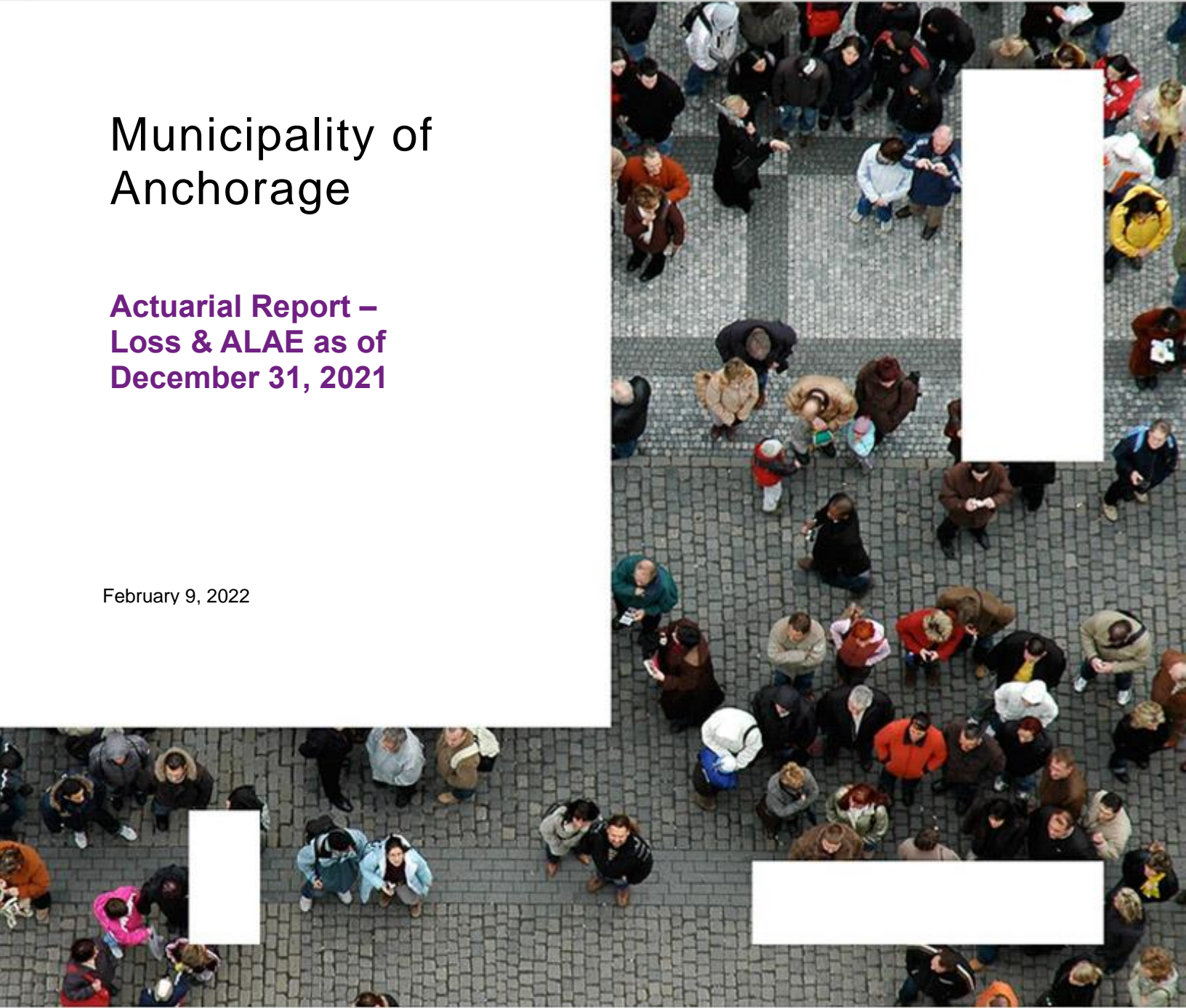


Municipality of Anchorage

Actuarial Report – Loss & ALAE as of December 31, 2021

February 9, 2022



February 9, 2022

Tracy Mears
Municipality of Anchorage
632 W. 6th Ave.
Suite 860
Anchorage, AK 99501

Dear Tracy:

The enclosed report has been prepared for the Municipality of Anchorage (“Anchorage”) using data valued as of December 31, 2021. We have estimated the unpaid liability for workers compensation, general liability, and automobile liability as of December 31, 2021. Additionally, we have prepared loss projection estimates for workers compensation, general liability, and automobile liability for the 2022-23 policy year.

This final replaces and supersedes the draft reports issued on and before February 4, 2022.

Attention is called to the section of the report entitled Distribution, which sets out the limits on distribution of the report.

This report contains workpapers, trade secrets, and confidential information of both Anchorage and Willis Towers Watson, and as such, it is not intended to be subject to disclosure requirements under any Freedom of Information Act or similar laws.

The author of this report is a member of the American Academy of Actuaries and meets its qualification standards to render the actuarial opinion contained herein.

We have enjoyed working with you in the preparation of this report. Please call if you have any questions.

Sincerely,



Maureen B. Stazinski, FCAS, MAAA
Director

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Section 1: Purpose and Scope

This actuarial report prepared by Willis Towers Watson provides a projection of losses for Anchorage for the January 1, 2022-23 policy year. In addition, this report estimates unpaid liability for workers compensation, general liability, and automobile liability as of December 31, 2021. This study has been prepared at the request of the insured to aid in insurance planning, to assist the insured in the evaluation of premium quotations and to define reserves required for retained liabilities.

This report was prepared for the internal use of Anchorage's management to present our findings with respect to this analysis. It is our understanding that Anchorage's management will consider our findings for use in establishing liability estimates for internal management and external financial reporting purposes. Our report is not intended or necessarily suitable for any other purpose.

The exhibits and appendices attached in support of our conclusions are an integral part of this report. These sections have been prepared so that our actuarial assumptions and judgments are documented. Judgments about the analysis and findings presented in this report should be made only after considering the report in its entirety. Our projections are predicated on several assumptions as to future conditions and events. These assumptions are documented in subsequent sections of this report and should be understood in order to place the actuarial estimates in their appropriate context. In addition, these projections are subject to several reliances and limitations, as described in subsequent sections of this report.

We are available to answer any questions that may arise regarding this report. We assume that the user of this report will seek such explanation on any matter in question.

In this report, we develop an actuarial central estimate of Anchorage's unpaid loss & ALAE as of December 31, 2021. This actuarial central estimate is intended to represent an expected value over a range of reasonably foreseeable outcomes. The actuarial central estimate was arrived at through evaluation of the results of various actuarial methods and models applied to Anchorage's experience. As such, the derivation of this estimate does not reflect extreme events believed to have a remote possibility of occurring. We consider the actuarial central estimate suitable for use in financial reporting contexts.

For the purposes of our report, the "accounting date" December 31, 2021 is the date used to separate paid and unpaid claim amounts. Transactions through the "valuation date" of December 31, 2021 are included in the data used in our analysis. No account whatsoever has been taken in the projections of developments or data received subsequent to the "review date" of January 24, 2022.

Our analysis was performed net as to excess reinsurance and net of anticipated future salvage and subrogation. We have assumed that all Anchorage's excess insurance will be valid and collectible.

We have not included in our estimates any provisions for claims adjustment fees payable to insurers, or any other expenses other than ALAE.

Throughout this report, the use of the term loss without modification includes loss and ALAE but does not include unallocated loss adjustment expenses (ULAE).

Section 2: Distribution

Our report is delivered under the following terms and conditions:

- This report is provided to Anchorage solely for the intended purpose, and may not be referenced or distributed to any other party without our prior written consent
- This report has been prepared for use by persons technically competent in the areas covered and with the necessary background information
- Draft versions of this report must not be relied upon by any person for any purpose
- A copy of this report may be shared with your auditors solely in the context of their performing regular audit activities
- You shall not refer to us or include any portion of this report in any shareholder communication or in any offering materials or fairness opinion provided by your professional advisors prepared in connection with the public offering or private placement of any security
- This report may be shared with your affiliates, provided that you ensure that each such affiliate complies with the terms above and the applicable statement of work as if it were a party to them, and you remain responsible for such compliance

We accept no responsibility for any consequences arising from any third party relying on this report. If we agree to provide this report to a third party, you are responsible for ensuring that the report is provided in its entirety, that the third party is made aware of the fact that they are not entitled to rely upon it, and that they may not distribute the report to any other party.

No further distribution of this report or reference, either oral or written to Willis Towers Watson, our analysis or findings related to this report may be made without our prior written consent.

This report contains workpapers, trade secrets, and confidential information of both Anchorage and Willis Towers Watson. Because of the nature of the material contained in the report, it is not intended to be subject to disclosure requirements under any Freedom of Information Act or similar laws.

Section 3: Executive Summary

The loss projections herein are the product of historical experience, actuarial methodology, quantitative analysis, and professional judgment. The projections are an objective estimate of the losses Anchorage may expect in the 2022 policy year. In this study, workers compensation, general liability, and automobile liability losses are limited to \$3,000,000 per occurrence for the projected year.

Summary Exhibit 1 displays the projected losses for Anchorage’s 2022-23 policy year by line of coverage at a \$3,000,000 per occurrence retention.

Summary Exhibit 1

Municipality of Anchorage

Policy Year 2022-23 Projected Losses & ALAE

Coverage	Proposed Retention	Projected Losses & ALAE
Workers Compensation	\$3,000,000	\$8,255,000
General Liability	3,000,000	765,000
Automobile Liability	3,000,000	866,000
Total		\$9,886,000

These projections are defined as all payments, including allocated loss adjustment expenses (ALAE), ultimately expected to be made for occurrences which take place during the prospective policy year. ALAE are those expenses clearly assignable to an individual claim (i.e., legal and expert witness fees) but exclude claim adjuster fees. The projections are the product of historical experience, actuarial assumptions, quantitative analysis, and professional judgment. They do not include a provision for any other expenses, such as excess insurance premiums or third party claims administration costs.

Summary Exhibit 2 shows the estimated unpaid liability as of 12/31/2021 at reasonably low, expected, and reasonably high levels. These ranges do not represent “best” or “worst” case scenarios, but rather the endpoints of the range within which the actual unpaid liability may reasonably be expected to fall. The estimated unpaid liability represents the estimated ultimate cost of losses incurred prior to 1/1/2022, including those that have been incurred but are not yet reported (IBNR), less the payments that have been made through 12/31/2021.

Summary Exhibit 2

Municipality of Anchorage

Estimated Unpaid Liability as of 12/31/21

Coverage	Reasonable Low	Expected	Reasonable High
Workers Compensation	\$21,677,516	\$28,244,871	\$36,108,229
General Liability	1,747,160	2,255,422	2,832,276
Automobile Liability	472,815	651,815	830,815
Total	\$23,897,491	\$31,152,108	\$39,771,320

Summary Exhibit 3 displays an estimated payout schedule of the estimated unpaid liability as of 12/31/2021 calculated in this analysis. The exhibit breaks down the estimated payments by line of coverage and period. Note that this only includes estimated unpaid liability as of 12/31/2021 and does not include projected payouts for losses incurred for policy years beyond 12/31/2021. See Appendix G for full detail on estimated payment schedules.

Summary Exhibit 3

Municipality of Anchorage

All Coverages

Estimated Payout of Unpaid Liability as of 12/31/21

Coverage	Estimated Unpaid Liability as of 12/31/21 to be paid during 1/1/22-23	Estimated Unpaid Liability as of 12/31/21 to be paid during 1/1/23-24	Estimated Unpaid Liability as of 12/31/21 to be paid during 1/1/24-25	Estimated Unpaid Liability as of 12/31/21 to be paid after 12/31/2024	Total
Workers Compensation	\$7,289,004	\$4,284,818	\$3,349,670	\$13,321,378	\$28,244,871
General Liability	1,057,842	610,900	365,075	221,605	2,255,422
Automobile Liability	244,268	181,695	133,666	92,186	651,815
Total All Coverages	\$8,591,115	\$5,077,413	\$3,848,411	\$13,635,169	\$31,152,108

Section 4: Analysis of Results

The methodology used in this analysis is similar to that used in the prior report submitted in January 2021. The loss and claim count development triangles were updated with losses evaluated as of 12/31/2021, and, if appropriate, new development factors were selected. Specific comments regarding each program are provided below:

Workers Compensation

Analysis Exhibit 1 displays the change in estimated ultimate losses for workers compensation since the prior analysis.

Overall, estimated ultimate losses for workers compensation through the 1/1/2021-22 policy year have decreased by \$810,787 (-0.5%) since the prior analysis. We have selected pure loss rate of \$2.49 per \$100 payroll based on a review of historical averages and recent experience. There has been volatility in the pure loss rate indications for recent periods as shown in Table 6 of the report, indications for all periods prior 1/1/2021-22 have all decreased compared to the prior report. However, immature periods are based on highly leveraged development factors, so volatility in these indications can be amplified by short-term changes or unexpected loss development. To account for this, we rely on various methods and averages that are designed to smooth indications.

Estimated unpaid liability for workers compensation as of 12/31/2021 is \$28,244,871 at the expected level. This is an increase of \$356,779 (+1.3%) from the prior results. Notable is that three large claims in 2011, 2014 and 2017 decreased significantly since 12/31/2020. Overall, the actual limited case outstanding reserves have decreased by \$55,990 while the estimated IBNR has increased \$412,769.

Analysis Exhibit 1

Municipality of Anchorage

Workers Compensation

Comparison of Results with 12/31/20 Report

Losses Limited to Historical Retentions

Policy Year	Estimated Ultimate Losses & ALAE as of 12/31/21	Estimated Ultimate Losses & ALAE as of 12/31/20	Change in Estimates	Percent Change
1/1/94-95	\$2,423,250	\$2,423,250	\$0	0.0%
1/1/95-96	2,517,000	2,518,000	(1,000)	(0.0%)
1/1/96-97	3,086,223	3,086,223	0	0.0%
1/1/97-98	3,297,006	3,297,006	0	0.0%
1/1/98-99	4,591,000	4,591,000	0	0.0%
1/1/99-00	4,221,597	4,221,597	0	0.0%
1/1/00-01	4,404,000	4,388,000	16,000	0.4%
1/1/01-02	5,846,262	5,846,262	0	0.0%
1/1/02-03	5,401,224	5,401,224	0	0.0%
1/1/03-04	4,445,360	4,445,360	0	0.0%
1/1/04-05	5,673,000	5,674,000	(1,000)	(0.0%)
1/1/05-06	4,665,441	4,694,000	(28,559)	(0.6%)
1/1/06-07	4,976,595	4,999,000	(22,405)	(0.4%)
1/1/07-08	3,740,177	3,756,000	(15,823)	(0.4%)
1/1/08-09	5,069,413	5,069,413	0	0.0%
1/1/09-10	4,467,000	4,289,000	178,000	4.2%
1/1/10-11	5,897,000	5,870,000	27,000	0.5%
1/1/11-12	5,751,000	6,598,000	(847,000)	(12.8%)
1/1/12-13	5,457,000	5,450,000	7,000	0.1%
1/1/13-14	6,375,000	6,403,000	(28,000)	(0.4%)
1/1/14-15	8,241,000	8,062,000	179,000	2.2%
1/1/15-16	6,589,000	6,607,000	(18,000)	(0.3%)
1/1/16-17	8,483,000	8,207,000	276,000	3.4%
1/1/17-18	12,084,000	10,483,000	1,601,000	15.3%
1/1/18-19	8,151,000	8,309,000	(158,000)	(1.9%)
1/1/19-20	9,186,000	8,924,000	262,000	2.9%
1/1/20-21	6,771,000	7,130,000	(359,000)	(5.0%)
1/1/21-22	6,590,000	8,468,000	(1,878,000)	(22.2%)
Total	\$158,399,548	\$159,210,335	(\$810,787)	(0.5%)

General Liability

Analysis Exhibit 2 displays the change in estimated ultimate losses for general liability since the prior analysis.

Overall, estimated ultimate losses for general liability through the 1/1/2021-22 policy year have increased by \$615,447 (+2.7%) since the prior analysis. The increases in the 1/1/2019-20 and 1/1/2020-21 periods are due to increases in losses. There is a large claim in the 1/1/2020-21 period with \$500,000 incurred losses. The decrease in the 1/1/09-10 period is due to a claim that received recoveries in 2021. We have selected a 2021 pure loss rate of \$0.27 per \$100 payroll which is the same as in the prior report. This selection recognizes that four of the last five policy years have had better than expected results when compared to long-term averages.

Estimated unpaid liability for general liability as of 12/31/2021 is \$2,255,422 at the expected level. This is an increase of \$931,713 from the prior results. The actual limited case outstanding reserves have increased by \$421,660 and the estimated development and IBNR has increased \$510,053. The increase is mainly due to a claim with a \$500,000 increase in case outstanding reserves in the 1/1/2020-21 period.

Analysis Exhibit 2**Municipality of Anchorage***General Liability**Comparison of Results with 12/31/20 Report**Losses Limited to Historical Retentions*

Policy Year	Estimated Ultimate Losses & ALAE as of 12/31/21	Estimated Ultimate Losses & ALAE as of 12/31/20	Change in Estimates	Percent Change
1/1/94-95	\$448,424	\$448,424	\$0	0.0%
1/1/95-96	694,789	694,789	0	0.0%
1/1/96-97	697,460	697,460	0	0.0%
1/1/97-98	854,456	854,456	0	0.0%
1/1/98-99	417,418	417,418	0	0.0%
1/1/99-00	222,191	222,191	0	0.0%
1/1/00-01	390,279	390,279	0	0.0%
1/1/01-02	624,404	624,404	0	0.0%
1/1/02-03	1,353,326	1,353,326	0	0.0%
1/1/03-04	473,700	473,700	0	0.0%
1/1/04-05	420,979	420,979	0	0.0%
1/1/05-06	721,910	721,910	0	0.0%
1/1/06-07	1,257,776	1,257,776	0	0.0%
1/1/07-08	534,389	534,389	0	0.0%
1/1/08-09	1,630,146	1,628,596	1,550	0.1%
1/1/09-10	2,489,008	2,833,111	(344,103)	(12.1%)
1/1/10-11	210,429	210,429	0	0.0%
1/1/11-12	77,272	77,272	0	0.0%
1/1/12-13	1,450,684	1,450,684	0	0.0%
1/1/13-14	1,790,632	1,790,632	0	0.0%
1/1/14-15	1,719,468	1,719,468	0	0.0%
1/1/15-16	441,179	441,179	0	0.0%
1/1/16-17	964,000	1,141,000	(177,000)	(15.5%)
1/1/17-18	386,000	404,000	(18,000)	(4.5%)
1/1/18-19	601,000	593,000	8,000	1.3%
1/1/19-20	655,000	399,000	256,000	64.2%
1/1/20-21	1,519,000	648,000	871,000	134.4%
1/1/21-22	769,000	751,000	18,000	2.4%
Total	\$23,814,319	\$23,198,872	\$615,447	2.7%

Automobile Liability

Analysis Exhibit 3 displays the change in estimated ultimate losses for automobile liability since the prior analysis.

Overall, estimated ultimate losses for automobile liability through the 1/1/2021-22 policy year have decreased by \$721,000 (-3.4%) since the prior analysis. The reductions in the selected ultimate losses are due better than expected incurred and paid loss emergence in the recent periods.

Estimated unpaid liability for automobile liability as of 12/31/2021 is \$651,815 at the expected level. This is a decrease of \$43,148 (-6.2%) from the prior results. The decrease is the result of claim closures and a reduction in case outstanding reserves.

Analysis Exhibit 3**Municipality of Anchorage***Automobile Liability**Comparison of Results with 12/31/20 Report**Losses Limited to Historical Retentions*

Policy Year	Estimated Ultimate Losses & ALAE as of 12/31/21	Estimated Ultimate Losses & ALAE as of 12/31/20	Change in Estimates	Percent Change
1/1/94-95	\$202,500	\$202,500	\$0	0.0%
1/1/95-96	461,967	461,967	0	0.0%
1/1/96-97	690,065	690,065	0	0.0%
1/1/97-98	678,847	678,847	0	0.0%
1/1/98-99	950,395	950,395	0	0.0%
1/1/99-00	311,892	311,892	0	0.0%
1/1/00-01	430,688	430,688	0	0.0%
1/1/01-02	2,346,793	2,346,793	0	0.0%
1/1/02-03	406,478	406,478	0	0.0%
1/1/03-04	708,247	708,247	0	0.0%
1/1/04-05	385,059	385,059	0	0.0%
1/1/05-06	1,339,208	1,339,208	0	0.0%
1/1/06-07	233,828	233,828	0	0.0%
1/1/07-08	488,937	488,937	0	0.0%
1/1/08-09	264,659	264,659	0	0.0%
1/1/09-10	1,942,104	1,942,104	0	0.0%
1/1/10-11	1,111,725	1,111,725	0	0.0%
1/1/11-12	490,570	490,570	0	0.0%
1/1/12-13	669,920	669,920	0	0.0%
1/1/13-14	465,676	465,676	0	0.0%
1/1/14-15	385,309	385,309	0	0.0%
1/1/15-16	656,718	656,718	0	0.0%
1/1/16-17	2,513,130	2,513,130	0	0.0%
1/1/17-18	951,633	951,633	0	0.0%
1/1/18-19	207,816	207,816	0	0.0%
1/1/19-20	247,000	543,000	(296,000)	(54.5%)
1/1/20-21	464,000	579,000	(115,000)	(19.9%)
1/1/21-22	560,000	870,000	(310,000)	(35.6%)
Total	\$20,565,164	\$21,286,164	(\$721,000)	(3.4%)

Section 5: Description of Methodology

Overview

There are two main functions of this report. The first is to project expected losses for the upcoming policy year (a prospective estimate), and the second is to determine estimated unpaid liability (a retrospective estimate). The description of methodology in this section is specifically for workers compensation, as an example. General liability and automobile liability use similar methodology.

The basic quantitative approach used to project the losses and estimate unpaid liability for workers compensation for Anchorage is described as follows:

1. **Loss limitations** of \$500,000 are applied to limit the known losses for each historical year before taking further steps in making the projections.
2. **Loss development factors** are selected by first defining loss development patterns unique to Anchorage through actuarial analysis of the historical losses for prior policy years. These unique patterns are considered along with industry patterns in selecting loss development factors.
3. The **selected loss development factors are applied** to the firm's most recently evaluated limited incurred losses in order to estimate the ultimate value of losses for each of the historical years, and paid development factors are applied to paid losses to calculate a second estimate.
4. **Severity trend** factors (and benefit level change factors for workers compensation) are applied to the estimated ultimate losses. These factors adjust losses to reflect changes in the level of loss costs or benefits from the time when the losses originally occurred to the time period for the projection.
5. **Projection of expected losses** then proceeds in three steps:
 - a. Exposures, such as payroll, which are inflation sensitive, are adjusted (trended) from each of the prior years to the level of the time period for the projection.
 - b. Adjusted losses are divided by adjusted exposures for each prior year to calculate a pure loss rate. Each of these pure loss rates is an estimate of the pure loss rate that may be required to pay losses for the projection year. These estimates are the main input in the selection of the pure loss rate to be used for the projection.
 - c. Projected losses are calculated by multiplying the selected pure loss rate by the projected exposure supplied by Anchorage.

6. **Projection of claim counts** involves a similar process of developing and trending in order to estimate the ultimate number of claims that will be involved in producing the projected losses.
7. **Average loss severities** are calculated as an important test and review of the reasonableness of the projected losses.
8. **Historical loss limitations** are applied to limit the known losses for each policy year to their appropriate historic retention.
9. **Loss development factors** are applied to limited known losses to estimate ultimate losses at historical retentions.
10. **The Bornhuetter-Ferguson method** is applied to arrive at two additional estimates of ultimate losses which account for incurred or paid losses to date, but estimate future development from a larger historical base.
11. **Estimated unpaid liability** as of 12/31/2021 is calculated by subtracting paid losses from estimated ultimate losses at the limits retained for each policy year.

Historical loss and exposure data provided by Anchorage have been used in projecting losses for the prospective policy year. Any changes in projected exposure will require a proportional change in loss projections.

The remainder of this section describes in more detail the projection of losses and claim counts for workers compensation for Anchorage.

Loss Limitation

Anchorage has requested that the loss projection for the upcoming policy year be made for a per occurrence loss limit of \$3,000,000 for workers compensation. The analysis begins by limiting each occurrence to \$500,000 before proceeding with calculations of projections as shown in Table 1. This table shows that there are 20 losses since the 1/1/2007-08 policy year that have exceeded \$500,000. Since only 1 claim has exceeded \$3,000,000, the loss limit for the base analysis is \$500,000. See Appendix E for a complete listing of claims excess of \$300,000.

Loss Development Factors

The ultimate cost of losses incurred for a specific time period is usually not known until several years after close of that period. Loss development factors are used to project the additional cost expected on losses associated with current and past loss periods. These factors quantify the late developing aspects of certain losses, such as claims involving medical complications not recognized in the early stages of treatment or verdict values for litigated claims which are different than the amount which was reserved to pay the claims. They also account for losses that occurred during the policy year but are not reported until a later date, commonly referred to as incurred but not reported losses, or IBNR.

Anchorage's database is large enough to permit calculation of unique loss development factors. These unique factors allow for a more accurate reflection of loss development patterns specific to Anchorage. Generally speaking, the use of unique factors as opposed to industry averages produces a more accurate projection of ultimate losses.

The calculation of development factors and selection of factors to be applied is shown in Table 2, beginning with Anchorage workers compensation losses limited to \$500,000 as of different evaluation dates. For example, in the top section of the table shows losses incurred during the 1/1/2010-11 policy year evaluated as of 12, 24, 36, 48, etc. months after the beginning of that year. In general, the value of incurred losses increases from one evaluation to the next as a result of development of reported losses and IBNR losses becoming known.

Middle section of Table 2 displays the rates by which losses develop from year to year (age-to-age factors). For example, the 12 to 24 month incurred age-to-age factor for the 1/1/2010-11 policy year is 1.051. This is the 24 month incurred amount divided by the 12 month incurred amount. The age-to-age factor of 1.051 means that the known value of losses incurred during the 1/1/2010-11 policy year increased by 5.1 percent during the 12 to 24 month interval. A loss development factor less than 1.000 indicates that the value of incurred losses declined, possibly due to a claim being settled for an amount less that was previously reserved.

Middle section of Table 2 shows the average of age-to-age factors from one evaluation to the next. The "Average" is the average or mean of all age-to-age factors in the column, the "Wtd Avg" represents the sum of the losses as of one evaluation divided by the sum of the losses from the previous evaluation for corresponding policy years, and the "5 Yr Wtd Avg" represents a weighted average of the last five years. The averages are considered along with insurance industry factors and prior selections. The factors selected as most representative of the expected loss development are shown in the "Selected" line.

In the bottom section of Table 2, computation of loss development factors is based on the selected age-to-age factors. The 24 month to ultimate loss development factor, for instance, is found by multiplying the 24 to 36 month age-to-age factors by the 36 to ultimate loss development factor.

In Table 3, the paid loss development pattern is selected in much the same manner as the incurred.

Selected Estimated Ultimate Losses

In Table 4, **loss development factors are applied** to incurred and paid losses limited to \$500,000 based on the time that has passed between the beginning of the loss period and the date of the most recent evaluation. In most cases, the closer the evaluation date is to the policy year effective date, the larger the loss development factor needed. Expected ultimate losses for each policy year are estimated by multiplying the loss development factors by recently valued incurred and paid losses for those policy years.

Table 4, Section C displays the estimated ultimate losses based on the incurred and paid methods and a selection of ultimate losses is made for each year based on the two estimates.

Severity Trend

Severity trend factors are applied to adjust historical losses to the cost level for the year being projected. For workers compensation this adjustment has two parts: a benefit level change factor and inflation trend factor.

The **benefit level change factor** for workers compensation quantifies increases in benefit levels attributable to changes in state workers compensation laws. These factors are developed from data compiled by the National Council on Compensation Insurance for the state of Alaska.

The **inflation trend factor** for workers compensation consists of two elements: medical costs and average wages on which indemnity benefits are based. The factor is based 55 percent on changes in average wages for the general services industry and 45 percent on medical cost inflation based on Willis Towers Watson's review of industry data. These factors are calculated in Appendix D, Exhibit I.

The selected estimated ultimate losses for each policy year are multiplied by the benefit level change factors and inflation trend factors to calculate trended ultimate losses, as shown in Section A of Table 5.

Having developed the historical workers compensation losses and having adjusted them to reflect projected cost levels, the next step is to trend historical exposure to appropriate expected levels for the projected year. The exposure base selected for workers compensation losses is payroll. In Section B of Table 5, historical payrolls are adjusted to anticipated average wage levels for the projected year.

Projection of Expected Losses

The next step is to calculate pure loss rates based on the historical experience of Anchorage. The pure loss rate can be defined as the expected dollar loss cost per \$100 of payroll. Adjusted losses are divided by the adjusted exposure to yield pure loss rates. A pure loss rate based on experience for each historical policy year included is calculated in Section A of Table 6.

Each calculated pure loss rate is an estimate of the pure loss rate, which could be charged for the projected policy year at a \$500,000 per occurrence limit. A pure loss rate of \$2.49 per \$100 of payroll is selected for the projected policy year. This pure loss rate of \$2.49 means that for every \$100 Anchorage pays its employees as wages during the projected year, Anchorage can expect an estimated \$2.49 of workers compensation losses. Figure 1 is a graphic representation of these pure loss rates, which helps illustrate the logic of the selected pure loss rate.

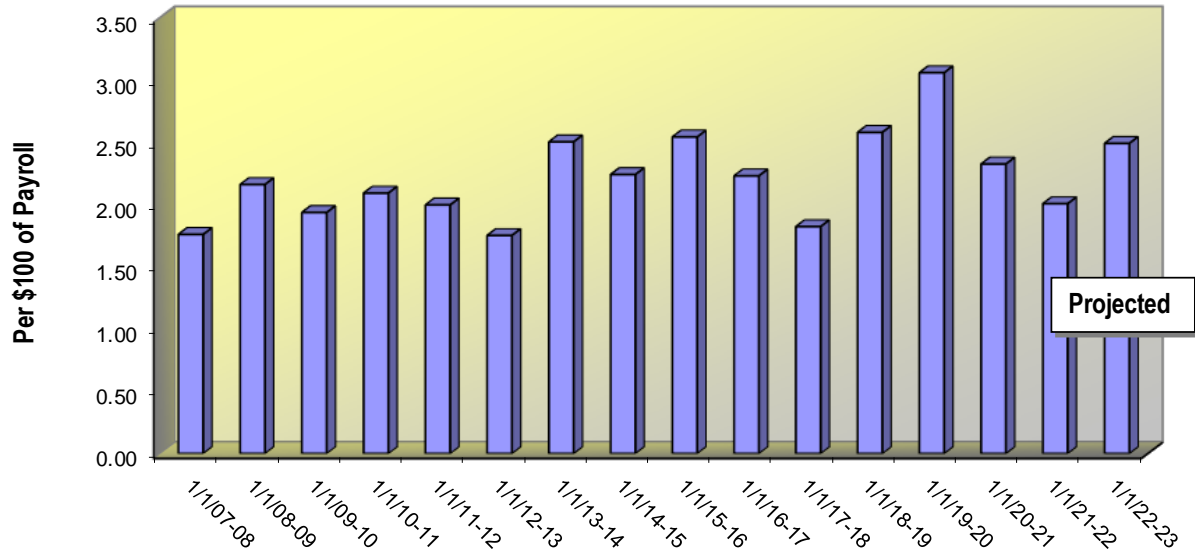
In Section B of Table 6, the pure loss rate is multiplied by the projected payroll exposures to forecast workers compensation losses at a \$500,000 per occurrence limit. A projection using this method is made for the 1/1/2019-20 through 1/1/2021-22 policy years by adjusting the 1/1/2022-23 pure loss rate to the appropriate cost level.

In Sections C of Table 6, increased limits factors are applied to the projections at a \$500,000 per occurrence limit to project losses at the appropriate per occurrence retention for the policy year. These increased limits factors are based on simulation derived from Anchorage's historic loss experience.

Figure 1

Municipality of Anchorage

*Workers Compensation
Loss & ALAE Rate Per \$100 Payroll
Losses & ALAE Limited to \$500,000 Per Occurrence*



Projection of Claim Counts

To forecast the number of workers compensation claims, frequencies are calculated in much the same manner as were pure loss rates in earlier tables. The first step is to select claim count development factors. Top section of Table 7 displays the history of workers compensation claim count development. In the middle section, age-to-age development factors are selected based on unique development patterns. The claim count development factors are then carried forward to Table 8, where known claim counts are developed to estimated ultimate levels based on the selected development factors.

Since claim frequency is not inflation sensitive, but payroll is, it is necessary to adjust the historic payroll to reflect projected wage levels before calculating the frequencies. This adjustment was made earlier in Table 6, Section B. In Section of Table 8, estimated ultimate claim counts are divided by exposures adjusted to the projected level in order to calculate estimates of the projected frequency for workers compensation. The historical frequencies are analyzed and a frequency rate per \$1,000,000 of payroll is selected that is most representative of the expected frequency for the projected policy year.

In Section C, multiplying the indicated frequency by the estimated payroll for the projected policy year yields an estimate of the number of claims expected to be incurred during the projected policy year. The total number of claims is an important piece of information and is used in comparisons of average loss severities in the pages that follow. Additionally, expected claims with cost are calculated using a ratio based on Anchorage's unique loss experience as shown in Section D.

Average Loss Severities

The average loss severities calculated in Table 9 provide an important review of known severities and a check of the reasonableness of estimated ultimate and projected loss severities. Section A of the table summarizes the data developed in earlier tables. Section B shows three sets of average severities calculated from the data in Section A.

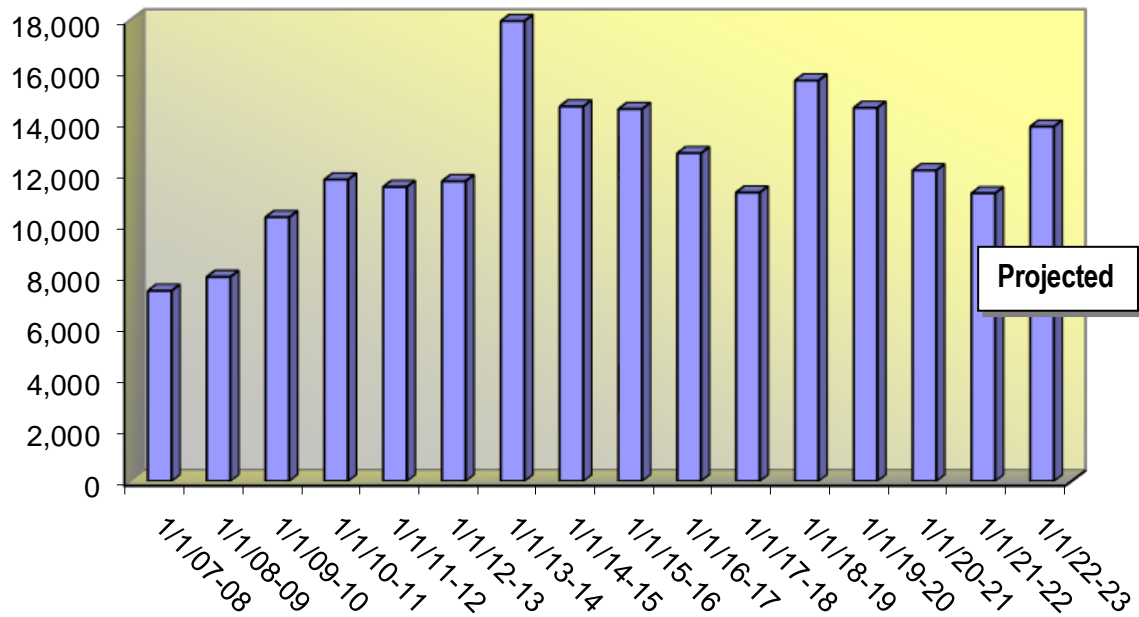
The first column of average severities is for known losses. The middle column shows calculated average severities based on estimated ultimate losses. In most cases, the ultimate average expected loss are larger than the known average because losses usually develop upward over time and late reported losses tend to be more severe than losses reported earlier in the development period. This column allows confirmation of a reasonable pattern of changes in severity over time since all losses are at their estimated ultimate level.

The third column of average severities shows trended estimated ultimate severities. The trend adjustment places severities for all years on a comparable cost level, allowing review of the results and effectiveness of the trend procedures employed. It also provides an important check of the appropriateness of the projected losses by verifying that the projected average severity is in the range indicated by trended severities for recent years. Figure 2 is a graphic representation of the ultimate average severities adjusted to a 2022 cost level.

Figure 2

Municipality of Anchorage

*Workers Compensation
 Ultimate Average Severities Adjusted to 2022 Cost Level
 Losses & ALAE Limited to \$500,000 Per Occurrence*



Historical Loss Limitation

Tables 10 through 14 follow the same methodology as Tables 1 and 4. In this case, losses are limited to their respective historical retentions.

Bornhuetter-Ferguson Method

Section A of Table 15 presents another method of estimating ultimate losses for recent policy years. The Bornhuetter-Ferguson (B-F) method begins with the projected losses from Table 6. The expected percent of unreported losses is calculated as 1.000 minus the reciprocal of the incurred loss development factor from Table 11. Multiplying projected losses times the expected percent unreported yields the estimated losses unreported. The estimated losses unreported are then added to known limited incurred losses to yield estimated ultimate losses. This method has the advantage of utilizing known incurred losses while estimating the loss development

to be added without the potential for distortion which might be caused by the presence or absence of a large claim. Similar calculations using paid losses are performed in Section B. After comparing the estimates based on development, projection and B-F methods, final selections of estimated ultimate losses are made in Section C.

Estimated Unpaid Liability

The calculation of the estimated unpaid liability is based on estimated ultimate losses and paid losses to date.

Appendix C, Exhibit I contains a summary of the estimated unpaid liability as of 12/31/2021 for workers compensation losses. The estimated unpaid liability is calculated by subtracting the paid losses as of 12/31/2021 from the estimated ultimate losses calculated in the Tables.

Appendices

Appendices A and B show similar calculations for the general liability and automobile liability programs, respectively. The analysis of estimated unpaid liability for all coverages can be found in Appendix C and supporting exhibits are included in Appendices D and E. The aggregate loss probability analysis is contained in Appendix F. Appendix G contains the estimated payout of unpaid liability as of 12/31/2021 by line and policy year for each period.

Section 6: Aggregate Loss Probability Analysis

This aggregate loss probability analysis can be most useful in helping to define appropriate levels of risk retention and policy limits. It provides an estimate of the range around the projected losses in which actual losses will lie.

Based on the historical loss distribution parameters for workers compensation losses, a loss distribution and associated parameters were determined for the projected year. This information was used as input into a simulation model to determine an aggregate probability distribution for the projected losses. Frequency and severity distributions are handled separately in the analysis of these losses. The frequency distribution describes the likelihood that Anchorage will incur a given number of claims in the upcoming policy year. The severity distribution describes the likelihood of possible values of each claim. The analysis is separated into the frequency and severity distributions for two reasons. First, the frequency and severity distributions are more effectively analysed individually than on a combined basis. Second, and more importantly, valuable information is lost by neglecting to analyze the frequency and severity distributions separately. For example, the average frequency may be decreasing while the average loss size may be increasing. Information such as this is not always apparent when the aggregate distribution is not divided into the underlying frequency and severity components.

Anchorage's losses for the projected policy year are then simulated using the selected frequency and severity distributions and random sampling. To minimize the effects of sampling error and to obtain an entire distribution of simulated losses, the above process is repeated 5,000 times to simulate 5,000 policy years, any of which could be Anchorage's projected policy year. Appendix F, Exhibit I shows the simulation output based on the projected claims with cost forecast for the upcoming policy year and the expected workers compensation losses at a \$500,000 retention and \$3,000,000 retention for all codes. The mean value is balanced to the projected losses in Table 6.

These distributions are summarized by the following information:

Mean ~ The average annual losses simulated in the 5,000 iterations

Percentile Information ~ The percentile information can be thought of as confidence levels. The line labelled "5% perc" represents the 5% confidence level. This means that 5% of the iterations (250 of 5,000) of annual losses fell below this amount. Therefore, the results of the simulation indicate that there is only a 5% chance that the losses in the upcoming year will be less than this amount. The "10% perc" means that 10% of the iterations (500 of 5,000) fell below this amount. The loss amounts at the larger confidence intervals are less likely to be exceeded. For example, "90% perc" means that 90% of the iterations (4,500 of 5,000) fell below this amount or that only 10% (500 of 5,000) were above this amount.

In order to derive the maximum benefit from the aggregate probability distribution, Anchorage should first select a probability level with which it feels comfortable and then structure a loss financing program designed to address that level of losses.

Section 7: Reliances and Limitations

Inherent Uncertainty

In our judgment, we have employed techniques and assumptions that are appropriate, and the estimates presented herein are reasonable, given the information currently available. However, projections of loss and LAE liabilities are subject to potentially large errors of estimation, since the ultimate disposition of claims incurred prior to the financial statement date, whether reported or not, is subject to the outcome of events that have not yet occurred. Examples of these events include jury decisions, court interpretations, changes in legislation and the standards of liability, changes in the medical condition of claimants, public attitudes, and social/economic conditions such as inflation. It should therefore be expected that the actual emergence of losses and LAE will vary, perhaps materially, from our estimates. Thus, no assurance can be given that Anchorage's actual loss and LAE liabilities will not ultimately differ, perhaps materially, from the estimates contained herein.

The inherent uncertainty associated with the ultimate loss and ALAE estimates is magnified in this case due to the following circumstances:

- Estimation of workers compensation and general liability coverage loss is more uncertain than for shorter-tailed property and casualty lines
- Anchorage's retention is materially high relative to its annual volume of loss. In the event of a max limit loss, estimates and projections would be significantly impacted
- Anchorage's historical severity shows considerable volatility. We supplemented our analysis with industry loss trend benchmarks. While we believe that the use of external benchmarks is reasonable, it introduces additional uncertainty to the projections

COVID-19

COVID-19 is a continually developing issue which is having significant effects on global economic activity and has created extensive social disruption. Longer term socio-economic implications and the impact on the projected liabilities remains uncertain. Key drivers of uncertainty include:

- Public, corporate and government responses to COVID-19, and the extent to which these responses impact global supply chains and economic conditions;
- The extent to which the spread of COVID-19, associated government actions and public behavior may increase or reduce underlying insurance losses;
- Policy terms and conditions and the extent to which coverage is available for losses identified as being related to COVID-19;
- The aggregation of COVID-19 related losses for outwards reinsurance purposes;
- The impact of restrictions arising from the virus on claim incidence, reporting, investigation and the potential for reporting delays due to operational constraints affecting claims reporting, handling and settlement that may

not fully manifest for some time dependent on the post-pandemic reversion to normalized levels of business activity in the affected markets;

- The impact of slowdowns in the tort system on the timing and recognition of losses on liability claims;
- Changes in behaviors of claimants and plaintiffs' attorneys due to economic conditions;
- The impact of delays in medical care on the ultimate value of bodily injury and workers compensation claims;
- The effectiveness, duration and timing of containment measures in reducing future infection and fatality rates of the virus, the speed and effectiveness of vaccines or treatments and the ability of health systems to cope with potentially large numbers of individuals simultaneously requiring treatment; and
- The impact on assets: our analysis makes no explicit allowance for the expected effects of COVID-19 on assets.

Specific considerations for Anchorage include:

- As part of our analysis, we reviewed any potential underlying slow-down in claims incidence, reporting and development due to COVID-19, for instance due to delays in medical treatment or judicial proceedings. To the extent that this slow-down is due to delays in claims reporting and settlement, there may be a subsequent increase in loss development which could result in an increase in our projections. No adjustments have been made, however to recognize this as a source of uncertainty.
- For liability coverages, we have not as of yet seen a significant number of claims related to COVID-19. We are not adding provisions for general liability based on the information available currently, but there is the potential for claim emergence in the future.
- For workers compensation, uncertainty exists with respect to long term health impacts for survivors and the potential for PTSD claims arising from healthcare workers.
- Given continued uncertainty over the duration of the pandemic, its economic impacts and the timing of post-pandemic reversion to normalized levels of business activity, projected business volumes remain highly uncertain.

Note that a quantification of the uncertainty in the loss and LAE estimates would likely reflect a range of reasonable favorable and adverse scenarios, but not necessarily a range of all possible outcomes. Further, the proper application of any range is dependent on the context. Anchorage's financial reports are governed by accounting standards, and such standards vary among jurisdictions. Under current accounting standards, the ends of a range that is illustrative of uncertainty would likely not be suitable for financial reporting purposes.

Ranges of Estimates

The range of estimates presented herein is intended to reflect the reasonably expected variation in loss and LAE based on information currently available. It is possible that actual results will fall outside this range.

Data Reliance

Throughout this analysis, we have relied on historical data and other quantitative and qualitative information supplied by Anchorage. We have not independently audited or verified this information; however, we have reviewed it for reasonableness and internal consistency. We have assumed that the information is complete and accurate and that we have been provided with all information relevant to the analysis of Anchorage's loss and ALAE. The accuracy of our results is dependent upon the accuracy and completeness of the underlying data; therefore, any material discrepancies discovered in this data should be reported to us and this report amended accordingly, if warranted.

Extraordinary Future Emergence

We have not anticipated any extraordinary changes to the legal, social or economic environment that might affect the cost, frequency or future reporting of claims. In addition, our estimates make no provision for potential future claims arising from loss causes not represented in the historical data (e.g., new types of mass torts or latent injuries, terrorist acts) except insofar as claims of these types are included but not identified in the reported claims and are implicitly analyzed.

Underlying Assets

We have not examined the assets underlying Anchorage's loss reserves, and we have formed no opinion as to the validity or value of these assets. We have assumed throughout the analysis that Anchorage's loss reserves are backed by valid assets with suitably scheduled maturities and/or adequate liquidity to meet cash flow requirements.

Self-Insurance Risk

When reviewing our findings, it is important to note certain implications of a large deductible insurance plan. The entire retained risk remains with the large deductible purchaser, which likely exposes this entity to greater potential fluctuations in financial experience than does a first dollar insurance program. Anchorage should have sufficient financial capacity to reserve for and withstand those fluctuations. Actual losses in excess of projected losses will have to be paid by Anchorage. It is not possible to estimate such fluctuations with complete accuracy; however, the effects of such fluctuations can be reduced by the funding of a provision for contingencies (a margin for the risk of adverse deviation from the expected loss levels). We have calculated such risk margins and confidence levels in our report.

An important factor bearing on a large deductible purchaser's/captive insurer's financial capacity is the existence of an excess insurance/reinsurance program. Insurance/excess insurance is generally considered an integral part of programs with the potential for catastrophic losses. Workers compensation, general liability and auto liability losses are characterized by this potential.

Nothing in this report should be construed as recommending that Anchorage should or should not self-insure these coverages. Many factors other than the unpaid loss and ALAE and prospective year loss and ALAE estimates should be considered in that decision.

Section 8: Data and Information

Anchorage provided the following data and information for use in this analysis:

- A detailed claim listing that displays incident date, report date, claim status, indemnity paid loss, indemnity case outstanding, medical paid loss, medical case outstanding, paid ALAE, outstanding ALAE, and recovery amounts, evaluated as of December 31, 2021
- Exposure information consisting of payrolls and vehicle counts.

We supplemented this data with information based on industry benchmarks and government indices as appropriate.

Tables – Workers Compensation

Table 1**Municipality of Anchorage***Workers Compensation**Limitation of Losses to \$500,000**Evaluated as of 12/31/21*

A. Limitation of Incurred Losses				
Policy Year	Incurred Losses as of 12/31/21	Number Excess of \$500,000	Total Amount Excess of \$500,000	Incurred Losses Limited to \$500,000
1/1/07-08	\$3,740,177	1	\$5,594	\$3,734,583
1/1/08-09	5,069,413	2	100,932	4,968,481
1/1/09-10	4,389,179	0	0	4,389,179
1/1/10-11	7,474,922	2	2,516,675	4,958,247
1/1/11-12	5,582,478	1	707,844	4,874,634
1/1/12-13	5,300,393	2	868,058	4,432,336
1/1/13-14	6,126,082	1	28,479	6,097,603
1/1/14-15	8,552,583	3	2,858,625	5,693,957
1/1/15-16	6,207,458	0	0	6,207,458
1/1/16-17	7,811,707	3	2,120,837	5,690,869
1/1/17-18	12,748,997	3	7,601,652	5,147,345
1/1/18-19	7,028,069	1	132,732	6,895,338
1/1/19-20	7,642,833	1	339,550	7,303,283
1/1/20-21	5,202,525	0	0	5,202,525
1/1/21-22	3,653,082	0	0	3,653,082
Total	\$96,529,900	20	\$17,280,978	\$79,248,921
B. Limitation of Paid Losses				
Policy Year	Paid Losses as of 12/31/21	Number Excess of \$500,000	Total Amount Excess of \$500,000	Paid Losses Limited to \$500,000
1/1/07-08	\$3,634,784	1	\$5,594	\$3,629,190
1/1/08-09	5,069,413	2	100,932	4,968,481
1/1/09-10	4,234,500	0	0	4,234,500
1/1/10-11	5,621,949	2	870,703	4,751,246
1/1/11-12	4,702,052	0	0	4,702,052
1/1/12-13	5,113,832	2	868,058	4,245,775
1/1/13-14	6,080,348	1	6,810	6,073,538
1/1/14-15	5,022,634	1	36,030	4,986,604
1/1/15-16	5,602,649	0	0	5,602,649
1/1/16-17	5,586,018	2	112,037	5,473,980
1/1/17-18	8,334,533	3	3,513,981	4,820,552
1/1/18-19	6,097,497	1	132,732	5,964,765
1/1/19-20	5,853,824	0	0	5,853,824
1/1/20-21	3,896,146	0	0	3,896,146
1/1/21-22	1,873,810	0	0	1,873,810
Total	\$76,723,988	15	\$5,646,876	\$71,077,112

Municipality of Anchorage
Workers Compensation
Incurred Loss Development Factor Calculation - Losses ALAE Limited to \$500,000 Per Occurrence (\$000's)
As of December 31, 2021

Table 2

Accident Period	Evaluation Age in Months												
	12	24	36	48	60	72	84	96	108	120	132	144	156
1997	1,960	2,201	2,489	2,661	2,751	2,912	3,010	3,115	3,154	3,194	3,280	3,283	3,276
1998	1,881	2,680	3,271	3,721	3,845	3,904	4,113	4,118	4,268	4,313	4,396	4,390	4,419
1999	1,824	2,838	3,497	3,843	4,056	4,140	4,112	4,124	4,201	4,139	4,139	4,140	4,139
2000	1,966	3,260	3,846	3,680	3,695	3,918	4,066	4,063	4,293	4,215	4,217	4,220	4,230
2001	3,041	3,871	4,126	4,519	4,698	4,875	5,220	5,400	5,571	5,680	5,630	5,639	5,759
2002	3,362	3,933	4,350	4,612	4,962	5,061	5,215	5,278	5,308	5,359	5,494	5,528	5,549
2003	2,503	3,763	3,979	4,052	4,199	4,402	4,397	4,478	4,461	4,483	4,459	4,442	4,442
2004	3,145	3,357	3,941	4,626	4,885	5,050	5,255	5,420	5,367	5,424	5,505	5,587	5,615
2005	2,199	3,113	3,728	3,915	4,104	4,120	4,253	4,191	4,293	4,254	4,442	4,517	4,517
2006	2,477	3,117	3,933	4,218	4,501	4,488	4,524	4,473	4,472	4,394	4,394	4,394	4,394
2007	2,616	2,861	3,226	3,558	3,701	3,623	3,821	3,826	3,722	3,722	3,593	3,614	3,700
2008	4,572	4,888	4,836	5,281	5,006	4,954	5,147	5,395	5,304	5,315	4,995	5,002	4,968
2009	3,460	4,095	4,089	4,005	4,135	4,219	4,255	4,388	4,269	4,269	4,269	4,269	4,389
2010	4,629	4,867	4,855	4,685	4,778	4,954	4,989	5,017	4,878	4,911	4,893	4,958	4,958
2011	4,081	4,910	4,482	4,512	5,035	5,190	5,392	4,898	4,983	4,875	4,875		
2012	4,421	4,490	4,059	4,268	4,140	4,367	4,262	4,313	4,384	4,432			
2013	6,729	5,510	6,407	6,171	6,205	6,239	6,263	6,104	6,098				
2014	4,285	5,044	4,775	4,888	4,907	4,935	5,435	5,694					
2015	5,697	5,886	5,890	5,739	6,079	6,089	6,207						
2016	5,167	5,299	5,100	5,656	5,735	5,691							
2017	4,344	5,014	4,700	5,053	5,147								
2018	6,438	6,839	6,770	6,895									
2019	6,242	6,813	7,303										
2020	4,145	5,203											
2021	3,653												

Accident Period	Age Interval in Months												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-Ult
1997	1.123	1.131	1.069	1.034	1.059	1.034	1.035	1.013	1.013	1.027	1.001	0.998	
1998	1.425	1.221	1.138	1.033	1.015	1.054	1.001	1.036	1.011	1.019	0.999	1.007	
1999	1.556	1.232	1.099	1.055	1.021	0.993	1.003	1.019	0.985	1.000	1.000	1.000	
2000	1.658	1.180	0.957	1.004	1.060	1.038	0.999	1.057	0.982	1.000	1.001	1.002	
2001	1.273	1.066	1.095	1.040	1.038	1.071	1.034	1.032	1.020	0.991	1.002	1.021	
2002	1.170	1.106	1.060	1.076	1.020	1.030	1.012	1.006	1.010	1.025	1.006	1.004	
2003	1.503	1.057	1.018	1.036	1.048	0.999	1.018	0.996	1.005	0.995	0.996	1.000	
2004	1.067	1.174	1.174	1.056	1.034	1.041	1.031	0.990	1.011	1.015	1.015	1.005	
2005	1.416	1.198	1.050	1.048	1.004	1.032	0.985	1.024	0.991	1.044	1.017	1.000	
2006	1.258	1.262	1.072	1.067	0.997	1.008	0.989	1.000	0.983	1.000	1.000	1.000	
2007	1.094	1.128	1.103	1.040	0.979	1.055	1.001	0.973	1.000	0.965	1.006	1.024	
2008	1.069	0.989	1.092	0.948	0.990	1.039	1.048	0.983	1.002	0.940	1.001	0.993	
2009	1.184	0.999	0.979	1.032	1.020	1.009	1.031	0.973	1.000	1.000	1.000	1.028	
2010	1.051	0.998	0.965	1.020	1.037	1.007	1.006	0.972	1.007	0.996	1.013		
2011	1.203	0.913	1.007	1.116	1.031	1.039	0.908	1.017	0.978	1.000			
2012	1.016	0.904	1.051	0.970	1.055	0.976	1.012	1.016	1.011				
2013	0.819	1.163	0.963	1.006	1.005	1.004	0.975	0.999					
2014	1.177	0.947	1.024	1.004	1.006	1.101	1.048						
2015	1.033	1.001	0.974	1.059	1.002	1.019							
2016	1.026	0.962	1.109	1.014	0.992								
2017	1.154	0.937	1.075	1.019									
2018	1.062	0.990	1.018										
2019	1.091	1.072											
2020	1.255												
2021													

Averages													
1:	Average												
	1.195	1.071	1.050	1.032	1.021	1.029	1.008	1.006	1.000	1.001	1.004	1.006	1.000
2:	Wtd Avg												
	1.139	1.051	1.044	1.031	1.019	1.029	1.007	1.005	1.001	1.000	1.004	1.006	1.000
3:	5 Yr Wtd Avg												
	1.108	0.997	1.037	1.021	1.009	1.028	0.988	0.996	0.999	0.980	1.004	1.008	1.000
4:	Industry												
	1.113	1.034	1.002	1.006	1.011	1.002	1.006	1.004	1.003	0.998	1.005	1.002	1.051
5:	Prior Selected												
	1.100	1.045	1.040	1.032	1.025	1.023	1.012	1.008	1.005	1.005	1.005	1.005	1.020

Selected Values													
	1.125	1.045	1.040	1.037	1.030	1.023	1.012	1.008	1.005	1.005	1.005	1.005	1.020
Cumulative	1.418	1.261	1.206	1.160	1.118	1.086	1.061	1.049	1.041	1.035	1.030	1.025	1.020

Note: Industry factors based on Willis Towers Watson benchmark statistics for Alaska.

Paid Loss Development Factor Calculation - Losses ALAE Limited to \$500,000 Per Occurrence (\$000's)
As of December 31, 2021

Accident Period	Evaluation Age in Months												
	12	24	36	48	60	72	84	96	108	120	132	144	156
1997	968	1,934	2,321	2,525	2,664	2,839	2,935	3,063	3,128	3,168	3,207	3,242	3,272
1998	1,193	2,080	2,832	3,320	3,695	3,817	3,986	4,039	4,197	4,254	4,322	4,370	4,392
1999	1,096	2,293	2,988	3,543	3,799	4,067	4,093	4,121	4,131	4,139	4,139	4,139	4,139
2000	1,169	2,497	3,176	3,428	3,673	3,831	3,993	3,990	4,041	4,194	4,197	4,200	4,210
2001	1,425	2,777	3,252	3,673	4,130	4,499	4,651	4,832	4,951	5,193	5,297	5,394	5,594
2002	1,350	3,000	3,864	4,435	4,755	4,941	5,020	5,233	5,260	5,265	5,335	5,339	5,339
2003	1,272	3,143	3,725	3,899	4,140	4,360	4,397	4,412	4,434	4,435	4,442	4,442	4,442
2004	1,475	2,774	3,610	4,081	4,539	4,666	4,738	4,862	4,948	5,025	5,134	5,187	5,194
2005	1,208	2,401	3,134	3,524	3,867	3,956	4,099	4,141	4,155	4,170	4,182	4,267	4,279
2006	1,168	2,477	3,071	3,754	3,964	4,273	4,344	4,366	4,371	4,369	4,372	4,373	4,374
2007	1,235	2,241	2,811	3,265	3,538	3,576	3,592	3,592	3,592	3,592	3,593	3,604	3,607
2008	1,877	3,504	4,237	4,539	4,443	4,603	4,898	4,917	4,947	4,961	4,962	4,968	4,968
2009	1,382	2,340	3,384	3,480	3,797	3,955	4,049	4,196	4,220	4,228	4,228	4,229	4,235
2010	2,059	4,079	4,492	4,578	4,654	4,685	4,692	4,695	4,702	4,724	4,725	4,751	
2011	1,608	3,647	3,759	4,069	4,254	4,439	4,521	4,567	4,612	4,649	4,702		
2012	1,990	3,046	3,605	3,773	3,875	4,102	4,145	4,217	4,227	4,246			
2013	2,195	4,229	4,848	5,406	5,894	5,976	5,991	6,062	6,074				
2014	2,070	3,391	3,809	4,101	4,243	4,445	4,940	4,987					
2015	2,104	4,343	4,950	5,380	5,463	5,491	5,603						
2016	1,960	4,101	4,600	5,090	5,329	5,474							
2017	2,564	4,046	4,376	4,725	4,821								
2018	2,677	4,914	5,477	5,965									
2019	2,208	4,650	5,854										
2020	1,853	3,896											
2021	1,874												

Accident Period	Age Interval in Months												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-Ult
1997	1.998	1.200	1.088	1.055	1.066	1.034	1.044	1.021	1.013	1.012	1.011	1.009	
1998	1.744	1.362	1.172	1.113	1.033	1.044	1.013	1.039	1.014	1.016	1.011	1.005	
1999	2.092	1.303	1.186	1.072	1.071	1.006	1.007	1.002	1.002	1.000	1.000	1.000	
2000	2.136	1.272	1.079	1.071	1.043	1.042	0.999	1.013	1.038	1.001	1.001	1.002	
2001	1.949	1.171	1.129	1.124	1.089	1.034	1.039	1.025	1.049	1.020	1.018	1.037	
2002	2.222	1.288	1.148	1.072	1.039	1.016	1.042	1.005	1.001	1.013	1.001	1.000	
2003	2.471	1.185	1.047	1.062	1.053	1.008	1.003	1.005	1.000	1.002	1.000	1.000	
2004	1.881	1.301	1.130	1.112	1.028	1.015	1.026	1.018	1.016	1.022	1.010	1.001	
2005	1.988	1.305	1.124	1.097	1.023	1.036	1.010	1.003	1.004	1.003	1.020	1.003	
2006	2.121	1.240	1.222	1.056	1.078	1.017	1.005	1.001	1.000	1.001	1.000	1.000	
2007	1.815	1.254	1.162	1.084	1.011	1.004	1.000	1.000	1.000	1.000	1.003	1.001	
2008	1.867	1.209	1.071	0.979	1.036	1.064	1.004	1.006	1.003	1.000	1.001	1.000	
2009	1.693	1.446	1.028	1.091	1.042	1.024	1.036	1.006	1.002	1.000	1.000	1.001	
2010	1.981	1.101	1.019	1.017	1.007	1.001	1.001	1.001	1.005	1.000	1.006		
2011	2.268	1.031	1.082	1.045	1.043	1.018	1.010	1.010	1.008	1.011			
2012	1.531	1.184	1.047	1.027	1.059	1.010	1.017	1.002	1.004				
2013	1.927	1.146	1.115	1.090	1.014	1.003	1.012	1.002					
2014	1.638	1.123	1.077	1.035	1.048	1.111	1.010						
2015	2.064	1.140	1.087	1.015	1.005	1.020							
2016	2.092	1.122	1.107	1.047	1.027								
2017	1.578	1.082	1.080	1.020									
2018	1.836	1.115	1.089										
2019	2.106	1.259											
2020	2.103												
2021													

Averages													
1:	Average												
	1.962	1.210	1.104	1.061	1.041	1.027	1.015	1.009	1.010	1.007	1.006	1.005	1.000
2:	Wtd Avg												
	1.940	1.193	1.100	1.059	1.039	1.026	1.015	1.009	1.010	1.007	1.006	1.005	1.000
3:	5 Yr Wtd Avg												
	1.919	1.145	1.088	1.042	1.028	1.031	1.010	1.004	1.004	1.003	1.002	1.001	1.000
4:	Industry												
	1.934	1.159	1.073	1.040	1.030	1.017	1.011	1.014	1.013	1.010	1.009	1.009	1.134
5:	Prior Selected												
	1.950	1.135	1.090	1.050	1.040	1.023	1.013	1.008	1.007	1.005	1.005	1.005	1.045
Selected Values	1.975	1.145	1.090	1.050	1.040	1.020	1.013	1.008	1.007	1.005	1.005	1.005	1.045
Cumulative	2.995	1.516	1.324	1.215	1.157	1.113	1.091	1.077	1.068	1.061	1.055	1.050	1.045

Note: Industry factors based on Willis Towers Watson benchmark statistics for Alaska.

Table 4

Municipality of Anchorage

Workers Compensation

Selection of Estimated Ultimate Losses

Losses Limited to \$500,000 Including ALAE

A. Incurred Method				
Policy Year	Limited Incurred Losses	Months of Development	Loss Development Factor ¹	Estimated Ultimate Losses ²
1/1/07-08	\$3,734,583	180	1.011	\$3,776,000
1/1/08-09	4,968,481	168	1.000	4,968,481
1/1/09-10	4,389,179	156	1.020	4,477,000
1/1/10-11	4,958,247	144	1.025	5,083,000
1/1/11-12	4,874,634	132	1.030	5,022,000
1/1/12-13	4,432,336	120	1.035	4,589,000
1/1/13-14	6,097,603	108	1.041	6,345,000
1/1/14-15	5,693,957	96	1.049	5,972,000
1/1/15-16	6,207,458	84	1.061	6,589,000
1/1/16-17	5,690,869	72	1.086	6,180,000
1/1/17-18	5,147,345	60	1.118	5,757,000
1/1/18-19	6,895,338	48	1.160	7,997,000
1/1/19-20	7,303,283	36	1.206	8,809,000
1/1/20-21	5,202,525	24	1.261	6,558,000
1/1/21-22	3,653,082	12	1.418	5,180,000
Total	\$79,248,921			\$87,302,481

B. Paid Method				
Policy Year	Limited Paid Losses	Months of Development	Loss Development Factor ¹	Estimated Ultimate Losses ²
1/1/07-08	\$3,629,190	180	1.025	\$3,720,000
1/1/08-09	4,968,481	168	1.000	4,968,481
1/1/09-10	4,234,500	156	1.045	4,425,000
1/1/10-11	4,751,246	144	1.050	4,990,000
1/1/11-12	4,702,052	132	1.055	4,963,000
1/1/12-13	4,245,775	120	1.061	4,504,000
1/1/13-14	6,073,538	108	1.068	6,488,000
1/1/14-15	4,986,604	96	1.077	5,369,000
1/1/15-16	5,602,649	84	1.091	6,111,000
1/1/16-17	5,473,980	72	1.113	6,090,000
1/1/17-18	4,820,552	60	1.157	5,578,000
1/1/18-19	5,964,765	48	1.215	7,247,000
1/1/19-20	5,853,824	36	1.324	7,752,000
1/1/20-21	3,896,146	24	1.516	5,908,000
1/1/21-22	1,873,810	12	2.995	5,611,000
Total	\$71,077,112			\$83,724,481

C. Selected Estimated Ultimate Losses			
Policy Year	Estimated Ultimate Losses (Incurred Method)	Estimated Ultimate Losses (Paid Method)	Estimated Ultimate Losses (Selected) ²
1/1/07-08	\$3,776,000	\$3,720,000	\$3,776,000 ³
1/1/08-09	4,968,481	4,968,481	4,968,481
1/1/09-10	4,477,000	4,425,000	4,477,000 ³
1/1/10-11	5,083,000	4,990,000	5,083,000 ³
1/1/11-12	5,022,000	4,963,000	5,022,000 ³
1/1/12-13	4,589,000	4,504,000	4,568,000 ⁴
1/1/13-14	6,345,000	6,488,000	6,345,000 ³
1/1/14-15	5,972,000	5,369,000	5,972,000 ³
1/1/15-16	6,589,000	6,111,000	6,589,000 ³
1/1/16-17	6,180,000	6,090,000	6,135,000
1/1/17-18	5,757,000	5,578,000	5,668,000
1/1/18-19	7,997,000	7,247,000	7,810,000 ⁴
1/1/19-20	8,809,000	7,752,000	8,809,000 ³
1/1/20-21	6,558,000	5,908,000	6,396,000 ⁴
1/1/21-22	5,180,000	5,611,000	5,180,000 ³
Total	\$87,302,481	\$83,724,481	\$86,798,481

¹ From Tables 2 & 3. A LDF of 1.000 is used where all claims are paid and closed and no further development is expected

² Selected the average of the incurred and paid methods unless otherwise indicated.

³ Selected the incurred method.

⁴ Weighted 75% incurred method and 25% paid method.

Table 5

Municipality of Anchorage

Workers Compensation

Trend Adjustment to 1/1/22-23 Benefit and Cost Levels

Losses Limited to \$500,000 Including ALAE

A. Loss Adjustment				
Policy Year	Selected Estimated Ultimate Losses	Benefit Level Change Factor ¹	Inflation Trend Factor ²	Adjusted Losses ³
1/1/07-08	\$3,776,000	0.985	1.467	\$5,231,802
1/1/08-09	4,968,481	0.977	1.403	6,441,859
1/1/09-10	4,477,000	0.963	1.380	5,841,699
1/1/10-11	5,083,000	0.956	1.357	6,298,156
1/1/11-12	5,022,000	0.937	1.330	6,029,965
1/1/12-13	4,568,000	0.937	1.302	5,351,018
1/1/13-14	6,345,000	0.936	1.278	7,453,566
1/1/14-15	5,972,000	0.935	1.262	6,757,889
1/1/15-16	6,589,000	0.938	1.230	7,537,860
1/1/16-17	6,135,000	0.965	1.202	6,875,448
1/1/17-18	5,668,000	0.962	1.177	6,219,140
1/1/18-19	7,810,000	0.969	1.155	8,679,441
1/1/19-20	8,809,000	0.969	1.110	9,435,030
1/1/20-21	6,396,000	1.000	1.082	6,920,472
1/1/21-22	5,180,000	1.000	1.040	5,387,200
Total	\$86,798,481			\$100,460,545

B. Exposure Adjustment			
Policy Year	Payroll (000's)	Payroll Trend Factor ²	Adjusted Payroll (000's)
1/1/07-08	\$201,414	1.476	\$297,287
1/1/08-09	208,263	1.432	298,233
1/1/09-10	213,690	1.412	301,730
1/1/10-11	216,392	1.392	301,218
1/1/11-12	221,454	1.364	302,063
1/1/12-13	229,302	1.333	305,660
1/1/13-14	227,346	1.310	297,823
1/1/14-15	231,678	1.302	301,645
1/1/15-16	234,954	1.262	296,512
1/1/16-17	250,693	1.230	308,353
1/1/17-18	282,094	1.210	341,334
1/1/18-19	282,094	1.193	336,539
1/1/19-20	272,116	1.134	308,580
1/1/20-21	269,415	1.105	297,704
1/1/21-22	255,551	1.051	268,584
Total	\$3,596,458		\$4,563,264

¹ Based on NCCI factors for Alaska.

² See Appendix D, Exhibit I.

³ Losses that exceed \$500,000 when trended, are limited to \$500,000.

Table 6

Municipality of Anchorage

Workers Compensation

Calculation of Projected Losses

Losses Limited to \$500,000 Including ALAE

A. Historical Pure Loss Rates			
Policy Year	Adjusted Losses	Adjusted Payroll (000's) ¹	Pure Loss Rate Per \$100 Payroll
1/1/07-08	\$5,231,802	\$297,287	\$1.76
1/1/08-09	6,441,859	298,233	2.16
1/1/09-10	5,841,699	301,730	1.94
1/1/10-11	6,298,156	301,218	2.09
1/1/11-12	6,029,965	302,063	2.00
1/1/12-13	5,351,018	305,660	1.75
1/1/13-14	7,453,566	297,823	2.50
1/1/14-15	6,757,889	301,645	2.24
1/1/15-16	7,537,860	296,512	2.54
1/1/16-17	6,875,448	308,353	2.23
1/1/17-18	6,219,140	341,334	1.82
1/1/18-19	8,679,441	336,539	2.58
1/1/19-20	9,435,030	308,580	3.06
1/1/20-21	6,920,472	297,704	2.32
1/1/21-22	5,387,200	268,584	2.01
		Average =	\$2.20
		Weighted Average =	2.20
		5-Year Wtd. Avg. =	2.36
		3-Year Wtd. Avg. =	2.49
		7-Year Wtd. Avg. (Excl. '21-22) =	2.39
		Selected 2022 Loss & ALAE Rate =	2.49
B. Loss Projection at \$500,000			
Policy Year	Projected Pure Loss Rate	Projected Payroll (000's)	Projected Losses
1/1/19-20	\$2.63 ²	\$272,116	\$7,157,000
1/1/20-21	2.54 ²	269,415	6,843,000
1/1/21-22	2.52 ²	255,551	6,440,000
1/1/22-23	2.49	267,359	6,657,000
C. Loss Projection at \$3,000,000			
Policy Year	Projected Losses at \$500,000	Increased Limits Factor ³	Projected Losses at \$3,000,000
1/1/19-20	\$7,157,000	1.240	\$8,875,000 ⁴
1/1/20-21	6,843,000	1.240	8,485,000 ⁴
1/1/21-22	6,440,000	1.240	7,986,000 ⁴
1/1/22-23	6,657,000	1.240	8,255,000

¹ From Table 5.

² The 1/1/19-20 through 1/1/21-22 pure loss rates are obtained by taking the 1/1/22-23 pure loss rate adjusted for trend.

³ Based on simulation of losses.

⁴ See Table 15 for final selection.

Municipality of Anchorage
Workers Compensation
Reported Claim Counts
As of December 31, 2021

Table 7

Accident Period	Evaluation Age in Months												
	12	24	36	48	60	72	84	96	108	120	132	144	156
1997	454	487	490	490	490	490	490	490	490	490	490	490	490
1998	396	461	464	465	465	465	465	465	466	466	466	466	467
1999	620	657	658	659	659	659	659	660	660	660	660	660	660
2000	591	634	634	634	635	635	635	635	635	635	635	635	635
2001	603	630	632	632	632	632	633	633	633	633	633	633	633
2002	614	651	652	652	652	652	652	652	652	652	652	652	652
2003	559	658	658	658	659	659	659	659	659	659	659	659	659
2004	657	676	676	677	677	678	678	679	679	679	679	679	679
2005	554	574	574	574	574	574	574	574	574	574	574	574	574
2006	602	618	618	618	618	618	618	618	618	618	618	618	618
2007	630	701	701	701	701	702	702	702	703	703	703	704	704
2008	743	808	808	808	808	808	808	808	808	808	808	808	808
2009	547	567	567	567	567	567	567	567	567	567	567	567	567
2010	510	532	533	533	533	533	533	533	533	535	535	535	
2011	503	523	524	524	525	525	525	525	525	525	525		
2012	430	457	457	457	457	457	457	457	457	457			
2013	413	415	415	415	415	415	415	415	415				
2014	458	460	461	461	462	462	462	462					
2015	518	521	521	521	521	519	519						
2016	532	537	539	539	537	537							
2017	539	552	553	552	552								
2018	549	555	555	555									
2019	541	545	544										
2020	457	487											
2021	480												

Accident Period	Age Interval in Months												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-Ult
1997	1.073	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.164	1.007	1.002	1.000	1.000	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.002
1999	1.060	1.002	1.002	1.000	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.073	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	1.045	1.003	1.000	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.060	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	1.177	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004	1.029	1.000	1.001	1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000
2005	1.036	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006	1.027	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007	1.113	1.000	1.000	1.000	1.001	1.000	1.000	1.001	1.000	1.000	1.001	1.000	1.000
2008	1.087	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009	1.037	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2010	1.043	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.004	1.000	1.000		
2011	1.040	1.002	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000			
2012	1.063	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2013	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2014	1.004	1.002	1.000	1.002	1.000	1.000	1.000						
2015	1.006	1.000	1.000	1.000	0.996	1.000							
2016	1.009	1.004	1.000	0.996	1.000								
2017	1.024	1.002	0.998	1.000									
2018	1.011	1.000	1.000										
2019	1.007	0.998											
2020	1.066												
2021													

Averages													
1:	Average												
	1.052	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2:	Wtd Avg												
	1.053	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3:	5 Yr Wtd Avg												
	1.022	1.001	1.000	1.000	0.999	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000
4:	Prior Selected												
	1.020	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected Values	1.025	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulative	1.026	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Table 8

Municipality of Anchorage

Workers Compensation
Claim Count Analysis

A. Estimated Ultimate Claim Counts				
Policy Year	Reported Claims ¹	Months of Development	Claim Count Development Factor ²	Estimated Ultimate Claims
1/1/07-08	704	180	1.000	704
1/1/08-09	808	168	1.000	808
1/1/09-10	567	156	1.000	567
1/1/10-11	535	144	1.000	535
1/1/11-12	525	132	1.000	525
1/1/12-13	457	120	1.000	457
1/1/13-14	415	108	1.000	415
1/1/14-15	462	96	1.000	462
1/1/15-16	519	84	1.000	519
1/1/16-17	537	72	1.000	537
1/1/17-18	552	60	1.000	552
1/1/18-19	555	48	1.000	555
1/1/19-20	544	36	1.000	544
1/1/20-21	487	24	1.001	487
1/1/21-22	480	12	1.026	492
Total	8,147			8,159

B. Frequency Analysis			
Policy Year	Estimated Ultimate Claims	Adjusted Payroll (000's)	Frequency Per \$1M Payroll
1/1/07-08	704	\$297,287	2.37
1/1/08-09	808	298,233	2.71
1/1/09-10	567	301,730	1.88
1/1/10-11	535	301,218	1.78
1/1/11-12	525	302,063	1.74
1/1/12-13	457	305,660	1.50
1/1/13-14	415	297,823	1.39
1/1/14-15	462	301,645	1.53
1/1/15-16	519	296,512	1.75
1/1/16-17	537	308,353	1.74
1/1/17-18	552	341,334	1.62
1/1/18-19	555	336,539	1.65
1/1/19-20	544	308,580	1.76
1/1/20-21	487	297,704	1.64
1/1/21-22	492	268,584	1.83
		Average =	1.79
		Weighted Average =	1.79
		5-Year Wtd. Avg. =	1.69
		Selected =	1.80

C. Claim Count Projection			
Policy Year	Projected Frequency	Projected Payroll (000's)	Projected Claims
1/1/22-23	1.80	\$267,359	481

D. Projected Claims with Cost			
Policy Year	Projected Claims	Percentage of Claims with Cost ³	Projected Claims with Cost
1/1/22-23	481	50.9%	245

¹ Reported claim counts are collapsed to one claim per occurrence.

² From Table 7.

³ Percentage of claims with cost is based on historical ratio of claims with cost to total claims.

Table 9

Municipality of Anchorage

Workers Compensation

Average Loss & ALAE Severities

Losses Limited to \$500,000 Including ALAE

A. Loss and Claim Data					
Policy Year	Limited Incurred Losses	Estimated Ultimate Losses	Trended Ultimate Losses	Reported Claim Count	Estimated Ultimate Claim
1/1/07-08	\$3,734,583	\$3,776,000	\$5,231,802	704	704
1/1/08-09	4,968,481	4,968,481	6,441,859	808	808
1/1/09-10	4,389,179	4,477,000	5,841,699	567	567
1/1/10-11	4,958,247	5,083,000	6,298,156	535	535
1/1/11-12	4,874,634	5,022,000	6,029,965	525	525
1/1/12-13	4,432,336	4,568,000	5,351,018	457	457
1/1/13-14	6,097,603	6,345,000	7,453,566	415	415
1/1/14-15	5,693,957	5,972,000	6,757,889	462	462
1/1/15-16	6,207,458	6,589,000	7,537,860	519	519
1/1/16-17	5,690,869	6,135,000	6,875,448	537	537
1/1/17-18	5,147,345	5,668,000	6,219,140	552	552
1/1/18-19	6,895,338	7,810,000	8,679,441	555	555
1/1/19-20	7,303,283	7,408,000 ¹	7,928,473	544	544
1/1/20-21	5,202,525	5,460,000 ¹	5,907,720	487	487
1/1/21-22	3,653,082	5,315,000 ¹	5,527,600	480	492
Projected 1/1/22-23		\$6,657,000	\$6,657,000		481

B. Average Loss & ALAE Severities			
Policy Year	Reported Severity	Estimated Ultimate Severity	Trended Ultimate Severity
1/1/07-08	\$5,305	\$5,364	\$7,432
1/1/08-09	6,149	6,149	7,973
1/1/09-10	7,741	7,896	10,303
1/1/10-11	9,268	9,501	11,772
1/1/11-12	9,285	9,566	11,486
1/1/12-13	9,699	9,996	11,709
1/1/13-14	14,693	15,289	17,960
1/1/14-15	12,325	12,926	14,627
1/1/15-16	11,960	12,696	14,524
1/1/16-17	10,598	11,425	12,803
1/1/17-18	9,325	10,268	11,267
1/1/18-19	12,424	14,072	15,639
1/1/19-20	13,425	13,618	14,574
1/1/20-21	10,683	11,211	12,131
1/1/21-22	7,611	10,803	11,235
Projected 1/1/22-23		\$13,840	\$13,840

¹ From Table 15 adjusted for \$500,000 limitation.

Table 10**Municipality of Anchorage***Workers Compensation**Limitation of Incurred Losses & ALAE to Historical Retentions**Evaluated as of 12/31/21*

Policy Year	Incurred Losses as of 12/31/21	Historical Retention	Number Excess of Historical Retention	Total Amount Excess of Historical Retention	Incurred Losses Limited to Historical Retention
1/1/94-95	\$2,636,663	\$500,000	1	\$213,414	\$2,423,250
1/1/95-96	2,550,622	750,000	1	52,571	2,498,051
1/1/96-97	3,112,783	500,000	1	26,560	3,086,223
1/1/97-98	3,830,085	500,000	1	533,079	3,297,006
1/1/98-99	5,424,490	500,000	1	836,645	4,587,845
1/1/99-00	4,221,597	500,000	0	0	4,221,597
1/1/00-01	4,411,386	500,000	1	21,374	4,390,012
1/1/01-02	6,133,095	500,000	1	286,833	5,846,262
1/1/02-03	5,401,224	500,000	0	0	5,401,224
1/1/03-04	4,445,360	500,000	0	0	4,445,360
1/1/04-05	5,634,700	500,000	0	0	5,634,700
1/1/05-06	4,665,441	750,000	0	0	4,665,441
1/1/06-07	6,045,776	1,000,000	1	1,069,181	4,976,595
1/1/07-08	3,740,177	1,000,000	0	0	3,740,177
1/1/08-09	5,069,413	1,000,000	0	0	5,069,413
1/1/09-10	4,389,179	1,000,000	0	0	4,389,179
1/1/10-11	7,474,922	1,000,000	1	1,687,319	5,787,603
1/1/11-12	5,582,478	1,000,000 ¹	0	0	5,582,478
1/1/12-13	5,300,393	1,500,000 ²	0	0	5,300,393
1/1/13-14	6,126,082	2,000,000	0	0	6,126,082
1/1/14-15	8,552,583	2,000,000	1	695,715	7,856,868
1/1/15-16	6,207,458	2,000,000	0	0	6,207,458
1/1/16-17	7,811,707	3,000,000	0	0	7,811,707
1/1/17-18	12,748,997	3,000,000	1	1,626,870	11,122,127
1/1/18-19	7,028,069	3,000,000	0	0	7,028,069
1/1/19-20	7,642,833	3,000,000	0	0	7,642,833
1/1/20-21	5,202,525	3,000,000	0	0	5,202,525
1/1/21-22	3,653,082	3,000,000	0	0	3,653,082
Total	\$155,043,121		11	\$7,049,561	\$147,993,560

¹ The retention for Firefighters code 7704 is \$2,000,000 for 1/1/11-12.² The retention for Firefighters code 7710 is \$2,000,000 for 1/1/12-13.

Table 11

Municipality of Anchorage

Workers Compensation

Development of Incurred Losses to Ultimate

Losses & ALAE Limited to Historical Retentions

Policy Year	Limited Incurred Losses	Months of Development	Loss Development Factor ¹	Estimated Ultimate Losses ²
1/1/94-95	\$2,423,250	336	1.000	\$2,423,250
1/1/95-96	2,498,051	324	1.000	2,498,051
1/1/96-97	3,086,223	312	1.000	3,086,223
1/1/97-98	3,297,006	300	1.000	3,297,006
1/1/98-99	4,587,845	288	1.000	4,587,845
1/1/99-00	4,221,597	276	1.000	4,221,597
1/1/00-01	4,390,012	264	1.000	4,390,012
1/1/01-02	5,846,262	252	1.000	5,846,262
1/1/02-03	5,401,224	240	1.000	5,401,224
1/1/03-04	4,445,360	228	1.000	4,445,360
1/1/04-05	5,634,700	216	1.000	5,634,700
1/1/05-06	4,665,441	204	1.000	4,665,441
1/1/06-07	4,976,595	192	1.000	4,976,595
1/1/07-08	3,740,177	180	1.000	3,740,177
1/1/08-09	5,069,413	168	1.000	5,069,413
1/1/09-10	4,389,179	156	1.020	4,477,000
1/1/10-11	5,787,603	144	1.025	5,933,000
1/1/11-12	5,582,478	132	1.030	5,751,000
1/1/12-13	5,300,393	120	1.035	5,488,000
1/1/13-14	6,126,082	108	1.041	6,375,000
1/1/14-15	7,856,868	96	1.049	8,241,000
1/1/15-16	6,207,458	84	1.061	6,589,000
1/1/16-17	7,811,707	72	1.086	8,483,000
1/1/17-18	11,122,127	60	1.118	12,084,000 ²
1/1/18-19	7,028,069	48	1.160	8,151,000
1/1/19-20	7,642,833	36	1.206	9,219,000
1/1/20-21	5,202,525	24	1.261	6,558,000
1/1/21-22	3,653,082	12	1.418	5,180,000
Total	\$139,137,953			\$145,074,156

¹ From Table 2. A LDF of 1.000 is used where all claims are paid and closed and no further development is expected.

² The 6/5/17 claim is limited to \$3,000,000 after development.

Table 12

Municipality of Anchorage

Workers Compensation

Limitation of Paid Losses & ALAE to Historical Retentions

Evaluated as of 12/31/21

Policy Year	Paid Losses as of 12/31/21	Historical Retention	Number Excess of Historical Retention	Total Amount Excess of Historical Retention	Paid Losses Limited to Historical Retention
1/1/94-95	\$2,198,747	\$500,000	0	\$0	\$2,198,747
1/1/95-96	2,306,497	750,000	0	0	2,306,497
1/1/96-97	3,112,783	500,000	1	26,560	3,086,223
1/1/97-98	3,462,242	500,000	1	165,237	3,297,006
1/1/98-99	4,970,568	500,000	1	417,196	4,553,372
1/1/99-00	4,221,597	500,000	0	0	4,221,597
1/1/00-01	4,268,770	500,000	1	21,374	4,247,396
1/1/01-02	5,829,887	500,000	0	0	5,829,887
1/1/02-03	5,401,224	500,000	0	0	5,401,224
1/1/03-04	4,445,360	500,000	0	0	4,445,360
1/1/04-05	5,251,415	500,000	0	0	5,251,415
1/1/05-06	4,450,385	750,000	0	0	4,450,385
1/1/06-07	5,207,688	1,000,000	1	250,624	4,957,065
1/1/07-08	3,634,784	1,000,000	0	0	3,634,784
1/1/08-09	5,069,413	1,000,000	0	0	5,069,413
1/1/09-10	4,234,500	1,000,000	0	0	4,234,500
1/1/10-11	5,621,949	1,000,000	1	41,347	5,580,601
1/1/11-12	4,702,052	1,000,000 ¹	0	0	4,702,052
1/1/12-13	5,113,832	1,500,000 ²	0	0	5,113,832
1/1/13-14	6,080,348	2,000,000	0	0	6,080,348
1/1/14-15	5,022,634	2,000,000	0	0	5,022,634
1/1/15-16	5,602,649	2,000,000	0	0	5,602,649
1/1/16-17	5,586,018	3,000,000	0	0	5,586,018
1/1/17-18	8,334,533	3,000,000	0	0	8,334,533
1/1/18-19	6,097,497	3,000,000	0	0	6,097,497
1/1/19-20	5,853,824	3,000,000	0	0	5,853,824
1/1/20-21	3,896,146	3,000,000	0	0	3,896,146
1/1/21-22	1,873,810	3,000,000	0	0	1,873,810
Total	\$126,081,197		6	\$922,338	\$125,158,859

¹ The retention for Firefighters code 7704 is \$2,000,000 for 1/1/11-12.

² The retention for Firefighters code 7710 is \$2,000,000 for 1/1/12-13.

Table 13

Municipality of Anchorage

Workers Compensation

Development of Paid Losses to Ultimate

Losses & ALAE Limited to Historical Retentions

Policy Year	Limited Paid Losses	Months of Development	Loss Development Factor ¹	Estimated Ultimate Losses ²
1/1/94-95	\$2,198,747	336	1.000	\$2,198,747
1/1/95-96	2,306,497	324	1.000	2,306,497
1/1/96-97	3,086,223	312	1.000	3,086,223
1/1/97-98	3,297,006	300	1.000	3,297,006
1/1/98-99	4,553,372	288	1.000	4,553,372
1/1/99-00	4,221,597	276	1.000	4,221,597
1/1/00-01	4,247,396	264	1.000	4,247,396
1/1/01-02	5,829,887	252	1.000	5,829,887
1/1/02-03	5,401,224	240	1.000	5,401,224
1/1/03-04	4,445,360	228	1.000	4,445,360
1/1/04-05	5,251,415	216	1.000	5,251,415
1/1/05-06	4,450,385	204	1.000	4,450,385
1/1/06-07	4,957,065	192	1.000	4,957,065
1/1/07-08	3,634,784	180	1.000	3,634,784
1/1/08-09	5,069,413	168	1.000	5,069,413
1/1/09-10	4,234,500	156	1.045	4,425,000
1/1/10-11	5,580,601	144	1.050	5,861,000
1/1/11-12	4,702,052	132	1.055	4,963,000
1/1/12-13	5,113,832	120	1.061	5,425,000
1/1/13-14	6,080,348	108	1.068	6,495,000
1/1/14-15	5,022,634	96	1.077	5,408,000
1/1/15-16	5,602,649	84	1.091	6,111,000
1/1/16-17	5,586,018	72	1.113	6,215,000
1/1/17-18	8,334,533	60	1.157	9,643,000
1/1/18-19	6,097,497	48	1.215	7,408,000
1/1/19-20	5,853,824	36	1.324	7,752,000
1/1/20-21	3,896,146	24	1.516	5,908,000
1/1/21-22	1,873,810	12	2.995	5,611,000
Total	\$125,158,859			\$132,656,371

¹ From Table 3. A LDF of 1.000 is used where all claims are paid and closed and no further development is expected.

² Losses in excess of the retention are excluded from development.

Table 14

Municipality of Anchorage

Workers Compensation

Selection of Estimated Ultimate Losses

Losses & ALAE Limited to Historical Retentions

Policy Year	Estimated Ultimate Losses (Incurred Method)	Estimated Ultimate Losses (Paid Method)	Estimated Ultimate Losses (Selected) ¹
1/1/94-95	\$2,423,250	\$2,198,747	\$2,423,250
1/1/95-96	2,498,051	2,306,497	2,517,000 ²
1/1/96-97	3,086,223	3,086,223	3,086,223
1/1/97-98	3,297,006	3,297,006	3,297,006
1/1/98-99	4,587,845	4,553,372	4,591,000 ²
1/1/99-00	4,221,597	4,221,597	4,221,597
1/1/00-01	4,390,012	4,247,396	4,404,000 ²
1/1/01-02	5,846,262	5,829,887	5,846,262
1/1/02-03	5,401,224	5,401,224	5,401,224
1/1/03-04	4,445,360	4,445,360	4,445,360
1/1/04-05	5,634,700	5,251,415	5,673,000 ²
1/1/05-06	4,665,441	4,450,385	4,665,441
1/1/06-07	4,976,595	4,957,065	4,976,595
1/1/07-08	3,740,177	3,634,784	3,740,177
1/1/08-09	5,069,413	5,069,413	5,069,413
1/1/09-10	4,477,000	4,425,000	4,467,000 ²
1/1/10-11	5,933,000	5,861,000	5,897,000 ³
1/1/11-12	5,751,000	4,963,000	5,751,000
1/1/12-13	5,488,000	5,425,000	5,457,000 ³
1/1/13-14	6,375,000	6,495,000	6,375,000
1/1/14-15	8,241,000	5,408,000	8,241,000
1/1/15-16	6,589,000	6,111,000	6,589,000
1/1/16-17	8,483,000	6,215,000	8,483,000
1/1/17-18	12,084,000	9,643,000	12,084,000
1/1/18-19	8,151,000	7,408,000	8,151,000
1/1/19-20	9,219,000	7,752,000	9,219,000 ⁴
1/1/20-21	6,558,000	5,908,000	6,558,000 ⁴
1/1/21-22	5,180,000	5,611,000	5,180,000 ⁴
Total	\$156,812,156	\$144,175,371	\$156,809,548

¹ Selected the incurred method unless otherwise indicated.

² Selected the limited reported losses plus judgmental IBNR based on case outstanding reserves.

³ Selected the average of the incurred and paid methods.

⁴ See Table 15 for final selection.

Table 15

Municipality of Anchorage

Workers Compensation

Selection of Ultimate Losses for 1/1/19-20 through 1/1/21-22

Losses & ALAE Limited to Historical Retentions

A. Incurred Bornhuetter-Ferguson Method					
Policy Year	Projected Expected Losses ¹	Expected Percent Unreported ²	Expected Losses Unreported	Limited Incurred Losses As of 12/31/21	Indicated Ultimate Losses
1/1/19-20	\$8,875,000	17.0%	\$1,508,750	\$7,642,833	\$9,152,000
1/1/20-21	8,485,000	21.0%	1,781,850	5,202,525	6,984,000
1/1/21-22	7,986,000	29.0%	2,315,940	3,653,082	5,969,000

B. Paid Bornhuetter-Ferguson Method					
Policy Year	Projected Expected Losses ¹	Expected Percent Unpaid ²	Expected Losses Unpaid	Limited Paid Losses As of 12/31/21	Indicated Ultimate Losses
1/1/19-20	\$8,875,000	24.0%	\$2,130,000	\$5,853,824	\$7,984,000
1/1/20-21	8,485,000	34.0%	2,884,900	3,896,146	6,781,000
1/1/21-22	7,986,000	67.0%	5,350,620	1,873,810	7,224,000

C. Selected Losses for 1/1/19-20 through 1/1/21-22					
Policy Year	Loss Development Method ⁴	Incurred Bornhuetter-Ferguson Method	Paid Bornhuetter-Ferguson Method	Projected Loss Method	Selected Ultimate Losses
1/1/19-20	\$9,219,000	\$9,152,000	\$7,984,000	\$8,875,000	\$9,186,000 ⁵
1/1/20-21	6,558,000	6,984,000	6,781,000	8,485,000	6,771,000 ⁵
1/1/21-22	5,180,000	5,969,000	7,224,000	7,986,000	6,590,000 ⁶

¹ From Table 6.

² Based on loss development factors from Tables 11 and 13. (1 - 1/LDF)

³ An adjustment is made for the large claim already reported.

⁴ From Table 14.

⁵ Selected the average of the loss development method and incurred B-F method.

⁶ Selected the average of all four methods.

Appendix A – General Liability

Appendix A, Exhibit I

Municipality of Anchorage

General Liability

Limitation of Losses to \$500,000

Evaluated as of 12/31/21

A. Limitation of Incurred Losses				
Policy Year	Incurred Losses as of 12/31/21	Number Excess of \$500,000	Total Amount Excess of \$500,000	Incurred Losses Limited to \$500,000
1/1/07-08	\$534,389	0	\$0	\$534,389
1/1/08-09	1,629,146	1	315,011	1,314,135
1/1/09-10	2,489,008	1	758,433	1,730,575
1/1/10-11	210,429	0	0	210,429
1/1/11-12	77,272	0	0	77,272
1/1/12-13	1,450,684	1	360,465	1,090,219
1/1/13-14	1,790,632	1	195,592	1,595,040
1/1/14-15	1,719,468	1	236,430	1,483,038
1/1/15-16	441,179	0	0	441,179
1/1/16-17	940,208	1	35,388	904,821
1/1/17-18	362,714	0	0	362,714
1/1/18-19	544,530	0	0	544,530
1/1/19-20	539,949	0	0	539,949
1/1/20-21	874,358	0	0	874,358
1/1/21-22	264,514	0	0	264,514
Total	\$13,868,481	6	\$1,901,319	\$11,967,162
B. Limitation of Paid Losses				
Policy Year	Paid Losses as of 12/31/21	Number Excess of \$500,000	Total Amount Excess of \$500,000	Paid Losses Limited to 12/31/21
1/1/07-08	\$534,389	0	\$0	\$534,389
1/1/08-09	1,628,596	1	315,011	1,313,585
1/1/09-10	2,489,008	1	758,433	1,730,575
1/1/10-11	210,429	0	0	210,429
1/1/11-12	77,272	0	0	77,272
1/1/12-13	1,450,684	1	360,465	1,090,219
1/1/13-14	1,790,632	1	195,592	1,595,040
1/1/14-15	1,719,468	1	236,430	1,483,038
1/1/15-16	441,179	0	0	441,179
1/1/16-17	861,446	1	35,388	826,058
1/1/17-18	352,714	0	0	352,714
1/1/18-19	518,280	0	0	518,280
1/1/19-20	411,351	0	0	411,351
1/1/20-21	254,523	0	0	254,523
1/1/21-22	241,814	0	0	241,814
Total	\$12,981,786	6	\$1,901,319	\$11,080,466

Incurred Loss Development Factor Calculation - Losses ALAE Limited to \$500,000 Per Occurrence (\$000's)
As of December 31, 2021

Accident Period	Evaluation Age in Months												
	12	24	36	48	60	72	84	96	108	120	132	144	156
1997	311	355	407	658	796	803	877	872	854	854	854	854	854
1998	265	227	393	454	453	431	431	456	447	444	441	418	417
1999	143	158	152	236	215	217	217	215	225	222	222	222	222
2000	161	226	358	544	432	712	391	390	390	390	390	390	390
2001	258	162	610	635	591	601	608	649	684	684	624	624	624
2002	345	387	1,083	1,230	1,174	1,153	1,153	1,153	1,153	1,153	1,153	1,153	1,153
2003	573	802	524	369	791	474	474	474	474	474	474	474	474
2004	371	616	584	631	505	543	421	421	421	421	421	421	421
2005	527	609	632	644	643	702	1,352	1,118	767	722	722	722	722
2006	333	564	553	598	577	1,113	1,224	1,258	1,258	1,258	1,258	1,258	1,258
2007	653	550	578	629	636	554	554	554	554	554	534	534	534
2008	320	411	474	1,202	1,371	1,353	1,334	1,314	1,314	1,314	1,314	1,314	1,314
2009	254	301	1,861	1,423	1,382	1,482	1,882	1,566	1,566	1,566	1,666	2,066	1,731
2010	72	102	260	252	215	225	255	225	210	210	210	210	210
2011	24	93	186	198	77	77	77	77	77	77	77	77	77
2012	456	674	1,261	1,246	1,243	1,365	1,090	1,090	1,090	1,090	1,090	1,090	1,090
2013	684	905	1,080	1,183	1,602	1,594	1,594	1,595	1,595	1,595	1,595	1,595	1,595
2014	832	888	1,462	1,470	1,464	1,483	1,483	1,483	1,483	1,483	1,483	1,483	1,483
2015	470	425	438	441	439	441	441	441	441	441	441	441	441
2016	376	328	850	1,030	1,030	905							
2017	275	355	363	363	363								
2018	239	243	482	545									
2019	150	209	540										
2020	208	874											
2021	265												

Accident Period	Age Interval in Months												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-Ult
1997	1.141	1.146	1.617	1.210	1.009	1.092	0.994	0.979	1.000	1.000	1.000	1.000	1.000
1998	0.857	1.731	1.155	0.998	0.951	1.000	1.058	0.980	0.993	0.993	0.948	0.998	0.998
1999	1.105	0.962	1.553	0.911	1.009	1.000	0.991	1.047	0.987	1.000	1.000	1.000	1.000
2000	1.404	1.584	1.520	0.794	1.648	0.549	0.997	1.000	1.000	1.000	1.000	1.000	1.000
2001	0.628	3.765	1.041	0.931	1.017	1.012	1.067	1.054	1.000	0.912	1.000	1.000	1.000
2002	1.122	2.798	1.136	0.954	0.982	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	1.400	0.653	0.704	2.144	0.599	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004	1.660	0.948	1.080	0.800	1.075	0.775	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005	1.156	1.038	1.019	0.998	1.092	1.926	0.827	0.686	0.941	1.000	1.000	1.000	1.000
2006	1.694	0.980	1.081	0.965	1.929	1.100	1.028	1.000	1.000	1.000	1.000	1.000	1.000
2007	0.842	1.051	1.088	1.011	0.871	1.000	1.000	1.000	1.000	0.964	1.000	1.000	1.000
2008	1.284	1.153	2.536	1.141	0.987	0.986	0.985	1.000	1.000	1.000	1.000	1.000	1.000
2009	1.185	6.183	0.765	0.971	1.072	1.270	0.832	1.000	1.000	1.064	1.240	0.838	
2010	1.417	2.549	0.969	0.853	1.047	1.133	0.882	0.933	1.000	1.000	1.000	1.000	
2011	3.875	2.000	1.065	0.389	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2012	1.478	1.871	0.988	0.998	1.098	0.799	1.000	1.000	1.000	1.000	1.000	1.000	
2013	1.323	1.193	1.095	1.354	0.995	1.000	1.001	1.000					
2014	1.067	1.646	1.005	0.996	1.013	1.000	1.000						
2015	0.904	1.031	1.007	0.995	1.005	1.000							
2016	0.872	2.591	1.212	1.000	0.879								
2017	1.291	1.023	1.000	1.000									
2018	1.017	1.984	1.131										
2019	1.393	2.584											
2020	4.202												
2021													

Averages													
1:	Average												
	1.752	1.846	1.171	1.020	1.064	1.034	0.981	0.981	0.995	0.996	1.013	0.987	1.000
2:	Wtd Avg												
	1.303	1.578	1.095	1.036	1.038	1.035	0.967	0.974	0.996	1.002	1.037	0.968	1.000
3:	5 Yr Wtd Avg												
	1.610	1.713	1.071	1.092	1.002	0.945	0.994	0.997	1.000	1.021	1.080	0.943	1.000
4:	Industry												
	1.800	1.345	1.185	1.105	1.062	1.040	1.030	1.020	1.016	1.015	1.014	1.013	1.041
5:	Prior Selected												
	1.250	1.600	1.070	1.040	1.040	1.030	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected Values	1.300	1.700	1.075	1.038	1.038	1.025	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulative	2.624	2.018	1.187	1.104	1.064	1.025	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Note: Industry factors based on Willis Towers Watson benchmark statistics for Alaska.

Municipality of Anchorage
 General Liability
 Paid Loss Development Factor Calculation - Losses ALAE Limited to \$500,000 Per Occurrence (\$000's)
 As of December 31, 2021

Accident Period	Evaluation Age in Months												
	12	24	36	48	60	72	84	96	108	120	132	144	156
1997	162	220	359	501	780	780	816	850	854	854	854	854	854
1998	105	134	253	396	426	428	429	429	427	424	421	418	417
1999	86	124	139	181	215	217	217	215	215	222	222	222	222
2000	129	148	159	208	221	250	391	390	390	390	390	390	390
2001	90	129	141	561	585	585	585	587	600	624	624	624	624
2002	245	322	893	992	1,149	1,153	1,153	1,153	1,153	1,153	1,153	1,153	1,153
2003	170	261	264	276	283	474	474	474	474	474	474	474	474
2004	292	327	355	399	423	420	421	421	421	421	421	421	421
2005	245	481	573	584	587	623	624	717	718	722	722	722	722
2006	215	302	399	401	400	400	1,161	1,258	1,258	1,258	1,258	1,258	1,258
2007	318	371	445	485	530	534	534	534	534	534	534	534	534
2008	142	295	298	318	1,314	1,314	1,314	1,314	1,314	1,314	1,314	1,314	1,314
2009	201	270	370	1,382	1,382	1,382	1,882	1,566	1,566	1,566	1,566	2,066	1,731
2010	21	36	46	210	210	210	210	210	210	210	210	210	210
2011	11	48	49	57	77	77	77	77	77	77	77	77	77
2012	107	197	871	996	1,090	1,090	1,090	1,090	1,090	1,090	1,090	1,090	1,090
2013	306	843	861	1,008	1,576	1,594	1,594	1,595	1,595	1,595	1,595	1,595	1,595
2014	406	595	1,458	1,467	1,461	1,483	1,483	1,483	1,483	1,483	1,483	1,483	1,483
2015	278	425	433	436	439	441	441	441	441	441	441	441	441
2016	277	325	826	826	826	826	826	826	826	826	826	826	826
2017	257	352	353	353	353	353	353	353	353	353	353	353	353
2018	102	223	245	518	518	518	518	518	518	518	518	518	518
2019	126	209	411	411	411	411	411	411	411	411	411	411	411
2020	199	255	255	255	255	255	255	255	255	255	255	255	255
2021	242	242	242	242	242	242	242	242	242	242	242	242	242

Accident Period	Age Interval in Months												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-Ult
1997	1.358	1.632	1.396	1.557	1.000	1.046	1.042	1.005	1.000	1.000	1.000	1.000	1.000
1998	1.276	1.888	1.565	1.076	1.005	1.002	1.000	0.995	0.993	0.993	0.993	0.993	0.998
1999	1.442	1.121	1.302	1.188	1.009	1.000	0.991	1.000	1.033	1.000	1.000	1.000	1.000
2000	1.147	1.074	1.308	1.063	1.131	1.564	0.997	1.000	1.000	1.000	1.000	1.000	1.000
2001	1.433	1.093	3.979	1.043	1.000	1.000	1.003	1.022	1.040	1.000	1.000	1.000	1.000
2002	1.314	2.773	1.111	1.158	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	1.535	1.011	1.045	1.025	1.675	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004	1.120	1.086	1.124	1.060	0.993	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005	1.963	1.191	1.019	1.005	1.061	1.002	1.149	1.001	1.006	1.000	1.000	1.000	1.000
2006	1.405	1.321	1.005	0.998	1.000	2.903	1.084	1.000	1.000	1.000	1.000	1.000	1.000
2007	1.167	1.199	1.090	1.093	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2008	2.077	1.010	1.067	4.132	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009	1.343	1.370	3.735	1.000	1.000	1.362	0.832	1.000	1.000	1.000	1.319	0.838	0.838
2010	1.714	1.278	4.565	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2011	4.364	1.021	1.163	1.351	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2012	1.841	4.421	1.144	1.094	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2013	2.755	1.021	1.171	1.563	1.011	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000
2014	1.466	2.450	1.006	0.996	1.015	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2015	1.529	1.019	1.007	1.007	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2016	1.173	2.542	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2017	1.370	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2018	2.186	1.099	2.114	2.114	2.114	2.114	2.114	2.114	2.114	2.114	2.114	2.114	2.114
2019	1.659	1.967	1.967	1.967	1.967	1.967	1.967	1.967	1.967	1.967	1.967	1.967	1.967
2020	1.281	1.281	1.281	1.281	1.281	1.281	1.281	1.281	1.281	1.281	1.281	1.281	1.281
2021	1.281	1.281	1.281	1.281	1.281	1.281	1.281	1.281	1.281	1.281	1.281	1.281	1.281

Averages													
1:	Average												
	1.663	1.547	1.587	1.258	1.046	1.152	1.005	1.001	1.004	1.000	1.022	0.987	1.000
2:	Wtd Avg												
	1.535	1.537	1.282	1.190	1.022	1.107	0.994	1.001	1.003	1.000	1.049	0.968	1.000
3:	5 Yr Wtd Avg												
	1.419	1.478	1.086	1.138	1.008	1.000	1.000	1.000	1.000	1.000	1.102	0.943	1.000
4:	Industry												
	2.550	1.680	1.370	1.210	1.116	1.070	1.045	1.030	1.025	1.022	1.019	1.017	1.070
5:	Prior Selected												
	1.680	1.700	1.150	1.140	1.025	1.020	1.003	1.001	1.001	1.000	1.000	1.000	1.000
Selected Values	1.665	1.725	1.155	1.135	1.020	1.015	1.003	1.001	1.001	1.000	1.000	1.000	1.000
Cumulative	3.918	2.353	1.364	1.181	1.040	1.020	1.005	1.002	1.001	1.000	1.000	1.000	1.000

Note: Industry factors based on Willis Towers Watson benchmark statistics for Alaska.

Appendix A, Exhibit IV

Municipality of Anchorage

General Liability

Selection of Estimated Ultimate Losses

Losses Limited to \$500,000 Including ALAE

A. Incurred Method				
Policy Year	Limited Incurred Losses	Months of Development	Loss Development Factor ¹	Estimated Ultimate Losses ²
1/1/07-08	\$534,389	180	1.000	\$534,389
1/1/08-09	1,314,135	168	1.000	1,314,135
1/1/09-10	1,730,575	156	1.000	1,730,575
1/1/10-11	210,429	144	1.000	210,429
1/1/11-12	77,272	132	1.000	77,272
1/1/12-13	1,090,219	120	1.000	1,090,219
1/1/13-14	1,595,040	108	1.000	1,595,040
1/1/14-15	1,483,038	96	1.000	1,483,038
1/1/15-16	441,179	84	1.000	441,179
1/1/16-17	904,821	72	1.025	915,000
1/1/17-18	362,714	60	1.064	386,000
1/1/18-19	544,530	48	1.104	601,000
1/1/19-20	539,949	36	1.187	641,000
1/1/20-21	874,358	24	2.018	1,765,000
1/1/21-22	264,514	12	2.624	694,000
Total	\$11,967,162			\$13,478,276

B. Paid Method				
Policy Year	Limited Paid Losses	Months of Development	Loss Development Factor ¹	Estimated Ultimate Losses ²
1/1/07-08	\$534,389	180	1.000	\$534,389
1/1/08-09	1,313,585	168	1.000	1,313,585
1/1/09-10	1,730,575	156	1.000	1,730,575
1/1/10-11	210,429	144	1.000	210,429
1/1/11-12	77,272	132	1.000	77,272
1/1/12-13	1,090,219	120	1.000	1,090,219
1/1/13-14	1,595,040	108	1.000	1,595,040
1/1/14-15	1,483,038	96	1.000	1,483,038
1/1/15-16	441,179	84	1.000	441,179
1/1/16-17	826,058	72	1.020	833,000
1/1/17-18	352,714	60	1.040	367,000
1/1/18-19	518,280	48	1.181	612,000
1/1/19-20	411,351	36	1.364	561,000
1/1/20-21	254,523	24	2.353	599,000
1/1/21-22	241,814	12	3.918	947,000
Total	\$11,080,466			\$12,394,726

C. Selected Estimated Ultimate Losses			
Policy Year	Estimated Ultimate Losses (Incurred Method)	Estimated Ultimate Losses (Paid Method)	Estimated Ultimate Losses (Selected) ³
1/1/07-08	\$534,389	\$534,389	\$534,389
1/1/08-09	1,314,135	1,313,585	1,315,000 ⁴
1/1/09-10	1,730,575	1,730,575	1,730,575
1/1/10-11	210,429	210,429	210,429
1/1/11-12	77,272	77,272	77,272
1/1/12-13	1,090,219	1,090,219	1,090,219
1/1/13-14	1,595,040	1,595,040	1,595,040
1/1/14-15	1,483,038	1,483,038	1,483,038
1/1/15-16	441,179	441,179	441,179
1/1/16-17	915,000	833,000	915,000 ⁵
1/1/17-18	386,000	367,000	386,000 ⁵
1/1/18-19	601,000	612,000	601,000 ⁵
1/1/19-20	641,000	561,000	641,000 ⁵
1/1/20-21	1,765,000	599,000	1,474,000 ⁶
1/1/21-22	694,000	947,000	694,000 ⁵
Total	\$13,478,276	\$12,394,726	\$13,188,141

¹ From Appendix A, Exhibits II & III. A LDF of 1.000 is used where all claims are paid and closed and no further development is expected.

² Losses in excess of the retention are excluded from development.

³ Selected the average of the incurred and paid methods unless otherwise indicated.

⁴ Selected limited incurred losses plus case outstanding amount, rounded.

⁵ Selected the incurred method.

⁶ Selected giving 75% weight to the incurred method and 25% paid method.

Appendix A, Exhibit V

Municipality of Anchorage

General Liability

Trend Adjustment to 1/1/22-23 Cost Levels

Losses Limited to \$500,000 Including ALAE

A. Loss Adjustment			
Policy Year	Selected Estimated Ultimate Losses	Inflation Trend Factor ¹	Adjusted Losses ²
1/1/07-08	\$534,389	1.514	\$809,065
1/1/08-09	1,315,000	1.454	1,467,458
1/1/09-10	1,730,575	1.414	2,240,033
1/1/10-11	210,429	1.456	306,385
1/1/11-12	77,272	1.401	108,258
1/1/12-13	1,090,219	1.360	1,302,698
1/1/13-14	1,595,040	1.326	1,952,023
1/1/14-15	1,483,038	1.292	1,770,085
1/1/15-16	441,179	1.245	549,268
1/1/16-17	915,000	1.200	998,000
1/1/17-18	386,000	1.159	447,374
1/1/18-19	601,000	1.133	680,933
1/1/19-20	641,000	1.095	701,895
1/1/20-21	1,474,000	1.059	1,531,466
1/1/21-22	694,000	1.029	714,126
Total	\$13,188,141		\$15,579,067

¹ See Appendix D, Exhibit II.

² Losses that exceed \$500,000 when trended, are limited to \$500,000.

Appendix A, Exhibit VI

Municipality of Anchorage

General Liability

Calculation of Projected Losses

Losses Limited to \$500,000 Including ALAE

A. Historical Pure Loss Rates			
Policy Year	Adjusted Losses	Adjusted Payroll (000's) ¹	Pure Loss Rate Per \$100 Payroll
1/1/07-08	\$809,065	\$297,287	\$0.27
1/1/08-09	1,467,458	298,233	0.49
1/1/09-10	2,240,033	301,730	0.74
1/1/10-11	306,385	301,218	0.10
1/1/11-12	108,258	302,063	0.04
1/1/12-13	1,302,698	305,660	0.43
1/1/13-14	1,952,023	297,823	0.66
1/1/14-15	1,770,085	301,645	0.59
1/1/15-16	549,268	296,512	0.19
1/1/16-17	998,000	308,353	0.32
1/1/17-18	447,374	341,334	0.13
1/1/18-19	680,933	336,539	0.20
1/1/19-20	701,895	308,580	0.23
1/1/20-21	1,531,466	297,704	0.51
1/1/21-22	714,126	268,584	0.27
Average =			\$0.34
Weighted Average =			0.34
7-Year Wtd. Avg. =			0.26
5-Year Wtd. Avg. =			0.26
Selected 2022 Loss & ALAE Rate =			0.27
B. Loss Projection at \$500,000			
Policy Year	Projected Pure Loss Rate	Projected Payroll (000's)	Projected Losses
1/1/19-20	\$0.28 ²	\$272,116	\$762,000
1/1/20-21	0.28 ²	269,415	754,000
1/1/21-22	0.28 ²	255,551	716,000
1/1/22-23	0.27	267,359	722,000
C. Loss Projection at \$3,000,000			
Policy Year	Projected Losses at \$500,000	Increased Limits Factor ³	Projected Losses at \$3,000,000
1/1/19-20	\$762,000	1.059	\$807,000 ⁴
1/1/20-21	754,000	1.059	798,000 ⁴
1/1/21-22	716,000	1.059	758,000 ⁴
1/1/22-23	722,000	1.059	765,000

¹ From Table 5.

² The 1/1/19-20 through 1/1/21-22 pure loss rates are obtained by taking the 1/1/22-23 pure loss rate adjusted for trend.

³ Based on simulation of losses.

⁴ See Appendix A, Exhibit XV for final selection.

Municipality of Anchorage
 General Liability
 Reported Claim Counts
 As of December 31, 2021

Appendix A
 Exhibit VII

Accident Period	Evaluation Age in Months												
	12	24	36	48	60	72	84	96	108	120	132	144	156
1997	238	295	304	305	306	307	307	307	307	308	307	307	307
1998	165	201	215	217	217	217	217	217	218	218	218	218	218
1999	156	181	191	195	195	195	195	195	196	196	196	196	196
2000	185	201	209	211	211	212	212	212	212	212	212	212	212
2001	156	187	194	198	198	199	199	199	199	199	199	199	199
2002	197	226	232	235	236	236	236	236	236	236	236	236	236
2003	97	149	158	160	161	162	162	162	162	162	162	162	162
2004	133	152	160	160	160	161	161	161	161	161	161	161	161
2005	119	132	137	138	138	138	139	139	139	139	139	139	139
2006	96	110	112	112	112	114	114	114	114	114	114	114	114
2007	108	113	115	116	117	117	117	117	117	117	117	117	117
2008	54	59	61	65	65	65	65	65	65	65	65	65	65
2009	44	49	54	57	57	58	58	58	58	58	59	59	59
2010	13	20	25	28	28	28	29	29	29	29	29	29	29
2011	11	19	27	29	30	30	30	30	30	30	30	30	30
2012	91	113	121	121	121	121	121	121	121	121	121	121	121
2013	163	172	177	178	179	180	180	181	181	181	181	181	181
2014	148	154	158	158	158	158	158	158	158	158	158	158	158
2015	135	144	145	147	147	146	146	146	146	146	146	146	146
2016	98	107	112	112	112	112	112	112	112	112	112	112	112
2017	117	128	130	131	131	131	131	131	131	131	131	131	131
2018	134	146	149	150	150	150	150	150	150	150	150	150	150
2019	95	110	117	117	117	117	117	117	117	117	117	117	117
2020	87	106	106	106	106	106	106	106	106	106	106	106	106
2021	80	106	106	106	106	106	106	106	106	106	106	106	106

Accident Period	Age Interval in Months												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-Ult
1997	1.239	1.031	1.003	1.003	1.003	1.000	1.000	1.000	1.003	0.997	1.000	1.000	1.000
1998	1.218	1.070	1.009	1.000	1.000	1.000	1.000	1.005	1.000	1.000	1.000	1.000	1.000
1999	1.160	1.055	1.021	1.000	1.000	1.000	1.000	1.005	1.000	1.000	1.000	1.000	1.000
2000	1.086	1.040	1.010	1.000	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	1.199	1.037	1.021	1.000	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.147	1.027	1.013	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	1.536	1.060	1.013	1.006	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004	1.143	1.053	1.000	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005	1.109	1.038	1.007	1.000	1.000	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006	1.146	1.018	1.000	1.000	1.018	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007	1.046	1.018	1.009	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2008	1.093	1.034	1.066	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009	1.114	1.102	1.056	1.000	1.018	1.000	1.000	1.000	1.000	1.017	1.000	1.000	1.000
2010	1.538	1.250	1.120	1.000	1.000	1.036	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2011	1.727	1.421	1.074	1.034	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2012	1.242	1.071	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2013	1.055	1.029	1.006	1.006	1.006	1.000	1.006	1.000	1.000	1.000	1.000	1.000	1.000
2014	1.041	1.026	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2015	1.067	1.007	1.014	1.000	0.993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2016	1.092	1.047	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2017	1.094	1.016	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2018	1.090	1.021	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2019	1.158	1.064	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2020	1.218	1.064	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2021	1.218	1.064	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Averages													
1:	Average												
	1.190	1.067	1.021	1.003	1.003	1.002	1.000	1.001	1.000	1.001	1.000	1.000	1.000
2:	Wtd Avg												
	1.153	1.043	1.012	1.002	1.003	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000
3:	5 Yr Wtd Avg												
	1.124	1.028	1.006	1.001	1.000	1.000	1.002	1.000	1.000	1.003	1.000	1.000	1.000
4:	Prior Selected												
	1.100	1.042	1.012	1.003	1.003	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000
Selected Values	1.125	1.045	1.010	1.003	1.003	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000
Cumulative	1.197	1.064	1.018	1.008	1.005	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000

Appendix A, Exhibit VIII

Municipality of Anchorage

General Liability

Claim Count Analysis

A. Estimated Ultimate Claim Counts				
Policy Year	Reported Claims ¹	Months of Development	Claim Count Development Factor ²	Estimated Ultimate Claims
1/1/07-08	117	180	1.000	117
1/1/08-09	66	168	1.000	66
1/1/09-10	59	156	1.000	59
1/1/10-11	29	144	1.000	29
1/1/11-12	30	132	1.000	30
1/1/12-13	121	120	1.000	121
1/1/13-14	181	108	1.000	181
1/1/14-15	158	96	1.000	158
1/1/15-16	146	84	1.000	146
1/1/16-17	112	72	1.002	112
1/1/17-18	131	60	1.005	132
1/1/18-19	150	48	1.008	151
1/1/19-20	117	36	1.018	119
1/1/20-21	106	24	1.064	113
1/1/21-22	80	12	1.197	96
Total	1,603			1,630

B. Frequency Analysis			
Policy Year	Estimated Ultimate Claims	Adjusted Payroll (000's)	Frequency Per \$1M Payroll
1/1/07-08	117	\$297,287	0.39
1/1/08-09	66	298,233	0.22
1/1/09-10	59	301,730	0.20
1/1/10-11	29	301,218	0.10
1/1/11-12	30	302,063	0.10
1/1/12-13	121	305,660	0.40
1/1/13-14	181	297,823	0.61
1/1/14-15	158	301,645	0.52
1/1/15-16	146	296,512	0.49
1/1/16-17	112	308,353	0.36
1/1/17-18	132	341,334	0.39
1/1/18-19	151	336,539	0.45
1/1/19-20	119	308,580	0.39
1/1/20-21	113	297,704	0.38
1/1/21-22	96	268,584	0.36
		Average =	0.36
		Weighted Average =	0.36
		7-Year Wtd. Avg. =	0.40
		Selected	0.41

C. Claim Count Projection			
Policy Year	Projected Frequency	Projected Payroll (000's)	Projected Claims
1/1/22-23	0.41	\$267,359	110

D. Projected Claims with Cost			
Policy Year	Projected Claims	Percentage of Claims with Cost ³	Projected Claims with Cost
1/1/22-23	110	57%	63

¹ Claim counts are uncollapsed and represent the total number of unique claim numbers.

² From Appendix A, Exhibit VII.

³ Percentage of claims with cost is based on historical ratio of claims with cost to total claims.

Appendix A, Exhibit IX

Municipality of Anchorage

General Liability

Average Loss & ALAE Severities

Losses Limited to \$500,000 Including ALAE

A. Loss and Claim Data					
Policy Year	Limited Incurred Losses	Estimated Ultimate Losses	Trended Ultimate Losses	Reported Claim Count	Estimated Ultimate Claims
1/1/07-08	\$534,389	\$534,389	\$809,065	117	117
1/1/08-09	1,314,135	1,315,000	1,467,458	66	66
1/1/09-10	1,730,575	1,730,575	2,240,033	59	59
1/1/10-11	210,429	210,429	306,385	29	29
1/1/11-12	77,272	77,272	108,258	30	30
1/1/12-13	1,090,219	1,090,219	1,302,698	121	121
1/1/13-14	1,595,040	1,595,040	1,952,023	181	181
1/1/14-15	1,483,038	1,483,038	1,770,085	158	158
1/1/15-16	441,179	441,179	549,268	146	146
1/1/16-17	904,821	915,000	998,000	112	112
1/1/17-18	362,714	386,000	447,374	131	132
1/1/18-19	544,530	601,000	680,933	150	151
1/1/19-20	539,949	619,000 ¹	677,805	117	119
1/1/20-21	874,358	1,434,000 ¹	1,489,106	106	113
1/1/21-22	264,514	726,000 ¹	747,054	80	96
Projected					
1/1/22-23		\$722,000	\$722,000		110

B. Average Loss & ALAE Severities			
Policy Year	Reported Severity	Estimated Ultimate Severity	Trended Ultimate Severity
1/1/07-08	\$4,567	\$4,567	\$6,915
1/1/08-09	19,911	19,924	22,234
1/1/09-10	29,332	29,332	37,967
1/1/10-11	7,256	7,256	10,565
1/1/11-12	2,576	2,576	3,609
1/1/12-13	9,010	9,010	10,766
1/1/13-14	8,812	8,812	10,785
1/1/14-15	9,386	9,386	11,203
1/1/15-16	3,022	3,022	3,762
1/1/16-17	8,079	8,170	8,911
1/1/17-18	2,769	2,924	3,389
1/1/18-19	3,630	3,980	4,509
1/1/19-20	4,615	5,202	5,696
1/1/20-21	8,249	12,690	13,178
1/1/21-22	3,306	7,563	7,782
Projected			
1/1/22-23		\$6,564	\$6,564

¹ From Appendix A, Exhibit XV, adjusted for \$500,000 limitation.

Appendix A, Exhibit X

Municipality of Anchorage

General Liability

Limitation of Incurred Losses & ALAE to Historical Retentions

Evaluated as of 12/31/21

Policy Year	Incurred Losses as of 12/31/21	Historical Retention	Number Excess of Historical Retention	Total Amount Excess of Historical Retention	Incurred Losses Limited to Historical Retention
1/1/94-95	\$448,424	\$2,000,000	0	\$0	\$448,424
1/1/95-96	694,789	2,000,000	0	0	694,789
1/1/96-97	697,460	2,000,000	0	0	697,460
1/1/97-98	854,456	2,000,000	0	0	854,456
1/1/98-99	417,418	2,000,000	0	0	417,418
1/1/99-00	222,191	2,000,000	0	0	222,191
1/1/00-01	390,279	2,000,000	0	0	390,279
1/1/01-02	624,404	2,000,000	0	0	624,404
1/1/02-03	1,353,326	2,000,000	0	0	1,353,326
1/1/03-04	473,700	2,000,000	0	0	473,700
1/1/04-05	420,979	2,000,000	0	0	420,979
1/1/05-06	721,910	2,000,000	0	0	721,910
1/1/06-07	1,257,776	2,000,000	0	0	1,257,776
1/1/07-08	534,389	2,000,000	0	0	534,389
1/1/08-09	1,629,146	2,000,000	0	0	1,629,146
1/1/09-10	2,489,008	2,000,000	0	0	2,489,008
1/1/10-11	210,429	2,000,000	0	0	210,429
1/1/11-12	77,272	2,000,000	0	0	77,272
1/1/12-13	1,450,684	2,000,000	0	0	1,450,684
1/1/13-14	1,790,632	2,500,000	0	0	1,790,632
1/1/14-15	1,719,468	2,500,000	0	0	1,719,468
1/1/15-16	441,179	2,500,000	0	0	441,179
1/1/16-17	940,208	3,000,000	0	0	940,208
1/1/17-18	362,714	3,000,000	0	0	362,714
1/1/18-19	544,530	3,000,000	0	0	544,530
1/1/19-20	539,949	3,000,000	0	0	539,949
1/1/20-21	874,358	3,000,000	0	0	874,358
1/1/21-22	264,514	3,000,000	0	0	264,514
Total	\$22,445,594		0	\$0	\$22,445,592

Appendix A, Exhibit XI

Municipality of Anchorage

General Liability

Development of Incurred Losses to Ultimate

Losses & ALAE Limited to Historical Retentions

Policy Year	Limited Incurred Losses	Months of Development	Loss Development Factor ¹	Estimated Ultimate Losses
1/1/94-95	\$448,424	336	1.000	\$448,424
1/1/95-96	694,789	324	1.000	694,789
1/1/96-97	697,460	312	1.000	697,460
1/1/97-98	854,456	300	1.000	854,456
1/1/98-99	417,418	288	1.000	417,418
1/1/99-00	222,191	276	1.000	222,191
1/1/00-01	390,279	264	1.000	390,279
1/1/01-02	624,404	252	1.000	624,404
1/1/02-03	1,353,326	240	1.000	1,353,326
1/1/03-04	473,700	228	1.000	473,700
1/1/04-05	420,979	216	1.000	420,979
1/1/05-06	721,910	204	1.000	721,910
1/1/06-07	1,257,776	192	1.000	1,257,776
1/1/07-08	534,389	180	1.000	534,389
1/1/08-09	1,629,146	168	1.000	1,629,146
1/1/09-10	2,489,008	156	1.000	2,489,008
1/1/10-11	210,429	144	1.000	210,429
1/1/11-12	77,272	132	1.000	77,272
1/1/12-13	1,450,684	120	1.000	1,450,684
1/1/13-14	1,790,632	108	1.000	1,790,632
1/1/14-15	1,719,468	96	1.000	1,719,468
1/1/15-16	441,179	84	1.000	441,179
1/1/16-17	940,208	72	1.025	964,000
1/1/17-18	362,714	60	1.064	386,000
1/1/18-19	544,530	48	1.104	601,000
1/1/19-20	539,949	36	1.187	641,000
1/1/20-21	874,358	24	2.018	1,765,000
1/1/21-22	264,514	12	2.624	694,000
Total	\$22,445,592			\$23,970,319

¹ From Appendix A, Exhibit II. A LDF of 1.000 is used where all claims are paid and closed and no further development is expected.

Appendix A, Exhibit XII

Municipality of Anchorage

General Liability

Limitation of Paid Losses & ALAE to Historical Retentions

Evaluated as of 12/31/21

Policy Year	Paid Losses as of 12/31/21	Historical Retention	Number Excess of Historical Retention	Total Amount Excess of Historical Retention	Paid Losses Limited to Historical Retention
1/1/94-95	\$448,424	\$2,000,000	0	\$0	\$448,424
1/1/95-96	694,789	2,000,000	0	0	694,789
1/1/96-97	697,460	2,000,000	0	0	697,460
1/1/97-98	854,456	2,000,000	0	0	854,456
1/1/98-99	417,418	2,000,000	0	0	417,418
1/1/99-00	222,191	2,000,000	0	0	222,191
1/1/00-01	390,279	2,000,000	0	0	390,279
1/1/01-02	624,404	2,000,000	0	0	624,404
1/1/02-03	1,353,326	2,000,000	0	0	1,353,326
1/1/03-04	473,700	2,000,000	0	0	473,700
1/1/04-05	420,979	2,000,000	0	0	420,979
1/1/05-06	721,910	2,000,000	0	0	721,910
1/1/06-07	1,257,776	2,000,000	0	0	1,257,776
1/1/07-08	534,389	2,000,000	0	0	534,389
1/1/08-09	1,628,596	2,000,000	0	0	1,628,596
1/1/09-10	2,489,008	2,000,000	0	0	2,489,008
1/1/10-11	210,429	2,000,000	0	0	210,429
1/1/11-12	77,272	2,000,000	0	0	77,272
1/1/12-13	1,450,684	2,000,000	0	0	1,450,684
1/1/13-14	1,790,632	2,500,000	0	0	1,790,632
1/1/14-15	1,719,468	2,500,000	0	0	1,719,468
1/1/15-16	441,179	2,500,000	0	0	441,179
1/1/16-17	861,446	3,000,000	0	0	861,446
1/1/17-18	352,714	3,000,000	0	0	352,714
1/1/18-19	518,280	3,000,000	0	0	518,280
1/1/19-20	411,351	3,000,000	0	0	411,351
1/1/20-21	254,523	3,000,000	0	0	254,523
1/1/21-22	241,814	3,000,000	0	0	241,814
Total	\$21,558,899		0	\$0	\$21,558,897

Appendix A, Exhibit XIII

Municipality of Anchorage

General Liability

Development of Paid Losses to Ultimate

Losses & ALAE Limited to Historical Retentions

Policy Year	Limited Paid Losses	Months of Development	Loss Development Factor ¹	Estimated Ultimate Losses
1/1/94-95	\$448,424	336	1.000	\$448,424
1/1/95-96	694,789	324	1.000	694,789
1/1/96-97	697,460	312	1.000	697,460
1/1/97-98	854,456	300	1.000	854,456
1/1/98-99	417,418	288	1.000	417,418
1/1/99-00	222,191	276	1.000	222,191
1/1/00-01	390,279	264	1.000	390,279
1/1/01-02	624,404	252	1.000	624,404
1/1/02-03	1,353,326	240	1.000	1,353,326
1/1/03-04	473,700	228	1.000	473,700
1/1/04-05	420,979	216	1.000	420,979
1/1/05-06	721,910	204	1.000	721,910
1/1/06-07	1,257,776	192	1.000	1,257,776
1/1/07-08	534,389	180	1.000	534,389
1/1/08-09	1,628,596	168	1.000	1,628,596
1/1/09-10	2,489,008	156	1.000	2,489,008
1/1/10-11	210,429	144	1.000	210,429
1/1/11-12	77,272	132	1.000	77,272
1/1/12-13	1,450,684	120	1.000	1,450,684
1/1/13-14	1,790,632	108	1.000	1,790,632
1/1/14-15	1,719,468	96	1.000	1,719,468
1/1/15-16	441,179	84	1.000	441,179
1/1/16-17	861,446	72	1.020	879,000
1/1/17-18	352,714	60	1.040	367,000
1/1/18-19	518,280	48	1.181	612,000
1/1/19-20	411,351	36	1.364	561,000
1/1/20-21	254,523	24	2.353	599,000
1/1/21-22	241,814	12	3.918	947,000
Total	\$21,558,897			\$22,883,769

¹ From Appendix A, Exhibit III. A LDF of 1.000 is used where all claims are paid and closed and no further development is expected.

Appendix A, Exhibit XIV

Municipality of Anchorage

General Liability

Selection of Estimated Ultimate Losses

Losses & ALAE Limited to Historic Retentions

Policy Year	Estimated Ultimate Losses (Incurred Method)	Estimated Ultimate Losses (Paid Method)	Estimated Ultimate Losses (Selected) ¹
1/1/94-95	\$448,424	\$448,424	\$448,424
1/1/95-96	694,789	694,789	694,789
1/1/96-97	697,460	697,460	697,460
1/1/97-98	854,456	854,456	854,456
1/1/98-99	417,418	417,418	417,418
1/1/99-00	222,191	222,191	222,191
1/1/00-01	390,279	390,279	390,279
1/1/01-02	624,404	624,404	624,404
1/1/02-03	1,353,326	1,353,326	1,353,326
1/1/03-04	473,700	473,700	473,700
1/1/04-05	420,979	420,979	420,979
1/1/05-06	721,910	721,910	721,910
1/1/06-07	1,257,776	1,257,776	1,257,776
1/1/07-08	534,389	534,389	534,389
1/1/08-09	1,629,146	1,628,596	1,630,146 ²
1/1/09-10	2,489,008	2,489,008	2,489,008
1/1/10-11	210,429	210,429	210,429
1/1/11-12	77,272	77,272	77,272
1/1/12-13	1,450,684	1,450,684	1,450,684
1/1/13-14	1,790,632	1,790,632	1,790,632
1/1/14-15	1,719,468	1,719,468	1,719,468
1/1/15-16	441,179	441,179	441,179
1/1/16-17	964,000	879,000	964,000 ³
1/1/17-18	386,000	367,000	386,000 ³
1/1/18-19	601,000	612,000	601,000 ³
1/1/19-20	641,000	561,000	641,000 ^{3,4}
1/1/20-21	1,765,000	599,000	1,765,000 ^{3,4}
1/1/21-22	694,000	947,000	694,000 ^{3,4}
Total	\$23,970,319	\$22,883,769	\$23,971,319

¹ Selected the average of the incurred and paid methods unless otherwise indicated.

² Selected judgmentally based on one open claim remaining.

³ Selected the incurred method.

⁴ See Appendix A, Exhibit XV for final selection.

Appendix A, Exhibit XV

Municipality of Anchorage

General Liability

Selection of Ultimate Losses for 1/1/19-20 through 1/1/21-22

Losses & ALAE Limited to Historic Retentions

A. Incurred Bornhuetter-Ferguson Method					
Policy Year	Projected Expected Losses ¹	Expected Percent Unreported ²	Expected Losses Unreported	Limited Incurred Losses As of 12/31/21	Indicated Ultimate Losses
1/1/19-20	\$807,000	16.0%	\$129,120	\$539,949	\$669,000
1/1/20-21	798,000	50.0%	399,000	874,358	1,273,000
1/1/21-22	758,000	62.0%	469,960	264,514	734,000

B. Paid Bornhuetter-Ferguson Method					
Policy Year	Projected Expected Losses ¹	Expected Percent Unpaid ²	Expected Losses Unpaid	Limited Paid Losses As of 12/31/21	Indicated Ultimate Losses
1/1/19-20	\$807,000	27.0%	\$217,890	\$411,351	\$629,000
1/1/20-21	798,000	57.0%	454,860	254,523	709,000
1/1/21-22	758,000	74.0%	560,920	241,814	803,000

C. Selected Losses for 1/1/19-20 through 1/1/21-22					
Policy Year	Loss Development Method ³	Incurred Bornhuetter-Ferguson Method	Paid Bornhuetter-Ferguson Method	Projected Loss Method	Selected Ultimate Losses
1/1/19-20	\$641,000	\$669,000	\$629,000	\$807,000	\$655,000 ⁴
1/1/20-21	1,765,000	1,273,000	709,000	798,000	1,519,000 ⁴
1/1/21-22	694,000	734,000	803,000	758,000	769,000 ⁵

¹ From Appendix A, Exhibit VI.

² Based on loss development factors from Appendix A, Exhibits II & III. (1 - 1/LDF)

³ From Appendix A, Exhibit XIV.

⁴ Based on the average of the loss development method and incurred B-F method.

⁵ Selected the average of the two B-F methods.

Appendix B – Automobile Liability

Appendix B, Exhibit I

Municipality of Anchorage

Automobile Liability

Limitation of Losses to \$500,000

Evaluated as of 12/31/21

A. Limitation of Incurred Losses				
Policy Year	Incurred Losses as of 12/31/21	Number Excess of \$500,000	Total Amount Excess of \$500,000	Incurred Losses Limited to \$500,000
1/1/07-08	\$488,937	0	\$0	\$488,937
1/1/08-09	264,659	0	0	264,659
1/1/09-10	1,942,104	1	1,021,268	920,837
1/1/10-11	1,111,725	0	0	1,111,725
1/1/11-12	490,570	0	0	490,570
1/1/12-13	669,920	0	0	669,920
1/1/13-14	465,676	0	0	465,676
1/1/14-15	385,309	0	0	385,309
1/1/15-16	656,718	0	0	656,718
1/1/16-17	2,513,130	1	1,200,000	1,313,130
1/1/17-18	951,633	0	0	951,633
1/1/18-19	207,816	0	0	207,816
1/1/19-20	206,907	0	0	206,907
1/1/20-21	301,929	0	0	301,929
1/1/21-22	220,601	0	0	220,601
Total	\$10,877,634	2	\$2,221,268	\$8,656,367

B. Limitation of Paid Losses				
Policy Year	Paid Losses as of 12/31/21	Number Excess of \$500,000	Total Amount Excess of \$500,000	Paid Losses Limited to 12/31/21
1/1/07-08	\$488,937	0	\$0	\$488,937
1/1/08-09	264,659	0	0	264,659
1/1/09-10	1,942,104	1	1,021,268	920,837
1/1/10-11	1,111,725	0	0	1,111,725
1/1/11-12	490,570	0	0	490,570
1/1/12-13	669,920	0	0	669,920
1/1/13-14	465,676	0	0	465,676
1/1/14-15	385,309	0	0	385,309
1/1/15-16	656,718	0	0	656,718
1/1/16-17	2,513,130	1	1,200,000	1,313,130
1/1/17-18	951,633	0	0	951,633
1/1/18-19	207,816	0	0	207,816
1/1/19-20	206,819	0	0	206,819
1/1/20-21	283,994	0	0	283,994
1/1/21-22	128,372	0	0	128,372
Total	\$10,767,382	2	\$2,221,268	\$8,546,114

Municipality of Anchorage
Automobile Liability
Incurred Loss Development Factor Calculation - Losses ALAE Limited to \$500,000 Per Occurrence (\$000's)
As of December 31, 2021

Accident Period	Evaluation Age in Months												
	12	24	36	48	60	72	84	96	108	120	132	144	156
1997	351	485	543	641	679	679	679	679	679	679	679	679	679
1998	306	585	677	900	950	950	950	950	950	950	950	950	950
1999	282	302	316	312	312	312	312	312	312	312	312	312	312
2000	318	466	417	413	427	430	431	431	431	431	431	431	431
2001	748	1,292	1,226	1,237	841	874	847	847	847	847	847	847	847
2002	181	235	443	507	406	406	406	406	406	406	406	406	406
2003	324	486	606	689	724	708	708	708	708	708	708	708	708
2004	323	344	472	385	385	385	385	385	385	385	385	385	385
2005	729	866	870	852	852	852	852	852	852	852	852	852	852
2006	239	269	239	234	234	234	234	234	234	234	234	234	234
2007	429	444	499	489	489	489	489	489	489	489	489	489	489
2008	234	283	264	264	265	265	265	265	265	265	265	265	265
2009	837	938	1,009	965	919	919	919	919	919	919	921	921	921
2010	472	736	612	1,080	1,080	1,080	1,080	1,082	1,082	1,112	1,112	1,112	
2011	384	498	506	487	487	487	491	491	491	491	491		
2012	417	685	670	670	670	670	670	670	670	670			
2013	262	284	344	344	473	466	461	466	466				
2014	264	413	435	447	385	379	385	385					
2015	537	597	692	692	650	657	657						
2016	804	967	984	1,324	1,313	1,313							
2017	265	261	734	952	747								
2018	193	195	208	208									
2019	317	395	207										
2020	225	302											
2021	221												

Accident Period	Age Interval in Months												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-Ult
1997	1.382	1.120	1.180	1.059	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.912	1.157	1.329	1.056	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	1.071	1.046	0.987	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.465	0.895	0.990	1.034	1.007	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	1.727	0.949	1.009	0.680	1.039	0.969	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.298	1.885	1.144	0.801	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	1.500	1.247	1.137	1.051	0.978	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004	1.065	1.372	0.816	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005	1.188	1.005	0.979	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006	1.126	0.888	0.979	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007	1.035	1.124	0.980	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2008	1.209	0.933	1.000	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009	1.121	1.076	0.956	0.952	1.000	1.000	1.000	1.000	1.000	1.002	1.000	1.000	1.000
2010	1.559	0.832	1.765	1.000	1.000	1.000	1.002	1.000	1.028	1.000	1.000		
2011	1.297	1.016	0.962	1.000	1.000	1.008	1.000	1.000	1.000	1.000			
2012	1.643	0.978	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2013	1.084	1.211	1.000	1.375	0.985	0.989	1.011	1.000					
2014	1.564	1.053	1.028	0.861	0.984	1.016	1.000						
2015	1.112	1.159	1.000	0.939	1.011	1.000							
2016	1.203	1.018	1.346	0.992	1.000								
2017	0.985	2.812	1.297	0.785									
2018	1.010	1.067	1.000										
2019	1.246	0.524											
2020	1.342												
2021													

Averages													
1:	Average												
	1.298	1.146	1.086	0.980	1.000	0.999	1.001	1.000	1.002	1.000	1.000	1.000	1.000
2:	Wtd Avg												
	1.306	1.079	1.104	0.957	1.001	0.998	1.001	1.000	1.003	1.000	1.000	1.000	1.000
3:	5 Yr Wtd Avg												
	1.175	1.170	1.187	0.949	0.998	1.002	1.002	1.000	1.009	1.001	1.000	1.000	1.000
4:	Industry												
	1.266	1.058	1.021	1.012	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5:	Prior Selected												
	1.250	1.150	1.180	1.005	1.002	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000
Selected Values	1.250	1.150	1.180	1.005	1.002	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000
Cumulative	1.715	1.372	1.193	1.011	1.006	1.004	1.002	1.000	1.000	1.000	1.000	1.000	1.000

Note: Industry factors based on Willis Towers Watson benchmark statistics for Alaska.

Municipality of Anchorage
Automobile Liability
Paid Loss Development Factor Calculation - Losses ALAE Limited to \$500,000 Per Occurrence (\$000's)
As of December 31, 2021

Accident Period	Evaluation Age in Months												
	12	24	36	48	60	72	84	96	108	120	132	144	156
1997	160	267	509	604	679	679	679	679	679	679	679	679	679
1998	151	349	414	501	950	950	950	950	950	950	950	950	950
1999	211	281	286	312	312	312	312	312	312	312	312	312	312
2000	151	246	333	353	427	430	431	431	431	431	431	431	431
2001	145	240	727	755	826	845	847	847	847	847	847	847	847
2002	106	166	236	381	406	406	406	406	406	406	406	406	406
2003	130	252	354	390	671	708	708	708	708	708	708	708	708
2004	227	306	314	385	385	385	385	385	385	385	385	385	385
2005	246	827	841	852	852	852	852	852	852	852	852	852	852
2006	118	207	234	234	234	234	234	234	234	234	234	234	234
2007	205	338	474	489	489	489	489	489	489	489	489	489	489
2008	137	254	264	264	265	265	265	265	265	265	265	265	265
2009	455	741	864	919	919	919	919	919	919	919	921	921	921
2010	180	346	521	1,080	1,080	1,080	1,080	1,082	1,082	1,112	1,112	1,112	
2011	134	361	376	487	487	487	491	491	491	491	491		
2012	130	516	670	670	670	670	670	670	670	670			
2013	137	212	237	238	407	466	461	466	466				
2014	144	185	261	297	385	379	385	385					
2015	276	453	610	655	650	657	657						
2016	158	428	983	978	1,313	1,313							
2017	216	231	229	952	747								
2018	134	195	208	208									
2019	64	367	207										
2020	60	284											
2021	128												

Accident Period	Age Interval in Months												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-Ult
1997	1.669	1.906	1.187	1.124	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	2.311	1.186	1.210	1.896	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	1.332	1.018	1.091	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.629	1.354	1.060	1.210	1.007	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	1.655	3.029	1.039	1.094	1.023	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.566	1.422	1.614	1.066	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	1.938	1.405	1.102	1.721	1.055	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004	1.348	1.026	1.226	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005	3.362	1.017	1.013	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006	1.754	1.130	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007	1.649	1.402	1.032	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2008	1.854	1.039	1.000	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009	1.629	1.166	1.064	1.000	1.000	1.000	1.000	1.000	1.000	1.002	1.000	1.000	1.000
2010	1.922	1.506	2.073	1.000	1.000	1.000	1.002	1.000	1.028	1.000	1.000		
2011	2.694	1.042	1.295	1.000	1.000	1.008	1.000	1.000	1.000	1.000			
2012	3.969	1.298	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2013	1.547	1.118	1.004	1.710	1.145	0.989	1.011	1.000					
2014	1.285	1.411	1.138	1.296	0.984	1.016	1.000						
2015	1.641	1.347	1.074	0.992	1.011	1.000							
2016	2.709	2.297	0.995	1.343	1.000								
2017	1.069	0.991	4.157	0.785									
2018	1.455	1.067	1.000										
2019	5.734	0.564											
2020	4.733												
2021													

Averages													
1:	Average												
	2.186	1.337	1.290	1.154	1.011	1.001	1.001	1.000	1.002	1.000	1.000	1.000	1.000
2:	Wtd Avg												
	1.976	1.307	1.207	1.115	1.010	1.001	1.001	1.000	1.003	1.000	1.000	1.000	1.000
3:	5 Yr Wtd Avg												
	2.381	1.336	1.349	1.122	1.018	1.002	1.002	1.000	1.009	1.001	1.000	1.000	1.000
4:	Industry												
	1.743	1.136	1.038	1.016	1.010	1.004	1.002	1.001	1.000	1.000	1.000	1.000	1.000
5:	Prior Selected												
	1.975	1.400	1.210	1.150	1.015	1.003	1.002	1.000	1.000	1.000	1.000	1.000	1.000
Selected Values	2.100	1.375	1.210	1.150	1.015	1.003	1.002	1.000	1.000	1.000	1.000	1.000	1.000
Cumulative	4.099	1.952	1.419	1.173	1.020	1.005	1.002	1.000	1.000	1.000	1.000	1.000	1.000

Note: Industry factors based on Willis Towers Watson benchmark statistics for Alaska.

Appendix B, Exhibit IV

Municipality of Anchorage

Automobile Liability

Selection of Estimated Ultimate Losses

Losses Limited to \$500,000 Including ALAE

A. Incurred Method				
Policy Year	Limited Incurred Losses	Months of Development	Loss Development Factor ¹	Estimated Ultimate Losses
1/1/07-08	\$488,937	180	1.000	\$488,937
1/1/08-09	264,659	168	1.000	264,659
1/1/09-10	920,837	156	1.000	920,837
1/1/10-11	1,111,725	144	1.000	1,111,725
1/1/11-12	490,570	132	1.000	490,570
1/1/12-13	669,920	120	1.000	669,920
1/1/13-14	465,676	108	1.000	465,676
1/1/14-15	385,309	96	1.000	385,309
1/1/15-16	656,718	84	1.000	656,718
1/1/16-17	1,313,130	72	1.000	1,313,130
1/1/17-18	951,633	60	1.000	951,633
1/1/18-19	207,816	48	1.000	207,816
1/1/19-20	206,907	36	1.193	247,000
1/1/20-21	301,929	24	1.372	414,000
1/1/21-22	220,601	12	1.715	378,000
Total	\$8,656,367			\$8,965,930

B. Paid Method				
Policy Year	Limited Paid Losses	Months of Development	Loss Development Factor ¹	Estimated Ultimate Losses
1/1/07-08	\$488,937	180	1.000	\$488,937
1/1/08-09	264,659	168	1.000	264,659
1/1/09-10	920,837	156	1.000	920,837
1/1/10-11	1,111,725	144	1.000	1,111,725
1/1/11-12	490,570	132	1.000	490,570
1/1/12-13	669,920	120	1.000	669,920
1/1/13-14	465,676	108	1.000	465,676
1/1/14-15	385,309	96	1.000	385,309
1/1/15-16	656,718	84	1.000	656,718
1/1/16-17	1,313,130	72	1.000	1,313,130
1/1/17-18	951,633	60	1.000	951,633
1/1/18-19	207,816	48	1.000	207,816
1/1/19-20	206,819	36	1.419	294,000
1/1/20-21	283,994	24	1.952	554,000
1/1/21-22	128,372	12	4.099	526,000
Total	\$8,546,114			\$9,300,930

C. Selected Estimated Ultimate Losses			
Policy Year	Estimated Ultimate Losses (Incurred Method)	Estimated Ultimate Losses (Paid Method)	Estimated Ultimate Losses (Selected) ²
1/1/07-08	\$488,937	\$488,937	\$488,937
1/1/08-09	264,659	264,659	264,659
1/1/09-10	920,837	920,837	920,837
1/1/10-11	1,111,725	1,111,725	1,111,725
1/1/11-12	490,570	490,570	490,570
1/1/12-13	669,920	669,920	669,920
1/1/13-14	465,676	465,676	465,676
1/1/14-15	385,309	385,309	385,309
1/1/15-16	656,718	656,718	656,718
1/1/16-17	1,313,130	1,313,130	1,313,130
1/1/17-18	951,633	951,633	951,633
1/1/18-19	207,816	207,816	207,816
1/1/19-20	247,000	294,000	247,000 ³
1/1/20-21	414,000	554,000	414,000 ³
1/1/21-22	378,000	526,000	378,000 ³
Total	\$8,965,930	\$9,300,930	\$8,965,930

¹ From Appendix B, Exhibits II & III. A LDF of 1.000 is used where all claims are paid and closed and no further development is expected.

² Selected the average of the incurred and paid methods unless otherwise indicated.

³ Selected the incurred method.

Appendix B, Exhibit V

Municipality of Anchorage

Automobile Liability

Trend Adjustment to 1/1/22-23 Cost Levels

Losses Limited to \$500,000 Including ALAE

A. Loss Adjustment			
Policy Year	Selected Estimated Ultimate Losses	Inflation Trend Factor ¹	Adjusted Losses ²
1/1/07-08	\$488,937	1.566	\$765,675
1/1/08-09	264,659	1.502	397,518
1/1/09-10	920,837	1.431	1,102,218
1/1/10-11	1,111,725	1.491	1,428,556
1/1/11-12	490,570	1.430	701,515
1/1/12-13	669,920	1.381	925,160
1/1/13-14	465,676	1.346	626,800
1/1/14-15	385,309	1.303	502,058
1/1/15-16	656,718	1.263	829,435
1/1/16-17	1,313,130	1.204	1,479,009
1/1/17-18	951,633	1.169	1,112,459
1/1/18-19	207,816	1.129	234,624
1/1/19-20	247,000	1.103	272,441
1/1/20-21	414,000	1.061	439,254
1/1/21-22	378,000	1.030	389,340
Total	\$8,965,930		\$11,206,062

¹ See Appendix D, Exhibit III.

² Losses that exceed \$500,000 when trended, are limited to \$500,000.

Appendix B, Exhibit VI

Municipality of Anchorage

Automobile Liability

Calculation of Projected Losses

Losses Limited to \$500,000 Including ALAE

A. Historical Pure Loss Rates			
Policy Year	Adjusted Losses	Vehicle Count	Pure Loss Rate Per Vehicle
1/1/07-08	\$765,675	1,532	\$500
1/1/08-09	397,518	1,551	256
1/1/09-10	1,102,218	1,547	712
1/1/10-11	1,428,556	1,386	1,031
1/1/11-12	701,515	1,179	595
1/1/12-13	925,160	1,175	787
1/1/13-14	626,800	1,498	418
1/1/14-15	502,058	1,500	335
1/1/15-16	829,435	1,450	572
1/1/16-17	1,479,009	1,564	946
1/1/17-18	1,112,459	1,366	814
1/1/18-19	234,624	1,742	135
1/1/19-20	272,441	1,754	155
1/1/20-21	439,254	1,788	246
1/1/21-22	389,340	1,784	218
		Average =	\$515
		Weighted Average =	491
		5-Year Wtd. Avg. =	290
		Selected 2022 Loss & ALAE Rate =	440
B. Loss Projection at \$500,000			
Policy Year	Projected Pure Loss Rate	Projected Vehicle Count	Projected Losses
1/1/20-21	\$415 ¹	1,788	\$742,000
1/1/21-22	427 ¹	1,784	762,000
1/1/22-23	440	1,857	817,000
C. Loss Projection at \$3,000,000			
Policy Year	Projected Losses at \$500,000	Increased Limits Factor ²	Projected Losses at \$3,000,000
1/1/20-21	\$742,000	1.060	\$787,000 ³
1/1/21-22	762,000	1.060	808,000 ³
1/1/22-23	817,000	1.060	866,000

¹ The 1/1/20-21 and 1/1/21-22 pure loss rates are obtained by taking the 1/1/22-23 pure loss rate adjusted for trend.

² Based on simulation of losses.

³ See Appendix B, Exhibit XV for final selection.

Municipality of Anchorage
 Automobile Liability
 Reported Claim Counts
 As of December 31, 2021

Appendix B
 Exhibit VII

Accident Period	Evaluation Age in Months												
	12	24	36	48	60	72	84	96	108	120	132	144	156
1997	104	120	125	125	125	125	125	125	125	125	125	125	125
1998	87	105	106	106	106	106	106	106	106	106	106	106	106
1999	113	128	130	130	130	130	130	130	130	130	130	130	130
2000	117	134	134	133	133	134	134	134	134	134	134	134	134
2001	103	111	111	116	116	116	116	116	116	116	116	116	116
2002	81	92	96	96	96	96	96	96	96	96	96	96	96
2003	80	116	117	117	117	117	117	117	117	117	117	117	117
2004	93	101	102	102	102	102	102	102	102	102	102	102	102
2005	71	76	78	78	78	78	78	78	78	78	78	78	78
2006	55	60	60	60	60	60	60	60	60	60	60	60	60
2007	70	74	74	74	74	74	74	74	74	74	74	74	74
2008	39	42	42	42	42	42	42	42	42	42	42	42	42
2009	41	43	43	43	43	43	43	43	43	43	43	43	43
2010	34	35	35	35	35	35	35	35	35	35	35	35	35
2011	28	32	34	34	34	34	34	34	34	34	34	34	34
2012	39	45	47	47	47	47	47	47	47	47	47	47	47
2013	80	81	81	83	82	82	82	80	80	80	80	80	80
2014	83	88	89	89	89	89	88	88	88	88	88	88	88
2015	85	94	94	94	94	92	92	92	92	92	92	92	92
2016	72	72	72	72	67	67	67	67	67	67	67	67	67
2017	89	91	91	89	89	89	89	89	89	89	89	89	89
2018	75	77	77	77	77	77	77	77	77	77	77	77	77
2019	69	68	68	68	68	68	68	68	68	68	68	68	68
2020	40	43	43	43	43	43	43	43	43	43	43	43	43
2021	41	41	41	41	41	41	41	41	41	41	41	41	41

Accident Period	Age Interval in Months												
	12-24	24-36	36-48	48-60	60-72	72-84	84-96	96-108	108-120	120-132	132-144	144-156	156-Ult
1997	1.154	1.042	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1998	1.207	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1999	1.133	1.016	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2000	1.145	1.000	0.993	1.000	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001	1.078	1.000	1.045	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2002	1.136	1.043	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003	1.450	1.009	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004	1.086	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005	1.070	1.026	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006	1.091	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007	1.057	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2008	1.077	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009	1.049	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2010	1.029	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2011	1.143	1.063	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2012	1.154	1.044	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2013	1.013	1.000	1.025	0.988	1.000	1.000	0.976	1.000	1.000	1.000	1.000	1.000	1.000
2014	1.060	1.011	1.000	1.000	1.000	1.000	0.989	1.000	1.000	1.000	1.000	1.000	1.000
2015	1.106	1.000	1.000	1.000	0.979	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2016	1.000	1.000	1.000	0.931	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2017	1.022	1.000	0.978	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2018	1.027	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2019	0.986	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2020	1.075	1.075	1.075	1.075	1.075	1.075	1.075	1.075	1.075	1.075	1.075	1.075	1.075
2021	1.075	1.075	1.075	1.075	1.075	1.075	1.075	1.075	1.075	1.075	1.075	1.075	1.075

Averages													
1:	Average												
	1.098	1.012	1.002	0.996	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000
2:	Wtd Avg												
	1.103	1.011	1.002	0.997	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000
3:	5 Yr Wtd Avg												
	1.017	1.000	0.995	0.986	0.995	0.997	0.993	1.000	1.000	1.000	1.000	1.000	1.000
4:	Prior Selected												
	1.060	1.010	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected Values													
Cumulative	1.060	1.010	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	1.074	1.013	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Appendix B, Exhibit VIII

Municipality of Anchorage

Automobile Liability
Claim Count Analysis

A. Estimated Ultimate Claim Counts				
Policy Year	Reported Claims ¹	Months of Development	Claim Count Development Factor ²	Estimated Ultimate Claims
1/1/07-08	74	180	1.000	74
1/1/08-09	42	168	1.000	42
1/1/09-10	43	156	1.000	43
1/1/10-11	35	144	1.000	35
1/1/11-12	34	132	1.000	34
1/1/12-13	47	120	1.000	47
1/1/13-14	80	108	1.000	80
1/1/14-15	88	96	1.000	88
1/1/15-16	92	84	1.000	92
1/1/16-17	67	72	1.000	67
1/1/17-18	89	60	1.000	89
1/1/18-19	77	48	1.000	77
1/1/19-20	68	36	1.003	68
1/1/20-21	43	24	1.013	44
1/1/21-22	41	12	1.074	44
Total	920			924

B. Frequency Analysis			
Policy Year	Estimated Ultimate Claims	Vehicle Count	Frequency Per 10 Vehicles
1/1/07-08	74	1,532	0.48
1/1/08-09	42	1,551	0.27
1/1/09-10	43	1,547	0.28
1/1/10-11	35	1,386	0.25
1/1/11-12	34	1,179	0.29
1/1/12-13	47	1,175	0.40
1/1/13-14	80	1,498	0.53
1/1/14-15	88	1,500	0.59
1/1/15-16	92	1,450	0.63
1/1/16-17	67	1,564	0.43
1/1/17-18	89	1,366	0.65
1/1/18-19	77	1,742	0.44
1/1/19-20	68	1,754	0.39
1/1/20-21	44	1,788	0.25
1/1/21-22	44	1,784	0.25
		Average	0.41
		Weighted Average	0.40
		5-Year Wtd. Avg. = Selected	0.38

C. Claim Count Projection			
Policy Year	Projected Frequency	Projected Vehicle Count	Projected Claims
1/1/22-23	0.40	1,857	74

D. Projected Claims with Cost			
Policy Year	Projected Claims	Percentage of Claims with Cost ³	Projected Claims with Cost
1/1/22-23	74	73%	54

¹ Claim counts are uncollapsed and represent the total number of unique claim numbers.

² From Appendix B, Exhibit VII.

³ Percentage of claims with cost is based on historical ratio of claims with cost to total claims.

Appendix B, Exhibit IX

Municipality of Anchorage

Automobile Liability

Average Loss & ALAE Severities

Losses Limited to \$500,000 Including ALAE

A. Loss and Claim Data					
Policy Year	Limited Incurred Losses	Estimated Ultimate Losses	Trended Ultimate Losses	Reported Claim Count	Estimated Ultimate Claim
1/1/07-08	\$488,937	\$488,937	\$765,675	74	74
1/1/08-09	264,659	264,659	397,518	42	42
1/1/09-10	920,837	920,837	1,102,218	43	43
1/1/10-11	1,111,725	1,111,725	1,428,556	35	35
1/1/11-12	490,570	490,570	701,515	34	34
1/1/12-13	669,920	669,920	925,160	47	47
1/1/13-14	465,676	465,676	626,800	80	80
1/1/14-15	385,309	385,309	502,058	88	88
1/1/15-16	656,718	656,718	829,435	92	92
1/1/16-17	1,313,130	1,313,130	1,479,009	67	67
1/1/17-18	951,633	951,633	1,112,459	89	89
1/1/18-19	207,816	207,816	234,624	77	77
1/1/19-20	206,907	247,000	272,441	68	68
1/1/20-21	301,929	438,000 ¹	464,718	43	44
1/1/21-22	220,601	528,000 ¹	543,840	41	44
Projected					
1/1/22-23		\$817,000	\$817,000		74

B. Average Loss & ALAE Severities				
Policy Year	Reported Severity	Estimated Ultimate Severity	Trended Ultimate Severity	
1/1/07-08	\$6,607	\$6,607	\$10,347	
1/1/08-09	6,301	6,301	9,465	
1/1/09-10	21,415	21,415	25,633	
1/1/10-11	31,764	31,764	40,816	
1/1/11-12	14,429	14,429	20,633	
1/1/12-13	14,254	14,254	19,684	
1/1/13-14	5,821	5,821	7,835	
1/1/14-15	4,379	4,379	5,705	
1/1/15-16	7,138	7,138	9,016	
1/1/16-17	19,599	19,599	22,075	
1/1/17-18	10,693	10,693	12,500	
1/1/18-19	2,699	2,699	3,047	
1/1/19-20	3,043	3,632	4,006	
1/1/20-21	7,022	9,955	10,562	
1/1/21-22	5,381	12,000	12,360	
Projected				
1/1/22-23		\$11,041	\$11,041	

¹ From Appendix B, Exhibit XV, adjusted for \$500,000 limitation.

Appendix B, Exhibit X

Municipality of Anchorage

Automobile Liability

Limitation of Incurred Losses & ALAE to Historical Retentions

Evaluated as of 12/31/21

Policy Year	Incurred Losses as of 12/31/21	Historical Retention	Number Excess of Historical Retention	Total Amount Excess of Historical Retention	Incurred Losses Limited to Historical Retention
1/1/94-95	\$202,500	\$2,000,000	0	\$0	\$202,500
1/1/95-96	461,967	2,000,000	0	0	461,967
1/1/96-97	690,065	2,000,000	0	0	690,065
1/1/97-98	678,847	2,000,000	0	0	678,847
1/1/98-99	950,395	2,000,000	0	0	950,395
1/1/99-00	311,892	2,000,000	0	0	311,892
1/1/00-01	430,688	2,000,000	0	0	430,688
1/1/01-02	2,346,793	2,000,000	0	0	2,346,793
1/1/02-03	406,478	2,000,000	0	0	406,478
1/1/03-04	708,247	2,000,000	0	0	708,247
1/1/04-05	385,059	2,000,000	0	0	385,059
1/1/05-06	1,339,208	2,000,000	0	0	1,339,208
1/1/06-07	233,828	2,000,000	0	0	233,828
1/1/07-08	488,937	2,000,000	0	0	488,937
1/1/08-09	264,659	2,000,000	0	0	264,659
1/1/09-10	1,942,104	2,000,000	0	0	1,942,104
1/1/10-11	1,111,725	2,000,000	0	0	1,111,725
1/1/11-12	490,570	2,000,000	0	0	490,570
1/1/12-13	669,920	2,000,000	0	0	669,920
1/1/13-14	465,676	2,500,000	0	0	465,676
1/1/14-15	385,309	2,500,000	0	0	385,309
1/1/15-16	656,718	2,500,000	0	0	656,718
1/1/16-17	2,513,130	3,000,000	0	0	2,513,130
1/1/17-18	951,633	3,000,000	0	0	951,633
1/1/18-19	207,816	3,000,000	0	0	207,816
1/1/19-20	206,907	3,000,000	0	0	206,907
1/1/20-21	301,929	3,000,000	0	0	301,929
1/1/21-22	220,601	3,000,000	0	0	220,601
Total	\$20,023,602		0	\$0	\$20,023,602

Appendix B, Exhibit XI

Municipality of Anchorage

Automobile Liability

Development of Incurred Losses to Ultimate

Losses & ALAE Limited to Historical Retentions

Policy Year	Limited Incurred Losses	Months of Development	Loss Development Factor ¹	Estimated Ultimate Losses
1/1/94-95	\$202,500	336	1.000	\$202,500
1/1/95-96	461,967	324	1.000	461,967
1/1/96-97	690,065	312	1.000	690,065
1/1/97-98	678,847	300	1.000	678,847
1/1/98-99	950,395	288	1.000	950,395
1/1/99-00	311,892	276	1.000	311,892
1/1/00-01	430,688	264	1.000	430,688
1/1/01-02	2,346,793	252	1.000	2,346,793
1/1/02-03	406,478	240	1.000	406,478
1/1/03-04	708,247	228	1.000	708,247
1/1/04-05	385,059	216	1.000	385,059
1/1/05-06	1,339,208	204	1.000	1,339,208
1/1/06-07	233,828	192	1.000	233,828
1/1/07-08	488,937	180	1.000	488,937
1/1/08-09	264,659	168	1.000	264,659
1/1/09-10	1,942,104	156	1.000	1,942,104
1/1/10-11	1,111,725	144	1.000	1,111,725
1/1/11-12	490,570	132	1.000	490,570
1/1/12-13	669,920	120	1.000	669,920
1/1/13-14	465,676	108	1.000	465,676
1/1/14-15	385,309	96	1.000	385,309
1/1/15-16	656,718	84	1.000	656,718
1/1/16-17	2,513,130	72	1.000	2,513,130
1/1/17-18	951,633	60	1.000	951,633
1/1/18-19	207,816	48	1.000	207,816
1/1/19-20	206,907	36	1.193	247,000
1/1/20-21	301,929	24	1.372	414,000
1/1/21-22	220,601	12	1.715	378,000
Total	\$20,023,602			\$20,333,164

¹ From Appendix B, Exhibit II. A LDF of 1.000 is used where all claims are paid and closed and no further development is expected.

Appendix B, Exhibit XII

Municipality of Anchorage

Automobile Liability

Limitation of Paid Losses & ALAE to Historical Retentions

Evaluated as of 12/31/21

Policy Year	Paid Losses as of 12/31/21	Historical Retention	Number Excess of Historical Retention	Total Amount Excess of Historical Retention	Paid Losses Limited to Historical Retention
1/1/94-95	\$202,500	\$2,000,000	0	\$0	\$202,500
1/1/95-96	461,967	2,000,000	0	0	461,967
1/1/96-97	690,065	2,000,000	0	0	690,065
1/1/97-98	678,847	2,000,000	0	0	678,847
1/1/98-99	950,395	2,000,000	0	0	950,395
1/1/99-00	311,892	2,000,000	0	0	311,892
1/1/00-01	430,688	2,000,000	0	0	430,688
1/1/01-02	2,346,793	2,000,000	0	0	2,346,793
1/1/02-03	406,478	2,000,000	0	0	406,478
1/1/03-04	708,247	2,000,000	0	0	708,247
1/1/04-05	385,059	2,000,000	0	0	385,059
1/1/05-06	1,339,208	2,000,000	0	0	1,339,208
1/1/06-07	233,828	2,000,000	0	0	233,828
1/1/07-08	488,937	2,000,000	0	0	488,937
1/1/08-09	264,659	2,000,000	0	0	264,659
1/1/09-10	1,942,104	2,000,000	0	0	1,942,104
1/1/10-11	1,111,725	2,000,000	0	0	1,111,725
1/1/11-12	490,570	2,000,000	0	0	490,570
1/1/12-13	669,920	2,000,000	0	0	669,920
1/1/13-14	465,676	2,500,000	0	0	465,676
1/1/14-15	385,309	2,500,000	0	0	385,309
1/1/15-16	656,718	2,500,000	0	0	656,718
1/1/16-17	2,513,130	3,000,000	0	0	2,513,130
1/1/17-18	951,633	3,000,000	0	0	951,633
1/1/18-19	207,816	3,000,000	0	0	207,816
1/1/19-20	206,819	3,000,000	0	0	206,819
1/1/20-21	283,994	3,000,000	0	0	283,994
1/1/21-22	128,372	3,000,000	0	0	128,372
Total	\$19,913,349		0	\$0	\$19,913,349

Appendix B, Exhibit XIII

Municipality of Anchorage

Automobile Liability

Development of Paid Losses to Ultimate

Losses & ALAE Limited to Historical Retentions

Policy Year	Limited Paid Losses	Months of Development	Loss Development Factor ¹	Estimated Ultimate Losses
1/1/94-95	\$202,500	336	1.000	\$202,500
1/1/95-96	461,967	324	1.000	461,967
1/1/96-97	690,065	312	1.000	690,065
1/1/97-98	678,847	300	1.000	678,847
1/1/98-99	950,395	288	1.000	950,395
1/1/99-00	311,892	276	1.000	311,892
1/1/00-01	430,688	264	1.000	430,688
1/1/01-02	2,346,793	252	1.000	2,346,793
1/1/02-03	406,478	240	1.000	406,478
1/1/03-04	708,247	228	1.000	708,247
1/1/04-05	385,059	216	1.000	385,059
1/1/05-06	1,339,208	204	1.000	1,339,208
1/1/06-07	233,828	192	1.000	233,828
1/1/07-08	488,937	180	1.000	488,937
1/1/08-09	264,659	168	1.000	264,659
1/1/09-10	1,942,104	156	1.000	1,942,104
1/1/10-11	1,111,725	144	1.000	1,111,725
1/1/11-12	490,570	132	1.000	490,570
1/1/12-13	669,920	120	1.000	669,920
1/1/13-14	465,676	108	1.000	465,676
1/1/14-15	385,309	96	1.000	385,309
1/1/15-16	656,718	84	1.000	656,718
1/1/16-17	2,513,130	72	1.000	2,513,130
1/1/17-18	951,633	60	1.000	951,633
1/1/18-19	207,816	48	1.000	207,816
1/1/19-20	206,819	36	1.419	294,000
1/1/20-21	283,994	24	1.952	554,000
1/1/21-22	128,372	12	4.099	526,000
Total	\$19,913,349			\$20,668,164

¹ From Appendix B, Exhibit III. A LDF of 1.000 is used where all claims are paid and closed and no further development is expected.

Appendix B, Exhibit XIV

Municipality of Anchorage

Automobile Liability

Selection of Estimated Ultimate Losses

Losses & ALAE Limited to Historical Retentions

Policy Year	Estimated Ultimate Losses (Incurred Method)	Estimated Ultimate Losses (Paid Method)	Estimated Ultimate Losses (Selected) ¹
1/1/94-95	\$202,500	\$202,500	\$202,500
1/1/95-96	461,967	461,967	461,967
1/1/96-97	690,065	690,065	690,065
1/1/97-98	678,847	678,847	678,847
1/1/98-99	950,395	950,395	950,395
1/1/99-00	311,892	311,892	311,892
1/1/00-01	430,688	430,688	430,688
1/1/01-02	2,346,793	2,346,793	2,346,793
1/1/02-03	406,478	406,478	406,478
1/1/03-04	708,247	708,247	708,247
1/1/04-05	385,059	385,059	385,059
1/1/05-06	1,339,208	1,339,208	1,339,208
1/1/06-07	233,828	233,828	233,828
1/1/07-08	488,937	488,937	488,937
1/1/08-09	264,659	264,659	264,659
1/1/09-10	1,942,104	1,942,104	1,942,104
1/1/10-11	1,111,725	1,111,725	1,111,725
1/1/11-12	490,570	490,570	490,570
1/1/12-13	669,920	669,920	669,920
1/1/13-14	465,676	465,676	465,676
1/1/14-15	385,309	385,309	385,309
1/1/15-16	656,718	656,718	656,718
1/1/16-17	2,513,130	2,513,130	2,513,130
1/1/17-18	951,633	951,633	951,633
1/1/18-19	207,816	207,816	207,816
1/1/19-20	247,000	294,000	247,000 ²
1/1/20-21	414,000	554,000	414,000 ^{2,3}
1/1/21-22	378,000	526,000	378,000 ^{2,3}
Total	\$20,333,164	\$20,668,164	\$20,333,164

¹ Selected the average of the incurred and paid methods unless otherwise indicated.

² Selected the incurred method.

³ See Appendix B, Exhibit XV for final selection.

Appendix B, Exhibit XV

Municipality of Anchorage

Automobile Liability

Selection of Ultimate Losses for 1/1/20-21 through 1/1/21-22

Losses & ALAE Limited to \$2,000,000 Per Occurrence

A. Incurred Bornhuetter-Ferguson Method					
Policy Year	Projected Expected Losses ¹	Expected Percent Unreported ²	Expected Losses Unreported	Limited Incurred Losses As of 12/31/21	Indicated Ultimate Losses
1/1/20-21	\$787,000	27.0%	\$212,490	\$301,929	\$514,000
1/1/21-22	808,000	42.0%	339,360	220,601	560,000
B. Paid Bornhuetter-Ferguson Method					
Policy Year	Projected Expected Losses ¹	Expected Percent Unpaid ²	Expected Losses Unpaid	Limited Paid Losses As of 12/31/21	Indicated Ultimate Losses
1/1/20-21	\$787,000	49.0%	\$385,630	\$283,994	\$670,000
1/1/21-22	808,000	76.0%	614,080	128,372	742,000
C. Selected Losses for 1/1/20-21 through 1/1/21-22					
Policy Year	Loss Development Method ³	Incurred Bornhuetter-Ferguson Method	Paid Bornhuetter-Ferguson Method	Projected Loss Method	Selected Ultimate Losses
1/1/20-21	\$414,000	\$514,000	\$670,000	\$787,000	\$464,000 ⁴
1/1/21-22	378,000	560,000	742,000	808,000	560,000 ⁵

¹ From Appendix B, Exhibit VI.

² Based on loss development factors from Appendix B, Exhibits II & III. (1 - 1/LDF)

³ From Appendix B, Exhibit XIV.

⁴ Selected the average of the loss development method and the incurred B-F method.

⁵ Based on the incurred B-F method.

Appendix C – Estimated Unpaid Liability

Appendix C, Exhibit I

Municipality of Anchorage

Workers Compensation

Estimated Unpaid Liability as of 12/31/21

Losses Limited to Historical Retentions

Policy Year	Historical Retention	Estimated Ultimate Losses ⁴	Limited Paid Losses as of 12/31/21	Case Reserves as of 12/31/21	Limited Incurred Losses as of 12/31/21	Estimated IBNR as of 12/31/21	Estimated Unpaid Liability as of 12/31/21
Prior to 1994	Various ¹			\$704,138		\$70,000 ⁶	\$774,138
1/1/94-95	\$500,000	\$2,423,250	\$2,198,747	224,503	\$2,423,250	0	224,503
1/1/95-96	750,000	2,517,000	2,306,497	191,554	2,498,051	18,949	210,503
1/1/96-97	500,000	3,086,223	3,086,223	0	3,086,223	0	0
1/1/97-98	500,000	3,297,006	3,297,006	0	3,297,006	0	0
1/1/98-99	500,000	4,591,000	4,553,372	34,473	4,587,845	3,155	37,628
1/1/99-00	500,000	4,221,597	4,221,597	0	4,221,597	0	0
1/1/00-01	500,000	4,404,000	4,247,396	142,616	4,390,012	13,988	156,604
1/1/01-02	500,000	5,846,262	5,829,887	16,375	5,846,262	0	16,375
1/1/02-03	500,000	5,401,224	5,401,224	0	5,401,224	0	0
1/1/03-04	500,000	4,445,360	4,445,360	0	4,445,360	0	0
1/1/04-05	500,000	5,673,000	5,251,415	383,285	5,634,700	38,300	421,585
1/1/05-06	750,000	4,665,441	4,450,385	215,056	4,665,441	0	215,056
1/1/06-07	1,000,000	4,976,595	4,957,065	19,530	4,976,595	0	19,530
1/1/07-08	1,000,000	3,740,177	3,634,784	105,393	3,740,177	0	105,393
1/1/08-09	1,000,000	5,069,413	5,069,413	0	5,069,413	0	0
1/1/09-10	1,000,000	4,467,000	4,234,500	154,679	4,389,179	77,821	232,500
1/1/10-11	1,000,000	5,897,000	5,580,601	207,002	5,787,603	109,397	316,399
1/1/11-12	1,000,000 ²	5,751,000	4,702,052	880,426	5,582,478	168,522	1,048,948
1/1/12-13	1,500,000 ³	5,457,000	5,113,832	186,561	5,300,393	156,607	343,168
1/1/13-14	2,000,000	6,375,000	6,080,348	45,734	6,126,082	248,918	294,652
1/1/14-15	2,000,000	8,241,000	5,022,634	2,834,234	7,856,868	384,132	3,218,366
1/1/15-16	2,000,000	6,589,000	5,602,649	604,809	6,207,458	381,542	986,351
1/1/16-17	3,000,000	8,483,000	5,586,018	2,225,689	7,811,707	671,293	2,896,982
1/1/17-18	3,000,000	12,084,000	8,334,533	2,787,594	11,122,127	961,873	3,749,467
1/1/18-19	3,000,000	8,151,000	6,097,497	930,572	7,028,069	1,122,931	2,053,503
1/1/19-20	3,000,000	9,186,000 ⁵	5,853,824	1,789,009	7,642,833	1,543,167	3,332,176
1/1/20-21	3,000,000	6,771,000 ⁵	3,896,146	1,306,379	5,202,525	1,568,475	2,874,854
1/1/21-22	3,000,000	6,590,000 ⁵	1,873,810	1,779,272	3,653,082	2,936,918	4,716,190
Total		\$158,399,548	\$130,928,815	\$17,768,883	\$147,993,560	\$10,475,988	\$28,244,871

¹ \$450,000 retention for 1988 and prior; \$500,000 retention for 1989 and subsequent.

² The retention for Firefighters code 7704 is \$2,000,000 for 1/1/11-12.

³ The retention for Firefighters code 7710 is \$2,000,000 for 1/1/12-13.

⁴ From Table 14 unless otherwise indicated.

⁵ From Table 15.

⁶ Selected judgmentally based on open number of claims and amount case outstanding.

Appendix C, Exhibit II

Municipality of Anchorage

Workers Compensation

Reconciliation of Estimated Unpaid Liability

Losses Limited to Historical Retentions

Policy Year	Estimated Unpaid Liability as of 12/31/20	Change in Estimated Ultimate Losses During 1/1/21-12/31/21	Change in Paid Losses During 1/1/21-12/31/21	Estimated Unpaid Liability as of 12/31/21
1/1/94-95	\$236,648	\$0	\$12,145	\$224,503
1/1/95-96	220,929	(1,000)	9,426	210,503
1/1/96-97	0	0	0	0
1/1/97-98	0	0	0	0
1/1/98-99	37,880	0	252	37,628
1/1/99-00	0	0	0	0
1/1/00-01	141,129	16,000	525	156,604
1/1/01-02	26,757	0	10,382	16,375
1/1/02-03	0	0	0	0
1/1/03-04	0	0	0	0
1/1/04-05	429,861	(1,000)	7,276	421,585
1/1/05-06	256,377	(28,559)	12,762	215,056
1/1/06-07	118,718	(22,405)	76,783	19,530
1/1/07-08	120,583	(15,823)	(633)	105,393
1/1/08-09	0	0	0	0
1/1/09-10	60,139	178,000	5,639	232,500
1/1/10-11	329,672	27,000	40,273	316,399
1/1/11-12	1,949,078	(847,000)	53,130	1,048,948
1/1/12-13	354,629	7,000	18,461	343,168
1/1/13-14	341,403	(28,000)	18,751	294,652
1/1/14-15	3,121,615	179,000	82,249	3,218,366
1/1/15-16	1,115,708	(18,000)	111,357	986,351
1/1/16-17	2,878,395	276,000	257,413	2,896,982
1/1/17-18	3,387,525	1,601,000	1,239,058	3,749,467
1/1/18-19	2,700,993	(158,000)	489,490	2,053,503
1/1/19-20	4,273,561	262,000	1,203,385	3,332,176
1/1/20-21	5,277,344	(359,000)	2,043,490	2,874,854
1/1/21-22		6,590,000	1,873,810	4,716,190
Total	\$27,378,944	\$7,657,213	\$7,565,424	\$27,470,733
Prior to 1994				774,138
Total All Years				\$28,244,871

Appendix C, Exhibit III

Municipality of Anchorage

Workers Compensation

Range of Estimated Ultimate Losses and Unpaid Liability as of 12/31/21

Losses Limited to Historical Retentions

Policy Year	Low	Expected	High
Estimated Ultimate Losses & ALAE¹			
Prior to 1994	\$735,000	\$774,138	\$813,000
1/1/94-95	2,423,250	2,423,250	2,484,000
1/1/95-96	2,498,051	2,517,000	2,580,000
1/1/96-97	3,086,223	3,086,223	3,086,223
1/1/97-98	3,297,006	3,297,006	3,379,000
1/1/98-99	4,587,845	4,591,000	4,706,000
1/1/99-00	4,221,597	4,221,597	4,221,597
1/1/00-01	4,390,012	4,404,000	4,514,000
1/1/01-02	5,846,262	5,846,262	5,992,000
1/1/02-03	5,401,224	5,401,224	5,401,224
1/1/03-04	4,445,360	4,445,360	4,556,000
1/1/04-05	5,634,700	5,673,000	5,815,000
1/1/05-06	4,665,441	4,665,441	4,782,000
1/1/06-07	4,976,595	4,976,595	5,101,000
1/1/07-08	3,740,177	3,740,177	3,834,000
1/1/08-09	5,069,413	5,069,413	5,196,000
1/1/09-10	4,389,179	4,467,000	4,579,000
1/1/10-11	5,787,603	5,897,000	6,044,000
1/1/11-12	5,607,000	5,751,000	5,895,000
1/1/12-13	5,300,393	5,457,000	5,621,000
1/1/13-14	6,152,000	6,375,000	6,598,000
1/1/14-15	7,911,000	8,241,000	8,571,000
1/1/15-16	6,292,000	6,589,000	6,886,000
1/1/16-17	7,932,000	8,483,000	9,034,000
1/1/17-18	11,178,000	12,084,000	12,990,000
1/1/18-19	7,336,000	8,151,000	8,966,000
1/1/19-20	8,176,000	9,186,000	10,196,000
1/1/20-21	5,925,000	6,771,000	7,617,000
1/1/21-22	5,602,000	6,590,000	7,579,000
Total	\$152,606,331	\$159,173,686	\$167,037,044
Paid Losses & ALAE as of 12/31/21			
	\$130,928,815	\$130,928,815	\$130,928,815
Est. Loss & ALAE Unpaid Liability as of 12/31/21			
	\$21,677,516	\$28,244,871	\$36,108,229

¹ Estimated unpaid liability for 1994 and prior.

Appendix C, Exhibit IV

Municipality of Anchorage

General Liability

Estimated Unpaid Liability as of 12/31/21

Losses Limited to Historical Retentions

Policy Year ¹	Historical Retention	Estimated Ultimate Losses ²	Limited Paid Losses as of 12/31/21	Case Reserves as of 12/31/21	Limited Incurred Losses as of 12/31/21	Estimated IBNR as of 12/31/21	Estimated Unpaid Liability as of 12/31/21
1/1/94-95	\$2,000,000	\$448,424	\$448,424	\$0	\$448,424	\$0	\$0
1/1/95-96	2,000,000	694,789	694,789	0	694,789	0	0
1/1/96-97	2,000,000	697,460	697,460	0	697,460	0	0
1/1/97-98	2,000,000	854,456	854,456	0	854,456	0	0
1/1/98-99	2,000,000	417,418	417,418	0	417,418	0	0
1/1/99-00	2,000,000	222,191	222,191	0	222,191	0	0
1/1/00-01	2,000,000	390,279	390,279	0	390,279	0	0
1/1/01-02	2,000,000	624,404	624,404	0	624,404	0	0
1/1/02-03	2,000,000	1,353,326	1,353,326	0	1,353,326	0	0
1/1/03-04	2,000,000	473,700	473,700	0	473,700	0	0
1/1/04-05	2,000,000	420,979	420,979	0	420,979	0	0
1/1/05-06	2,000,000	721,910	721,910	0	721,910	0	0
1/1/06-07	2,000,000	1,257,776	1,257,776	0	1,257,776	0	0
1/1/07-08	2,000,000	534,389	534,389	0	534,389	0	0
1/1/08-09	2,000,000	1,630,146	1,628,596	550	1,629,146	1,000	1,550
1/1/09-10	2,000,000	2,489,008	2,489,008	0	2,489,008	0	0
1/1/10-11	2,000,000	210,429	210,429	0	210,429	0	0
1/1/11-12	2,000,000	77,272	77,272	0	77,272	0	0
1/1/12-13	2,000,000	1,450,684	1,450,684	0	1,450,684	0	0
1/1/13-14	2,500,000	1,790,632	1,790,632	0	1,790,632	0	0
1/1/14-15	2,500,000	1,719,468	1,719,468	0	1,719,468	0	0
1/1/15-16	2,500,000	441,179	441,179	0	441,179	0	0
1/1/16-17	3,000,000	964,000	861,446	78,762	940,208	23,792	102,554
1/1/17-18	3,000,000	386,000	352,714	10,000	362,714	23,286	33,286
1/1/18-19	3,000,000	601,000	518,280	26,250	544,530	56,470	82,720
1/1/19-20	3,000,000	655,000 ³	411,351	128,598	539,949	115,051	243,649
1/1/20-21	3,000,000	1,519,000 ³	254,523	619,835	874,358	644,642	1,264,477
1/1/21-22	3,000,000	769,000 ³	241,814	22,700	264,514	504,486	527,186
Total		\$23,814,319	\$21,558,897	\$886,695	\$22,445,592	\$1,368,727	\$2,255,422

¹ No open claims are reported prior to 1994.

² From Appendix A, Exhibit XIV unless otherwise indicated.

³ From Appendix A, Exhibit XV.

Appendix C, Exhibit V

Municipality of Anchorage

General Liability

Reconciliation of Estimated Unpaid Liability

Losses Limited to Historical Retentions

Policy Year	Estimated Unpaid Liability as of 12/31/20	Change in Estimated Ultimate Losses During 1/1/21-12/31/21	Change in Paid Losses During 1/1/21-12/31/21	Estimated Unpaid Liability as of 12/31/21
1/1/94-95	\$0	\$0	\$0	\$0
1/1/95-96	0	0	0	0
1/1/96-97	0	0	0	0
1/1/97-98	0	0	0	0
1/1/98-99	0	0	0	0
1/1/99-00	0	0	0	0
1/1/00-01	0	0	0	0
1/1/01-02	0	0	0	0
1/1/02-03	0	0	0	0
1/1/03-04	0	0	0	0
1/1/04-05	0	0	0	0
1/1/05-06	0	0	0	0
1/1/06-07	0	0	0	0
1/1/07-08	0	0	0	0
1/1/08-09	0	1,550	0	1,550
1/1/09-10	5,628	(344,103)	(338,475)	0
1/1/10-11	0	0	0	0
1/1/11-12	0	0	0	0
1/1/12-13	0	0	0	0
1/1/13-14	0	0	0	0
1/1/14-15	0	0	0	0
1/1/15-16	0	0	0	0
1/1/16-17	279,554	(177,000)	0	102,554
1/1/17-18	51,286	(18,000)	0	33,286
1/1/18-19	348,462	8,000	273,742	82,720
1/1/19-20	190,177	256,000	202,528	243,649
1/1/20-21	448,602	871,000	55,125	1,264,477
1/1/21-22		769,000	241,814	527,186
Total	\$1,323,709	\$1,366,447	\$434,734	\$2,255,422

Appendix C, Exhibit VI

Municipality of Anchorage

General Liability

Range of Estimated Ultimate Losses and Unpaid Liability as of 12/31/21

Losses Limited to Historical Retentions

Policy Year	Low	Expected	High
Estimated Ultimate Losses & ALAE			
1/1/94-95	\$448,424	\$448,424	\$448,424
1/1/95-96	694,789	694,789	694,789
1/1/96-97	697,460	697,460	697,460
1/1/97-98	854,456	854,456	854,456
1/1/98-99	417,418	417,418	417,418
1/1/99-00	222,191	222,191	222,191
1/1/00-01	390,279	390,279	390,279
1/1/01-02	624,404	624,404	624,404
1/1/02-03	1,353,326	1,353,326	1,353,326
1/1/03-04	473,700	473,700	473,700
1/1/04-05	420,979	420,979	420,979
1/1/05-06	721,910	721,910	721,910
1/1/06-07	1,257,776	1,257,776	1,257,776
1/1/07-08	534,389	534,389	534,389
1/1/08-09	1,629,146	1,630,146	1,671,000
1/1/09-10	2,489,008	2,489,008	2,489,008
1/1/10-11	210,429	210,429	210,429
1/1/11-12	77,272	77,272	77,272
1/1/12-13	1,450,684	1,450,684	1,450,684
1/1/13-14	1,790,632	1,790,632	1,790,632
1/1/14-15	1,719,468	1,719,468	1,719,468
1/1/15-16	441,179	441,179	441,179
1/1/16-17	940,208	964,000	1,012,000
1/1/17-18	367,000	386,000	405,000
1/1/18-19	544,530	601,000	661,000
1/1/19-20	590,000	655,000	721,000
1/1/20-21	1,291,000	1,519,000	1,747,000
1/1/21-22	654,000	769,000	884,000
Total	\$23,306,057	\$23,814,319	\$24,391,173
Paid Losses & ALAE as of 12/31/21			
	\$21,558,897	\$21,558,897	\$21,558,897
Est. Loss & ALAE Unpaid Liability as of 12/31/21			
	\$1,747,160	\$2,255,422	\$2,832,276

Appendix C, Exhibit VII

Municipality of Anchorage

Automobile Liability

Estimated Unpaid Liability as of 12/31/21

Losses Limited to Historical Retentions

Policy Year ¹	Historical Retention	Estimated Ultimate Losses ²	Limited Paid Losses as of 12/31/21	Case Reserves as of 12/31/21	Limited Incurred Losses as of 12/31/21	Estimated IBNR as of 12/31/21	Estimated Unpaid Liability as of 12/31/21
1/1/94-95	\$2,000,000	\$202,500	\$202,500	\$0	\$202,500	\$0	\$0
1/1/95-96	2,000,000	461,967	461,967	0	461,967	0	0
1/1/96-97	2,000,000	690,065	690,065	0	690,065	0	0
1/1/97-98	2,000,000	678,847	678,847	0	678,847	0	0
1/1/98-99	2,000,000	950,395	950,395	0	950,395	0	0
1/1/99-00	2,000,000	311,892	311,892	0	311,892	0	0
1/1/00-01	2,000,000	430,688	430,688	0	430,688	0	0
1/1/01-02	2,000,000	2,346,793	2,346,793	0	2,346,793	0	0
1/1/02-03	2,000,000	406,478	406,478	0	406,478	0	0
1/1/03-04	2,000,000	708,247	708,247	0	708,247	0	0
1/1/04-05	2,000,000	385,059	385,059	0	385,059	0	0
1/1/05-06	2,000,000	1,339,208	1,339,208	0	1,339,208	0	0
1/1/06-07	2,000,000	233,828	233,828	0	233,828	0	0
1/1/07-08	2,000,000	488,937	488,937	0	488,937	0	0
1/1/08-09	2,000,000	264,659	264,659	0	264,659	0	0
1/1/09-10	2,000,000	1,942,104	1,942,104	0	1,942,104	0	0
1/1/10-11	2,000,000	1,111,725	1,111,725	0	1,111,725	0	0
1/1/11-12	2,000,000	490,570	490,570	0	490,570	0	0
1/1/12-13	2,000,000	669,920	669,920	0	669,920	0	0
1/1/13-14	2,500,000	465,676	465,676	0	465,676	0	0
1/1/14-15	2,500,000	385,309	385,309	0	385,309	0	0
1/1/15-16	2,500,000	656,718	656,718	0	656,718	0	0
1/1/16-17	3,000,000	2,513,130	2,513,130	0	2,513,130	0	0
1/1/17-18	3,000,000	951,633	951,633	0	951,633	0	0
1/1/18-19	3,000,000	207,816	207,816	0	207,816	0	0
1/1/19-20	3,000,000	247,000	206,819	88	206,907	40,093	40,181
1/1/20-21	3,000,000	464,000 ³	283,994	17,935	301,929	162,071	180,006
1/1/21-22	3,000,000	560,000 ³	128,372	92,229	220,601	339,399	431,628
Total		\$20,565,164	\$19,913,349	\$110,252	\$20,023,601	\$541,563	\$651,815

¹ No open claims are reported prior to 1994.

² From Appendix B, Exhibit XIV unless otherwise indicated.

³ From Appendix B, Exhibit XV.

Appendix C, Exhibit VIII

Municipality of Anchorage

Automobile Liability

Reconciliation of Estimated Unpaid Liability

Losses Limited to Historical Retentions

Policy Year	Estimated Unpaid Liability as of 12/31/20	Change in Estimated Ultimate Losses During 1/1/21-12/31/21	Change in Paid Losses During 1/1/21-12/31/21	Estimated Unpaid Liability as of 12/31/21
1/1/94-95	\$0	\$0	\$0	\$0
1/1/95-96	0	0	0	0
1/1/96-97	0	0	0	0
1/1/97-98	0	0	0	0
1/1/98-99	0	0	0	0
1/1/99-00	0	0	0	0
1/1/00-01	0	0	0	0
1/1/01-02	0	0	0	0
1/1/02-03	0	0	0	0
1/1/03-04	0	0	0	0
1/1/04-05	0	0	0	0
1/1/05-06	0	0	0	0
1/1/06-07	0	0	0	0
1/1/07-08	0	0	0	0
1/1/08-09	0	0	0	0
1/1/09-10	0	0	0	0
1/1/10-11	0	0	0	0
1/1/11-12	0	0	0	0
1/1/12-13	0	0	0	0
1/1/13-14	0	0	0	0
1/1/14-15	0	0	0	0
1/1/15-16	0	0	0	0
1/1/16-17	0	0	0	0
1/1/17-18	0	0	0	0
1/1/18-19	0	0	0	0
1/1/19-20	176,193	(296,000)	(159,988)	40,181
1/1/20-21	518,770	(115,000)	223,764	180,006
1/1/21-22		560,000	128,372	431,628
Total	\$694,963	\$149,000	\$192,148	\$651,814

Appendix C, Exhibit IX

Municipality of Anchorage

Automobile Liability

Range of Estimated Ultimate Losses and Unpaid Liability as of 12/31/21

Losses Limited to Historical Retentions

Policy Year	Low	Expected	High
Estimated Ultimate Losses & ALAE			
1/1/94-95	\$202,500	\$202,500	\$202,500
1/1/95-96	461,967	461,967	461,967
1/1/96-97	690,065	690,065	690,065
1/1/97-98	678,847	678,847	678,847
1/1/98-99	950,395	950,395	950,395
1/1/99-00	311,892	311,892	311,892
1/1/00-01	430,688	430,688	430,688
1/1/01-02	2,346,793	2,346,793	2,346,793
1/1/02-03	406,478	406,478	406,478
1/1/03-04	708,247	708,247	708,247
1/1/04-05	385,059	385,059	385,059
1/1/05-06	1,339,208	1,339,208	1,339,208
1/1/06-07	233,828	233,828	233,828
1/1/07-08	488,937	488,937	488,937
1/1/08-09	264,659	264,659	264,659
1/1/09-10	1,942,104	1,942,104	1,942,104
1/1/10-11	1,111,725	1,111,725	1,111,725
1/1/11-12	490,570	490,570	490,570
1/1/12-13	669,920	669,920	669,920
1/1/13-14	465,676	465,676	465,676
1/1/14-15	385,309	385,309	385,309
1/1/15-16	656,718	656,718	656,718
1/1/16-17	2,513,130	2,513,130	2,513,130
1/1/17-18	951,633	951,633	951,633
1/1/18-19	207,816	207,816	207,816
1/1/19-20	222,000	247,000	272,000
1/1/20-21	394,000	464,000	534,000
1/1/21-22	476,000	560,000	644,000
Total	\$20,386,164	\$20,565,164	\$20,744,164
Paid Losses & ALAE as of 12/31/21			
	\$19,913,349	\$19,913,349	\$19,913,349
Est. Loss & ALAE Unpaid Liability as of 12/31/21			
	\$472,815	\$651,815	\$830,815

Appendix C, Exhibit X

Municipality of Anchorage

All Coverages

Estimated Payout of IBNR as of 12/31/21

Coverage	Estimated Expected IBNR as of 12/31/21 to be paid during 1/1/22-23	Estimated Expected IBNR as of 12/31/21 to be paid after 12/31/2022	Total
Workers Compensation	\$3,152,367	\$7,323,621	\$10,475,988
General Liability	581,841	786,886	1,368,727
Automobile Liability	204,417	337,146	541,563
Total All Coverages	\$3,938,625	\$8,447,653	\$12,386,278

Appendix D – Support Exhibits

Appendix D, Exhibit I

Municipality of Anchorage

Workers' Compensation

Loss and Exposure Trend Factors

Policy Year	Average Hourly Earnings Index (Services) ¹	Payroll Trend Factor to 1/1/22-23 Levels	Medical Cost Trend Index ²	Medical Trend Factor to 1/1/22-23 Levels	Weighted Trend Factor to 1/1/22-23 Levels ³
1/1/07-08	\$23.78	1.476	244.8	1.456	1.467
1/1/08-09	24.50	1.432	260.7	1.367	1.403
1/1/09-10	24.85	1.412	265.9	1.340	1.380
1/1/10-11	25.20	1.392	271.2	1.314	1.357
1/1/11-12	25.73	1.364	276.6	1.288	1.330
1/1/12-13	26.33	1.333	282.1	1.263	1.302
1/1/13-14	26.78	1.310	287.7	1.239	1.278
1/1/14-15	26.95	1.302	293.5	1.214	1.262
1/1/15-16	27.80	1.262	299.4	1.190	1.230
1/1/16-17	28.53	1.230	305.4	1.167	1.202
1/1/17-18	29.00	1.210	313.3	1.137	1.177
1/1/18-19	29.40	1.193	321.4	1.109	1.155
1/1/19-20	30.93	1.134	329.8	1.080	1.110
1/1/20-21	31.75	1.105	338.4	1.053	1.082
1/1/21-22	33.38	1.051	347.3	1.026	1.040
1/1/22-23	35.08	1.000	356.3	1.000	1.000

¹ From Bureau of Statistics Series "LEU0254530200". Professional and related occupations average hourly earnings (2020). The 2022 index is estimated by Willis Towers Watson.

² Based on Willis Towers Watson's review of industry data.

³ Weighted 55% Payroll and 45% Medical.

Appendix D, Exhibit II

Municipality of Anchorage

General Liability

Loss Trend Factors

Policy Year	Other Bodily Injury ¹	Other Property Damage ¹	Weighted Index ²	Loss Trend Factor to 1/1/22-23 Cost Levels
1/1/07-08	366.1	258.2	322.9	1.514
1/1/08-09	383.1	265.8	336.2	1.454
1/1/09-10	394.8	272.3	345.8	1.414
1/1/10-11	380.6	268.5	335.8	1.456
1/1/11-12	396.8	276.8	348.8	1.401
1/1/12-13	407.6	286.9	359.3	1.360
1/1/13-14	419.1	293.2	368.7	1.326
1/1/14-15	428.4	303.2	378.3	1.292
1/1/15-16	452.3	303.0	392.6	1.245
1/1/16-17	470.4	312.6	407.2	1.200
1/1/17-18	491.8	317.2	421.9	1.159
1/1/18-19	496.6	333.9	431.5	1.133
1/1/19-20	519.1	337.5	446.4	1.095
1/1/20-21	536.4	348.8	461.4	1.059
1/1/21-22	551.8	359.6	474.9	1.029
1/1/22-23	567.6	370.7	488.8	1.000

¹ Based on Willis Towers Watson's review of industry data.

² Weighted 60% Bodily Injury and 40% Property Damage.

Appendix D, Exhibit III

Municipality of Anchorage

Automobile Liability

Loss Trend Factors

Policy Year	Auto Bodily Injury ¹	Auto Property Damage ¹	Weighted Index ²	Loss Trend Factor to 1/1/22-23 Cost Levels
1/1/07-08	375.7	260.4	346.9	1.566
1/1/08-09	392.8	268.9	361.8	1.502
1/1/09-10	409.4	290.2	379.6	1.431
1/1/10-11	390.4	286.7	364.5	1.491
1/1/11-12	408.0	295.3	379.9	1.430
1/1/12-13	424.1	301.2	393.4	1.381
1/1/13-14	435.7	306.9	403.5	1.346
1/1/14-15	450.8	315.0	416.9	1.303
1/1/15-16	465.8	322.4	430.0	1.263
1/1/16-17	490.5	333.2	451.2	1.204
1/1/17-18	506.3	340.1	464.7	1.169
1/1/18-19	525.0	350.4	481.3	1.129
1/1/19-20	536.8	360.2	492.7	1.103
1/1/20-21	558.9	372.5	512.3	1.061
1/1/21-22	575.6	383.6	527.6	1.030
1/1/22-23	592.7	395.0	543.3	1.000

¹ Based on Willis Towers Watson's review of industry data.

² Weighted 75% Bodily Injury and 25% Property Damage.

Appendix E – Large Loss Details

Appendix E, Exhibit I

Municipality of Anchorage

Workers Compensation

Losses in Excess of \$300,000

Policy Year	Claim Number	Date of Accident	Status	Total Incurred As of 12/31/21	Total Paid As of 12/31/21	Case Outstanding Reserves	Total Incurred As of 12/31/20	Difference
1/1/78-79	1866	3/10/1978	Closed	\$381,374	\$381,374	\$0	\$381,374	\$0
1/1/78-79	550	6/21/1978	Closed	339,118	339,118	0	339,118	0
1/1/79-80	1786	6/27/1979	Closed	402,669	402,669	0	402,669	0
1/1/80-81	2571	10/28/1980	Closed	303,350	303,350	0	303,350	0
1/1/81-82	3846	1/14/1981	Closed	397,975	397,975	0	397,975	0
1/1/82-83	3402	6/15/1982	Closed	801,534	801,534	0	801,534	0
1/1/83-84	4157	3/3/1983	Closed	353,450	353,450	0	353,450	0
1/1/83-84	4423	9/24/1983	Closed	351,082	351,082	0	351,082	0
1/1/84-85	4507	5/1/1984	Open	420,855	267,770	153,085	300,855	120,000
1/1/86-87	6022	5/5/1986	Open	887,121	457,374	429,747	900,872	(13,752)
1/1/86-87	6065	7/17/1986	Open	480,474	413,738	66,735	485,691	(5,217)
1/1/87-88	6721	8/7/1987	Open	916,792	557,301	359,491	909,477	7,315
1/1/87-88	6785	10/21/1987	Closed	304,947	304,947	0	304,947	0
1/1/90-91	8242	6/28/1990	Closed	428,042	428,042	0	428,042	0
1/1/91-92	8911	9/16/1991	Open	596,637	444,076	152,561	596,637	0
1/1/94-95	10187	10/12/1994	Open	713,414	275,497	437,916	742,014	(28,600)
1/1/95-96	10400	3/26/1995	Open	802,571	595,111	207,459	802,605	(34)
1/1/96-97	10853	5/24/1996	Closed	346,845	346,845	0	346,845	0
1/1/96-97	11038	10/26/1996	Closed	526,560	526,560	0	526,560	0
1/1/97-98	11319	6/5/1997	Closed	300,278	300,278	0	300,278	0
1/1/97-98	11353	7/17/1997	Open	1,033,079	665,237	367,842	1,033,079	0
1/1/98-99	11715	3/14/1998	Open	1,336,645	917,196	419,449	1,372,948	(36,303)
1/1/98-99	12031	11/10/1998	Closed	393,027	393,027	0	393,027	0
1/1/98-99	12012	12/13/1998	Closed	354,325	354,325	0	354,325	0
1/1/99-00	12592	11/3/1999	Closed	375,155	375,155	0	375,155	0
1/1/00-01	12812	2/3/2000	Closed	521,374	521,374	0	521,374	0
1/1/00-01	13295	11/29/2000	Closed	325,030	325,030	0	325,030	0
1/1/00-01	13332	12/2/2000	Open	311,896	276,280	35,617	297,295	14,601
1/1/01-02	13546	4/9/2001	Closed	500,000	500,000	0	500,000	0
1/1/01-02	13556	4/20/2001	Closed	456,455	456,455	0	456,455	0
1/1/01-02	13671	7/9/2001	Closed	493,870	493,870	0	493,870	0
1/1/01-02	13981	7/31/2001	Open	786,833	483,624	303,208	786,833	0
1/1/02-03	14482	9/21/2002	Closed	500,000	500,000	0	500,000	0
1/1/03-04	14850	4/14/2003	Closed	363,959	363,959	0	363,959	0
1/1/04-05	15507	3/31/2004	Closed	441,803	441,803	0	441,803	0
1/1/04-05	15520	4/4/2004	Open	475,400	199,602	275,798	475,400	0
1/1/04-05	15841	9/23/2004	Closed	473,568	473,568	0	473,568	0
1/1/04-05	15927	11/21/2004	Closed	468,634	468,634	0	468,634	0
1/1/05-06	16022	1/9/2005	Closed	481,573	481,573	0	481,573	0
1/1/05-06	16074	1/25/2005	Closed	549,436	549,436	0	549,436	0
1/1/05-06	16122	3/21/2005	Open	588,902	373,847	215,055	589,717	(815)
1/1/05-06	16209	5/12/2005	Closed	413,442	413,442	0	413,442	0
1/1/06-07	16757	4/20/2006	Open	2,069,181	1,250,624	818,558	1,835,767	233,414
1/1/06-07	16754	4/22/2006	Closed	410,272	410,272	0	410,272	0
1/1/06-07	17165	12/20/2006	Closed	398,105	398,105	0	325,122	72,983

Appendix E, Exhibit I

Municipality of Anchorage

Workers Compensation

Losses in Excess of \$300,000

Policy Year	Claim Number	Date of Accident	Status	Total Incurred As of 12/31/21	Total Paid As of 12/31/21	Case Outstanding Reserves	Total Incurred As of 12/31/20	Difference
1/1/07-08	17600	7/30/2007	Closed	505,594	505,594	0	505,594	0
1/1/08-09	17963	3/3/2008	Closed	528,789	528,789	0	528,789	0
1/1/08-09	18120	5/30/2008	Closed	572,144	572,144	0	572,144	0
1/1/09-10	18773	2/27/2009	Closed	387,270	387,270	0	387,270	0
1/1/09-10	18875	4/14/2009	Closed	399,039	399,039	0	415,398	(16,359)
1/1/09-10	19276	11/16/2009	Open	422,220	299,376	122,844	319,349	102,872
1/1/10-11	19270	1/9/2010	Closed	829,356	829,356	0	829,356	0
1/1/10-11	19442	4/9/2010	Open	2,687,319	1,041,347	1,645,972	2,687,319	0
1/1/10-11	19738	11/22/2010	Closed	332,427	332,427	0	332,427	0
1/1/11-12	21581	1/1/2011	Open	1,207,844	459,529	748,315	2,198,647	(990,803)
1/1/11-12	20103	7/31/2011	Closed	484,075	484,075	0	484,075	0
1/1/11-12	20278	12/10/2011	Closed	381,437	381,437	0	381,437	0
1/1/12-13	20337	1/10/2012	Closed	1,229,243	1,229,243	0	1,229,243	0
1/1/12-13	20427	3/11/2012	Open	394,052	285,770	108,282	394,052	0
1/1/12-13	20726	11/14/2012	Closed	638,814	638,814	0	638,814	0
1/1/13-14	20821	1/21/2013	Closed	425,978	425,978	0	425,978	0
1/1/13-14	20886	3/21/2013	Closed	440,214	440,214	0	440,214	0
1/1/13-14	21011	7/29/2013	Open	528,479	506,810	21,669	504,955	23,524
1/1/14-15	24569	1/4/2014	Open	2,695,715	490,445	2,205,269	3,592,557	(896,842)
1/1/14-15	21284	3/5/2014	Open	438,630	156,953	281,677	274,444	164,187
1/1/14-15	21289	3/7/2014	Open	1,142,509	536,030	606,480	1,142,509	0
1/1/14-15	21615	11/8/2014	Open	520,401	211,419	308,982	520,401	0
1/1/15-16	21804	1/22/2015	Closed	458,976	458,976	0	458,976	0
1/1/15-16	21900	6/11/2015	Open	304,920	280,994	23,926	304,920	0
1/1/15-16	22036	9/10/2015	Open	391,288	347,615	43,673	404,831	(13,543)
1/1/15-16	22126	10/2/2015	Open	461,412	109,772	351,640	463,611	(2,200)
1/1/15-16	22075	10/15/2015	Closed	423,454	423,454	0	423,454	0
1/1/15-16	22118	11/4/2015	Open	302,177	234,244	67,933	195,484	106,693
1/1/16-17	22226	1/14/2016	Closed	311,325	311,325	0	311,325	0
1/1/16-17	22437	6/14/2016	Open	1,698,342	492,223	1,206,119	1,698,342	0
1/1/16-17	22695	9/4/2016	Open	745,679	555,561	190,119	510,000	235,679
1/1/16-17	22660	11/12/2016	Open	1,176,816	556,477	620,340	936,978	239,838
1/1/17-18	22886	3/9/2017	Open	1,733,295	1,014,703	718,591	1,733,881	(586)
1/1/17-18	22907	4/3/2017	Open	2,741,487	1,065,142	1,676,346	1,231,128	1,510,360
1/1/17-18	23000	6/5/2017	Open	4,626,870	2,934,136	1,692,734	6,169,654	(1,542,784)
1/1/18-19	23378	2/14/2018	Closed	632,732	632,732	0	631,036	1,696
1/1/18-19	23479	4/17/2018	Open	300,302	269,454	30,848	296,694	3,608
1/1/18-19	23684	9/10/2018	Open	386,608	225,552	161,056	361,951	24,657
1/1/18-19	23743	10/16/2018	Closed	366,472	366,472	0	310,000	56,472
1/1/18-19	23832	11/28/2018	Closed	305,833	305,833	0	320,000	(14,167)
1/1/19-20	23942	2/20/2019	Open	839,550	497,139	342,411	839,877	(327)
1/1/19-20	24313	10/10/2019	Open	419,606	357,638	61,968	65,000	354,606
1/1/19-20	24318	10/18/2019	Open	355,203	287,411	67,793	175,000	180,203
1/1/20-21	24431	1/12/2020	Open	435,306	109,981	325,325	95,000	340,306

Appendix E, Exhibit II

Municipality of Anchorage

General Liability

Losses in Excess of \$300,000

Policy Year	Claim Number	Date of Accident	Status	Total Incurred As of 12/31/21	Total Paid As of 12/31/21	Case Outstanding Reserves	Total Incurred As of 12/31/20	Difference
1/1/80-81	2308	3/29/1980	Closed	\$451,627	\$451,627	\$0	\$451,627	\$0
1/1/83-84	4334	8/24/1983	Closed	344,732	344,732	0	344,732	0
1/1/85-86	5506	2/3/1985	Closed	1,397,809	1,397,809	0	1,397,809	0
1/1/88-89	10172	9/14/1988	Closed	334,381	334,381	0	334,381	0
1/1/88-89	7726	10/6/1988	Closed	351,497	351,497	0	351,497	0
1/1/95-96	10989	8/5/1995	Closed	582,290	582,290	0	582,290	0
1/1/96-97	10587	10/18/1996	Closed	371,958	371,958	0	371,958	0
1/1/01-02	12373	11/16/2001	Closed	378,172	378,172	0	378,172	0
1/1/02-03	13141	8/3/2002	Closed	700,624	700,624	0	700,624	0
1/1/06-07	14187	3/24/2006	Closed	357,706	357,706	0	357,706	0
1/1/06-07	14192	7/7/2006	Closed	403,329	403,329	0	403,329	0
1/1/08-09	14216	9/5/2008	Closed	493,502	493,502	0	493,502	0
1/1/08-09	14190	12/30/2008	Closed	815,011	815,011	0	815,011	0
1/1/09-10	14193	4/4/2009	Closed	1,258,433	1,258,433	0	1,258,433	0
1/1/12-13	14882	5/23/2012	Closed	302,925	302,925	0	302,925	0
1/1/12-13	14256	6/9/2012	Closed	860,465	860,465	0	860,465	0
1/1/13-14	14438	3/6/2013	Closed	695,592	695,592	0	695,592	0
1/1/13-14	14598	9/16/2013	Closed	312,011	312,011	0	312,011	0
1/1/14-15	14707	1/30/2014	Closed	736,430	736,430	0	736,430	0
1/1/16-17	15354	9/30/2016	Closed	535,388	535,388	0	535,388	0
1/1/20-21	16570	9/24/2020	Open	500,000	0	500,000	0	500,000

Appendix E, Exhibit III

Municipality of Anchorage

Automobile Liability

Losses in Excess of \$300,000

Policy Year	Claim Number	Date of Accident	Status	Total Incurred As of 12/31/21	Total Paid As of 12/31/21	Case Outstanding Reserves	Total Incurred As of 12/31/20	Difference
1/1/98-99	11249	5/30/1998	Closed	\$479,941	\$479,941	\$0	\$479,941	\$0
1/1/01-02	12311	8/21/2001	Closed	1,560,681	1,560,681	0	1,560,681	0
1/1/05-06	13403	5/17/2005	Closed	417,856	417,856	0	417,856	0
1/1/05-06	13404	5/17/2005	Closed	476,738	476,738	0	476,738	0
1/1/09-10	14039	2/27/2009	Closed	1,521,268	1,521,268	0	1,521,268	0
1/1/10-11	14151	7/15/2010	Closed	488,951	488,951	0	488,951	0
1/1/16-17	15303	4/13/2016	Closed	1,700,000	1,700,000	0	1,700,000	0
1/1/16-17	15308	8/18/2016	Closed	329,647	329,647	0	329,647	0
1/1/17-18	15433	2/28/2017	Closed	704,749	704,749	0	704,749	0

Appendix F – Aggregate Loss Probability Analysis

Appendix F, Exhibit I

Municipality of Anchorage

Workers Compensation

Simulation Summaries of Projected Losses for 1/1/22-23 at Various Confidence Levels and Retentions

Simulation Item	Unlimited Losses	\$500,000 Per Occurrence Retention		\$3,000,000 Per Occurrence Retention	
		Limited Losses	Excess Losses	Limited Losses	Excess Losses
Mean	\$8,973,000	\$6,657,000	\$2,316,000	\$8,255,000	\$718,000
5% Perc	5,092,000	4,772,000	320,000	5,092,000	0
10% Perc	5,621,000	5,162,000	459,000	5,621,000	0
15% Perc	6,036,000	5,427,000	609,000	6,009,000	27,000
20% Perc	6,358,000	5,666,000	692,000	6,330,000	28,000
25% Perc	6,657,000	5,860,000	797,000	6,627,000	30,000
30% Perc	6,938,000	6,036,000	902,000	6,879,000	59,000
35% Perc	7,208,000	6,198,000	1,010,000	7,127,000	81,000
40% Perc	7,502,000	6,367,000	1,135,000	7,376,000	126,000
45% Perc	7,819,000	6,529,000	1,290,000	7,649,000	170,000
50% Perc	8,131,000	6,706,000	1,425,000	7,931,000	200,000
55% Perc	8,454,000	6,882,000	1,572,000	8,209,000	245,000
60% Perc	8,794,000	7,045,000	1,749,000	8,475,000	319,000
65% Perc	9,151,000	7,242,000	1,909,000	8,761,000	390,000
70% Perc	9,592,000	7,442,000	2,150,000	9,076,000	516,000
75% Perc	10,164,000	7,658,000	2,506,000	9,408,000	756,000
80% Perc	10,817,000	7,899,000	2,918,000	9,811,000	1,006,000
85% Perc	11,629,000	8,158,000	3,471,000	10,420,000	1,209,000
90% Perc	12,859,000	8,514,000	4,345,000	11,057,000	1,802,000
95% Perc	14,973,000	9,091,000	5,882,000	12,089,000	2,884,000

Appendix F, Exhibit II

Municipality of Anchorage

General Liability

Simulation Summaries of Projected Losses for 1/1/22-23 at Various Confidence Levels and Retentions

Simulation Item	Unlimited Losses	\$500,000 Per Occurrence Retention		\$3,000,000 Per Occurrence Retention	
		Limited Losses	Excess Losses	Limited Losses	Excess Losses
Mean	\$779,000	\$722,000	\$57,000	\$765,000	\$14,000
5% Perc	222,000	222,000	0	222,000	0
10% Perc	297,000	297,000	0	297,000	0
15% Perc	354,000	354,000	0	354,000	0
20% Perc	401,000	401,000	0	401,000	0
25% Perc	443,000	443,000	0	443,000	0
30% Perc	482,000	482,000	0	482,000	0
35% Perc	526,000	526,000	0	526,000	0
40% Perc	569,000	569,000	0	569,000	0
45% Perc	612,000	612,000	0	612,000	0
50% Perc	652,000	652,000	0	652,000	0
55% Perc	710,000	706,000	4,000	710,000	0
60% Perc	767,000	762,000	5,000	767,000	0
65% Perc	825,000	818,000	7,000	825,000	0
70% Perc	893,000	876,000	17,000	893,000	0
75% Perc	971,000	946,000	25,000	971,000	0
80% Perc	1,068,000	1,028,000	40,000	1,068,000	0
85% Perc	1,193,000	1,123,000	70,000	1,193,000	0
90% Perc	1,377,000	1,264,000	113,000	1,377,000	0
95% Perc	1,671,000	1,473,000	198,000	1,671,000	0

Appendix F, Exhibit III

Municipality of Anchorage

Automobile Liability

Simulation Summaries of Projected Losses for 1/1/22-23 at Various Confidence Levels and Retentions

Simulation Item	Unlimited Losses	\$500,000 Per Occurrence Retention		\$3,000,000 Per Occurrence Retention	
		Limited Losses	Excess Losses	Limited Losses	Excess Losses
Mean	\$866,000	\$817,000	\$49,000	\$866,000	\$0
5% Perc	392,000	392,000	0	392,000	0
10% Perc	442,000	442,000	0	442,000	0
15% Perc	480,000	480,000	0	480,000	0
20% Perc	513,000	513,000	0	513,000	0
25% Perc	546,000	546,000	0	546,000	0
30% Perc	578,000	578,000	0	578,000	0
35% Perc	603,000	603,000	0	603,000	0
40% Perc	635,000	635,000	0	635,000	0
45% Perc	668,000	668,000	0	668,000	0
50% Perc	701,000	701,000	0	701,000	0
55% Perc	735,000	735,000	0	735,000	0
60% Perc	774,000	774,000	0	774,000	0
65% Perc	818,000	818,000	0	818,000	0
70% Perc	867,000	866,000	1,000	867,000	0
75% Perc	931,000	919,000	12,000	931,000	0
80% Perc	1,008,000	988,000	20,000	1,008,000	0
85% Perc	1,106,000	1,058,000	48,000	1,106,000	0
90% Perc	1,257,000	1,148,000	109,000	1,257,000	0
95% Perc	1,548,000	1,300,000	248,000	1,548,000	0

Appendix G – Estimated Payout of Unpaid Liability

Appendix G, Exhibit I

Municipality of Anchorage

Workers Compensation
 Estimated Payout of Unpaid Liability as of 12/31/21
 Losses Limited to Historical Retentions

A. Estimated Payment Pattern of Unpaid Liability as of 12/31/21																		
Policy Year	1/1/22-23	1/1/23-24	1/1/24-25	1/1/25-26	1/1/26-27	1/1/27-28	1/1/28-29	1/1/29-30	1/1/30-31	1/1/31-32	1/1/32-33	1/1/33-34	1/1/34-35	1/1/35-36	1/1/36-37	1/1/37-38	1/1/38-39	Total
Prior to 1994	100.00%																	100.0%
1/1/94-95	100.00%																	100.0%
1/1/95-96	100.00%																	100.0%
1/1/96-97	100.00%																	100.0%
1/1/97-98	100.00%																	100.0%
1/1/98-99	100.00%																	100.0%
1/1/99-00	100.00%																	100.0%
1/1/00-01	100.00%																	100.0%
1/1/01-02	100.00%																	100.0%
1/1/02-03	100.00%																	100.0%
1/1/03-04	100.00%																	100.0%
1/1/04-05	100.00%																	100.0%
1/1/05-06	100.00%																	100.0%
1/1/06-07	36.11%	63.89%																100.0%
1/1/07-08	38.47%	22.22%	39.31%															100.0%
1/1/08-09																		0.0%
1/1/09-10	34.55%	24.39%	15.79%	9.12%	16.14%													100.0%
1/1/10-11	9.96%	31.11%	21.96%	14.22%	8.22%	14.54%												100.0%
1/1/11-12	9.01%	9.06%	28.31%	19.98%	12.94%	7.48%	13.23%											100.0%
1/1/12-13	8.23%	8.27%	8.31%	25.98%	18.33%	11.88%	6.86%	12.14%										100.0%
1/1/13-14	10.27%	7.38%	7.42%	7.46%	23.31%	16.45%	10.66%	6.16%	10.89%									100.0%
1/1/14-15	10.43%	9.20%	6.61%	6.65%	6.68%	20.88%	14.74%	9.54%	5.51%	9.76%								100.0%
1/1/15-16	14.33%	8.93%	7.88%	5.67%	5.70%	5.72%	17.89%	12.63%	8.18%	4.72%	8.36%							100.0%
1/1/16-17	17.77%	11.78%	7.35%	6.48%	4.66%	4.68%	4.71%	14.71%	10.38%	6.72%	3.88%	6.87%						100.0%
1/1/17-18	25.47%	13.25%	8.78%	5.47%	4.83%	3.47%	3.49%	3.51%	10.96%	7.74%	5.01%	2.89%	5.12%					100.0%
1/1/18-19	23.27%	19.54%	10.16%	6.74%	4.20%	3.70%	2.66%	2.68%	2.69%	8.41%	5.94%	3.85%	2.22%	3.93%				100.0%
1/1/19-20	27.76%	16.81%	14.12%	7.34%	4.87%	3.03%	2.68%	1.93%	1.93%	1.94%	6.08%	4.29%	2.78%	1.60%	2.84%			100.0%
1/1/20-21	28.09%	19.96%	12.09%	10.15%	5.28%	3.50%	2.18%	1.92%	1.38%	1.39%	1.40%	4.37%	3.08%	2.00%	1.15%	2.04%		100.0%
1/1/21-22	48.88%	14.36%	10.20%	6.18%	5.19%	2.70%	1.79%	1.12%	0.98%	0.71%	0.71%	0.71%	2.23%	1.58%	1.02%	0.59%	1.04%	100.0%
B. Estimated Payments of the Unpaid Liability as of 12/31/21																		
Policy Year	1/1/22-23	1/1/23-24	1/1/24-25	1/1/25-26	1/1/26-27	1/1/27-28	1/1/28-29	1/1/29-30	1/1/30-31	1/1/31-32	1/1/32-33	1/1/33-34	1/1/34-35	1/1/35-36	1/1/36-37	1/1/37-38	1/1/38-39	Total Payments
Prior to 1994	\$193,534	\$193,534	\$193,534	\$193,534														\$774,138
1/1/94-95	56,126	56,126	56,126	56,126														224,503
1/1/95-96	52,626	52,626	52,626	52,626														210,503
1/1/96-97	0	0	0	0														0
1/1/97-98	0	0	0	0														0
1/1/98-99	9,407	9,407	9,407	9,407														37,628
1/1/99-00	0	0	0	0														0
1/1/00-01	39,151	39,151	39,151	39,151														156,604
1/1/01-02	4,094	4,094	4,094	4,094														16,375
1/1/02-03	0	0	0	0														0
1/1/03-04	0	0	0	0														0
1/1/04-05	105,396	105,396	105,396	105,396														421,585
1/1/05-06	53,764	53,764	53,764	53,764														215,056
1/1/06-07	7,052	12,478																19,530
1/1/07-08	40,540	23,419	41,434															105,393
1/1/08-09																		0
1/1/09-10	80,337	56,697	36,722	21,213	\$37,531													232,500
1/1/10-11	31,498	98,443	69,475	44,998	25,994	\$45,990												316,399
1/1/11-12	94,540	95,013	296,951	209,568	135,736	78,411	\$138,728											1,048,948
1/1/12-13	28,243	28,384	28,526	89,153	62,919	40,752	23,541	\$41,650										343,168
1/1/13-14	30,252	21,760	21,869	21,978	68,690	48,477	31,398	18,138	\$32,090									294,652
1/1/14-15	335,578	295,979	212,894	213,958	215,028	672,041	474,282	307,190	177,454	\$313,961								3,218,366
1/1/15-16	141,340	88,109	77,712	55,897	56,177	56,458	176,451	124,527	80,655	46,592	\$82,433							986,351
1/1/16-17	514,854	341,348	212,791	187,682	134,997	135,672	136,350	426,144	300,745	194,790	112,525	\$199,084						2,896,982
1/1/17-18	955,050	496,626	329,263	205,258	181,037	130,217	130,869	131,523	411,057	290,097	187,894	108,541	\$192,036					3,749,467
1/1/18-19	477,805	401,356	208,705	138,371	86,259	76,080	54,723	54,997	55,272	172,745	121,912	78,962	45,614	\$80,702				2,053,503
1/1/19-20	924,950	560,108	470,491	244,655	162,206	101,117	89,185	64,150	64,470	64,793	202,501	142,912	92,563	53,471	\$94,604			3,332,176
1/1/20-21	807,476	573,865	347,507	291,906	151,791	100,638	62,736	55,333	39,800	39,999	40,199	125,637	88,667	57,429	33,175	\$58,695		2,874,854
1/1/21-22	2,305,391	677,135	481,233	291,413	244,787	127,289	84,393	52,609	46,401	33,376	33,543	33,710	105,357	74,354	48,159	27,820	\$49,220	4,716,190
Totals	\$7,289,004	\$4,284,818	\$3,349,670	\$2,530,150	\$1,563,152	\$1,613,142	\$1,402,656	\$1,276,261	\$1,207,945	\$1,156,354	\$781,007	\$688,846	\$524,236	\$265,956	\$175,937	\$86,515	\$49,220	\$28,244,871

Appendix G, Exhibit II

Municipality of Anchorage

General Liability

Estimated Payout of Unpaid Liability as of 12/31/21

Losses Limited to Historical Retentions

A. Estimated Payment Pattern of Unpaid Liability as of 12/31/21										
Policy Year	1/1/22-23	1/1/23-24	1/1/24-25	1/1/25-26	1/1/26-27	1/1/27-28	1/1/28-29	1/1/29-30	1/1/30-31	Total
1/1/05-06	100.00%									100.0%
1/1/06-07	100.00%									100.0%
1/1/07-08	100.00%									100.0%
1/1/08-09	100.00%									100.0%
1/1/09-10	100.00%									100.0%
1/1/10-11	100.00%									100.0%
1/1/11-12	100.00%									100.0%
1/1/12-13	100.00%									100.0%
1/1/13-14	100.00%									100.0%
1/1/14-15	100.00%									100.0%
1/1/15-16	100.00%									100.0%
1/1/16-17	74.69%	15.16%	5.07%	5.07%						100.0%
1/1/17-18	49.40%	37.79%	7.67%	2.56%	2.57%					100.0%
1/1/18-19	74.61%	12.54%	9.60%	1.95%	0.65%	0.65%				100.0%
1/1/19-20	42.58%	42.84%	7.20%	5.51%	1.12%	0.37%	0.37%			100.0%
1/1/20-21	53.59%	19.76%	19.88%	3.34%	2.56%	0.52%	0.17%	0.17%		100.0%
1/1/21-22	22.79%	41.37%	15.26%	15.35%	2.58%	1.97%	0.40%	0.13%	0.13%	100.0%

B. Estimated Payments of the Unpaid Liability as of 12/31/21										
Policy Year	1/1/22-23	1/1/23-24	1/1/24-25	1/1/25-26	1/1/26-27	1/1/27-28	1/1/28-29	1/1/29-30	1/1/30-31	Total Payments
1/1/05-06	\$0									\$0
1/1/06-07	0									0
1/1/07-08	0									0
1/1/08-09	1,550									1,550
1/1/09-10	0									0
1/1/10-11	0									0
1/1/11-12	0									0
1/1/12-13	0									0
1/1/13-14	0									0
1/1/14-15	0									0
1/1/15-16	0									0
1/1/16-17	76,601	\$15,550	\$5,199	\$5,204						102,554
1/1/17-18	16,444	12,580	2,554	854	\$855					33,286
1/1/18-19	61,715	10,377	7,939	1,612	539	\$539				82,720
1/1/19-20	103,753	104,372	17,550	13,426	2,725	911	\$912			243,649
1/1/20-21	677,619	249,901	251,392	42,271	32,337	6,565	2,195	\$2,197		1,264,477
1/1/21-22	120,161	218,120	80,441	80,921	13,607	10,409	2,113	706	\$707	527,186
Totals	\$1,057,842	\$610,900	\$365,075	\$144,287	\$50,063	\$18,424	\$5,220	\$2,903	\$707	\$2,255,422

Appendix G, Exhibit III

Municipality of Anchorage

Automobile Liability

Estimated Payout of Unpaid Liability as of 12/31/21

Losses Limited to Historical Retentions

A. Estimated Payment Pattern of Unpaid Liability as of 12/31/21								
Policy Year	1/1/22-23	1/1/23-24	1/1/24-25	1/1/25-26	1/1/26-27	1/1/27-28	1/1/28-29	Total
1/1/05-06	100.00%							100.0%
1/1/06-07	100.00%							100.0%
1/1/07-08	100.00%							100.0%
1/1/08-09	100.00%							100.0%
1/1/09-10	100.00%							100.0%
1/1/10-11	100.00%							100.0%
1/1/11-12	100.00%							100.0%
1/1/12-13	100.00%							100.0%
1/1/13-14	100.00%							100.0%
1/1/14-15	100.00%							100.0%
1/1/15-16	100.00%							100.0%
1/1/16-17	100.00%							100.0%
1/1/17-18	100.00%							100.0%
1/1/18-19	100.00%							100.0%
1/1/19-20	50.07%	43.27%	4.98%	1.01%	0.68%			100.0%
1/1/20-21	39.40%	30.34%	26.22%	3.02%	0.61%	0.41%		100.0%
1/1/21-22	35.50%	25.41%	19.57%	16.91%	1.95%	0.39%	0.26%	100.0%

B. Estimated Payments of the Unpaid Liability as of 12/31/21								
Policy Year	1/1/22-23	1/1/23-24	1/1/24-25	1/1/25-26	1/1/26-27	1/1/27-28	1/1/28-29	Total Payments
1/1/05-06	\$0							\$0
1/1/06-07	0							0
1/1/07-08	0							0
1/1/08-09	0							0
1/1/09-10	0							0
1/1/10-11	0							0
1/1/11-12	0							0
1/1/12-13	0							0
1/1/13-14	0							0
1/1/14-15	0							0
1/1/15-16	0							0
1/1/16-17	0							0
1/1/17-18	0							0
1/1/18-19	0							0
1/1/19-20	20,117	\$17,387	\$2,000	\$406	\$271			40,181
1/1/20-21	70,926	54,613	47,201	5,428	1,102	\$737		180,006
1/1/21-22	153,225	109,696	84,466	73,002	8,395	1,704	\$1,140	431,628
Totals	\$244,268	\$181,695	\$133,666	\$78,836	\$9,769	\$2,441	\$1,140	\$651,815