Actuarial Accrued Liabilities for the pension and healthcare trusts are amortized using the current method of 25-year layered bases. This approach was adopted by the Alaska Retirement Management Board (ARMB) effective June 30, 2018.
- Exhibit 2 – 0% of the FY25 healthcare Normal Cost is assumed to be deposited to the healthcare trust. The Unfunded Actuarial Accrued Liabilities for the pension and healthcare trusts are amortized using the current method of 25-year layered bases. This approach was adopted by the Alaska Retirement Management Board (ARMB) effective June 30, 2018.
- Exhibit 3 – 0% of the FY25 healthcare Normal Cost is assumed to be deposited to the healthcare trust. The Unfunded Actuarial Accrued Liabilities for the pension and healthcare trusts are amortized using a single base. The 25-year period for the single base was established June 30, 2014. The remaining amortization period for this single base in FY25 is 15 years.

For Exhibits 2 and 3, the portion of the FY25 healthcare Normal Cost not contributed to the healthcare trust was added to the pension Past Service Cost in order to keep the total employer contribution rate at 22% (PERS non-State employers) and 12.56% (TRS).

For all three exhibits:

- Liabilities as of June 30, 2022 were rolled forward two years based on the June 30, 2022 valuation projections. For FY23, actual (pension) and expected (healthcare) benefit payments were used in the liability roll-forward. For FY24, expected benefit payments (pension and healthcare) were used in the liability roll-forward.
- Assets as of June 30, 2022 were rolled forward one year using actual FY23 investment return, contributions, subsidies, benefit payments, and administrative expenses based on the preliminary June 30, 2023 asset statements. Assets as of June 30, 2023 were rolled forward one year based on the expected FY24 investment return and cash flows from the June 30, 2022 valuation projections.
- Investment gains and losses are recognized over 5 years beginning June 30, 2014.
- All contribution rates are based on total payroll of Defined Benefit (DB) and Defined Contribution Retirement (DCR) combined.
- For PERS, contributions were allocated between non-State employers and the State as an employer per the provisions of SB 55. The payroll of the State's PERS employees was assumed to be 49.58% of total PERS payroll based on the June 30, 2022 valuation data.

For JRS, the allocation of the FY25 past service cost rate between pension and healthcare is shown below. The FY25 past service cost rate is based on the June 30, 2022 valuation, but not less than zero.

JRS			
	Projected Pay	FY25 Past Service Cost Rate	FY25 Past Service Contribution Amount
Pension	$ 14,035,000	17.17%	$ 2,410,000
Healthcare	$ 14,035,000	0.00%	$ 0
Total		17.17%	$ 2,410,000

Data, Provisions, Assumptions, and Methods

The data, plan provisions, actuarial assumptions, and methods used for the PERS, TRS, and JRS plan costs are described in the June 30, 2022 actuarial valuation reports (except the amortization method for Exhibit 3 was changed as noted above). These reports include detailed information related to the potential risks associated with funding of the plans (ASOP 51), our use of models (ASOP 56), and the assumption setting process (ASOP 27 and ASOP 35).

Preliminary June 30, 2023 asset statements for PERS and TRS were reflected as noted above.

Please call me at 602-803-6174 if you have any questions.

Sincerely,

David J. Kershner, FSA, EA, MAAA, FCA
Principal
Buck, A Gallagher Company

Attachments

cc: Mr. Kevin Worley, State of Alaska

Exhibit 1

State of Alaska
Allocation of Projected FY25 Employer and Additional State Contributions

Based on June 30, 2022 Valuations
with Liabilities Rolled Forward Two Years and
Assets Rolled Forward One Year and Smoothed

100% of FY25 Healthcare Normal Cost Contributed to Healthcare Trust
and Unfunded Liability Amortized with Layered Bases

	PERS						TRS	
	Non-State Employers		State as an Employer		All Employers			
Projected FY25 DB Payroll		$ 327,399,000		$ 321,945,000		$ 649,344,000		$ 248,321,000
Projected FY25 DCR Payroll		915,232,000		899,984,000		1,815,216,000		521,222,000
Projected FY25 Total Payroll		$ 1,242,631,000		$ 1,221,929,000		$ 2,464,560,000		$ 769,543,000
	Percent of Total Payroll	**Estimated Dollar Amount**	**Percent of Total Payroll**	**Estimated Dollar Amount**	**Estimated Dollar Amount**		**Percent of Total Payroll**	**Estimated Dollar Amount**
Employer Contributions								
DB Pension Plan								
1. Normal Cost	2.15%		2.15%				2.21%	
2. Past Service Cost	11.18%		17.57%				0.96%	
3. Total: (1) + (2)	13.33%	$ 165,643,000	19.72%	$ 240,964,000	$ 406,607,000		3.17%	$ 24,395,000
DB Healthcare Plan								
4. Normal Cost	1.94%		1.94%				2.10%	
5. Past Service Cost	0.00%		0.00%				0.00%	
6. Total: (4) + (5)	1.94%	24,107,000	1.94%	23,705,000	47,812,000		2.10%	16,160,000
7. DCR Plan	6.73%	83,629,000	6.73%	82,236,000	165,865,000		7.29%	56,100,000
8. Total: (3) + (6) + (7)	22.00%	$ 273,379,000	28.39%	$ 346,905,000	$ 620,284,000		12.56%	$ 96,655,000
Additional State Contributions to DB								
9. DB Pension Plan	6.39%	$ 79,404,000	0.00%	$ 0	$ 79,404,000		18.06%	$ 138,979,000
10. DB Healthcare Plan	0.00%	0	0.00%	0	0		0.00%	0
11. Total: (9) + (10)	6.39%	$ 79,404,000	0.00%	$ 0	$ 79,404,000		18.06%	$ 138,979,000
Total DB								
12. DB Pension Plan: (3) + (9)	19.72%	$ 245,047,000	19.72%	$ 240,964,000	$ 486,011,000		21.23%	$ 163,374,000
13. DB Healthcare Plan: (6) + (10)	1.94%	24,107,000	1.94%	23,705,000	47,812,000		2.10%	16,160,000
14. Total: (12) + (13)	21.66%	$ 269,154,000	21.66%	$ 264,669,000	$ 533,823,000		23.33%	$ 179,534,000
Total DB and DCR: (7) + (14)	28.39%	$ 352,783,000	28.39%	$ 346,905,000	$ 699,688,000		30.62%	$ 235,634,000

Notes:

1. Projected FY25 payroll is based on the June 30, 2022 valuation projections assuming 0% population growth.
2. Additional State Contributions for FY24 were assumed to be made 100% to pension.
3. All contribution rates are expressed as a percentage of total payroll of DB and DCR combined.
4. FY23 investment return, contributions, subsidies, benefit payments, and administrative expenses are based on preliminary June 30, 2023 asset statements provided by the State. FY24 investment return, contributions, subsidies, benefit payments, and administrative expenses are based on the June 30, 2022 valuation projections assuming 0% population growth. Investment gains and losses are recognized over 5 years beginning June 30, 2014.
5. For PERS under SB 55, payroll for the State's PERS employees was assumed to be 49.58% of total PERS payroll based on the June 30, 2022 valuation data.
6. Total contribution rates for pension and healthcare are not less than the Normal Cost rates.
7. Data, plan provisions, assumptions, and methods are as described in the June 30, 2022 actuarial valuation reports, except as noted above.

Exhibit 2

State of Alaska
Allocation of Projected FY25 Employer and Additional State Contributions

Based on June 30, 2022 Valuations
with Liabilities Rolled Forward Two Years and
Assets Rolled Forward One Year and Smoothed

0% of FY25 Healthcare Normal Cost Contributed to Healthcare Trust
and Unfunded Liability Amortized with Layered Bases

	PERS						TRS	
	Non-State Employers		State as an Employer		All Employers			
Projected FY25 DB Payroll		$ 327,399,000		$ 321,945,000		$ 649,344,000		$ 248,321,000
Projected FY25 DCR Payroll		915,232,000		899,984,000		1,815,216,000		521,222,000
Projected FY25 Total Payroll		$ 1,242,631,000		$ 1,221,929,000		$ 2,464,560,000		$ 769,543,000
	Percent of Total Payroll	**Estimated Dollar Amount**	**Percent of Total Payroll**	**Estimated Dollar Amount**	**Estimated Dollar Amount**		**Percent of Total Payroll**	**Estimated Dollar Amount**
Employer Contributions								
DB Pension Plan								
1. Normal Cost	2.15%		2.15%				2.21%	
2. Past Service Cost	13.12%		17.57%				3.06%	
3. Total: (1) + (2)	15.27%	$ 189,750,000	19.72%	$ 240,964,000	$ 430,714,000		5.27%	$ 40,555,000
DB Healthcare Plan								
4. Normal Cost	0.00%		0.00%				0.00%	
5. Past Service Cost	0.00%		0.00%				0.00%	
6. Total: (4) + (5)	0.00%	0	0.00%	0	0		0.00%	0
7. DCR Plan	6.73%	83,629,000	6.73%	82,236,000	165,865,000		7.29%	56,100,000
8. Total: (3) + (6) + (7)	22.00%	$ 273,379,000	26.45%	$ 323,200,000	$ 596,579,000		12.56%	$ 96,655,000
Additional State Contributions to DB								
9. DB Pension Plan	4.45%	$ 55,297,000	0.00%	$ 0	$ 55,297,000		15.96%	$ 122,819,000
10. DB Healthcare Plan	0.00%	0	0.00%	0	0		0.00%	0
11. Total: (9) + (10)	4.45%	$ 55,297,000	0.00%	$ 0	$ 55,297,000		15.96%	$ 122,819,000
Total DB								
12. DB Pension Plan: (3) + (9)	19.72%	$ 245,047,000	19.72%	$ 240,964,000	$ 486,011,000		21.23%	$ 163,374,000
13. DB Healthcare Plan: (6) + (10)	0.00%	0	0.00%	0	0		0.00%	0
14. Total: (12) + (13)	19.72%	$ 245,047,000	19.72%	$ 240,964,000	$ 486,011,000		21.23%	$ 163,374,000
Total DB and DCR: (7) + (14)	26.45%	$ 328,676,000	26.45%	$ 323,200,000	$ 651,876,000		28.52%	$ 219,474,000

Notes:

1. Projected FY25 payroll is based on the June 30, 2022 valuation projections assuming 0% population growth.
2. Additional State Contributions for FY24 were assumed to be made 100% to pension.
3. All contribution rates are expressed as a percentage of total payroll of DB and DCR combined.
4. FY23 investment return, contributions, subsidies, benefit payments, and administrative expenses are based on preliminary June 30, 2023 asset statements provided by the State. FY24 investment return, contributions, subsidies, benefit payments, and administrative expenses are based on the June 30, 2022 valuation projections assuming 0% population growth. Investment gains and losses are recognized over 5 years beginning June 30, 2014.
5. For PERS under SB 55, payroll for the State's PERS employees was assumed to be 49.58% of total PERS payroll based on the June 30, 2022 valuation data.
6. Healthcare negative past service cost rates are allowed to reduce the total Healthcare rates to zero. The Pension past service cost rates are adjusted to keep the total employer contribution rates at 22% (PERS non-State employers) and 12.56% (TRS).
7. Data, plan provisions, assumptions, and methods are as described in the June 30, 2022 actuarial valuation reports, except as noted above.

Exhibit 3

State of Alaska
Allocation of Projected FY25 Employer and Additional State Contributions

Based on June 30, 2022 Valuations
with Liabilities Rolled Forward Two Years and
Assets Rolled Forward One Year and Smoothed

0% of FY25 Healthcare Normal Cost Contributed to Healthcare Trust
and Unfunded Liability Amortized with a Single Amortization Base

	PERS						TRS	
	Non-State Employers		State as an Employer		All Employers			
Projected FY25 DB Payroll		$ 327,399,000		$ 321,945,000		$ 649,344,000		$ 248,321,000
Projected FY25 DCR Payroll		915,232,000		899,984,000		1,815,216,000		521,222,000
Projected FY25 Total Payroll		$ 1,242,631,000		$ 1,221,929,000		$ 2,464,560,000		$ 769,543,000
	Percent of Total Payroll	**Estimated Dollar Amount**	**Percent of Total Payroll**	**Estimated Dollar Amount**	**Estimated Dollar Amount**		**Percent of Total Payroll**	**Estimated Dollar Amount**
Employer Contributions								
DB Pension Plan								
1. Normal Cost	2.15%		2.15%				2.21%	
2. Past Service Cost	13.12%		17.88%				3.06%	
3. Total: (1) + (2)	15.27%	$ 189,750,000	20.03%	$ 244,752,000	$ 434,502,000		5.27%	$ 40,555,000
DB Healthcare Plan								
4. Normal Cost	0.00%		0.00%				0.00%	
5. Past Service Cost	0.00%		0.00%				0.00%	
6. Total: (4) + (5)	0.00%	0	0.00%	0	0		0.00%	0
7. DCR Plan	6.73%	83,629,000	6.73%	82,236,000	165,865,000		7.29%	56,100,000
8. Total: (3) + (6) + (7)	22.00%	$ 273,379,000	26.76%	$ 326,988,000	$ 600,367,000		12.56%	$ 96,655,000
Additional State Contributions to DB								
9. DB Pension Plan	4.76%	$ 59,149,000	0.00%	$ 0	$ 59,149,000		16.03%	$ 123,358,000
10. DB Healthcare Plan	0.00%	0	0.00%	0	0		0.00%	0
11. Total: (9) + (10)	4.76%	$ 59,149,000	0.00%	$ 0	$ 59,149,000		16.03%	$ 123,358,000
Total DB								
12. DB Pension Plan: (3) + (9)	20.03%	$ 248,899,000	20.03%	$ 244,752,000	$ 493,651,000		21.30%	$ 163,913,000
13. DB Healthcare Plan: (6) + (10)	0.00%	0	0.00%	0	0		0.00%	0
14. Total: (12) + (13)	20.03%	$ 248,899,000	20.03%	$ 244,752,000	$ 493,651,000		21.30%	$ 163,913,000
Total DB and DCR: (7) + (14)	26.76%	$ 332,528,000	26.76%	$ 326,988,000	$ 659,516,000		28.59%	$ 220,013,000

Notes:

1. Projected FY25 payroll is based on the June 30, 2022 valuation projections assuming 0% population growth.
2. Additional State Contributions for FY24 were assumed to be made 100% to pension.
3. All contribution rates are expressed as a percentage of total payroll of DB and DCR combined.
4. FY23 investment return, contributions, subsidies, benefit payments, and administrative expenses are based on preliminary June 30, 2023 asset statements provided by the State. FY24 investment return, contributions, subsidies, benefit payments, and administrative expenses are based on the June 30, 2022 valuation projections assuming 0% population growth. Investment gains and losses are recognized over 5 years beginning June 30, 2014.
5. For PERS under SB 55, payroll for the State's PERS employees was assumed to be 49.58% of total PERS payroll based on the June 30, 2022 valuation data.
6. Healthcare negative past service cost rates are allowed to reduce the total Healthcare rates to zero. The Pension past service cost rates are adjusted to keep the total employer contribution rates at 22% (PERS non-State employers) and 12.56% (TRS).
7. The Unfunded Actuarial Accrued Liability is amortized using a single base. The remaining amortization period for this single base in FY25 is 15 years.
8. Data, plan provisions, assumptions, and methods are as described in the June 30, 2022 actuarial valuation reports, except as noted above.

ALASKA RETIREMENT MANAGEMENT BOARD

Actuarial Committee

SUBJECT: History of PERS / TRS Employer Contribution Rates

ACTION: _____

DATE: September 13, 2023

INFORMATION: X

Below is a history of employer contribution rates adopted by the Alaska Retirement Management Board for Fiscal Years 2015 through 2024, as well as the proposed FY 2025 contribution rates:

ARM BOARD ADOPTED RATES															
		FY15 (a)	FY15 (b)	FY16	FY17	FY18	FY19 (c)	FY20	FY21	FY22	FY23	FY24	PROPOSED FY25 (1)	PROPOSED FY25 (2)	PROPOSED FY25 (3)
Public Employees' Retirement System (PERS)															
	Total Employer Contribution Rate	44.03%	31.90%	27.19%	26.14%	25.01%	27.58%	28.62%	30.85%	30.11%	24.79%	25.10%	28.39%	26.45%	26.76%
	- DB Employer Contribution Rate	39.85%	27.72%	22.58%	21.78%	20.38%	22.64%	23.18%	24.93%	24.01%	18.38%	18.47%	21.66%	19.72%	20.03%
	- DCR Employer Contribution Rate	4.18%	4.18%	4.61%	4.36%	4.63%	4.94%	5.44%	5.92%	6.10%	6.41%	6.63%	6.73%	6.73%	6.73%
	DCR - Retiree Medical Plan	1.66%	1.66%	1.68%	1.18%	1.03%	0.94%	1.32%	1.27%	1.07%	1.10%	1.01%	0.83%	0.83%	0.83%
	DCR - OD&D - All Others	0.22%	0.22%	0.22%	0.17%	0.16%	0.26%	0.26%	0.31%	0.31%	0.30%	0.30%	0.24%	0.24%	0.24%
	DCR - OD&D - P/F	1.06%	1.06%	1.05%	0.49%	0.43%	0.76%	0.72%	0.70%	0.68%	0.68%	0.68%	0.69%	0.69%	0.69%
Teachers' Retirement System (TRS)															
	Total Employer Contribution Rate	70.75%	48.69%	29.27%	28.02%	26.78%	28.90%	30.47%	30.47%	31.85%	24.62%	25.52%	30.62%	28.52%	28.59%
	- DB Employer Contribution Rate	66.31%	44.25%	24.48%	23.40%	21.75%	23.56%	24.62%	24.34%	25.49%	17.90%	18.49%	23.33%	21.23%	21.30%
	- DCR Employer Contribution Rate	4.44%	4.44%	4.79%	4.62%	5.03%	5.34%	5.85%	6.13%	6.36%	6.72%	7.03%	7.29%	7.29%	7.29%
	DCR - Retiree Medical Plan	2.04%	2.04%	2.04%	1.05%	0.91%	0.79%	1.09%	0.93%	0.83%	0.87%	0.82%	0.68%	0.68%	0.68%
	DCR - OD&D	0.00%	0.00%	0.00%	0.00%	0.00%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%

(a) As noted in the June 30, 2012 actuarial valuation reports, "The Board changed the amortization method used for funding from the level percentage of payroll method to the level dollar method in June 2012, effective June 30, 2012."

(b) During the FY 2014 legislative session, HB 385 enacted certain changes into law. In AS 37.10.220(a), item (a)(8)(B) was amended to define that "an appropriate contribution rate for liquidating the past service liability of the defined benefit retirement plan under AS 14.25.009 - 14.25.220 or the past service liability of the defined benefit retirement plan under AS 39.35.095 - 39.35.680 must be determined by a level percent of pay method based on amortization of the past service liability for a closed term of 25 years;"
The PERS DB and TRS DB Employer Contribution Rates for FY 2015 were updated to the level percentage of pay methodology from the previously determined rates that were prepared using the level dollar methodology, and have been done so going forward.

(c) Beginning in Fiscal Year 2019, employer contribution rates for plans which have no past service liability as determined by the actuarial valuation process will not reflect a contribution rate for liquidating past service liability under AS 37.10.220(a)(8)(B).

(1) Proposed FY25 rates are based on Buck letter dated August 22, 2023 with liabilities rolled forward two years and assets rolled forward one year and smoothed. Portion of FY25 healthcare normal cost contributed to healthcare trust is 100%.

(2) Proposed FY25 rates are based on Buck letter dated August 22, 2023 with liabilities rolled forward two years and assets rolled forward one year and smoothed. Portion of FY25 healthcare normal cost contributed to healthcare trust is 0%.

(3) Proposed FY25 rates are based on Buck letter dated August 22, 2023 with liabilities rolled forward two years and assets rolled forward one year and smoothed. Portion of FY25 healthcare normal cost contributed to healthcare trust is 0% and unfunded liability is amortized with a single 25-year amortization period.

ARM BOARD ADOPTED RATES															
		FY15 (a)	FY15 (b)	FY16	FY17	FY18	FY19 (c)	FY20	FY21	FY22	FY23	FY24	PROPOSED FY25 (1)	PROPOSED FY25 (2)	PROPOSED FY25 (3)
Public Employees' Retirement System (PERS)															
	Total Employer Contribution Rate	44.03%	31.90%	27.19%	26.14%	25.01%	27.58%	28.62%	30.85%	30.11%	24.79%	25.10%	28.39%	26.45%	26.76%
	- DB Employer Contribution Rate	39.85%	27.72%	22.58%	21.78%	20.38%	22.64%	23.18%	24.93%	24.01%	18.38%	18.47%	21.66%	19.72%	20.03%
	- DCR Employer Contribution Rate	4.18%	4.18%	4.61%	4.36%	4.63%	4.94%	5.44%	5.92%	6.10%	6.41%	6.63%	6.73%	6.73%	6.73%
	DCR - Retiree Medical Plan	1.66%	1.66%	1.68%	1.18%	1.03%	0.94%	1.32%	1.27%	1.07%	1.10%	1.01%	0.83%	0.83%	0.83%
	DCR - OD&D - All Others	0.22%	0.22%	0.22%	0.17%	0.16%	0.26%	0.26%	0.31%	0.31%	0.30%	0.30%	0.24%	0.24%	0.24%
	DCR - OD&D - P/F	1.06%	1.06%	1.05%	0.49%	0.43%	0.76%	0.72%	0.70%	0.68%	0.68%	0.68%	0.69%	0.69%	0.69%
Teachers' Retirement System (TRS)															
	Total Employer Contribution Rate	70.75%	48.69%	29.27%	28.02%	26.78%	28.90%	30.47%	30.47%	31.85%	24.62%	25.52%	30.62%	28.52%	28.59%
	- DB Employer Contribution Rate	66.31%	44.25%	24.48%	23.40%	21.75%	23.56%	24.62%	24.34%	25.49%	17.90%	18.49%	23.33%	21.23%	21.30%
	- DCR Employer Contribution Rate	4.44%	4.44%	4.79%	4.62%	5.03%	5.34%	5.85%	6.13%	6.36%	6.72%	7.03%	7.29%	7.29%	7.29%
	DCR - Retiree Medical Plan	2.04%	2.04%	2.04%	1.05%	0.91%	0.79%	1.09%	0.93%	0.83%	0.87%	0.82%	0.68%	0.68%	0.68%
	DCR - OD&D	0.00%	0.00%	0.00%	0.00%	0.00%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%

(a) As noted in the June 30, 2012 actuarial valuation reports, "The Board changed the amortization method used for funding from the level percentage of payroll method to the level dollar method in June 2012, effective June 30, 2012."

(b) During the FY 2014 legislative session, HB 385 enacted certain changes into law. In AS 37.10.220(a), item (a)(8)(B) was amended to define that "an appropriate contribution rate for liquidating the past service liability of the defined benefit retirement plan under AS 14.25.009 - 14.25.220 or the past service liability of the defined benefit retirement plan under AS 39.35.095 - 39.35.680 must be determined by a level percent of pay method based on amortization of the past service liability for a closed term of 25 years;"
The PERS DB and TRS DB Employer Contribution Rates for FY 2015 were updated to the level percentage of pay methodology from the previously determined rates that were prepared using the level dollar methodology, and have been done so going forward.

(c) Beginning in Fiscal Year 2019, employer contribution rates for plans which have no past service liability as determined by the actuarial valuation process will not reflect a contribution rate for liquidating past service liability under AS 37.10.220(a)(8)(B).

(1) Proposed FY25 rates are based on Buck letter dated August 22, 2023 with liabilities rolled forward two years and assets rolled forward one year and smoothed. Portion of FY25 healthcare normal cost contributed to healthcare trust is 100%.

(2) Proposed FY25 rates are based on Buck letter dated August 22, 2023 with liabilities rolled forward two years and assets rolled forward one year and smoothed. Portion of FY25 healthcare normal cost contributed to healthcare trust is 0%.

(3) Proposed FY25 rates are based on Buck letter dated August 22, 2023 with liabilities rolled forward two years and assets rolled forward one year and smoothed. Portion of FY25 healthcare normal cost contributed to healthcare trust is 0% and unfunded liability is amortized with a single 25-year amortization period.

BUCK
A Gallagher Company

State of Alaska Retirement Systems

Retirements by Age for PERS and TRS
2013 to 2020 Experience

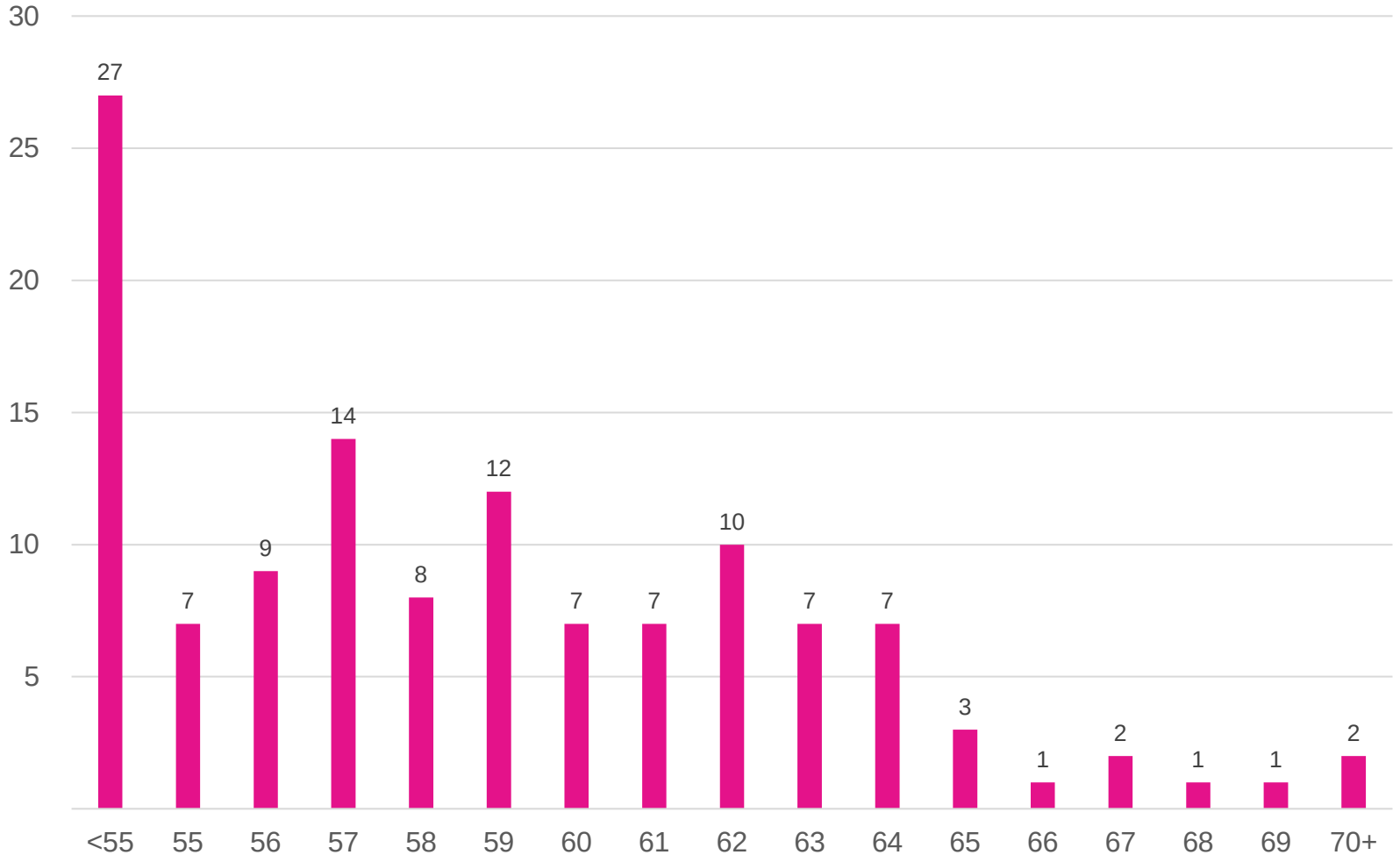
September 13, 2023

Observations

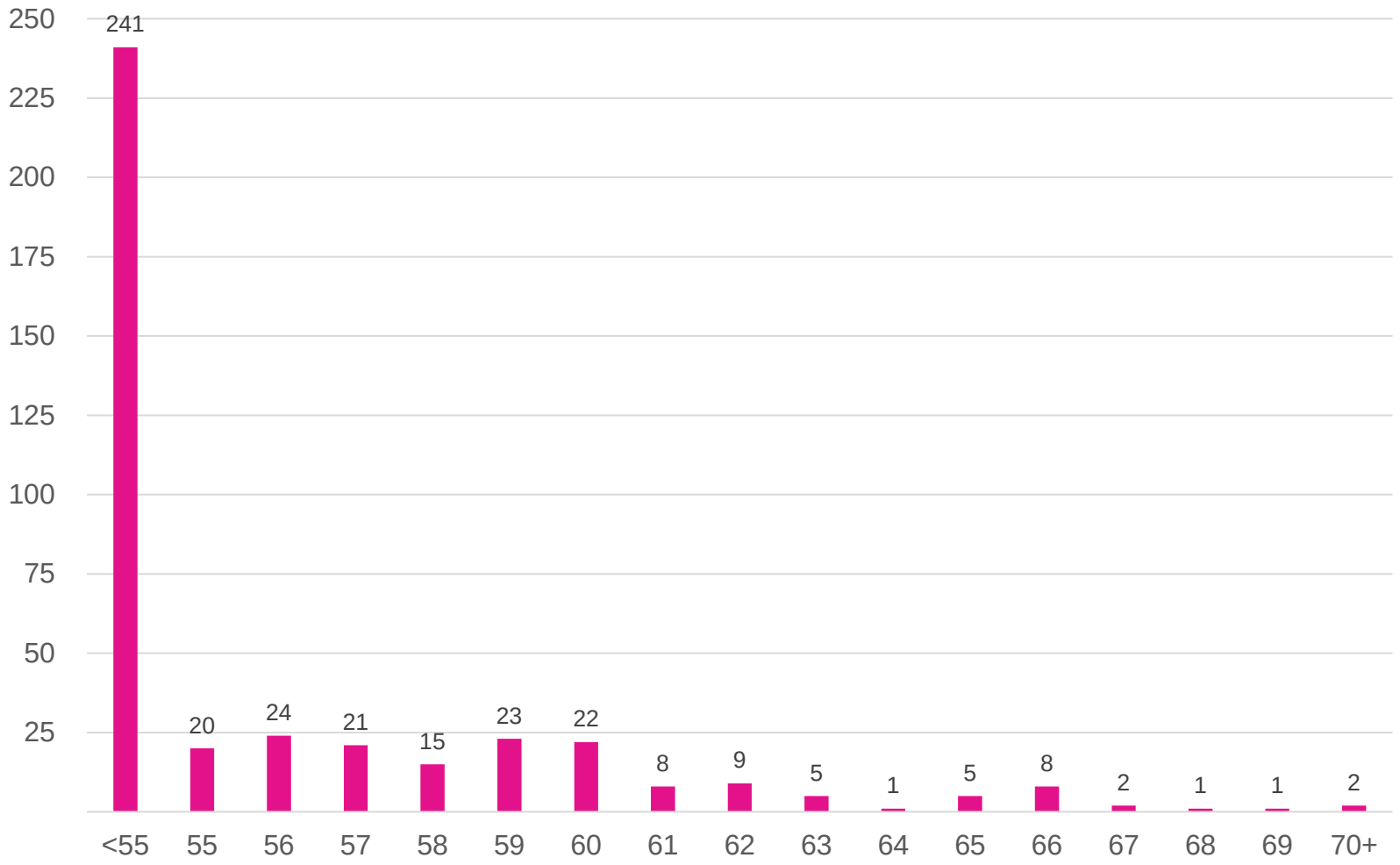
- We summarized the PERS and TRS retirement ages based on the data from the last two 4-year experience studies covering 2013 to 2020
  - Slides 4-14: Number of retirements by age and by tier
  - Slides 16-18: Distribution of retirements by age for all tiers
- PERS P/F
  - 45% of retirements are at ages younger than 55
  - 82% of retirements are at ages 60 and below
  - Patterns of retirement ages are fairly constant over the 8-year period
- PERS Others / TRS
  - 51% / 60% of retirements are at ages 60 and below
  - 33% / 27% of retirements are at ages 61-65
  - 16% / 13% of retirements are at ages above 65
  - About 5% of retirements are at ages above 70 (both groups)
  - There was a slight increase in the percentage of retirements at ages over 65 in the last 4-year period (both groups)

Number of Retirements by Age and by Tier

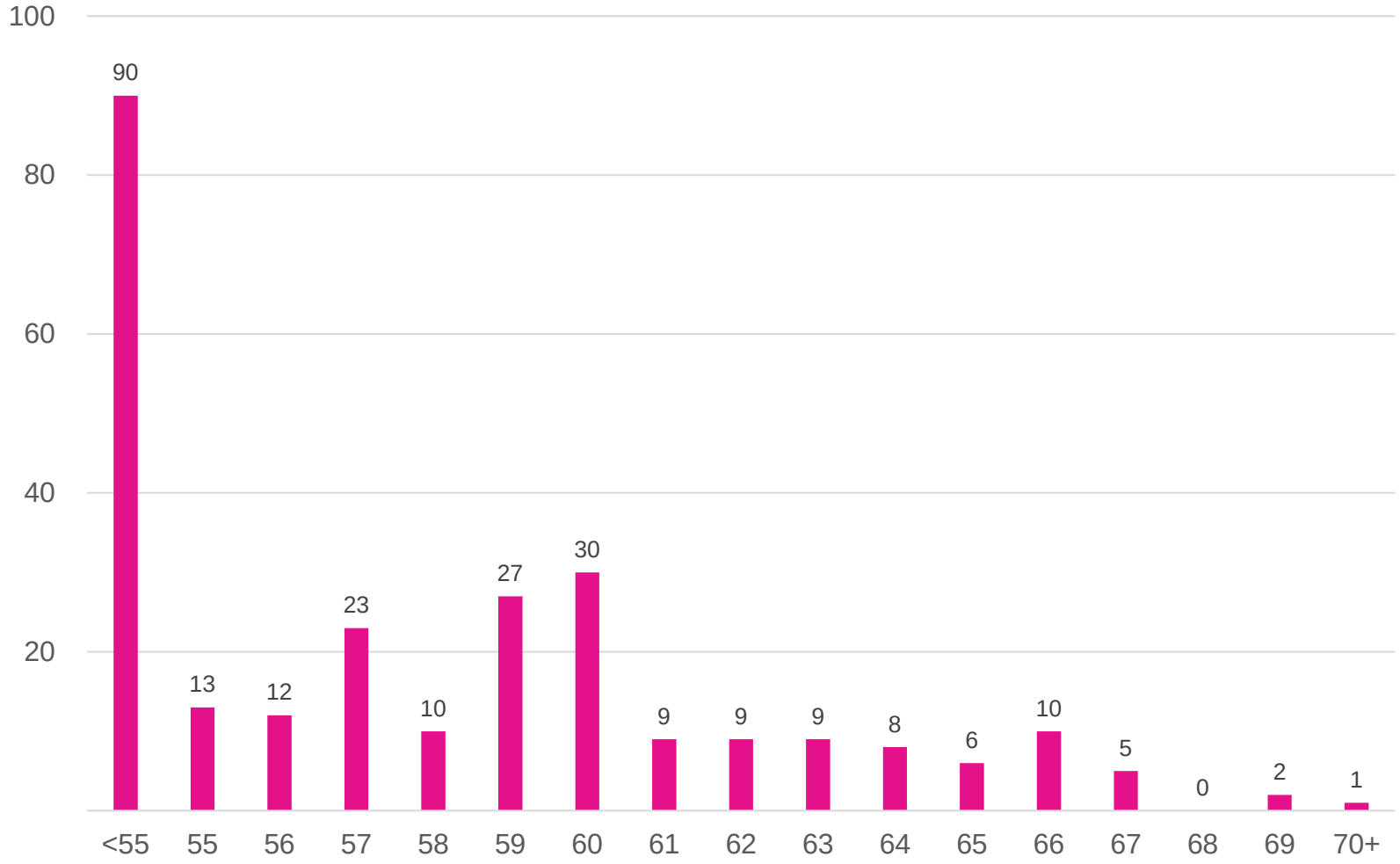
PERS P/F – Number of Retirements by Age (Tier 1)



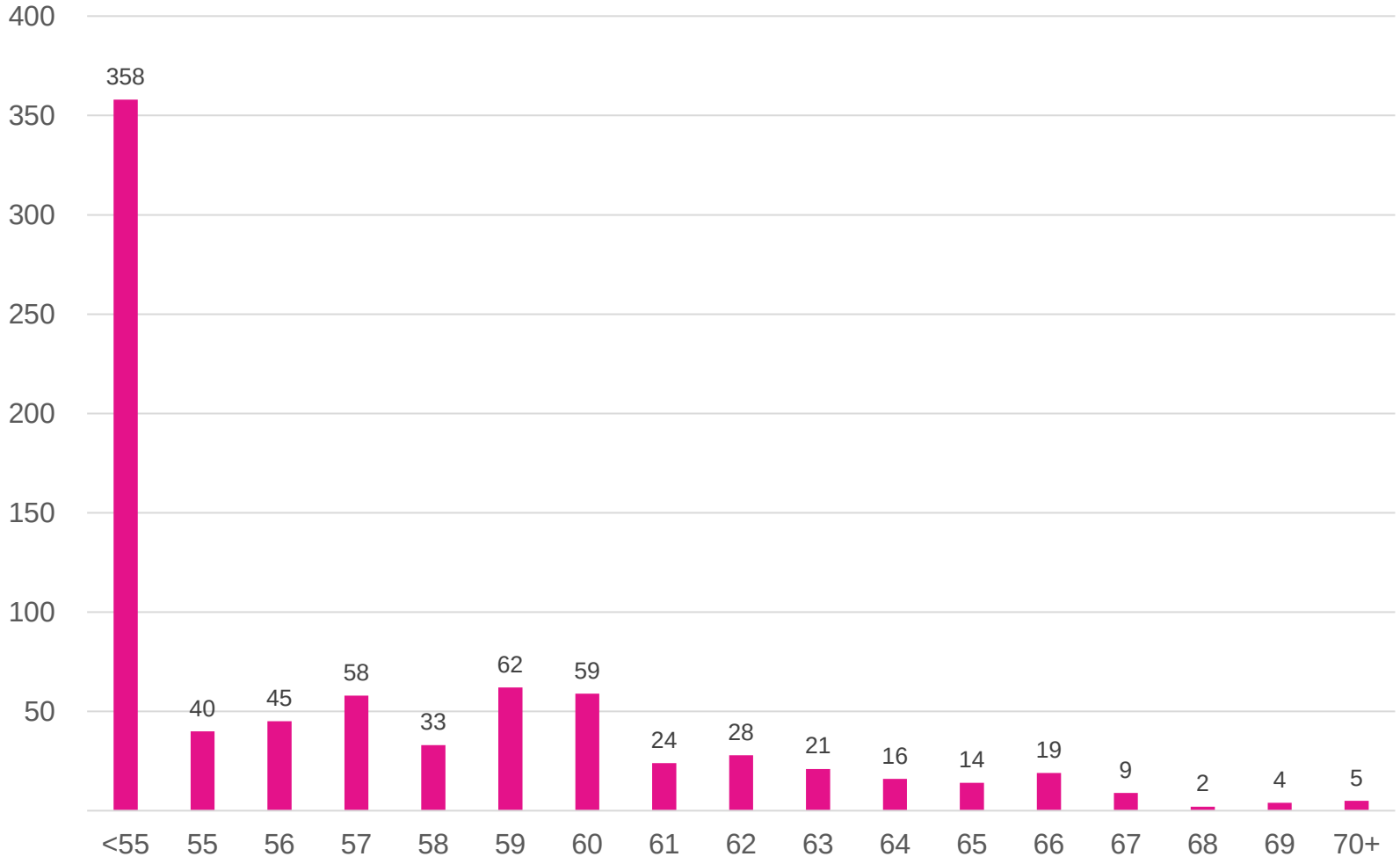
PERS P/F – Number of Retirements by Age (Tier 2)



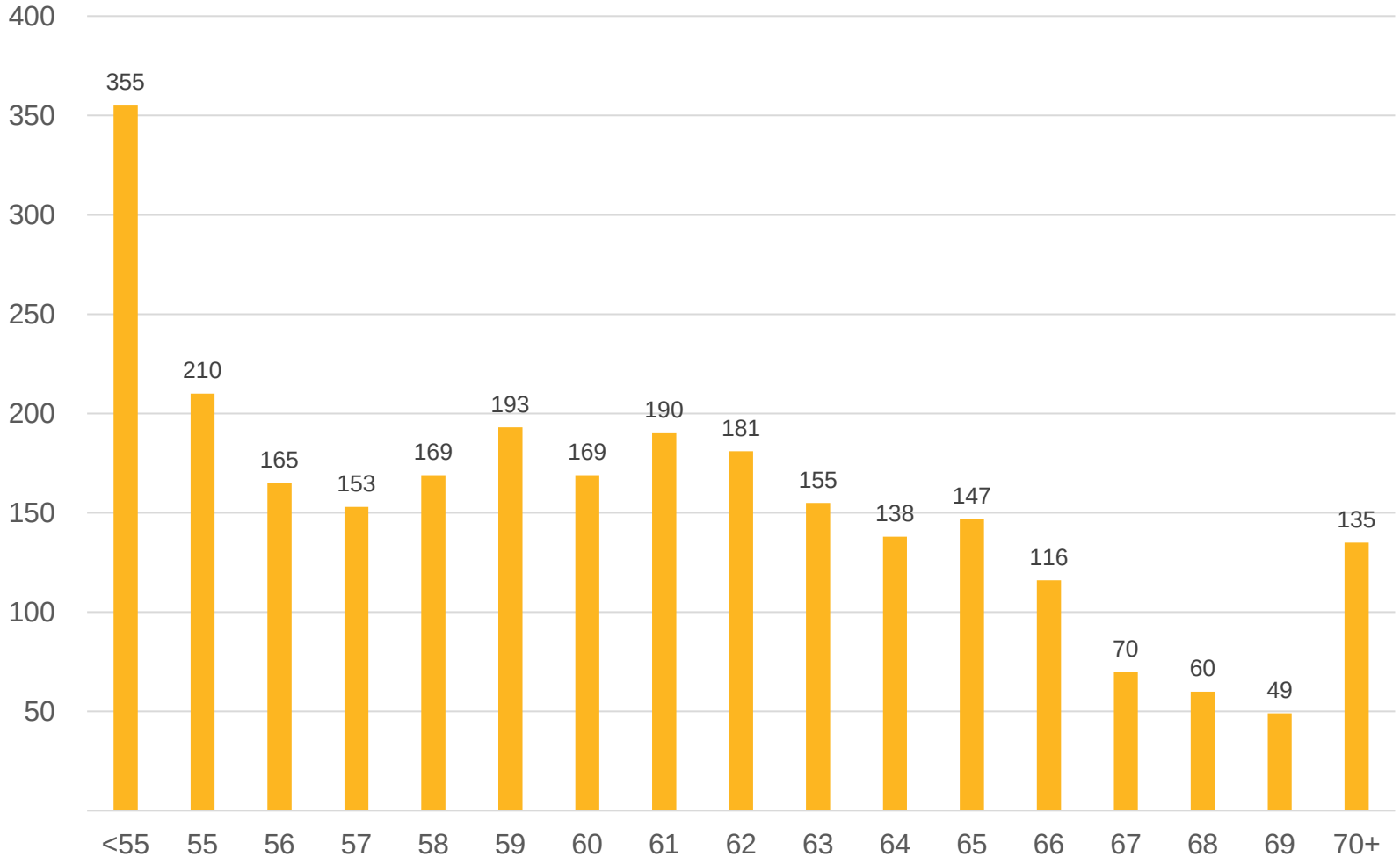
PERS P/F – Number of Retirements by Age (Tier 3)



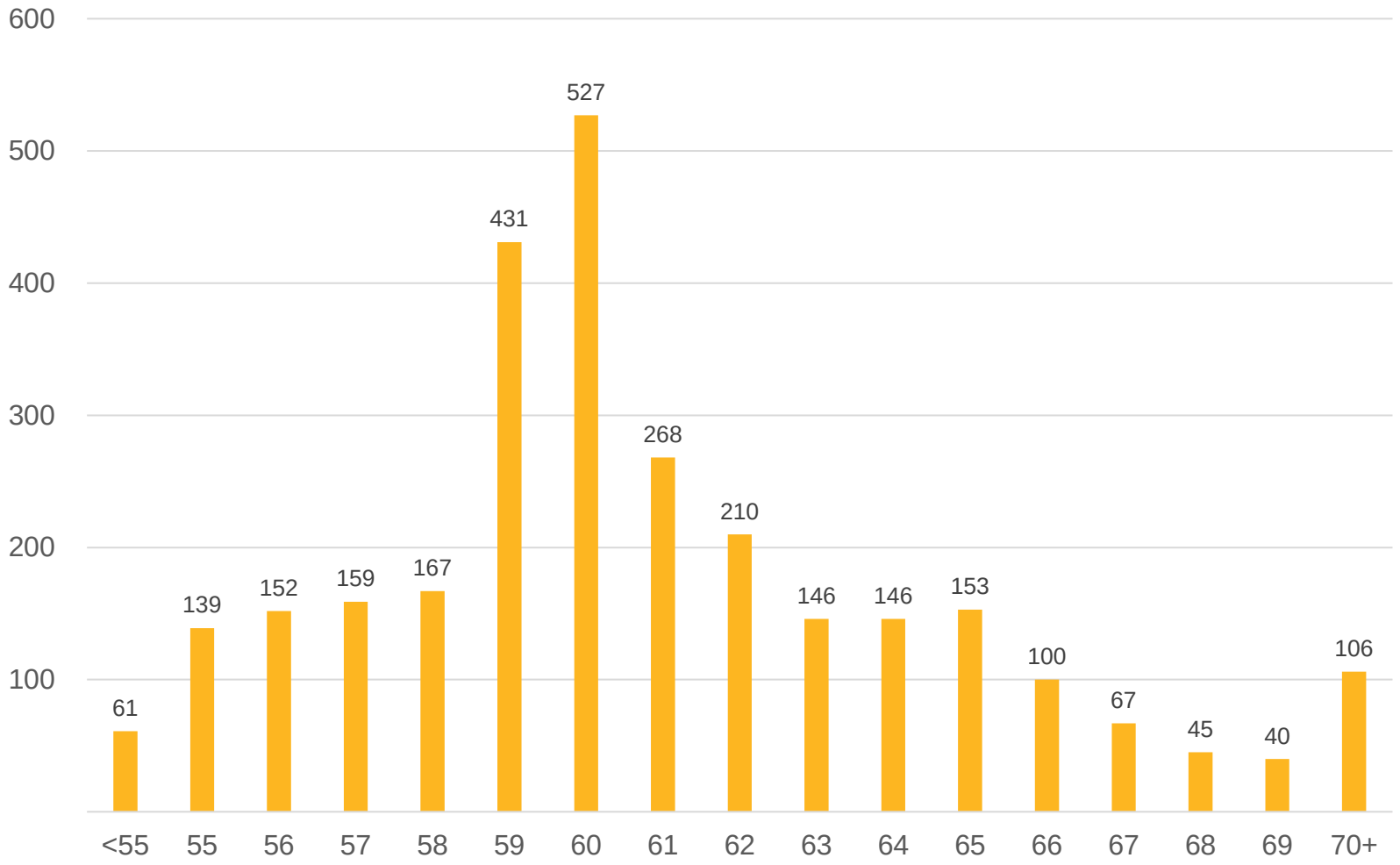
PERS P/F – Number of Retirements by Age (All Tiers)



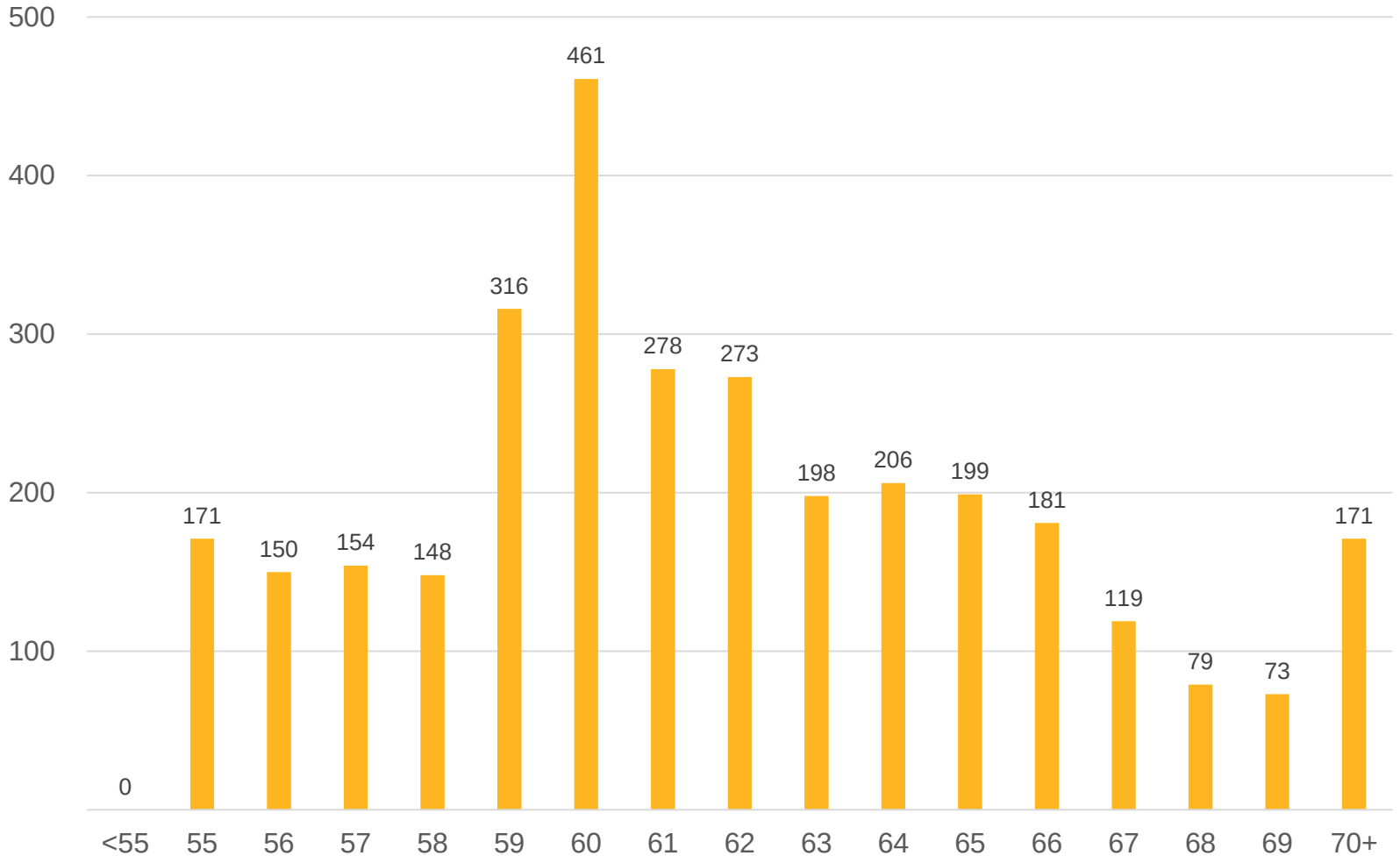
PERS Others – Number of Retirements by Age (Tier 1)



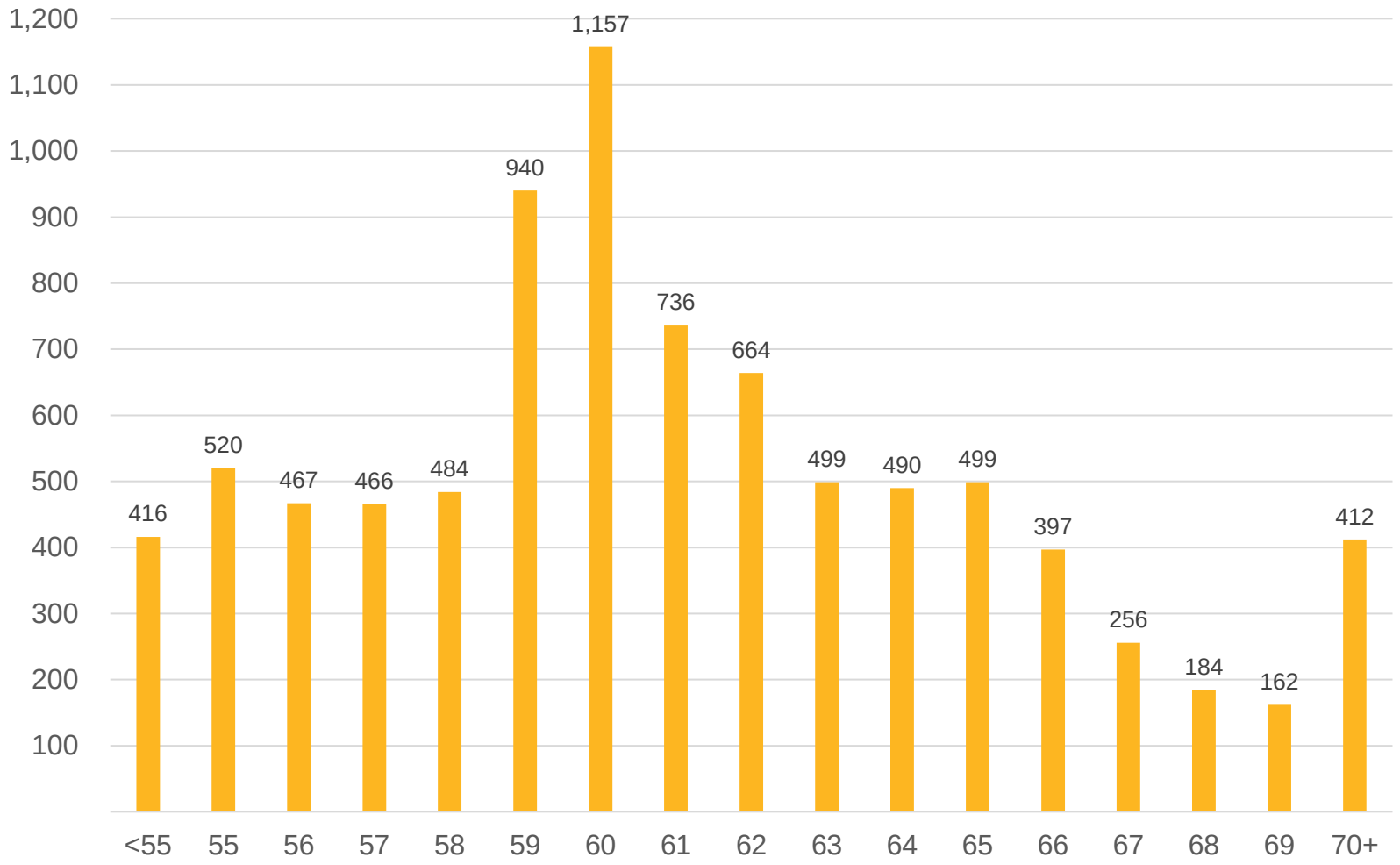
PERS Others – Number of Retirements by Age (Tier 2)



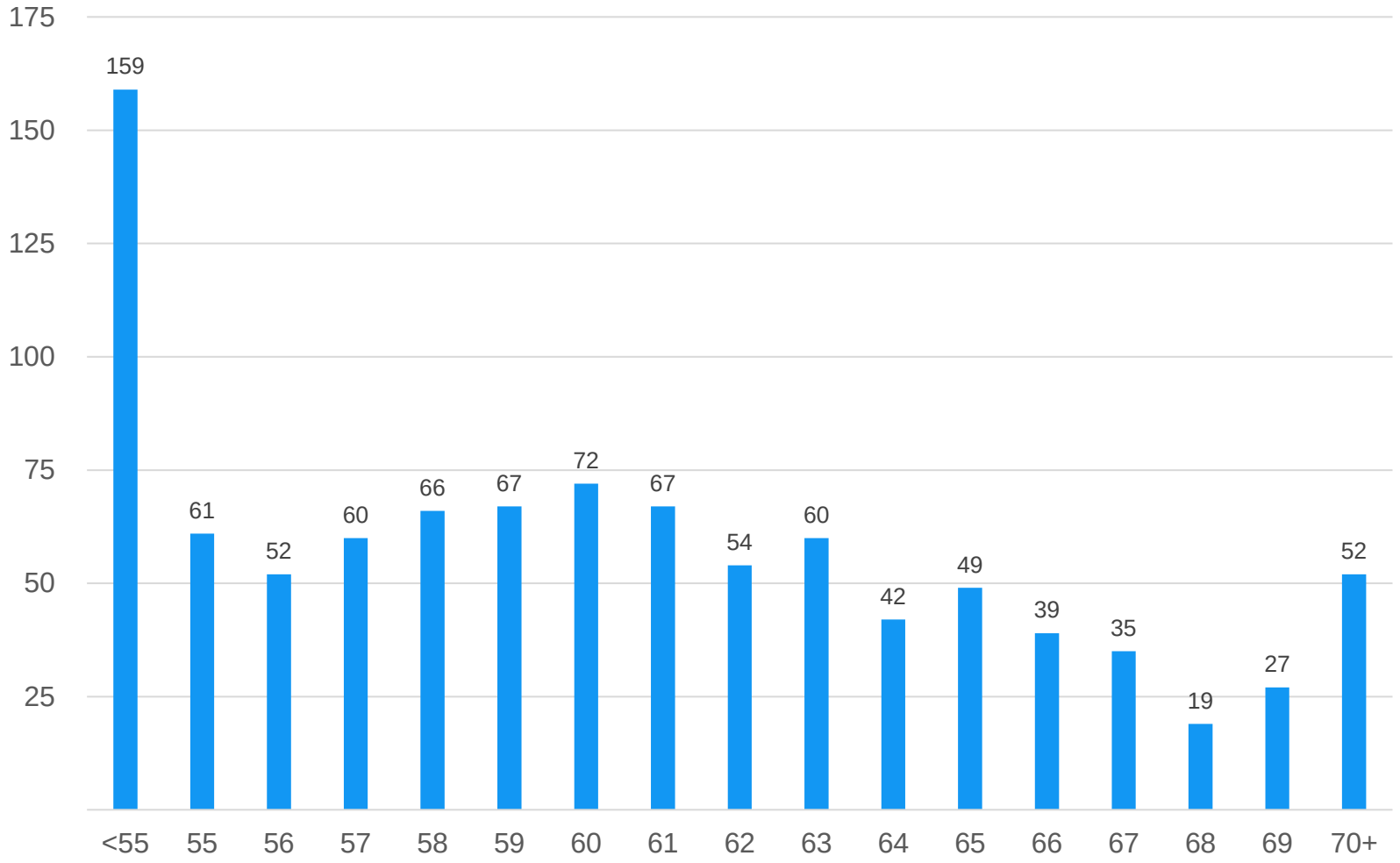
PERS Others – Number of Retirements by Age (Tier 3)



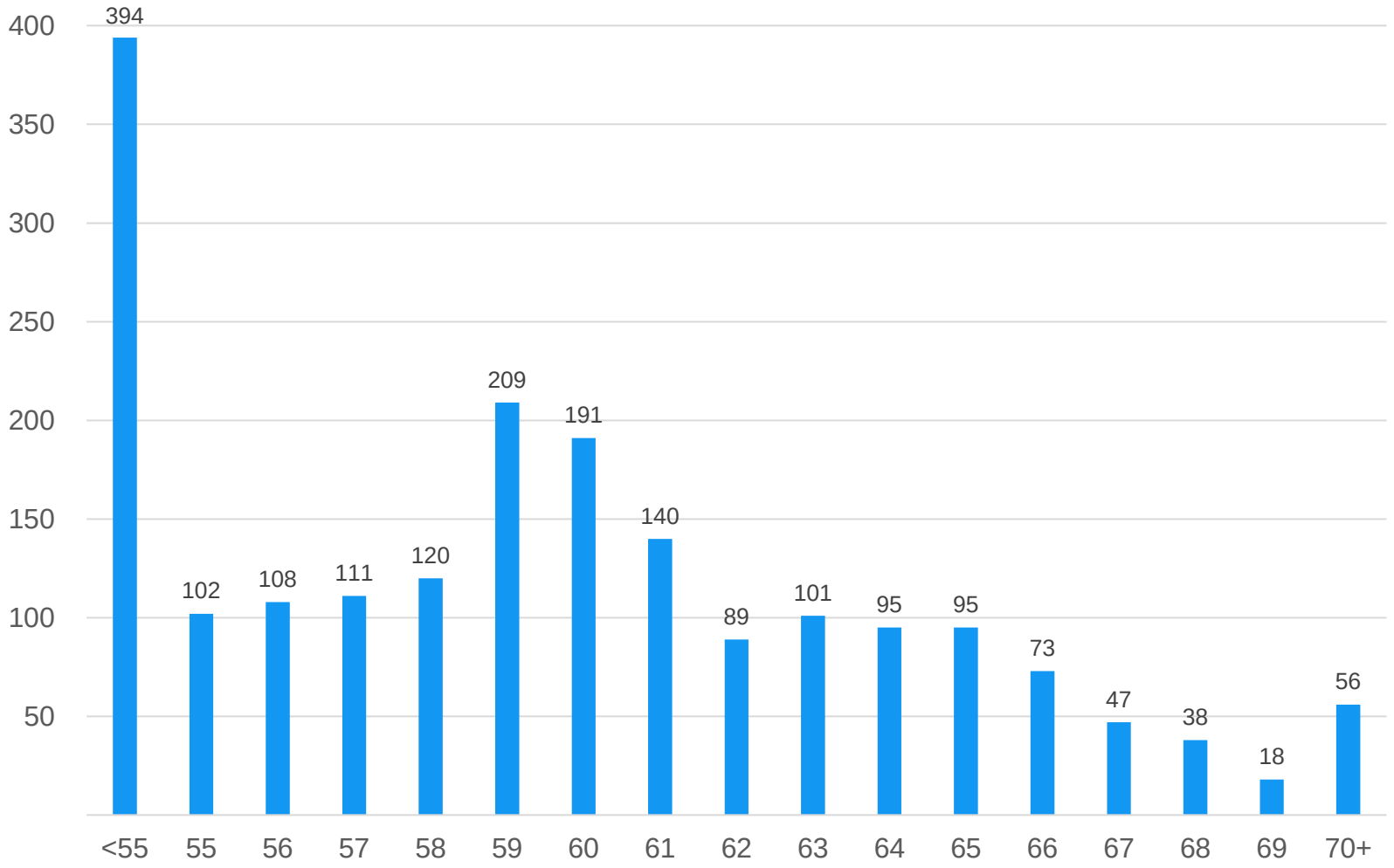
PERS Others – Number of Retirements by Age (All Tiers)



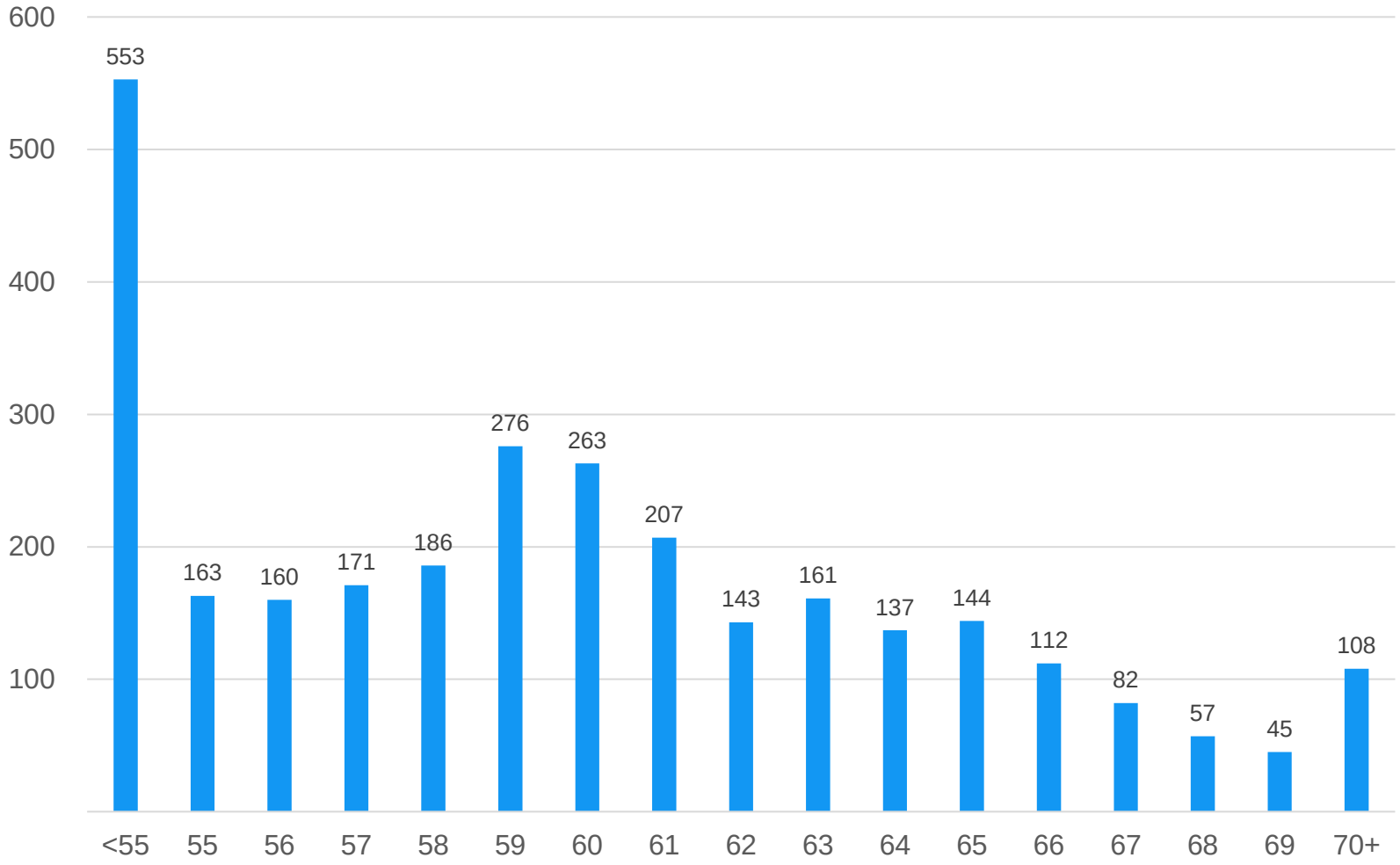
TRS – Number of Retirements by Age (Tier 1)



TRS – Number of Retirements by Age (Tier 2)

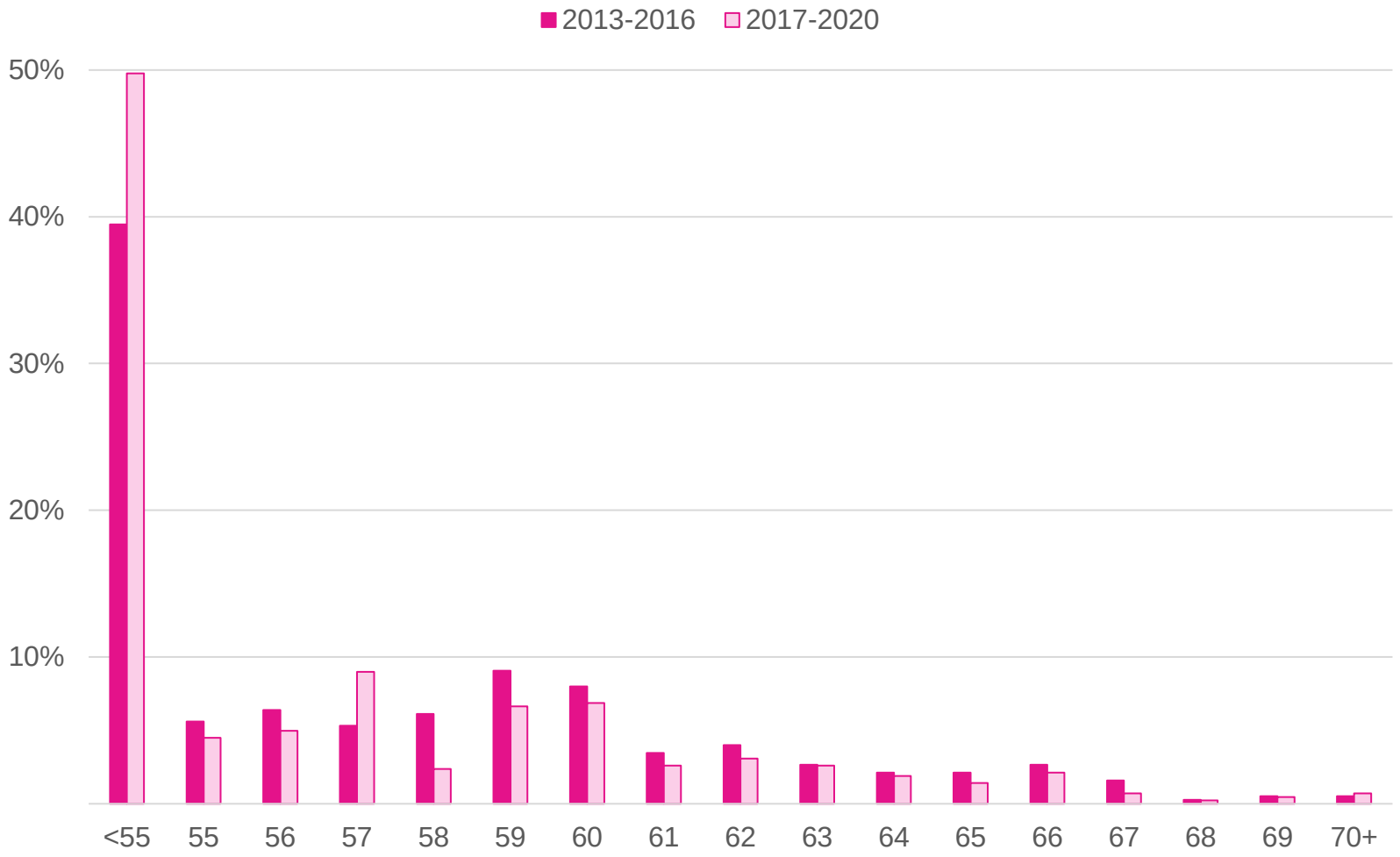


TRS – Number of Retirements by Age (All Tiers)

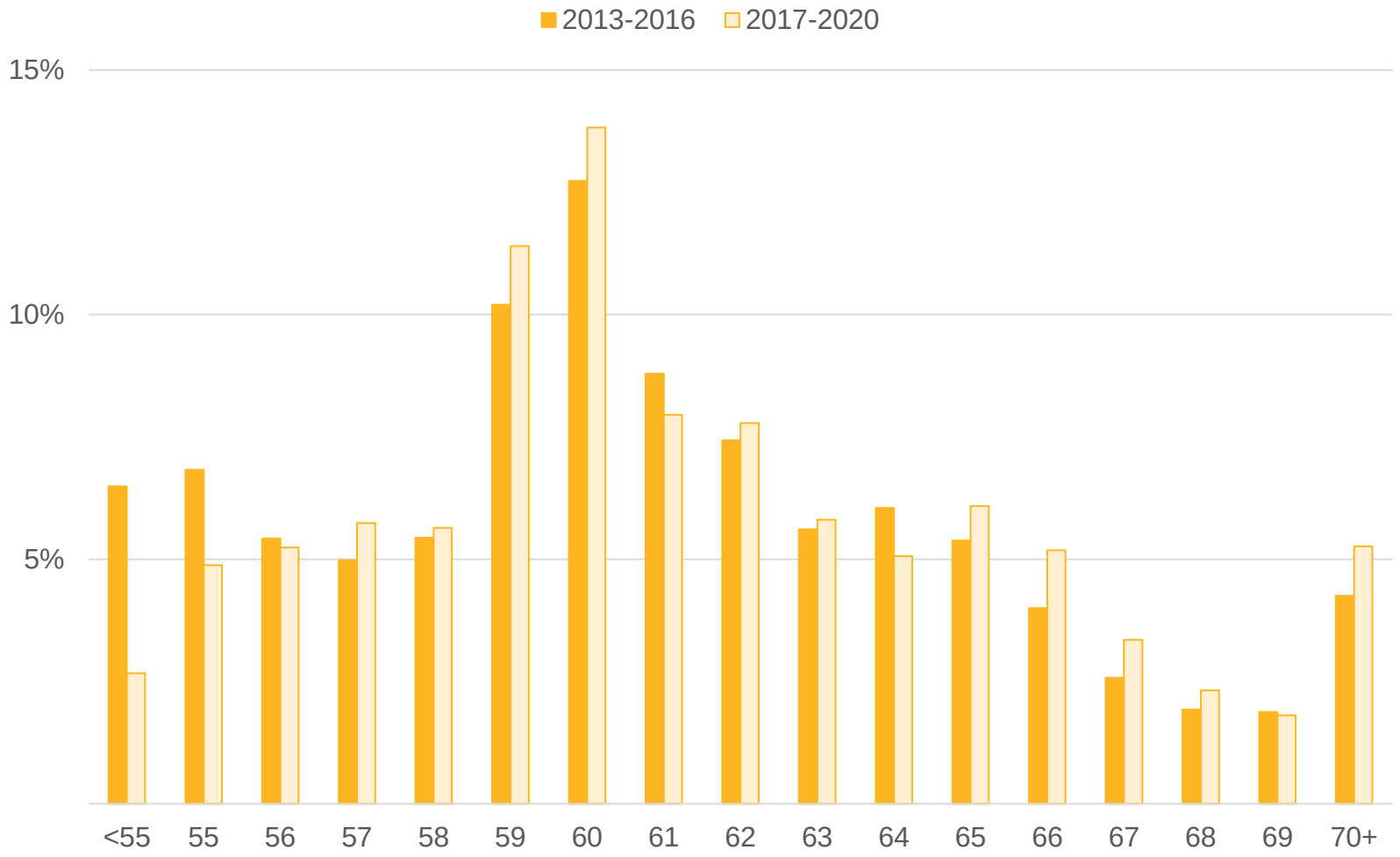


Distribution of Retirements by Age

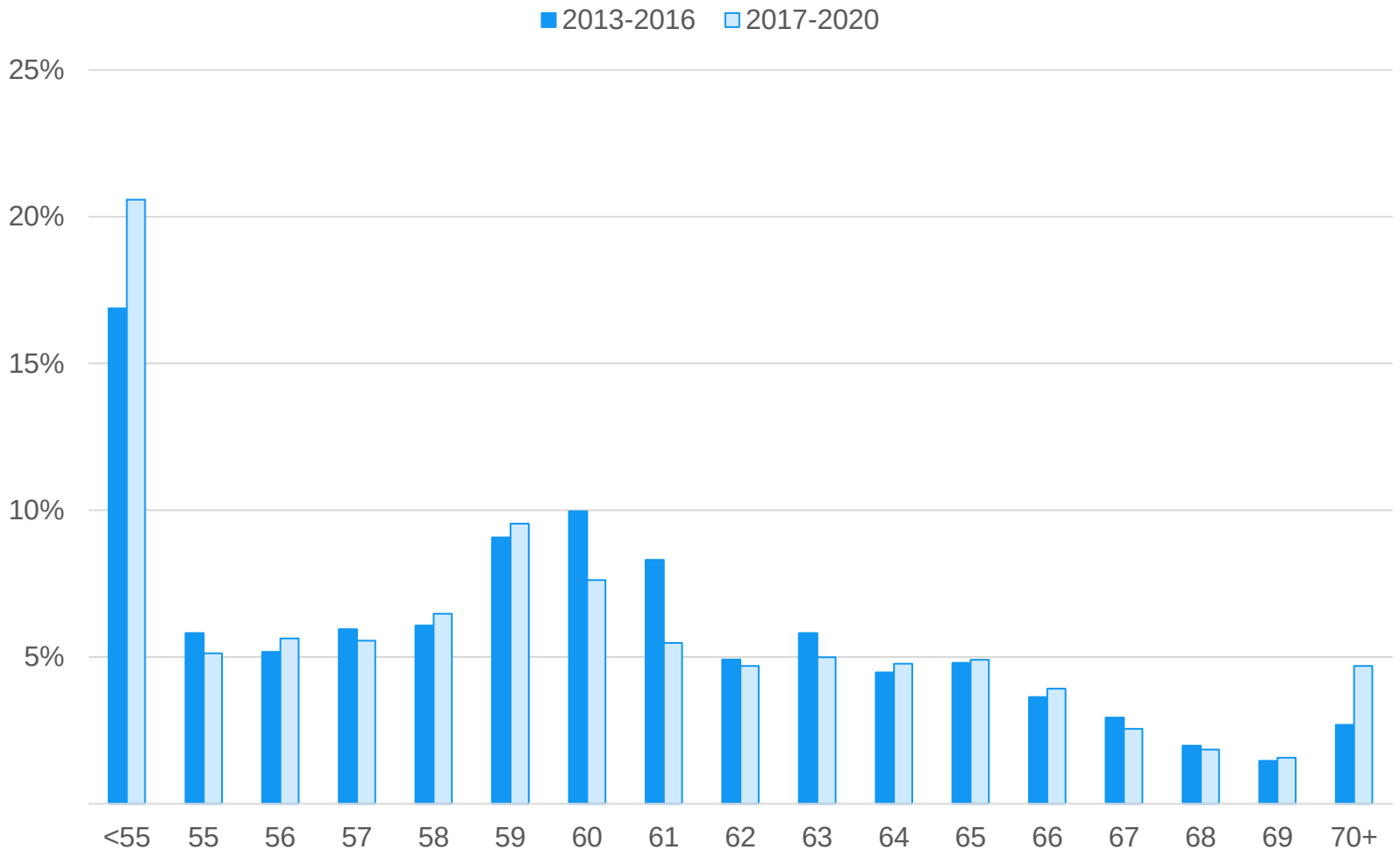
PERS P/F – Distribution of Retirements by Age (All Tiers)



PERS Others – Distribution of Retirements by Age (All Tiers)



TRS – Distribution of Retirements by Age (All Tiers)



ALASKA RETIREMENT MANAGEMENT BOARD

Actuarial Committee

SUBJECT:	FY 25 PERS Employer Contribution Rate Tier I - III	ACTION:	X
DATE:	September 13, 2023	INFORMATION:	

BACKGROUND:

AS 37.10.220(a)(8) sets forth the responsibility of the Alaska Retirement Management Board (Board) to annually certify to each employer in the system contribution rates for normal costs and for liquidating any past service liability:

> *(8) coordinate with the retirement system administrator to have an annual actuarial valuation of each retirement system prepared to determine system assets, accrued liabilities, and funding ratios and to certify to the appropriate budgetary authority of each employer in the system*
>
> *(A) an appropriate contribution rate for normal costs; and*
>
> *(B) an appropriate contribution rate for liquidating any past service liability; in this subparagraph, the appropriate contribution rate for liquidating the past service liability of the defined benefit retirement plan under AS 14.25.009 - 14.25.220 or the past service liability of the defined benefit retirement plan under AS 39.35.095 - 39.35.680 must be determined by a level percent of pay method based on amortization of the past service liability for a closed term of 25 years;*

AS 39.35.270 requires that the amount of each Public Employees' Retirement System (PERS) employer's contribution to the system shall be determined by applying the employer's contribution rate, as certified by the Board, to the total compensation paid to the active employee. Statutory employer contribution and additional state contribution are established under the following two sections of Alaska Statute:

Sec. 39.35.255. Contributions by employers. (a) Each employer, except as provided in (i) shall contribute to the system every payroll period an amount calculated by applying a rate of 22 percent of the greater of the total of all base salaries

(1) paid by the employer to employees who are active members of the system, including any adjustments to contributions required by AS 39.35.520; or

(2) paid by the employer to employees who were active members of the system during the corresponding payroll period for the fiscal year ending June 30, 2008.

(i) The State as an employer shall contribute to the system every payroll period an amount sufficient to pay the actuarially determined employer normal cost, all contributions required under AS 39.30.370 and AS 39.35.750, and all past service cost for members at the contribution rate adopted by the board under AS 37.10.220 for the fiscal year for that payroll period.

and:

Sec. 39.35.280. Additional state contributions. In addition to the contributions that the state is required to make under AS 39.35.255 as an employer, the state shall contribute to the plan each July 1 or, if funds are not available on July 1, as soon after July 1 as funds become available, an amount for the ensuing fiscal year that, when combined with the total employer contributions that the administrator estimates will be allocated under AS 39.35.255(c), is sufficient to pay the plan's past service liability at the contribution rate adopted by the board under AS 37.10.220 for that fiscal year.

STATUS:

The Division of Retirement & Benefits' (Division) actuary, Buck, A Gallagher Company (Buck), has completed the allocation of projected FY 25 employer and additional state contributions as shown in their letter dated August 22, 2023 based on the June 30, 2022 valuation report, except the results for PERS reflect FY 23 asset performance as shown in the preliminary June 30, 2023 asset statements provided by the Division on August 15, 2023. The PERS June 30, 2022 valuation report has been reviewed by the Board's actuary, Gabriel, Roeder, Smith & Co. (GRS) and then certified and accepted by the Board.

RECOMMENDATION:

The Actuarial Committee recommends that the Alaska Retirement Management Board set the Fiscal Year 2025 PERS actuarially determined contribution rate attributable to employers consistent with its fiduciary duty, as set out in the attached form of Resolution 2023-05.

Proposal #1(full HC normal cost)

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to the Fiscal Year 2025 Employer Contribution Rate
For the Public Employees' Retirement System

Resolution 2023-05

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, AS 37.10.220(a)(8) requires the Board to coordinate with the retirement system administrator to conduct an annual actuarial valuation of each retirement system to determine system assets, accrued liabilities and funding ratios, and to certify to the appropriate budgetary authority of each employer in the system an appropriate contribution rate for normal costs and an appropriate contribution rate for liquidating any past service liability determined by a level percent of pay method based on amortization of the past service liability for a closed term of 25 years; and

WHEREAS, AS 39.35.255 establishes a statutory non-State employer contribution rate of 22.00 percent and the actuarially determined contribution rate for the State as an employer, and AS 39.35.280 requires additional state contribution to make up the difference between 22.00 percent for non-State employers and the actuarially determined contribution rate; and

WHEREAS, the Buck schedule dated August 22, 2023 determines that the actuarially determined contribution rate for pension benefits is 19.72 percent composed of the normal cost rate of 2.15 percent and past service rate of 17.57 percent; and

WHEREAS, the Buck schedule dated August 22, 2023 determines that the actuarially determined contribution rate for postemployment healthcare benefits is 1.94 percent composed of the normal cost rate of 1.94 percent and past service rate of negative 7.19 percent; and

WHEREAS, the Buck schedule dated August 22, 2023 presents the employer rate incorporating the total cost of the Defined Contribution Retirement Plan of 6.73 percent;

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD, that the Fiscal Year 2025 actuarially determined contribution rate attributable to employers participating in the Public Employees' Retirement System is set at 28.39 percent, composed of the contribution rate for defined benefit pension of 19.72 percent, the contribution rate for postemployment healthcare of 1.94 percent, the contribution rate for defined contribution pension of 6.73 percent, and the Additional State Contribution for non-state employers per the attached Buck schedule dated August 22, 2023.

DATED at Anchorage, Alaska this 14th day of September, 2023.

_____
Chair

ATTEST:

_____
Secretary

Proposal #2 (no HC normal cost)

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to the Fiscal Year 2025 Employer Contribution Rate
For the Public Employees' Retirement System

Resolution 2023-05

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, AS 37.10.220(a)(8) requires the Board to coordinate with the retirement system administrator to conduct an annual actuarial valuation of each retirement system to determine system assets, accrued liabilities and funding ratios, and to certify to the appropriate budgetary authority of each employer in the system an appropriate contribution rate for normal costs and an appropriate contribution rate for liquidating any past service liability determined by a level percent of pay method based on amortization of the past service liability for a closed term of 25 years; and

WHEREAS, AS 39.35.255 establishes a statutory non-State employer contribution rate of 22.00 percent and the actuarially determined contribution rate for the State as an employer, and AS 39.35.280 requires additional state contribution to make up the difference between 22.00 percent for non-State employers and the actuarially determined contribution rate; and

WHEREAS, the Buck schedule dated August 22, 2023 determines that the actuarially determined contribution rate for pension benefits is 19.72 percent composed of the normal cost rate of 2.15 percent and past service rate of 17.57 percent; and

WHEREAS, the Buck schedule dated August 22, 2023 determines that the actuarially determined contribution rate for postemployment healthcare benefits is 1.94 percent composed of the normal cost rate of 1.94 percent and past service rate of negative 7.19 percent; and

WHEREAS, due to the funded status of the postemployment healthcare trust, the Board has the authority under AS 37.10.220(a)(8) to adopt a rate that is appropriate, and the Board has determined that the appropriate contribution rate for the postemployment healthcare benefits is 0.00 percent; and

WHEREAS, the Buck schedule dated August 22, 2023 presents the employer rate incorporating the total cost of the Defined Contribution Retirement Plan of 6.73 percent;

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD, that the Fiscal Year 2025 actuarially determined contribution rate attributable to employers participating in the Public Employees' Retirement System is set at 26.45 percent, composed of the contribution rate for defined benefit pension of 19.72 percent, the contribution rate for postemployment healthcare of 0.00 percent, and the contribution rate for defined contribution pension of 6.73 percent, and the Additional State Contribution for non-state employers per the attached Buck schedule dated August 22, 2023.

DATED at Anchorage, Alaska this 14th day of September, 2023.

_____
Chair

ATTEST:

_____
Secretary

Proposal #3 (no HC normal cost and 25 yr amort)

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to the Fiscal Year 2025 Employer Contribution Rate
For the Public Employees' Retirement System

Resolution 2023-05

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, AS 37.10.220(a)(8) requires the Board to coordinate with the retirement system administrator to conduct an annual actuarial valuation of each retirement system to determine system assets, accrued liabilities and funding ratios, and to certify to the appropriate budgetary authority of each employer in the system an appropriate contribution rate for normal costs and an appropriate contribution rate for liquidating any past service liability determined by a level percent of pay method based on amortization of the past service liability for a closed term of 25 years; and

WHEREAS, AS 39.35.255 establishes a statutory non-State employer contribution rate of 22.00 percent and the actuarially determined contribution rate for the State as an employer, and AS 39.35.280 requires additional state contribution to make up the difference between 22.00 percent for non-State employers and the actuarially determined contribution rate; and

WHEREAS, the Buck schedule dated August 22, 2023 determines that the actuarially determined contribution rate for pension benefits is 20.03 percent composed of the normal cost rate of 2.15 percent and past service rate of 17.88 percent; and

WHEREAS, the Buck schedule dated August 22, 2023 determines that the actuarially determined contribution rate for postemployment healthcare benefits is 1.94 percent composed of the normal cost rate of 1.94 percent and past service rate of negative 9.13 percent; and

WHEREAS, due to the funded status of the postemployment healthcare trust, the Board has the authority under AS 37.10.220(a)(8) to adopt a rate that is appropriate, and the Board has determined that the appropriate contribution rate for the postemployment healthcare benefits is 0.00 percent; and

WHEREAS, the Buck schedule dated August 22, 2023 presents the employer rate incorporating the total cost of the Defined Contribution Retirement Plan of 6.73 percent;

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD, that the Fiscal Year 2025 actuarially determined contribution rate attributable to employers participating in the Public Employees' Retirement System is set at 26.76 percent, composed of the contribution rate for defined benefit pension of 20.03 percent, the contribution rate for postemployment healthcare of 0.00 percent, and the contribution rate for defined contribution pension of 6.73 percent, and the Additional State Contribution for non-state employers per the attached Buck schedule dated August 22, 2023.

DATED at Anchorage, Alaska this 14th day of September, 2023.

_____
Chair

ATTEST:

_____
Secretary

ALASKA RETIREMENT MANAGEMENT BOARD

Actuarial Committee

SUBJECT: FY 25 PERS Retiree Major Medical and Occupational Death & Disability

ACTION: X

DATE: September 13, 2023

INFORMATION:

BACKGROUND:

The Alaska Retirement Management Board (Board) establishes rates for the Public Employees' Retirement System (PERS) Defined Contribution Retirement (DCR) Plan for the following plans: 1) Retiree Major Medical Insurance and 2) Occupational Death & Disability under the following two sections in Alaska Statute:

Retiree Major Medical Insurance

AS 39.35.750 (b) requires that "An employer shall also contribute an amount equal to a percentage, as adopted by the board, of each member's compensation from July 1 to the following June 30 to pay for retiree major medical insurance."

Occupational Death & Disability

AS 39.35.750 (e) requires that "An employer shall make annual contributions to the plan in an amount determined by the board to be actuarially required to fully fund the cost of providing occupational disability and occupational death benefits under AS 39.35.890 and 39.35.892. The contribution required under this subsection for peace officers and fire fighters and the contribution required under this subsection for other employees shall be separately calculated based on the actuarially calculated costs for each group of employees."

STATUS:

The Division of Retirement & Benefits' actuary, Buck, A Gallagher Company (Buck), has completed the actuarial valuation of the PERS DCR Plan as of June 30, 2022. The valuation has been reviewed by the Board's actuary, Gabriel, Roeder, Smith & Co. (GRS) and then certified and accepted by the Board.

According to the PERS DCR Plan actuarial valuation report, and confirmed by GRS, the Fiscal Year 2025 actuarially determined contribution rates attributable to employers for the Retiree Major Medical Insurance should be 0.83 percent; for the peace officer/firefighter Occupational Death & Disability benefit should be 0.69 percent; and for "all other" Occupational Death & Disability benefit should be 0.24 percent.

RECOMMENDATION:

The Actuarial Committee recommends that the Alaska Retirement Management Board set Fiscal Year 2025 PERS DCR Retiree Major Medical Insurance and Occupational Death & Disability Benefit rates as set out in the following resolutions:

1. Resolution 2023-06: Public Employees' Defined Contribution Retirement Plan Retiree Major Medical Insurance Rate

2. Resolution 2023-07: Public Employees' Defined Contribution Retirement Plan Occupational Death & Disability Benefit Rates

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to the Fiscal Year 2025 Employer Contribution Rate For
Public Employees' Defined Contribution Retirement Plan
Retiree Major Medical Insurance Rate

Resolution 2023-06

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, AS 37.10.220 requires the Board to coordinate with the retirement system administrator to conduct an annual actuarial valuation of each retirement system to determine system assets, accrued liabilities and funding ratios; and

WHEREAS, AS 39.35.750(b) requires the Board to approve an amount equal to a percentage of each member's compensation from July 1 to the following June 30 to pay for retiree major medical insurance; and

WHEREAS, the June 30, 2022 PERS Defined Contribution actuarial valuation report determines that the actuarially determined contribution rate for retiree major medical insurance is 0.83 percent composed of the normal cost rate of 0.83 percent and past service rate of negative 0.14 percent; and

WHEREAS, there is no past service liability as determined by the annual actuarial valuation of the PERS Defined Contribution retiree major medical insurance, so no contribution rate for liquidating past service liability is appropriate under AS 37.10.220(a)(8)(B);

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD, the Fiscal Year 2025 employer contribution rate for the retiree major medical insurance for the Public Employees' Defined Contribution Retirement Plan is set at 0.83 percent.

DATED at Anchorage, Alaska this 14th day of September, 2023.

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Chair

ATTEST:

_____
Secretary

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to the Fiscal Year 2025 Employer Contribution Rate
For Public Employees' Defined Contribution Retirement Plan
Occupational Death & Disability Benefit Rates

Resolution 2023-07

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, AS 37.10.220 requires the Board to coordinate with the retirement system administrator to conduct an annual actuarial valuation of each retirement system to determine system assets, accrued liabilities and funding ratios; and

WHEREAS, AS 39.35.750(e) requires the Board to determine an actuarially sound amount required to fully fund the cost of providing occupational disability and occupational death benefits under AS 39.35.890 and 39.35.892, and that such contribution for peace officers and fire fighters, and the contribution for other employees shall be calculated separately; and

WHEREAS, the June 30, 2022 PERS Defined Contribution actuarial valuation report determines that the actuarially determined contribution rate for peace officer / firefighter occupational death & disability is 0.69 percent composed of the normal cost rate of 0.69 percent and past service rate of negative 0.20 percent; and

WHEREAS, the June 30, 2022 PERS Defined Contribution actuarial valuation report determines that the actuarially determined contribution rate for all others occupational death & disability is 0.24 percent composed of the normal cost rate of 0.24 percent and past service rate of negative 0.22 percent; and

WHEREAS, there is no past service liability as determined by the annual actuarial valuation of the PERS Defined Contribution occupational death & disability, so no contribution rate for liquidating past service liability is appropriate under AS 37.10.220(a)(8)(B);

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD, the Fiscal Year 2025 employer contribution rate for public employees' occupational death and disability benefit rate is set at 0.69 percent for peace officers / fire fighters, and at 0.24 percent for all other Public Employees' Defined Contribution Retirement Plan employees.

DATED at Anchorage, Alaska this 14th day of September, 2023.

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Chair

ATTEST:

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Secretary

ALASKA RETIREMENT MANAGEMENT BOARD

Actuarial Committee

SUBJECT:	FY 25 TRS Employer Contribution Rate Tier I - II	ACTION:	**X**
DATE:	September 13, 2023	INFORMATION:	

BACKGROUND:

AS 37.10.220(a)(8) sets forth the responsibility of the Alaska Retirement Management Board (Board) to annually certify to each employer in the system contribution rates for normal costs and for liquidating any past service liability:

> *(8) coordinate with the retirement system administrator to have an annual actuarial valuation of each retirement system prepared to determine system assets, accrued liabilities, and funding ratios and to certify to the appropriate budgetary authority of each employer in the system*
>
> *(A) an appropriate contribution rate for normal costs; and*
>
> *(B) an appropriate contribution rate for liquidating any past service liability; in this subparagraph, the appropriate contribution rate for liquidating the past service liability of the defined benefit retirement plan under AS 14.25.009 - 14.25.220 or the past service liability of the defined benefit retirement plan under AS 39.35.095 - 39.35.680 must be determined by a level percent of pay method based on amortization of the past service liability for a closed term of 25 years;*

AS 14.25.070 requires that the amount of each Teachers' Retirement System (TRS) employer's contribution to the system shall be determined by applying the employer's contribution rate, as certified by the Board, to the total compensation paid to the active employee. Statutory employer contribution and additional state contribution are established under the following two sections of Alaska Statute:

Sec. 14.25.070. Contributions by employers. (a) Each employer shall contribute to the system every payroll period an amount calculated by applying a rate of 12.56 percent to the total of all base salaries paid by the employer to active members of the system, including any adjustments to contributions required by AS 14.25.173(a).

and:

Sec. 14.25.085. Additional state contributions. In addition to the contributions that the state is required to make under AS 14.25.070 as an employer, the state shall contribute to the plan each July 1 or, if funds are not available on July 1, as soon after July 1 as funds become available, an amount for the ensuing fiscal year that, when combined with the total employer contributions that the administrator estimates will be allocated under AS 14.25.070(c), is sufficient to pay the plan's past service liability at the contribution rate adopted by the board under AS 37.10.220 for that fiscal year.

STATUS:

The Division of Retirement & Benefits' (Division) actuary, Buck, A Gallagher Company (Buck), has completed the allocation of projected FY 25 employer and additional state contributions as shown in their letter dated August 22, 2023 based on the June 30, 2022 valuation report, except the results for TRS reflect FY 23 asset performance as shown in the preliminary June 30, 2023 asset statements provided by the Division on August 15, 2023. The TRS June 30, 2022 valuation report has been reviewed by the Board's actuary, Gabriel, Roeder, Smith & Co. (GRS) and then certified and accepted by the Board.

RECOMMENDATION:

The Actuarial Committee recommends that the Alaska Retirement Management Board set the Fiscal Year 2025 TRS actuarially determined contribution rate attributable to employers consistent with its fiduciary duty, as set out in the attached form of Resolution 2023-08.

Proposal #1 (full HC normal cost)

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to the Fiscal Year 2025 Employer Contribution Rate
For the Teachers' Retirement System

Resolution 2023-08

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, AS 37.10.220(a)(8) requires the Board to coordinate with the retirement system administrator to conduct an annual actuarial valuation of each retirement system to determine system assets, accrued liabilities and funding ratios, and to certify to the appropriate budgetary authority of each employer in the system an appropriate contribution rate for normal costs and an appropriate contribution rate for liquidating any past service liability determined by a level percent of pay method based on amortization of the past service liability for a closed term of 25 years; and

WHEREAS, AS 14.25.070 establishes a statutory employer contribution rate of 12.56 percent and AS 14.25.085 requires additional state contribution to make up the difference between 12.56 percent and the actuarially determined contribution rate; and

WHEREAS, the Buck schedule dated August 22, 2023 determines that the actuarially determined contribution rate for pension benefits is 21.23 percent composed of the normal cost rate of 2.21 percent and past service rate of 19.02 percent; and

WHEREAS, the Buck schedule dated August 22, 2023 determines that the actuarially determined contribution rate for postemployment healthcare benefits is 2.10 percent composed of the normal cost rate of 2.10 percent and past service rate of negative 10.26 percent; and

WHEREAS, the Buck schedule dated August 22, 2023 presents the employer rate incorporating the total cost of the Defined Contribution Retirement Plan of 7.29 percent;

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD, that the Fiscal Year 2025 actuarially determined contribution rate attributable to employers participating in the Teachers' Retirement System is set at 30.62 percent, composed of the contribution rate for defined benefit pension of 21.23 percent, the contribution rate for postemployment healthcare of 2.10 percent, the contribution rate for defined contribution pension of 7.29 percent, and the Additional State Contribution per the attached Buck schedule dated August 22, 2023.

DATED at Anchorage, Alaska this 14th day of September, 2023.

_____
Chair

ATTEST:

_____
Secretary

Proposal #2 (no HC normal cost)

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to the Fiscal Year 2025 Employer Contribution Rate
For the Teachers' Retirement System

Resolution 2023-08

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, AS 37.10.220(a)(8) requires the Board to coordinate with the retirement system administrator to conduct an annual actuarial valuation of each retirement system to determine system assets, accrued liabilities and funding ratios, and to certify to the appropriate budgetary authority of each employer in the system an appropriate contribution rate for normal costs and an appropriate contribution rate for liquidating any past service liability determined by a level percent of pay method based on amortization of the past service liability for a closed term of 25 years; and

WHEREAS, AS 14.25.070 establishes a statutory employer contribution rate of 12.56 percent and AS 14.25.085 requires additional state contribution to make up the difference between 12.56 percent and the actuarially determined contribution rate; and

WHEREAS, the Buck schedule dated August 22, 2023 determines that the actuarially determined contribution rate for pension benefits is 21.23 percent composed of the normal cost rate of 2.21 percent and past service rate of 19.02 percent; and

WHEREAS, the Buck schedule dated August 22, 2023 determines that the actuarially determined contribution rate for postemployment healthcare benefits is 2.10 percent composed of the normal cost rate of 2.10 percent and past service rate of negative 10.26 percent; and

WHEREAS, due to the funded status of the postemployment healthcare trust, the Board has the authority under AS 37.10.220(a)(8) to adopt a rate that is appropriate, and the Board has determined that the appropriate contribution rate for the postemployment healthcare benefits is 0.00 percent; and

WHEREAS, the Buck schedule dated August 22, 2023 presents the employer rate incorporating the total cost of the Defined Contribution Retirement Plan of 7.29 percent;

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD, that the Fiscal Year 2025 actuarially determined contribution rate attributable to employers participating in the Teachers' Retirement System is set at 28.52 percent, composed of the contribution rate for defined benefit pension of 21.23 percent, the contribution rate for postemployment healthcare of 0.00 percent, the contribution rate for defined contribution pension of 7.29 percent, and the Additional State Contribution per the attached Buck schedule dated August 22, 2023.

DATED at Anchorage, Alaska this 14th day of September, 2023.

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Chair

ATTEST:

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Secretary

Proposal #3 (no HC normal cost and 25 yr amort)

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to the Fiscal Year 2025 Employer Contribution Rate
For the Teachers' Retirement System

Resolution 2023-08

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, AS 37.10.220(a)(8) requires the Board to coordinate with the retirement system administrator to conduct an annual actuarial valuation of each retirement system to determine system assets, accrued liabilities and funding ratios, and to certify to the appropriate budgetary authority of each employer in the system an appropriate contribution rate for normal costs and an appropriate contribution rate for liquidating any past service liability determined by a level percent of pay method based on amortization of the past service liability for a closed term of 25 years; and

WHEREAS, AS 14.25.070 establishes a statutory employer contribution rate of 12.56 percent and AS 14.25.085 requires additional state contribution to make up the difference between 12.56 percent and the actuarially determined contribution rate; and

WHEREAS, the Buck schedule dated August 22, 2023 determines that the actuarially determined contribution rate for pension benefits is 21.30 percent composed of the normal cost rate of 2.21 percent and past service rate of 19.09 percent; and

WHEREAS, the Buck schedule dated August 22, 2023 determines that the actuarially determined contribution rate for postemployment healthcare benefits is 2.10 percent composed of the normal cost rate of 2.10 percent and past service rate of negative 12.82 percent; and

WHEREAS, due to the funded status of the postemployment healthcare trust, the Board has the authority under AS 37.10.220(a)(8) to adopt a rate that is appropriate, and the Board has determined that the appropriate contribution rate for the postemployment healthcare benefits is 0.00 percent; and

WHEREAS, the Buck schedule dated August 22, 2023 presents the employer rate incorporating the total cost of the Defined Contribution Retirement Plan of 7.29 percent;

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD, that the Fiscal Year 2025 actuarially determined contribution rate attributable to employers participating in the Teachers' Retirement System is set at 28.59 percent, composed of the contribution rate for defined benefit pension of 21.30 percent, the contribution rate for postemployment healthcare of 0.00 percent, the contribution rate for defined contribution pension of 7.29 percent, and the Additional State Contribution per the attached Buck schedule dated August 22, 2023.

DATED at Anchorage, Alaska this 14th day of September, 2023.

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Chair

ATTEST:

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Secretary

ALASKA RETIREMENT MANAGEMENT BOARD

Actuarial Committee

SUBJECT: FY 25 TRS Retiree Major Medical and Occupational Death & Disability

ACTION: X

DATE: September 13, 2023

INFORMATION:

BACKGROUND:

The Alaska Retirement Management Board (Board) establishes rates for the Teachers' Retirement System (TRS) Defined Contribution Retirement (DCR) Plans for the following plans: 1) Retiree Major Medical Insurance and 2) Occupational Death & Disability under the following two sections in Alaska Statute:

Retiree Major Medical Insurance

AS 14.25.350 (b) requires that "An employer shall also contribute an amount equal to a percentage, as approved by the board, of each member's compensation from July 1 to the following June 30 to pay for retiree major medical insurance."

Occupational Death & Disability

AS 14.25.350 (e) requires that "An employer shall make annual contributions to a trust account in the plan, applied as a percentage of each member's compensation from July 1 to the following June 30, in an amount determined by the board to be actuarially required to fully fund the cost of providing occupational disability and occupational death benefits under AS 14.25.310 - 14.25.590."

STATUS:

The Division of Retirement & Benefits' actuary, Buck, A Gallagher Company (Buck), has completed the actuarial valuation of the TRS DCR Plan as of June 30, 2022. The valuation has been reviewed by the Board's actuary, Gabriel, Roeder, Smith & Co. (GRS) and then certified and accepted by the Board.

According to the TRS DCR Plan actuarial valuation report, and confirmed by GRS, the Fiscal Year 2025 actuarially determined contribution rate attributable to employers for the Retiree Major Medical Insurance should be 0.68 percent and for the Occupational Death & Disability Benefit should be 0.08 percent.

RECOMMENDATION:

The Actuarial Committee recommends that the Alaska Retirement Management Board set Fiscal Year 2025 TRS DCR Plan Retiree Major Medical Insurance and Occupational Death & Disability Benefit rates as set out in the following resolutions:

1. Resolution 2023-09: Teachers' Defined Contribution Retirement Plan Retiree Major Medical Insurance Rate

2. Resolution 2023-10: Teachers' Defined Contribution Retirement Plan Occupational Death & Disability Benefit Rate

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to the Fiscal Year 2025 Employer Contribution Rate
For Teachers' Defined Contribution Retirement Plan
Retiree Major Medical Insurance Rate

Resolution 2023-09

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, AS 37.10.220 requires the Board to coordinate with the retirement system administrator to conduct an annual actuarial valuation of each retirement system to determine system assets, accrued liabilities and funding ratios; and

WHEREAS, AS 14.25.350(b) requires the Board to approve an amount equal to a percentage of each member's compensation from July 1 to the following June 30 to pay for retiree major medical insurance; and

WHEREAS, the June 30, 2022 TRS Defined Contribution actuarial valuation report determines that the actuarially determined contribution rate for retiree major medical insurance is 0.68 percent composed of the normal cost rate of 0.68 percent and past service rate of negative 0.29 percent; and

WHEREAS, there is no past service liability as determined by the annual actuarial valuation of the TRS Defined Contribution retiree major medical insurance, so no contribution rate for liquidating past service liability is appropriate under AS 37.10.220(a)(8)(B);

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD, the Fiscal Year 2025 employer contribution rate for the retiree major medical insurance for the Teachers' Defined Contribution Retirement Plan is set at 0.68 percent.

DATED at Anchorage, Alaska this 14th day of September, 2023.

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Chair

ATTEST:

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Secretary

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to the Fiscal Year 2025 Employer Contribution Rate For
Teachers' Defined Contribution Retirement Plan Occupational
Death & Disability Benefit Rate

Resolution 2023-10

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, AS 37.10.220 requires the Board to coordinate with the retirement system administrator to conduct an annual actuarial valuation of each retirement system to determine system assets, accrued liabilities and funding ratios; and

WHEREAS, AS 14.25.350 (e) requires the Board to determine an actuarially sound amount required to fully fund the cost of providing occupational disability and occupational death benefits under AS 14.25.310 – 14.25.590; and

WHEREAS, the June 30, 2022 TRS Defined Contribution actuarial valuation report determines that the actuarially determined contribution rate for occupational death & disability is 0.08 percent composed of the normal cost rate of 0.08 percent and past service rate of negative 0.11 percent; and

WHEREAS, there is no past service liability as determined by the annual actuarial valuation of the TRS Defined Contribution occupational death & disability, so no contribution rate for liquidating past service liability is appropriate under AS 37.10.220(a)(8)(B);

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD, the Fiscal Year 2025 employer contribution rate for teachers' occupational death and disability benefit rate is set at 0.08 percent for all Teachers' Defined Contribution Retirement Plan employees.

DATED at Anchorage, Alaska this 14th day of September, 2023.

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Chair

ATTEST:

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Secretary

ALASKA RETIREMENT MANAGEMENT BOARD

Actuarial Committee

SUBJECT: FY 25 Alaska National Guard and Naval Militia Contribution Amount

ACTION: X

DATE: September 13, 2023

INFORMATION:

BACKGROUND:

AS 26.05.226 requires that "(a) The Department of Military and Veterans' Affairs (DMVA) shall contribute to the Alaska National Guard and Alaska Naval Militia retirement system the amounts determined by the Alaska Retirement Management Board as necessary to (1) fund the system based on the actuarial requirements of the system as established by the Alaska Retirement Management Board; and (2) administer the system. (b) The amount required for contributions from the Department of Military and Veterans' Affairs under (a) of this section shall be included in the annual appropriations made to the Department of Military and Veterans' Affairs."

STATUS:

The Division of Retirement & Benefits' (Division's) actuary, Buck, A Gallagher Company (Buck), has completed the actuarial valuation of the Alaska National Guard and Naval Militia Retirement System (NGNMRS) as of June 30, 2022. The actuarial valuation has been reviewed by the Alaska Retirement Management Board's (Board's) actuary, Gabriel, Roeder, Smith & Co. (GRS) and then certified and accepted by the Board.

According to the NGNMRS June 30, 2022 actuarial valuation report, and confirmed by GRS, the Fiscal Year 2025 actuarially determined contribution amount should be $0, consisting of the normal cost of $690,172, past service cost of negative $2,691,240, and administrative expense load of $331,000.

RECOMMENDATION:

The Actuarial Committee recommends that the Alaska Retirement Management Board set the Fiscal Year 2025 NGNMRS annual contribution amount consistent with its fiduciary duty, as set out in the attached form of Resolution 2023-11.

State of Alaska
ALASKA RETIREMENT MANAGEMENT BOARD
Relating to the Fiscal Year 2025 Contribution Amount
For the Alaska National Guard and Naval Militia Retirement System

Resolution 2023-11

WHEREAS, the Alaska Retirement Management Board (Board) was established by law to serve as trustee to the assets of the State's retirement systems; and

WHEREAS, under AS 37.10.210-220, the Board is to establish and determine the investment objectives and policy for each of the funds entrusted to it; and

WHEREAS, AS 37.10.071 and AS 37.10.210-220 require the Board to apply the prudent investor rule and exercise the fiduciary duty in the sole financial best interest of the funds entrusted to it and treat beneficiaries thereof with impartiality; and

WHEREAS, AS 37.10.220(a)(8) requires the Board to coordinate with the retirement system administrator to conduct an annual actuarial valuation of each retirement system to determine system assets, accrued liabilities and funding ratios, and to certify to the appropriate budgetary authority of each employer in the system an appropriate contribution rate for normal costs and an appropriate contribution rate for liquidating any past service liability; and

WHEREAS, the June 30, 2022 Alaska National Guard and Naval Militia Retirement System actuarial valuation report determines that the actuarially determined contribution amount is $0, composed of the normal cost of $690,172, past service cost amortization of ($2,691,240) and administrative expense load of $331,000; and

WHEREAS, due to the funded status of the pension trust, the Board has the authority under AS 37.10.220(a)(8) to adopt an amount that is appropriate, and the Board has determined that the appropriate contribution amount for the pension benefits is $0; and

NOW THEREFORE, BE IT RESOLVED BY THE ALASKA RETIREMENT MANAGEMENT BOARD, that the Fiscal Year 2025 contribution amount for the State of Alaska, Department of Military and Veterans' Affairs to the Alaska National Guard and Naval Militia Retirement System is set at $0.

DATED at Anchorage, Alaska this 14th day of September, 2023.

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Chair

ATTEST:

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Secretary

ALASKA RETIREMENT MANAGEMENT BOARD

Actuarial Committee

SUBJECT:	FY 25 JRS Employer Contribution Rate	ACTION:	
DATE:	September 13, 2023	INFORMATION:	X

BACKGROUND:

AS 22.25.046 states in part that:

(a) The state court system shall contribute to the judicial retirement system at the rate established by the commissioner of administration. The contribution rate shall be based on the results of an actuarial valuation of the judicial retirement system. The results of the actuarial valuation shall be based on actuarial methods and assumptions adopted by the commissioner of administration.

(b) The contribution rate shall be a percentage which, when applied to the covered compensation of all active members of the judicial retirement system, will generate sufficient money to support, along with contributions from members, the benefits of the judicial retirement system.

(c) Employer contributions shall be separately computed for benefits provided by AS 22.25.090 and shall be deposited in the Alaska retiree health care trust established under AS 39.30.097(a)."

STATUS:

The Division of Retirement & Benefits' (Division's) actuary, Buck, A Gallagher Company, has completed the actuarial valuation of the Alaska Judicial Retirement System (JRS) as of June 30, 2022. The actuarial valuation has been reviewed by the Alaska Retirement Management Board's (Board's) actuary, Gabriel, Roeder, Smith & Co. (GRS) and then certified and accepted by the Board.

According to page 4 of the JRS actuarial valuation report as of June 30, 2022, the recommended Fiscal Year 2025 employer contribution rate is 59.24 percent based on the following table:

	Pension	Post-employment Health Care	Total
Normal Cost Rate	35.32%	6.75%	42.07%
Past Service Cost Rate	17.17%	-10.19%	17.17%
Total Employer Contribution Rate	52.49%	6.75%	59.24%

The Alaska Legislature has established operating budget language that explicitly addresses JRS past service costs separate from the normal costs. Normal costs as a percentage are charged to the Alaska Court System's operating budget and past service cost in dollars is funded separately in retirement section language like PERS and TRS.

The computed JRS Past Service Contribution amount is $2,410,000 as shown on page 2 of the Buck letter dated August 22, 2023. The contribution amount should be reflected in the operating budget language section and should be deposited in the JRS pension benefit trust during FY 2025.

State of Alaska

Timeline for June 30, 2023 Valuations (PERS, TRS, PERS DCR, TRS DCR)

Item #	Task	Original Deadline	Revised Deadline	Date Completed	Team Responsible	Comments / Notes
1	Monthly audit discussion with GRS / Buck	7/12/23		7/12/23	GRS / Buck	
2	Enrollment data request to Aetna	7/14/23		7/13/23	Buck	
3	Valuation data request to DRB	7/14/23		7/14/23	Buck	
4	Monthly audit discussion with GRS / Buck	8/9/23		8/9/23	GRS / Buck	
5	Preliminary 6/30/23 assets to Buck (to be used for FY25 contribution rates only)	8/18/23		8/18/23	DRB	Updated TRS statement provided on 8/21.
6	Valuation data to Buck	9/1/23			DRB	
7	Monthly audit discussion with GRS / Buck	9/6/23			GRS / Buck	
8	Send valuation data files received from DRB to GRS	9/8/23			Buck	
9	**Actuarial Committee Meeting - FY25 contribution rates (based on 6/30/22 valuations)**	9/13/23			All	**Anchorage**. Deadline for meeting materials is 8/26.
10	Audit data and sample lives request to Buck	9/15/23			GRS	
11	Claims data request to Segal/DRB	9/22/23			Buck	Incurred claims through 6/30/23 that are paid through 8/31/23.
12	Data questions to DRB	9/22/23			Buck	
13	Data answers to Buck	10/6/23			DRB	
14	Monthly audit discussion with GRS / Buck	10/11/23			GRS / Buck	
15	Final 6/30/23 assets to Buck (to be used for 6/30/23 valuations)	10/13/23			DRB	
16	Claims data to Buck	10/20/23			Segal / DRB	Incurred claims through 6/30/23 that are paid through 8/31/23.
17	6/30/23 valuation data and DRB data questions to GRS	10/27/23			Buck	
18	Monthly audit discussion with GRS / Buck	11/8/23			GRS / Buck	
19	Sample life information to GRS	11/10/23			Buck	
20	Preliminary valuation results and PVB's by individual to GRS	11/17/23			Buck	
21	**Actuarial Committee Meeting - 6/30/23 valuation results (preliminary)**	12/6/23			All	**Anchorage**. Deadline for meeting materials is 11/17.
22	Monthly audit discussion with GRS / Buck	12/13/23			GRS / Buck	
23	Draft DCR valuation reports to GRS	1/5/24			Buck	
24	Monthly audit discussion with GRS / Buck	1/10/24			GRS / Buck	
25	Draft DB valuation reports to GRS	1/19/24			Buck	
26	Monthly audit discussion with GRS / Buck	2/14/24			GRS / Buck	
27	**Actuarial Committee Meeting - 6/30/23 valuation results (full), projections, sensitivity analysis, draft valuation reports**	3/5/24			All	**Juneau**.
28	Draft actuarial review report to Buck	3/8/24			GRS	
29	Monthly audit discussion with GRS / Buck	4/10/24			GRS / Buck	
30	**ARMB Meeting - follow-up to March meeting (if needed)**	April 2024 - TBD			All	**Teleconference.**
31	Monthly audit discussion with GRS / Buck	5/8/24			GRS / Buck	
32	Monthly audit discussion with GRS / Buck	6/5/24			GRS / Buck	
33	**Actuarial Committee Meeting - final valuation reports**	6/11/24			All	**Anchorage**.

Note: All deadline and completion dates are specific to PERS and TRS.

Alaska Retirement Management Board

Actuarial Committee

Schedule of 2023 Meetings

March 15, 2023 (Juneau/ Videoconference)

1. Discuss Draft Review Actuary Report;
2. Review Draft Valuation Reports; requests or recommendations for edits or corrections
3. Review Audit Findings List; proposed resolution and recommendations
4. Optional Renewal for Actuary Contract (Buck) for FY24
4. Education Topic:

April TBD, 2023 (Videoconference)

1. *If necessary* – scheduled to follow up on discussion/findings/questions from March meeting

June 14, 2023 (Anchorage/ Videoconference)

1. Review and discussion of final review reports and valuations, including any items brought forward from March meeting
2. Action: Recommendations from committee to board for acceptance of review reports and valuations
3. Recommendation from committee to board for action on Audit Findings List
4. FY2023 valuation discussion
    a. Valuation Timeline
    b. Actuarial principles and underlying assumptions; any proposed new assumptions
    c. Outstanding audit issues (Audit Findings List)
5. Committee Performance – Self Assessment
6. Education Topic:

September 13, 2023 (Anchorage/ Videoconference)

1. Review contribution rate resolutions/action memos for recommendation to Board
2. Status/Follow-up from previous meetings
3. Education Topic:

December 6, 2023 (Anchorage/ Videoconference)

1. Status Report/Discussion on Draft Actuarial Valuation and Second Actuary Review Process
2. Discussion of new trends and findings in actuarial matters
3. Committee Performance – Self Assessment
4. Education topic:

Periodic and As Needed Meeting Topics

1. Updates by DOA on actuary procurement.
2. Actuarial Committee training.

Alaska Retirement Management Board
Actuarial Committee
Schedule of 2024 Meetings

March 5, 2024 (Juneau/ Videoconference)

1. Discuss Draft Review Actuary Report;
2. Review Draft Valuation Reports; requests or recommendations for edits or corrections
3. Review Audit Findings List; proposed resolution and recommendations
4. Optional Renewal for Actuary Contract (Buck) for FY24
4. Education Topic:

April TBD, 2024 (Videoconference)

1. *If necessary* – scheduled to follow up on discussion/findings/questions from March meeting

June 11, 2024 (Anchorage/ Videoconference)

1. Review and discussion of final review reports and valuations, including any items brought forward from March meeting
2. Action: Recommendations from committee to board for acceptance of review reports and valuations
3. Recommendation from committee to board for action on Audit Findings List
4. FY2023 valuation discussion
    a. Valuation Timeline
    b. Actuarial principles and underlying assumptions; any proposed new assumptions
    c. Outstanding audit issues (Audit Findings List)
5. Committee Performance – Self Assessment
6. Education Topic:

September 17, 2024 (Fairbanks/ Videoconference)

1. Review contribution rate resolutions/action memos for recommendation to Board
2. Status/Follow-up from previous meetings
3. Education Topic:

December 3, 2024 (Anchorage/ Videoconference)

1. Status Report/Discussion on Draft Actuarial Valuation and Second Actuary Review Process
2. Discussion of new trends and findings in actuarial matters
3. Committee Performance – Self Assessment
4. Education topic:

Periodic and As Needed Meeting Topics

1. Updates by DOA on actuary procurement.
2. Actuarial Committee training.

Alaska Retirement Management Board

CHARTER OF THE ACTUARIAL COMMITTEE

I. Actuarial Committee Purpose.

The Actuarial Committee (Committee) assists the Alaska Retirement Management Board (Board) in fulfilling the Board's function of independent oversight of the integrity of the Alaska Retirement Management Board' s (Board) retirement systems ' actuarial valuations, experience analyses, and other requested reports and analysis, including compliance with legal, accounting., and regulatory requirements. It also serves as a conduit of communication between the Actuary, the Review Actuary, the Audit Actuary, Department of Administration (DOA) and Department of Revenue (DOR) staff, and the Board.

The Committee has the authority to conduct any review appropriate to fulfilling its responsibilities and it has direct access to the independent actuaries, as well as DOR and DOA management and staff, and legal counsel. The Committee may recommend that the Board retain, at Board expense and consistent with applicable procurement requirements, special legal, accounting, or other consultants or experts it considers necessary in the performance of its duties.

II. Actuarial Committee Responsibilities and Duties.

A. The Committee shall assist the Board in carrying out the following responsibilities:

1. Coordinate with the retirement system administrator to have an annual actuarial valuation of each retirement system prepared to determine system assets, accrued liabilities, and funding ratios and to certify to the appropriate budgetary author it y of each employer in the system (A) an appropriate contribution rate for normal costs; (B) an appropriate contribution rate for liquidating any past service liability; in this subparagraph, the appropriate contribution rate for liquidating the past service liability of the defined benefit retirement plan under AS 14.25.009 - 14.25.220 or the past service liability of the defined benefit retirement plan under AS 39.35.095 - 39.35.680 must be determined by a level percent of pay method based on amortization of the past service liability for a closed term of 25 years;

2. Review actuarial assumptions prepared and certified by a member of the American Academy of Actuaries and conduct experience analyses of the retirement systems not less than once every four years, except for health cost assumptions, which shall be reviewed annually; the results of all actuarial assumptions prepared under this paragraph shall be reviewed and certified by a second member of the American Academy of Actuaries before presentation to the board.

3. Review the annual actuarial valuations and any actuarial experience analysis prepared by the Actuary and the report prepared by the Review Actuary prior to presentation or distribution of any report.

4. Coordinate with staff to conduct an independent audit of the state's actuary not less than once every four years and review any audit report prepared by the Audit Actuary prior to presentation or distribution to the Board.

5. In consultation with management and the independent actuaries, consider the integrity of the actuarial reporting processes and controls, including the process for "closure" on the audit findings.

6. Review any significant changes to applicable actuarial principles and any items required to be communicated by the independent actuaries.

7. Review the independence and performance of the actuaries and periodically recommend to the Board the appointment of the independent actuaries or recommend approval of any discharge of actuaries when circumstances warrant.

8. Review, discuss and recommend for Board consideration any strategic issues related to the actuarial work.

9. Review and assess the adequacy of this Charter at least annually and submit recommended changes to it to the Board for approval.

10. Review and periodically perform self-assessment of the Committee's performance.

B. The Committee shall have the following responsibilities with respect to the ARMB's independent actuaries:

1. Schedule an annual pre-valuation entrance conference with the Actuary that includes DOA and DOR staff and the Review Actuary to discuss scope, staffing, locations, timeline , reliance upon management, and general approach to the annual valuation conducted for the retirement systems; and in the year that an actuarial experience analysis is conducted, schedule a similar entrance conference.

2. Discuss with management and the independent actuaries the actuarial principles and provide input as to the underlying assumptions and methods used in the preparation of the retirement systems' valuation reports and experience analyses to ensure the integrity of actuarial number s used in preparation of accounting reports, compliance with GASB or other regulatory bodies, consistency with the actuarial policies of the plan, and alignment with the purpose of the reporting.

3. Review the Actuary's draft valuation and the Review Actuary's draft report (and the experience analysis and review when conducted); discuss the contents with the actuaries and monitor the follow-up on significant observations, findings, and recommendations.

4. Discuss with the independent actuaries the clarity and format of the presentations in appearances before the committee and the Board.

5. Meet with the actuaries, in the absence of management, to review findings, recommendations or other pertinent subjects.

6. Review Audit Actuary report (conducted every four years); discuss any significant findings with Actuary and management.

C. In addition to the foregoing, the Committee shall:

1. Perform such other activities consistent with this Charter, and governing law as the Committee considers necessary or appropriate or as the Board may otherwise request.

2. Maintain minutes of Committee meetings and periodically report to the Board on significant results of the Committee's activities.