



Bickmore — Actuarial

Actuarial Review of the Self-Insured Workers' Compensation Program

Outstanding Liabilities as of June 30, 2022

Presented to
Novato Fire Protection District

July 13, 2022



SCOPE AND SIGNATURE

The Novato Fire Protection District (“the District”) has engaged Bickmore Actuarial to conduct an actuarial review of unpaid loss and loss adjustment expenses for claims that occurred on or before June 30, 2022 for its self-insured workers’ compensation program utilizing data valued as of June 30, 2022 for claims with dates of loss prior to July 1, 2014.

The specific objectives of the study are:

1. Estimate the District’s net liability for outstanding claims as of June 30, 2022. Liabilities net of reinsurance are presented on both an undiscounted basis as well as a discounted basis. The net liabilities are also presented at the expected level (i.e. without a risk margin) and with risk margins, which are quantified via confidence levels. The net liabilities include provisions for loss, allocated loss adjustment expense (ALAE), and unallocated loss adjustment expense (ULAE). ALAE and ULAE are defined in the Glossary section of this report.
2. Provide a statement of compliance with Governmental Accounting Standards Board Statement #10.

We appreciate the opportunity to be of service to the District in preparing this report. Please feel free to call Becky Richard at (916) 244-1183 or Derek Burkhalter at (916) 244-1167 with any questions you may have concerning this report.

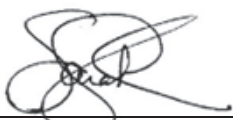
Becky Richard and Derek Burkhalter meet the Casualty Actuarial Society continuing education requirements and the American Academy of Actuaries’ qualification standards to sign Statements of Actuarial Opinion.

A handwritten signature in dark ink, appearing to read "Becky Richard", written over a horizontal line.

Becky Richard, ACAS, MAAA
Senior Actuarial Manager

A handwritten signature in dark ink, appearing to read "Derek Burkhalter", written over a horizontal line.

Derek Burkhalter, ACAS, MAAA
Senior Actuarial Manager

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Sarah Ashworth
Senior Actuarial Analyst

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EXECUTIVE SUMMARY

Net Claim Liabilities

The following table presents our conclusions regarding the District's net claim liabilities for claims with dates of loss prior to July 1, 2014.

Loss & LAE Claim Liabilities
As of June 30, 2022, Net of Reinsurance

Dollars (\$000s)	Expected ¹	← Confidence Level →				
		70%	75%	80%	85%	90%
Loss & ALAE	\$896	\$1,048	\$1,124	\$1,211	\$1,323	\$1,470
Claims Admin. (ULAE)	<u>68</u>	<u>80</u>	<u>85</u>	<u>92</u>	<u>100</u>	<u>112</u>
Total Loss & LAE	\$964	\$1,128	\$1,209	\$1,303	\$1,423	\$1,582
NPV Adjustment ²	<u>(124)</u>	<u>(145)</u>	<u>(156)</u>	<u>(167)</u>	<u>(183)</u>	<u>(204)</u>
Discounted Loss & LAE	\$840	\$983	\$1,053	\$1,136	\$1,240	\$1,378
Short Term ³	\$109	\$127	\$136	\$147	\$161	\$179
Long Term ³	731	856	917	989	1,079	1,199

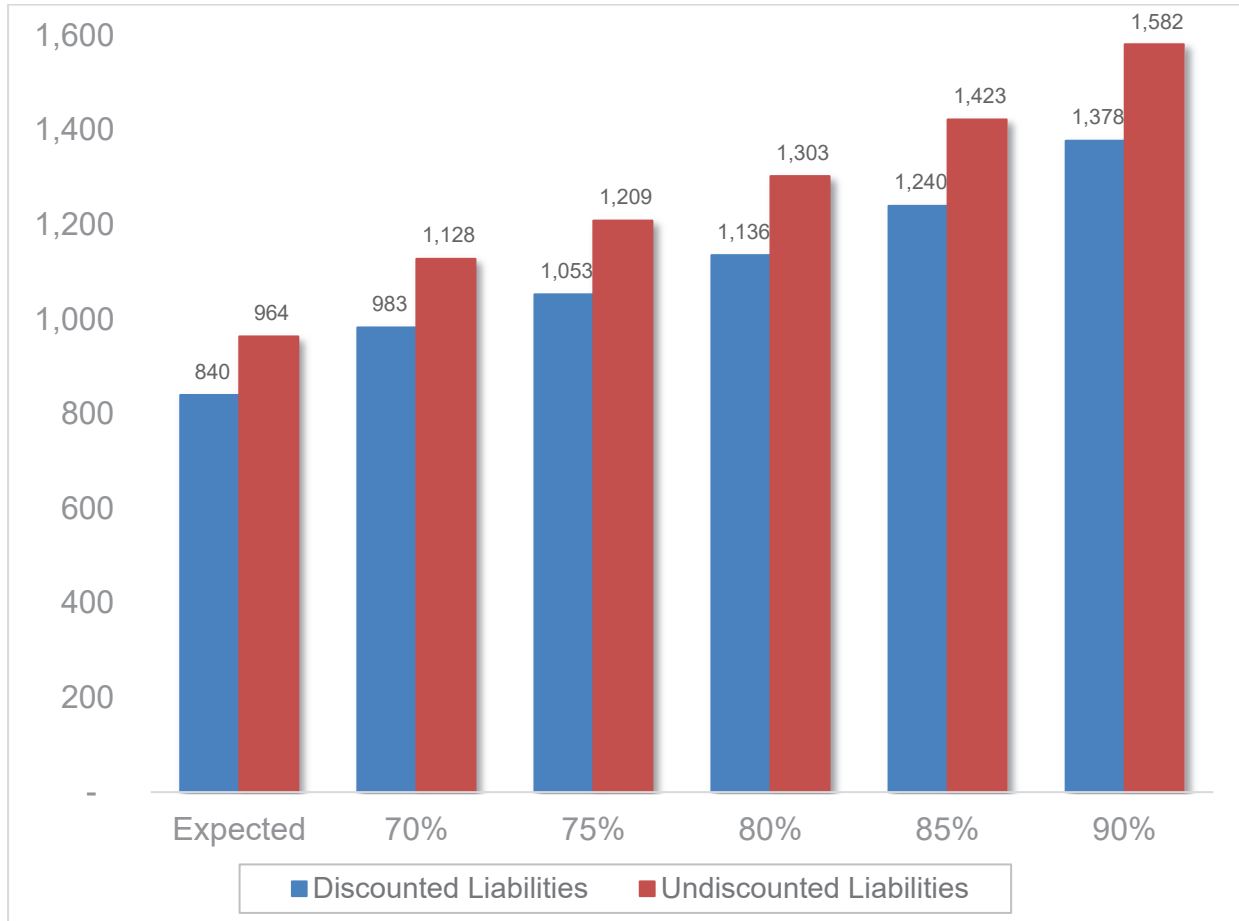
¹ Expected values represent the "best actuarial" or "central" estimate.

² Net present value is based on an annual discount rate of 2.0%.

³ Short term liabilities are projected to be paid within 12 months of the accounting date. Long term liabilities are projected to be paid after 12 months.

The following graph displays the program's net claim liabilities as of June 30, 2022 as shown on the prior page.

Loss & LAE Claim Liabilities
As of June 30, 2022, Net of Reinsurance
(\$000s)



We generally recommend that entities maintain funding at the 75% - 85% confidence level. However, we understand that each entity is unique, and that proper funding levels can vary based on issues such as the organization's risk tolerance, financial circumstances, and priorities.

Statement of Compliance with GASB #10

The outstanding liabilities presented in this section that include claims administration costs comply with the requirements promulgated by GASB #10.

BACKGROUND

Novato Fire Protection District began its self-insured workers' compensation program on July 1, 1987. It is our understanding that, effective July 1, 2014, the District joined the Fire Agencies Self Insurance System and the self-insured workers' compensation program is now in run-off. Claims administration services for the District's workers' compensation program are provided by Athens.

The following table shows a history of the District's self-insured retentions (SIRs) by year.

Policy Year Start Date	Policy Year End Date	Per Occurrence Retention	Aggregate Retention
7/1/1987	6/30/1994	275,000	(none)
7/1/1994	6/30/1995	275,000	(none)
7/1/1995	6/30/1996	275,000	(none)
7/1/1996	6/30/1997	275,000	(none)
7/1/1997	6/30/1998	275,000	(none)
7/1/1998	6/30/1999	275,000	(none)
7/1/1999	6/30/2000	275,000	(none)
7/1/2000	6/30/2001	275,000	(none)
7/1/2001	6/30/2002	300,000	(none)
7/1/2002	6/30/2003	1,000,000	(none)
7/1/2003	6/30/2004	1,000,000	(none)
7/1/2004	6/30/2005	1,000,000	(none)
7/1/2005	6/30/2006	1,000,000	(none)
7/1/2006	6/30/2007	1,000,000	(none)
7/1/2007	6/30/2008	1,000,000	(none)
7/1/2008	6/30/2009	1,000,000	(none)
7/1/2009	6/30/2010	1,000,000	(none)
7/1/2010	6/30/2011	1,000,000	(none)
7/1/2011	6/30/2012	1,000,000	(none)
7/1/2012	6/30/2013	1,000,000	(none)
7/1/2013	6/30/2014	1,250,000	(none)

Additional background on the program is given in Appendix K.

OBSERVATIONS AND ANALYSIS

In this section, we present a comparison to the prior analysis. The prior report for the District was dated July 13, 2021 and relied on data evaluated as of June 30, 2021. The current analysis relies on data evaluated as of June 30, 2022.

Comparison of Actual versus Expected Activity

The following tables describe how paid and reported losses have emerged between the two points in time referenced above. We also compare how our projected ultimate loss & ALAE amounts have changed between these two points in time.

Actual Versus Expected Incurred Loss & ALAE¹
Prior vs. Current Reports
(\$000s)

Fiscal Year	Expected Emergence	Actual Emergence	Actual Minus Expected Emergence
Prior	\$0	\$0	\$0
1994-95	0	0	0
1995-96	1	0	(1)
1996-97	0	(4)	(4)
1997-98	1	0	(1)
1998-99	0	0	0
1999-00	1	0	(1)
2000-01	1	(27)	(28)
2001-02	2	0	(2)
2002-03	1	0	(1)
2003-04	0	0	0
2004-05	2	2	(0)
2005-06	1	10	9
2006-07	0	0	0
2007-08	0	0	0
2008-09	8	0	(8)
2009-10	9	11	2
2010-11	12	0	(12)
2011-12	14	13	(1)
2012-13	12	25	13
2013-14	26	0	(26)
Total	\$91	\$30	(\$61)

¹ Loss & ALAE limited to the District's self-insured retention.

Actual Versus Expected Paid Loss & ALAE¹
Prior vs. Current Reports
(\$000s)

Fiscal Year	Expected Payments	Actual Payments	Actual Minus Expected Payments
Prior	\$0	\$0	\$0
1994-95	0	0	0
1995-96	2	0	(2)
1996-97	1	3	2
1997-98	2	0	(2)
1998-99	0	0	0
1999-00	4	1	(3)
2000-01	5	0	(5)
2001-02	4	0	(4)
2002-03	5	0	(5)
2003-04	0	0	0
2004-05	6	2	(4)
2005-06	1	0	(1)
2006-07	0	0	0
2007-08	0	0	0
2008-09	21	1	(20)
2009-10	9	5	(4)
2010-11	12	0	(12)
2011-12	16	11	(5)
2012-13	13	11	(2)
2013-14	22	0	(22)
Total	\$123	\$35	(\$88)

¹ Loss & ALAE limited to the District's self-insured retention.

Change in Projected Ultimate Loss & ALAE¹
Prior vs. Current Reports
(\$000s)

Fiscal Year	Prior Ultimate	Current Ultimate	Change in Ultimate
Prior	\$1,773	\$1,773	0
1994-95	354	354	0
1995-96	128	127	(1)
1996-97	559	554	(5)
1997-98	454	454	0
1998-99	988	988	0
1999-00	440	440	0
2000-01	586	559	(27)
2001-02	1,086	1,085	(1)
2002-03	183	183	0
2003-04	2,004	2,004	0
2004-05	215	215	0
2005-06	264	274	10
2006-07	493	493	0
2007-08	92	92	0
2008-09	666	655	(11)
2009-10	692	691	(1)
2010-11	617	604	(13)
2011-12	697	690	(7)
2012-13	339	341	2
2013-14	563	534	(29)
Total	\$13,193	\$13,110	(\$83)

¹ Projected ultimate loss & ALAE limited to the District's self-insured retention, at expected (no risk margin), and not discounted to reflect net present value.

Comparison of Liabilities: Prior vs. Current Reports

The table below compares our prior report's estimated liability for outstanding claims by component as of June 30, 2021 to our current report's estimated liability for outstanding claims as of June 30, 2022.

Change in Claims Liabilities
At Expected (without Risk Margin), Net of Reinsurance

Dollars (\$000s)	Prior Report at 6/30/2021	Current Report at 6/30/2022	Dollar Change	Percent Change
Case Reserves ¹	\$465	\$460	(\$5)	-1.1%
IBNR ²	549	436	(113)	-20.6%
Claims Administration	75	68	(7)	-9.3%
Total (Undiscounted)	\$1,089	\$964	(\$125)	-11.5%
NPV Adjustment ³	(138)	(124)	14	-10.1%
Total (Discounted)	\$951	\$840	(\$111)	-11.7%

¹ Established by the claims administrator.

² IBNR: Incurred But Not Reported for development beyond the case reserves.

³ Net present value is based on an annual discount rate of 2.0% in the prior and current reports.

The table below reconciles our prior report's estimated liability for outstanding claims as of June 30, 2021 to our current report's estimated liability for outstanding claims as of June 30, 2022.

Reconciliation of Claims Liabilities
At Expected (without Risk Margin), Net of Reinsurance

	Dollars (\$000s)
(A) Prior 6/30/2021 Discounted Loss & LAE Liabilities	\$951
(B) Change in Ultimate Loss & ALAE	(83)
(C) Paid Loss & ALAE in 2021-22	(35)
(D) Change in ULAE	(7)
(E) Change in Net Present Value	14
(F) Current 6/30/2022 Discounted Loss & LAE Liabilities	\$840

Loss and LAE Liabilities by Category

The following table shows the categories that compose our ultimate loss & LAE liability estimates.

Loss & ALAE Liabilities by Category and Year¹
As of June 30, 2022, Net of Reinsurance
(\$000s)

Fiscal Year	Case Reserves	Incurred but Not Reported (IBNR)	Total Liabilities
Prior	\$0	\$0	\$0
1994-95	0	0	0
1995-96	11	0	11
1996-97	0	1	1
1997-98	10	2	13
1998-99	0	3	3
1999-00	21	4	25
2000-01	0	5	5
2001-02	14	8	22
2002-03	15	4	19
2003-04	0	0	0
2004-05	41	10	51
2005-06	15	7	22
2006-07	0	0	0
2007-08	0	0	0
2008-09	149	35	183
2009-10	41	44	86
2010-11	33	68	101
2011-12	54	70	123
2012-13	56	58	114
<u>2013-14</u>	<u>0</u>	<u>118</u>	<u>118</u>
Total Loss & ALAE	\$460	\$436	\$896
ULAE	n/a	68	68
Total Loss & LAE	\$460	\$504	\$964

¹ Loss & ALAE liabilities are limited to the District's self-insured retention, at expected (no risk margin), and not discounted to reflect net present value.

Losses by Component

The following graphs illustrate our selected ultimate loss and ALAE amount for each accident year and segregates each ultimate into its component parts of (1) amounts already paid, (2) amounts already reserved for individual claims, and (3) IBNR reserves to cover both unreported claims as well as any adverse development on known claims.

Ultimate Loss & ALAE by Component
As of June 30, 2022



METHODOLOGY

The methodology that we have used to estimate ultimate Loss & LAE liabilities is in accordance with standard actuarial principles. The 6-step process described below outlines the methods used to calculate the liabilities.

1. Estimate Ultimate Loss & ALAE: The ultimate value of losses associated with a given policy year is usually not known until many years after the policy year has expired. One estimate of future payments for a given policy year is the case reserve. However, to accurately project future payments for a given policy year, we also calculate indicated IBNR reserves that consider the following three factors:
 - The amount that case reserves are redundant or deficient.
 - Losses that occurred during the policy period but have not yet been reported. This is called "Pure IBNR".
 - Future payments on claims which are closed but will reopen in the future.

Separate ultimate loss & ALAE projections are developed for costs limited to \$100,000 and limited to the retention. Loss development factors are primarily based on the District's own historical experience supplemented with industry data. The following methods are used to estimate ultimate loss & ALAE:

- Reported Loss Development: Includes paid losses and case reserves.
- Paid Loss Development: Based on payments only.
- Reported Exposure Method: This calculates IBNR based on expected ultimate loss times an IBNR factor. For the first layer of losses, the expected ultimate loss is based on exposure times initial loss rates. These loss rates are based on historical losses in that layer developed to ultimate using loss development factors. The loss rates in the higher layer incorporate increased limits factors based on the District's historical losses and industry data. Where appropriate, historical data is adjusted for both claims and exposure trend, to reflect issues such as inflation, benefit level changes, and legal changes.
- Paid Exposure Method: This calculates unpaid costs based on expected ultimate loss times an unpaid factor. The loss rates are identical to those utilized in the reported exposure method.
- Frequency x Severity: This calculates ultimate costs based on expected ultimate severity and expected ultimate frequency derived from historical experience.

2. Select Ultimate Loss & ALAE: Based on the indicated ultimate loss and ALAE from the various methods described previously, the ultimate losses by year are selected.
3. Calculate Expected Undiscounted Unpaid Loss & ALAE: Unpaid loss & ALAE equals ultimate Loss & ALAE (calculated in step #2, above) minus payments to date.
4. Discounting/Net Present Value: Since payments associated with claims liabilities will be spread out over several years, they are discounted to reflect anticipated investment income on the assets set aside to pay these costs. The expected Loss & ALAE payout pattern is based on the paid loss development factors previously described.
5. Claims Administration: Liabilities associated with claims administration expenses are calculated based on an average cost per claim method.

For the average cost per claim method, we first develop an average cost per claim by assuming a 7.5% ULAE to loss ratio. We then apply this cost per claim to open and IBNR claims to arrive at the ULAE liability.

6. Confidence Levels: The “expected” estimate of unpaid Loss & ALAE is our best estimate given current information. However, there is uncertainty inherent in the claims settlement process. This uncertainty is quantified via confidence levels. For example, we believe that future payments have a 75% chance of being less than the liabilities at the 75% confidence level and have only a 25% chance of exceeding the 75% confidence level estimates. The confidence levels are based on the Heckman Meyers approach.

CONSIDERATIONS AND KEY ASSUMPTIONS

Several considerations should be taken into account when evaluating property/casualty claim liabilities and funding projections for upcoming years. The following is a list of issues that we have considered in this report, along with some key assumptions that we have made.

Data

Data Quality: Our analysis is based on loss experience, exposure data, and other general and specific information provided to us by or on behalf of the District. While we have not independently audited or verified this information, we have reviewed it for reasonability and internal consistency. We have assumed that the data is accurate and complete. Any material inaccuracy or omission could invalidate the conclusions in this report and should be brought to our attention immediately.

Exposure: The exposure base utilized in this study is payroll, which was provided to us by the District. A list of exposure by year can be found in Appendix M.

Claims: The claims data utilized in this study was provided to us by the District.

Other Program Information: Key program information, including historical retentions, were provided to us by the District. We relied on this information without audit.

Key Dates

Accounting Date: This study presents liabilities as of an accounting date of June 30, 2022.

Valuation Date: The data underlying this study are valued as of June 30, 2022.

Review Date: We have also made use of information presented to us through the review date of July 15, 2022. We have not reflected any actual claims activity subsequent to the valuation date.

Accounting Standard

The accounting standards applicable to this analysis follow the guidance promulgated by the Governmental Accounting Standards Board (GASB).

Other Actuarial Considerations

Discounting to Reflect Net Present Value: Reserves in this report are presented on both undiscounted and discounted bases. We have assumed that assets held for investment will generate an average annual rate of return of 2.0% over the time during which the loss liabilities are paid out. It should be noted that actual future investment returns may vary

significantly from this assumption, depending upon prevailing investment market conditions.

Uncertainty & Risk Margin: There is uncertainty regarding the ultimate cost of the reserves and funding amounts that are estimated in this report. Our estimates are presented both at the expected level (also known as the actuarial central estimate) and at higher confidence levels. The projections at higher confidence levels reflect uncertainty by including a risk margin for the potential of costs coming in higher than at the expected level.

Trending: We have adjusted historical payroll and claims costs to reflect inflation as well as other changes in the claims environment. The payroll, claim frequency, and claim cost trend factors by year are in Appendices M and E, respectively. Benefit level changes are based on estimates from the California Workers' Compensation Rating Bureau (WCIRB).

External Influences: This analysis contemplates a continuation of current social, economic, judicial, and legislative trends. Historical changes have been reflected through the use of trend factors.

Homogeneity: The accuracy of loss estimates may be improved by subdividing loss experience into groups exhibiting similar characteristics. In evaluating the District's loss experience, we considered all of the experience together.

Credibility: Credibility is a measure of the predictive value attached to a body of data. The degree to which consideration is given to homogeneity is related to the consideration of credibility. While making more homogeneous groupings may increase the credibility of the data, partitioning into cells too small to be reliable statistically may also decrease it. As discussed above, further subdivision of data (by individual department, for instance) would reduce the statistical credibility too greatly. This aggregation of data assumes that there has been a relatively stable distribution of exposures among various risk characteristics during the years included in this analysis.

Loss Development: The rate at which costs develop to their ultimate level was included in the calculation of loss development factors. The loss development factors are described in the Methodology section of this report.

Claim Emergence Patterns: The delay between the occurrence of claims and the recording of claims was considered in the estimation of loss development factors.

Claim Settlement Patterns: The rate at which claims are closed and the impact upon incurred losses are considered in the calculation of loss development factors.

Reopened Claim Potential: The effect of reopened claims is included in the calculation of loss development factors.

Claim Frequency and Average Claim Size: The average and potential claim frequency and average claim size have been measured and considered in the liability estimates.

Large Losses & Catastrophes: The impact of large losses and catastrophes have the potential to distort the results of actuarial analyses. We have mitigated this risk by separating loss development and loss rates into the lower layer (limited to \$100,000 per occurrence) and the excess layer. In addition, our net liability and funding estimates limit loss & ALAE to the appropriate SIR. Lastly, we have utilized industry size of loss curves and increased limits factors where we feel that the District's experience is not fully credible.

Loss Limitations: Our projections of claim costs are limited to the District's SIR. We have assumed that all relevant reinsurance purchased by the District for costs above the SIR is collectible. The retentions used in the study are displayed by year in the Background section of this report.

Recoveries: The data underlying this report are net of salvage, subrogation and other recoveries.

Portfolio Transfers, Commutations, and Structured Settlements: No historical loss portfolio transfers or commutations have been reflected in this analysis. To the extent there are structured settlements, they have been reflected in the claims data utilized in this analysis.

Operational Changes: This analysis has not made special adjustment for any specific operational changes at the District.

Reasonableness: We have established the reasonability of our results by utilizing standard actuarial techniques and reasonable assumptions.

Claims Administration Costs (Unallocated Loss Adjustment Expense or ULAE): ULAE costs have been included in our estimate of outstanding liabilities.

CONDITIONS AND LIMITATIONS

It is important to recognize that the projections in this report are estimates at one point in time and are subject to future changes. Since the emergence and settlement of claims are subject to uncertainty, actual developments likely will vary, perhaps significantly, from the amounts carried in this report. No warranty is expressed or implied that such variance will not occur. The accuracy of the conclusions in this report depends on many factors, including the following:

Loss Activity since the Evaluation Date: The losses in this study were valued as of June 30, 2022. It is possible that there has been significant loss activity that has occurred since that date which would change the findings of this report.

Data Accuracy: This report relies on unaudited loss and exposure information provided by the District. The accuracy of our projections relies on the accuracy of this data.

Loss Development: The appropriateness of the District's historical and industry loss development patterns in projecting future loss development.

Trend Changes: The appropriateness of the trend indices used to adjust historical losses.

Discounting/Net Present Value: Our estimates that are discounted to reflect net present value assume a certain investment return on assets. This adjustment to reflect net present value is inaccurate to the extent that actual investment returns deviate from the assumed returns.

Insurance: Our estimates assume that all excess insurance is valid and collectible. Further, our funding recommendations do not include a provision for losses greater than the District's excess coverage.

Future Law Changes: We cannot predict, nor have we attempted to predict, the impact of future law changes and court rulings on claims costs.

New Classes of Claims: Our projections make no provision for the extraordinary future emergence of new classes of loss or types of loss not sufficiently represented in the District's historical data, or which are not yet quantifiable.

DISTRIBUTION AND USE

This report was prepared for the sole use of the Novato Fire Protection District and its auditors. This report is neither intended nor necessarily suitable for any other use. It may be forwarded to regulatory authorities as required by law. Any other distribution of this report requires the express written consent of Bickmore Actuarial. If such consent is granted, the report should be forwarded in its entirety, including all exhibits and appendices. It should also be understood that Bickmore Actuarial would be available to answer any questions regarding this report and its conclusions.

GLOSSARY OF ACTUARIAL TERMS

Accident Year – Year during which the accidents that generate a group of claims occurs, regardless of when the claims are reported, payments are made, or reserves are established.

Allocated Loss Adjustment Expenses (ALAE) – Expense incurred in settling claims that can be directly attributed to specific individual claims (e.g., legal fees, investigative fees, court charges, utilization review, bill review, etc.)

Benefit Level Factor – Factor used to adjust historical losses to the current level of workers' compensation benefits.

Case Reserve – The amount left to be paid on an open claim, as estimated by the claims administrator.

Claim Count Development Factor – A factor that is applied to the number of claims reported in a particular accident period in order to estimate the number of claims that will ultimately be reported.

Claim Frequency – Number of claims per \$1 million of payroll.

Confidence Level – An estimated probability that a given level of funding will be adequate to pay actual claims costs. For example, the 85% confidence level refers to an estimate for which there is an 85% chance that the amount will be sufficient to pay loss costs.

Discount Factor – A factor to adjust estimated loss costs to reflect net present value.

Expected Losses – The best estimate of the full, ultimate value of losses.

Exposure Base – An objective and easily measurable quantity that is correlated with loss. Commonly used exposure bases include payroll, population, revenue, number of employees (FTE), average daily attendance (ADA), number of vehicles and total insured value (TIV).

Incurred but not Reported (IBNR) Losses – This is the ultimate value of losses less any amount that has been paid to date or set up as a case reserve by the claims adjuster. It includes amounts for claims incurred but not yet received by the administrator as well as loss development on already reported claims.

Loss Adjustment Expense – The sum of Allocated Loss Adjustment Expense (ALAE) and Unallocated Loss Adjustment Expense (ULAE).

Loss Development Factor – A factor applied to losses for a particular accident period to reflect the fact that reported and paid losses do not reflect final values until all claims are settled. See the Methodology section.

Loss Rate – Ultimate losses per \$100 of payroll.

Non-Claims Related Expenses – Program expenses not directly associated with claims settlement and administration, such as excess insurance, safety program expenses, and general overhead. These exclude expenses associated with loss settlements (Indemnity/Medical, BI/PD), legal expenses associated with individual claims (ALAE), and claims administration (ULAE).

Outstanding Losses – Losses that have been incurred but not paid. This is the ultimate value of losses less any amount that has been paid.

Paid Losses – Losses actually paid on all reported claims.

Program Losses – Losses, including ALAE, limited to the SIR for each occurrence.

Reported Losses – The total expected value of losses as estimated by the claims administrator. This is the sum of paid losses and case reserves.

Self-Insured Retention (SIR) – The level at which an excess insurance policy is triggered to begin payments on a claim. Financially, this is similar to an insurance deductible.

Severity – Average claim cost.

Ultimate Losses – The value of claim costs at the time when all claims have been settled. This amount must be estimated until all claims are actually settled.

Unallocated Loss Adjustment Expenses (ULAE) – Claim settlement expenses that cannot be directly attributed to individual claims (e.g., claims administration expenses, taxes, etc.)

EXHIBITS AND APPENDICES

Novato Fire Protection District - Workers' Compensation

Funding Guidelines for Outstanding Liabilities at
June 30, 2022

(A) Estimated Ultimate Losses Incurred through 6/30/22: (From Appendix G)	\$13,110,000
(B) Estimated Paid Losses through 6/30/22: (From Appendix G)	12,214,000
(C) Estimated Liability for Claims Outstanding at 6/30/22: (From Appendix G)	<u>\$896,000</u>
(D) Estimated Liability for Outstanding Claims Administration Fees at 6/30/22: (From Appendix F)	68,000
(E) Total Outstanding Liability for Claims at 6/30/22: ((C) + (D))	<u>\$964,000</u>
(F) Reserve Discount Factor (Based on a Discount Rate of 2.0%): (Appendix I, Page 1, (G))	0.871
(G) Discounted Outstanding Liability for Claims at 6/30/22: ((E) x (F))	<u>\$840,000</u>

	<u>Marginally Acceptable</u>	<u>75%</u>	<u>Recommended</u>	<u>85%</u>	<u>Conservative</u>
Confidence Level of Adequacy:	70%	75%	80%	85%	90%
(H) Confidence Level Factor: (From Appendix J)	1.170	1.254	1.352	1.476	1.641
(I) Margin for Adverse Experience: ((G) x [(H) - 1])	143,000	213,000	296,000	400,000	538,000
(J) Total Required Assets at 6/30/22: ((G) + (I))	<u>\$983,000</u>	<u>\$1,053,000</u>	<u>\$1,136,000</u>	<u>\$1,240,000</u>	<u>\$1,378,000</u>

Novato Fire Protection District - Workers' Compensation

IBNR as of 6/30/23 at Expected Claims Level

Accident Year	Estimated Ultimate (A)	Reported as of 6/30/22 (B)	Estimated IBNR as of 6/30/22 (C)	Estimated Percent of IBNR Reported Between 7/1/22 and 6/30/23 (D)	Estimated IBNR Reported (E)	Estimated IBNR as of 6/30/23 (F)
Prior	\$1,772,557	\$1,772,557	\$0	100.0%	\$0	\$0
1994-1995	353,817	353,817	0	100.0%	0	0
1995-1996	127,000	126,843	157	0.0%	0	157
1996-1997	554,000	553,381	619	50.0%	310	309
1997-1998	454,000	451,864	2,136	49.9%	1,000	1,136
1998-1999	988,000	985,316	2,684	19.9%	1,000	1,684
1999-2000	440,000	436,297	3,703	28.4%	1,000	2,703
2000-2001	559,000	553,734	5,266	22.1%	1,000	4,266
2001-2002	1,085,000	1,077,213	7,787	24.8%	2,000	5,787
2002-2003	183,000	178,814	4,186	29.1%	1,000	3,186
2003-2004	2,004,301	2,004,301	0	18.7%	0	0
2004-2005	215,000	205,146	9,854	18.8%	2,000	7,854
2005-2006	274,000	267,235	6,765	15.7%	1,000	5,765
2006-2007	493,327	493,327	0	19.9%	0	0
2007-2008	92,328	92,328	0	18.0%	0	0
2008-2009	655,000	620,125	34,875	15.1%	5,000	29,875
2009-2010	691,000	646,780	44,220	16.5%	7,000	37,220
2010-2011	604,000	536,416	67,584	13.9%	9,000	58,584
2011-2012	690,000	620,420	69,580	15.3%	11,000	58,580
2012-2013	341,000	282,947	58,053	14.3%	8,000	50,053
2013-2014	534,000	415,567	118,433	14.9%	18,000	100,433
Totals	\$13,110,330	\$12,674,428	\$435,902		\$68,310	\$367,592

Notes:

- (A) From Exhibit 3, Page 1.
 (B) Provided by the District. These losses exclude amounts incurred above the District's SIR for each year.
 (C) (A) - (B).
 (D) Percentage of incurred but not reported (IBNR) expected to be reported between 7/1/22 and 6/30/23. The percentage is based on the development pattern selected in Appendix A.
 (E) ((A) - (B)) x (D).
 (F) (A) - (B) - (E).

This exhibit shows the calculation of the amount of incurred but not reported losses we expect as of 6/30/23. This amount is dependent on both the strength of the case reserves and the average frequency and severity of the losses incurred.

Novato Fire Protection District - Workers' Compensation

Estimated Ultimate Program Losses

Accident Year	Reported Loss Development Method (A)	Paid Loss Development Method (B)	Exposure Method Based on Reported Losses (C)	Exposure Method Based on Paid Losses (D)	Case Reserve Method (E)	Selected Estimate of Ultimate Losses (F)
Prior	\$1,772,557	\$1,790,283			\$1,772,557	\$1,772,557
1994-1995	354,171	358,417			353,817	353,817
1995-1996	126,970	117,920			127,540	127,000
1996-1997	554,488	565,555			553,381	554,000
1997-1998	453,671	453,405			453,722	454,000
1998-1999	990,243	1,017,831			985,316	988,000
1999-2000	439,351	431,897			440,940	440,000
2000-2001	558,718	580,313			553,734	559,000
2001-2002	1,090,140	1,124,374			1,081,209	1,085,000
2002-2003	181,854	176,381			183,373	183,000
2003-2004	2,046,391	2,186,692			2,004,301	2,004,301
2004-2005	210,480	181,228			220,339	215,000
2005-2006	275,519	281,449	\$280,937	\$299,464	273,324	274,000
2006-2007	512,567	556,966	511,082	546,592	493,327	493,327
2007-2008	96,760	105,623	99,771	112,714	92,328	92,328
2008-2009	655,472	547,932	663,942	584,330	713,881	655,000
2009-2010	691,408	715,623	690,260	708,447	676,632	691,000
2010-2011	579,866	607,529	584,470	612,902	562,085	604,000
2011-2012	680,601	700,344	681,127	698,384	666,849	690,000
2012-2013	315,486	289,100	355,183	377,184	334,716	341,000
2013-2014	472,915	548,133	505,105	594,642	415,567	534,000
Totals						\$13,110,330

Notes:

- (A) From Appendix A, Page 1, Column (G).
- (B) From Appendix B, Page 1, Column (G).
- (C) From Appendix C, Page 1, Column (G).
- (D) From Appendix C, Page 2, Column (G).
- (E) From Exhibit 3, Page 3, Column (E).
- (F) Selected averages of (A), (B), (C), (D), and (E).

This exhibit summarizes the results of the actuarial methods we have applied to estimate ultimate losses for each year. It is important to apply a number of estimation methods because each one relies on specific assumptions about the claims process that tend to hold generally true, but that may be violated in specific situations. Thus, the more estimation methods that can be applied, the better.

Novato Fire Protection District - Workers' Compensation

Estimated Ultimate Limited Losses Capped at \$100,000 per Claim

Accident Year	Reported Loss Development Method (A)	Paid Loss Development Method (B)	Exposure Method Based on Reported Losses (C)	Exposure Method Based on Paid Losses (D)	Frequency-Severity Method (E)	Selected Ultimate Limited Losses (F)
Prior	\$1,519,306	\$1,526,903			\$1,519,329	\$1,519,306
1994-1995	280,016	281,696			280,023	280,016
1995-1996	126,843	116,993			126,848	126,843
1996-1997	503,080	508,608			502,588	502,577
1997-1998	372,299	366,595			371,566	371,556
1998-1999	693,724	704,790			691,641	691,649
1999-2000	321,509	306,098			320,230	320,228
2000-2001	335,272	342,611			335,010	335,000
2001-2002	597,490	612,338			593,928	593,926
2002-2003	180,066	169,346			180,000	180,000
2003-2004	439,113	452,169			435,209	435,196
2004-2005	207,608	171,206			208,000	208,000
2005-2006	270,976	264,032	\$271,000	\$264,255	269,001	269,000
2006-2007	275,368	284,574	275,367	284,031	270,756	270,765
2007-2008	94,175	97,406	94,174	97,127	92,322	92,328
2008-2009	459,203	442,354	458,889	443,250	455,009	455,000
2009-2010	448,553	449,130	446,409	444,222	384,930	449,000
2010-2011	372,384	351,827	371,619	351,397	299,896	367,000
2011-2012	410,029	410,323	408,718	407,458	305,387	410,000
2012-2013	213,561	205,817	218,842	218,376	363,032	212,000
2013-2014	384,104	404,436	384,006	402,095	469,530	369,686
Totals						\$8,459,076

Notes:

- (A) From Appendix A, Page 1, Column (D).
- (B) From Appendix B, Page 1, Column (D).
- (C) Based on results in Appendix C, Page 1.
- (D) Based on results in Appendix C, Page 2.
- (E) Based on results in Appendix D, Page 1.
- (F) Selected averages of (A), (B), (C), (D), and (E).

This exhibit summarizes the results of the actuarial methods we have applied to estimate limited losses for each year. These results are used to select a limited loss rate for future years.

Novato Fire Protection District - Workers' Compensation

Reported Loss Development

Accident Year (A)	Limited Reported Losses as of 6/30/22 (B)	Reported Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Reported Losses of 6/30/22 (E)	Reported Loss Development Factor (F)	Ultimate Program Losses (G)
Prior	\$1,519,306	1.000	\$1,519,306	\$1,772,557	1.000	\$1,772,557
1994-1995	280,016	1.000	280,016	353,817	1.001	354,171
1995-1996	126,843	1.000	126,843	126,843	1.001	126,970
1996-1997	502,577	1.001	503,080	553,381	1.002	554,488
1997-1998	371,556	1.002	372,299	451,864	1.004	453,671
1998-1999	691,649	1.003	693,724	985,316	1.005	990,243
1999-2000	320,228	1.004	321,509	436,297	1.007	439,351
2000-2001	333,604	1.005	335,272	553,734	1.009	558,718
2001-2002	593,926	1.006	597,490	1,077,213	1.012	1,090,140
2002-2003	178,814	1.007	180,066	178,814	1.017	181,854
2003-2004	435,196	1.009	439,113	2,004,301	1.021	2,046,391
2004-2005	205,146	1.012	207,608	205,146	1.026	210,480
2005-2006	267,235	1.014	270,976	267,235	1.031	275,519
2006-2007	270,765	1.017	275,368	493,327	1.039	512,567
2007-2008	92,328	1.020	94,175	92,328	1.048	96,760
2008-2009	448,879	1.023	459,203	620,125	1.057	655,472
2009-2010	437,186	1.026	448,553	646,780	1.069	691,408
2010-2011	361,889	1.029	372,384	536,416	1.081	579,866
2011-2012	397,315	1.032	410,029	620,420	1.097	680,601
2012-2013	206,339	1.035	213,561	282,947	1.115	315,486
2013-2014	369,686	1.039	384,104	415,567	1.138	472,915
Totals	\$8,410,483		\$8,504,679	\$12,674,428		\$13,059,628

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the District. These losses exclude amounts over \$100,000 per occurrence.
- (C) From Appendix A, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over \$100,000 per occurrence.
- (E) Losses capped at the District's SIR. Amounts are provided by the District.
- (F) Derived from factors on Appendix A, Page 4.
- (G) (E) x (F).

This method tends to understate ultimate losses for the most recent several years because the large losses for those years generally have not yet emerged at the time of our review.

This exhibit shows the calculation of estimated ultimate losses for each year based on paid losses and case reserves as reported by the claims administrator. These losses tend to "develop" or change from period to period as more information becomes available about the cases. This development tends to follow quantifiable patterns over time.

Novato Fire Protection District - Workers' Compensation
Reported Loss Development

Accident Year	<u>Limited Losses Reported as of:</u>									
	108 Months	120 Months	132 Months	144 Months	156 Months	168 Months	180 Months	192 Months	204 Months	216 Months
1993-1994										
1994-1995										
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										319,226
2000-2001		336,295	326,958	326,958	326,958	332,558	332,558	340,226	340,226	336,751
2001-2002	602,305	602,316	602,390	603,332	603,332	603,332	614,352	614,352	593,926	593,926
2002-2003	155,323	177,069	177,091	177,091	177,091	177,091	177,091	177,091	177,091	177,091
2003-2004	435,196	435,196	435,196	435,196	435,196	435,196	435,196	435,196	435,196	435,196
2004-2005	198,520	198,520	198,520	198,932	198,932	198,932	198,932	198,932	203,640	205,146
2005-2006	263,457	263,457	257,533	257,533	257,533	257,533	257,533	257,533	267,235	
2006-2007	270,420	270,420	270,420	270,420	270,420	270,765	270,765	270,765		
2007-2008	92,328	92,328	92,328	92,328	92,328	92,328	92,328			
2008-2009	439,700	428,838	428,838	428,838	448,879	448,879				
2009-2010	429,898	429,898	429,898	437,186	437,186					
2010-2011	337,589	350,681	361,889	361,889						
2011-2012	389,225	389,225	397,315							
2012-2013	206,339	206,339								
2013-2014	369,686									

Reported Loss Development Factors:

	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months
1993-1994										
1994-1995										
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										1.000
2000-2001		0.972	1.000	1.000	1.017	1.000	1.023	1.000	0.990	1.010
2001-2002	1.000	1.000	1.002	1.000	1.000	1.018	1.000	0.967	1.000	1.000
2002-2003	1.140	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.010
2003-2004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004-2005	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.024	1.007	
2005-2006	1.000	0.978	1.000	1.000	1.000	1.000	1.000	1.038		
2006-2007	1.000	1.000	1.000	1.000	1.001	1.000	1.000			
2007-2008	1.000	1.000	1.000	1.000	1.000	1.000				
2008-2009	0.975	1.000	1.000	1.047	1.000					
2009-2010	1.000	1.000	1.017	1.000						
2010-2011	1.039	1.032	1.000							
2011-2012	1.000	1.021								
2012-2013	1.000									

	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months
Average	1.013	1.000	1.002	1.005	1.002	1.002	1.003	1.005	0.999	1.004
\$-Wtd. Averages										
Total	1.006	1.001	1.002	1.006	1.002	1.005	1.003	0.997	0.999	1.003
5-yr	1.001	1.011	1.005	1.013	1.000	1.000	1.000	0.996	0.999	1.003
4-yr	1.010	1.012	1.006	1.016	1.000	1.000	1.000	1.013	1.001	1.003
Comparative										
Factors	1.001	1.001	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.002
Prior	1.005	1.004	1.004	1.004	1.003	1.003	1.003	1.003	1.003	1.003
Selected	1.004	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.002	1.003
Cumulated	1.039	1.035	1.032	1.029	1.026	1.023	1.020	1.017	1.014	1.012

Novato Fire Protection District - Workers' Compensation
Reported Loss Development

Accident Year	Limited Losses Reported as of:										
	228 Months	240 Months	252 Months	264 Months	276 Months	288 Months	300 Months	312 Months	324 Months	336 Months	348 Months
1993-1994						142,806	142,806	142,806	142,806	142,806	142,806
1994-1995					280,016	280,016	280,016	280,016	280,016	280,016	
1995-1996				119,386	119,386	119,386	119,386	126,843	126,843		
1996-1997			532,576	532,576	525,967	511,997	506,972	502,577			
1997-1998		371,556	371,556	371,556	371,556	371,556	371,556				
1998-1999	691,649	691,649	691,649	691,649	691,649	691,649					
1999-2000	319,226	319,226	319,226	320,228	320,228						
2000-2001	340,226	360,113	360,113	333,604							
2001-2002	593,926	593,926	593,926								
2002-2003	178,814	178,814									
2003-2004	435,196										
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											
2013-2014											

Reported Loss Development Factors:

	228-240 Months	240-252 Months	252-264 Months	264-276 Months	276-288 Months	288-300 Months	300-312 Months	312-324 Months	324-336 Months	336-348 Months	348-Ult. Months
1993-1994						1.000	1.000	1.000	1.000	1.000	
1994-1995					1.000	1.000	1.000	1.000	1.000		
1995-1996				1.000	1.000	1.000	1.062	1.000			
1996-1997			1.000	0.988	0.973	0.990	0.991				
1997-1998		1.000	1.000	1.000	1.000	1.000					
1998-1999	1.000	1.000	1.000	1.000	1.000						
1999-2000	1.000	1.000	1.003	1.000							
2000-2001	1.058	1.000	0.926								
2001-2002	1.000	1.000									
2002-2003	1.000										
2003-2004											
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											
Average	1.012	1.000	0.986	0.998	0.995	0.998	1.013	1.000	1.000	1.000	
\$-Wtd. Averages											
Total	1.009	1.000	0.989	0.997	0.993	0.996	1.003	1.000			
5-yr	1.009	1.000	0.989	0.997	0.993	0.996					
4-yr	1.014	1.000	0.985	0.997	0.992	0.996	1.003				
Comparative											
Factors	1.001	1.001	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.000	1.004
Prior	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	
Selected	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	
Cumulated	1.009	1.007	1.006	1.005	1.004	1.003	1.002	1.001	1.000	1.000	

Novato Fire Protection District - Workers' Compensation
Reported between \$100,000 and \$500,000 Loss Development

Accident Year	<u>Losses Reported as of:</u>									
	108 Months	120 Months	132 Months	144 Months	156 Months	168 Months	180 Months	192 Months	204 Months	216 Months
1993-1994										
1994-1995										
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										116,070
2000-2001		225,797	225,797	225,797	225,797	225,797	225,797	225,797	225,797	225,797
2001-2002	474,934	456,502	456,513	469,335	468,862	468,862	468,862	468,862	468,862	468,862
2002-2003										
2003-2004	796,287	835,498	811,932	811,932	811,932	811,932	811,932	811,932	811,932	811,932
2004-2005										
2005-2006										
2006-2007	222,562	222,562	222,562	222,562	222,562	222,562	222,562	222,562		
2007-2008										
2008-2009	233,043	173,043	171,227	171,245	171,245	171,245				
2009-2010	214,972	193,278	195,778	198,310	209,594					
2010-2011	202,417	202,417	174,528	174,528						
2011-2012	207,821	218,106	223,106							
2012-2013	51,156	76,607								
2013-2014	45,881									

Reported Loss Development Factors:

	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months
1993-1994										
1994-1995										
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										1.000
2000-2001		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001-2002	0.961	1.000	1.028	0.999	1.000	1.000	1.000	1.000	1.000	1.130
2002-2003										
2003-2004	1.049	0.972	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004-2005										
2005-2006										
2006-2007	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2007-2008										
2008-2009	0.743	0.990	1.000	1.000	1.000					
2009-2010	0.899	1.013	1.013	1.057						
2010-2011	1.000	0.862	1.000							
2011-2012	1.049	1.023								
2012-2013	1.498									

	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months
Average	1.025	0.983	1.006	1.009	1.000	1.000	1.000	1.000	1.000	1.033
\$-Wtd. Averages										
Total	0.990	0.982	1.007	1.005	1.000	1.000	1.000	1.000	1.000	1.038
5-yr	0.949	0.972	1.003	1.019	1.000	1.000	1.000	1.000	1.000	1.038
4-yr	1.021	0.972								
Comparative										
Factors	1.020	1.018	1.013	1.017	1.012	1.009	1.012	1.007	1.003	1.005
Prior	1.044	1.039	1.032	1.025	1.024	1.019	1.018	1.015	1.012	1.010
Selected	1.036	1.032	1.026	1.022	1.020	1.016	1.016	1.012	1.009	1.008
Cumulated	1.263	1.219	1.181	1.151	1.126	1.104	1.087	1.070	1.057	1.048

Novato Fire Protection District - Workers' Compensation
Reported between \$100,000 and \$500,000 Loss Development

Accident Year	Losses Reported as of:										
	228 Months	240 Months	252 Months	264 Months	276 Months	288 Months	300 Months	312 Months	324 Months	336 Months	348 Months
1993-1994						3,159	3,159	3,159	3,159	3,159	3,159
1994-1995					73,502	73,801	73,801	73,801	73,801	73,801	
1995-1996											
1996-1997			50,804	50,804	50,804	50,804	50,804	50,804	50,804		
1997-1998		80,309	80,309	80,309	80,309	80,309	80,309	80,309			
1998-1999	305,632	305,632	311,438	311,888	293,668	293,668					
1999-2000	116,070	116,070	116,070	116,070	116,070						
2000-2001	225,797	225,797	225,797	225,797							
2001-2002	529,782	529,782	534,828								
2002-2003											
2003-2004	811,932										
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											
2013-2014											

Reported Loss Development Factors:

	228-240 Months	240-252 Months	252-264 Months	264-276 Months	276-288 Months	288-300 Months	300-312 Months	312-324 Months	324-336 Months	336-348 Months	348-Ult. Months
1993-1994						1.000	1.000	1.000	1.000	1.000	
1994-1995					1.004	1.000	1.000	1.000	1.000		
1995-1996											
1996-1997			1.000	1.000	1.000	1.000	1.000				
1997-1998		1.000	1.000	1.000	1.000	1.000					
1998-1999	1.000	1.019	1.001	0.942	1.000						
1999-2000	1.000	1.000	1.000	1.000							
2000-2001	1.000	1.000	1.000								
2001-2002	1.000	1.010									
2002-2003											
2003-2004											
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											

	228-240 Months	240-252 Months	252-264 Months	264-276 Months	276-288 Months	288-300 Months	300-312 Months	312-324 Months	324-336 Months	336-348 Months	348-Ult. Months
Average	1.000	1.006	1.000	0.986	1.001	1.000	1.000	1.000	1.000	1.000	
\$-Wtd. Averages											
Total	1.000	1.009	1.001	0.967	1.001	1.000	1.000	1.000			
5-yr	1.000	1.009	1.001	0.967	1.001	1.000					
4-yr		1.009	1.001	0.967							
Comparative											
Factors	1.006	1.006	1.006	1.006	1.005	1.004	1.004	1.003	1.003	1.003	1.025
Prior	1.007	1.006	1.004	1.004	1.003	1.003	1.003	1.002	1.002	1.001	
Selected	1.007	1.006	1.005	1.005	1.004	1.003	1.003	1.002	1.002	1.002	1.001
Cumulated	1.040	1.033	1.027	1.022	1.017	1.013	1.010	1.007	1.005	1.003	1.001

Novato Fire Protection District - Workers' Compensation

Paid Loss Development

Accident Year (A)	Limited Paid Losses as of 6/30/22 (B)	Paid Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Paid Losses of 6/30/22 (E)	Paid Loss Development Factor (F)	Ultimate Program Losses (G)
Prior	\$1,519,306	1.005	\$1,526,903	\$1,772,557	1.010	\$1,790,283
1994-1995	280,016	1.006	281,696	353,817	1.013	358,417
1995-1996	115,949	1.009	116,993	115,949	1.017	117,920
1996-1997	502,577	1.012	508,608	553,381	1.022	565,555
1997-1998	361,177	1.015	366,595	441,485	1.027	453,405
1998-1999	691,649	1.019	704,790	985,316	1.033	1,017,831
1999-2000	299,216	1.023	306,098	415,286	1.040	431,897
2000-2001	333,604	1.027	342,611	553,734	1.048	580,313
2001-2002	593,926	1.031	612,338	1,062,735	1.058	1,124,374
2002-2003	163,619	1.035	169,346	163,619	1.078	176,381
2003-2004	435,196	1.039	452,169	2,004,301	1.091	2,186,692
2004-2005	164,305	1.042	171,206	164,305	1.103	181,228
2005-2006	252,421	1.046	264,032	252,421	1.115	281,449
2006-2007	270,765	1.051	284,574	493,327	1.129	556,966
2007-2008	92,328	1.055	97,406	92,328	1.144	105,623
2008-2009	417,315	1.060	442,354	471,542	1.162	547,932
2009-2010	421,718	1.065	449,130	605,434	1.182	715,623
2010-2011	328,810	1.070	351,827	503,338	1.207	607,529
2011-2012	381,341	1.076	410,323	566,621	1.236	700,344
2012-2013	189,693	1.085	205,817	227,101	1.273	289,100
2013-2014	369,686	1.094	404,436	415,567	1.319	548,133
Totals	\$8,184,617		\$8,469,252	\$12,214,164		\$13,336,995

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the District. These losses exclude amounts over \$100,000 per occurrence.
- (C) From Appendix B, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over \$100,000 per occurrence.
- (E) Losses capped at the District's SIR. Amounts are provided by the District.
- (F) Derived from factors on Appendix B, Page 4.
- (G) (E) x (F).

This method tends to understate ultimate losses for the most recent several years because the large losses for those years generally have not yet emerged at the time of our review.

This exhibit shows the calculation of estimated ultimate losses for each year based on paid losses as reported by the claims administrator. These losses tend to "develop" or change from period to period as more information becomes available about the cases. This development tends to follow quantifiable patterns over time.

Novato Fire Protection District - Workers' Compensation
Paid Loss Development

Accident Year	<u>Limited Losses Paid as of:</u>									
	108 Months	120 Months	132 Months	144 Months	156 Months	168 Months	180 Months	192 Months	204 Months	216 Months
1993-1994										
1994-1995										
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										292,759
2000-2001		326,958	326,958	326,958	326,958	327,518	327,540	329,590	329,620	327,772
2001-2002	593,110	593,121	593,195	593,217	593,217	593,239	593,261	593,926	593,926	593,926
2002-2003	150,369	156,650	157,007	157,007	157,029	157,851	162,306	162,324	162,395	162,491
2003-2004	435,196	435,196	435,196	435,196	435,196	435,196	435,196	435,196	435,196	435,196
2004-2005	150,458	151,422	151,616	152,733	153,478	154,856	156,476	159,312	162,096	164,305
2005-2006	245,226	245,304	246,398	247,621	247,639	247,740	249,390	252,032	252,421	
2006-2007	270,420	270,420	270,420	270,420	270,420	270,765	270,765	270,765		
2007-2008	92,328	92,328	92,328	92,328	92,328	92,328	92,328			
2008-2009	409,566	410,956	414,112	415,512	417,279	417,315				
2009-2010	415,898	415,898	415,918	421,718	421,718					
2010-2011	304,014	309,482	328,439	328,810						
2011-2012	377,415	379,299	381,341							
2012-2013	189,675	189,693								
2013-2014	369,686									

Paid Loss Development Factors:

	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months
1993-1994										
1994-1995										
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										1.002
2000-2001		1.000	1.000	1.000	1.002	1.000	1.006	1.000	0.994	1.014
2001-2002	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000
2002-2003	1.042	1.002	1.000	1.000	1.005	1.028	1.000	1.000	1.001	1.005
2003-2004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004-2005	1.006	1.001	1.007	1.005	1.009	1.010	1.018	1.017	1.014	
2005-2006	1.000	1.004	1.005	1.000	1.000	1.007	1.011	1.002		
2006-2007	1.000	1.000	1.000	1.000	1.001	1.000	1.000			
2007-2008	1.000	1.000	1.000	1.000	1.000	1.000				
2008-2009	1.003	1.008	1.003	1.004	1.000					
2009-2010	1.000	1.000	1.014	1.000						
2010-2011	1.018	1.061	1.001							
2011-2012	1.005	1.005								
2012-2013	1.000									

	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months
Average	1.006	1.007	1.003	1.001	1.002	1.006	1.005	1.003	1.002	1.004
\$-Wtd. Averages										
Total	1.004	1.007	1.003	1.001	1.001	1.003	1.004	1.002	1.000	1.003
5-yr	1.005	1.015	1.005	1.001	1.002	1.003	1.004	1.002	1.000	1.003
4-yr	1.006	1.016	1.006	1.001	1.000	1.004	1.005	1.003	1.002	1.004
Comparative										
Factors	1.011	1.010	1.009	1.007	1.007	1.007	1.005	1.004	1.005	1.004
Prior	1.007	1.007	1.005	1.004	1.004	1.004	1.004	1.005	1.003	1.003
Selected	1.008	1.008	1.006	1.005	1.005	1.005	1.004	1.005	1.004	1.003
Cumulated	1.094	1.085	1.076	1.070	1.065	1.060	1.055	1.051	1.046	1.042

Novato Fire Protection District - Workers' Compensation
Paid Loss Development

Accident Year	Limited Losses Paid as of:										
	228 Months	240 Months	252 Months	264 Months	276 Months	288 Months	300 Months	312 Months	324 Months	336 Months	348 Months
1993-1994						142,806	142,806	142,806	142,806	142,806	142,806
1994-1995					280,016	280,016	280,016	280,016	280,016	280,016	280,016
1995-1996				107,407	107,407	107,407	115,863	115,863	115,949		
1996-1997			497,195	498,498	499,071	499,791	499,827	502,577			
1997-1998		358,917	358,917	358,917	358,917	361,177	361,177				
1998-1999	691,649	691,649	691,649	691,649	691,649	691,649					
1999-2000	293,266	294,471	295,047	298,689	299,216						
2000-2001	332,240	333,532	333,586	333,604							
2001-2002	593,926	593,926	593,926								
2002-2003	163,347	163,619									
2003-2004	435,196										
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											
2013-2014											

Paid Loss Development Factors:

	228-240 Months	240-252 Months	252-264 Months	264-276 Months	276-288 Months	288-300 Months	300-312 Months	312-324 Months	324-336 Months	336-348 Months	348-Ult. Months
1993-1994						1.000	1.000	1.000	1.000	1.000	
1994-1995					1.000	1.000	1.000	1.000	1.000		
1995-1996				1.000	1.000	1.079	1.000	1.001			
1996-1997			1.003	1.001	1.001	1.000	1.006				
1997-1998		1.000	1.000	1.000	1.006	1.000					
1998-1999	1.000	1.000	1.000	1.000	1.000						
1999-2000	1.004	1.002	1.012	1.002							
2000-2001	1.004	1.000	1.000								
2001-2002	1.000	1.000									
2002-2003	1.002										
2003-2004											
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											

	228-240 Months	240-252 Months	252-264 Months	264-276 Months	276-288 Months	288-300 Months	300-312 Months	312-324 Months	324-336 Months	336-348 Months	348-Ult. Months
Average	1.002	1.000	1.003	1.001	1.001	1.016	1.002	1.000	1.000	1.000	
\$-Wtd. Averages											
Total	1.001	1.000	1.002	1.001	1.002	1.006	1.003	1.000			
5-yr	1.001	1.000	1.002	1.001	1.002	1.006					
4-yr	1.002	1.000	1.002	1.001	1.002	1.007	1.003				
Comparative											
Factors	1.004	1.003	1.004	1.005	1.003	1.004	1.002	1.003	1.002	1.001	1.010
Prior	1.004	1.004	1.004	1.004	1.004	1.004	1.003	1.003	1.003	1.008	
Selected	1.004	1.004	1.004	1.004	1.004	1.004	1.003	1.003	1.003	1.006	
Cumulated	1.039	1.035	1.031	1.027	1.023	1.019	1.015	1.012	1.009	1.006	

Novato Fire Protection District - Workers' Compensation
Paid between \$100,000 and \$500,000 Loss Development

Accident Year	Losses Paid as of:									
	108 Months	120 Months	132 Months	144 Months	156 Months	168 Months	180 Months	192 Months	204 Months	216 Months
1993-1994										
1994-1995										
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										116,070
2000-2001		225,797	225,797	225,797	225,797	225,797	225,797	225,797	225,797	225,797
2001-2002	432,649	442,267	442,456	447,584	452,308	452,495	455,015	457,753	460,195	462,462
2002-2003										
2003-2004	392,530	544,660	811,932	811,932	811,932	811,932	811,932	811,932	811,932	811,932
2004-2005										
2005-2006										
2006-2007	222,562	222,562	222,562	222,562	222,562	222,562	222,562	222,562		
2007-2008										
2008-2009	49,247	51,237	52,400	53,224	53,469	54,227				
2009-2010	169,097	171,960	176,157	178,688	183,716					
2010-2011	174,483	174,528	174,528	174,528						
2011-2012	166,387	176,483	185,280							
2012-2013	26,037	37,408								
2013-2014	45,881									

Paid Loss Development Factors:

	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months
1993-1994										
1994-1995										
1995-1996										
1996-1997										
1997-1998										
1998-1999										
1999-2000										1.000
2000-2001		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2001-2002	1.022	1.000	1.012	1.011	1.000	1.006	1.006	1.005	1.005	1.007
2002-2003										
2003-2004	1.388	1.491	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2004-2005										
2005-2006										
2006-2007	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2007-2008										
2008-2009	1.040	1.023	1.016	1.005	1.014					
2009-2010	1.017	1.024	1.014	1.028						
2010-2011	1.000	1.000	1.000							
2011-2012	1.061	1.050								
2012-2013	1.437									

	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months
Average	1.121	1.074	1.006	1.007	1.003	1.002	1.002	1.002	1.002	1.002
\$-Wtd. Averages										
Total	1.115	1.140	1.004	1.005	1.001	1.001	1.002	1.002	1.002	1.002
5-yr	1.045	1.025	1.005	1.012	1.003	1.000	1.000	1.002	1.002	1.002
4-yr	1.045	1.025								
Comparative										
Factors	1.066	1.061	1.057	1.049	1.043	1.038	1.032	1.028	1.026	1.027
Prior	1.087	1.073	1.065	1.053	1.045	1.035	1.032	1.029	1.028	1.028
Selected	1.066	1.055	1.046	1.041	1.033	1.028	1.024	1.022	1.020	1.021
Cumulated	1.676	1.572	1.490	1.424	1.368	1.324	1.288	1.258	1.231	1.207

Novato Fire Protection District - Workers' Compensation
Paid between \$100,000 and \$500,000 Loss Development

Accident Year	<u>Losses Paid as of:</u>										
	228 Months	240 Months	252 Months	264 Months	276 Months	288 Months	300 Months	312 Months	324 Months	336 Months	348 Months
1993-1994						3,159	3,159	3,159	3,159	3,159	3,159
1994-1995					73,502	73,801	73,801	73,801	73,801	73,801	
1995-1996											
1996-1997			50,804	50,804	50,804	50,804	50,804	50,804	50,804		
1997-1998		80,309	80,309	80,309	80,309	80,309	80,309	80,309			
1998-1999	280,293	290,536	293,078	293,650	293,668	293,668					
1999-2000	116,070	116,070	116,070	116,070	116,070						
2000-2001	225,797	225,797	225,797	225,797							
2001-2002	465,791	468,536	468,809								
2002-2003											
2003-2004	811,932										
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											
2013-2014											

Paid Loss Development Factors:

	228-240 Months	240-252 Months	252-264 Months	264-276 Months	276-288 Months	288-300 Months	300-312 Months	312-324 Months	324-336 Months	336-348 Months	348-Ult. Months
1993-1994						1.000	1.000	1.000	1.000	1.000	
1994-1995					1.004	1.000	1.000	1.000	1.000		
1995-1996											
1996-1997			1.000	1.000	1.000	1.000	1.000				
1997-1998		1.000	1.000	1.000	1.000	1.000					
1998-1999	1.037	1.009	1.002	1.000	1.000						
1999-2000	1.000	1.000	1.000	1.000							
2000-2001	1.000	1.000	1.000								
2001-2002	1.006	1.001									
2002-2003											
2003-2004											
2004-2005											
2005-2006											
2006-2007											
2007-2008											
2008-2009											
2009-2010											
2010-2011											
2011-2012											
2012-2013											

	228-240 Months	240-252 Months	252-264 Months	264-276 Months	276-288 Months	288-300 Months	300-312 Months	312-324 Months	324-336 Months	336-348 Months	348-Ult. Months
Average	1.011	1.002	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	
\$-Wtd. Averages											
Total	1.012	1.002	1.001	1.000	1.001	1.000	1.000	1.000			
5-yr	1.012	1.002	1.001	1.000	1.001	1.000					
4-yr		1.003	1.001	1.000							
Comparative											
Factors	1.025	1.023	1.027	1.025	1.022	1.019	1.018	1.016	1.014	1.013	1.123
Prior	1.028	1.027	1.022	1.018	1.014	1.011	1.009	1.007	1.006	1.040	
Selected	1.022	1.019	1.019	1.017	1.015	1.012	1.011	1.010	1.008	1.006	1.030
Cumulated	1.182	1.157	1.135	1.114	1.095	1.079	1.066	1.054	1.044	1.036	1.030

Novato Fire Protection District - Workers' Compensation

Exposure and Development Method
Based on Reported Losses

Accident Year	Trended Payroll (\$00) (A)	Reported Losses as of 6/30/22 (B)	Loss Development Factor (C)	Percentage of Losses Yet to Be Reported (D)	Program Rate (E)	Incurred but not Reported (IBNR) (F)	Ultimate Program Losses (G)
2005-2006	\$132,887	\$267,235	1.031	0.030	\$3.437	\$13,702	\$280,937
2006-2007	145,241	493,327	1.039	0.038	3.217	17,755	511,082
2007-2008	171,214	92,328	1.048	0.046	0.945	7,443	99,771
2008-2009	178,925	620,125	1.057	0.054	4.535	43,817	663,942
2009-2010	158,062	646,780	1.069	0.065	4.232	43,480	690,260
2010-2011	135,003	536,416	1.081	0.075	4.746	48,054	584,470
2011-2012	135,585	620,420	1.097	0.088	5.088	60,707	681,127
2012-2013	133,382	282,947	1.115	0.103	5.258	72,236	355,183
2013-2014	133,162	415,567	1.138	0.121	5.557	89,538	505,105
Totals	1,323,461	\$3,975,145				\$396,732	\$4,371,877

Notes:

- (A) From Appendix M, Column (C).
- (B) Provided by the District. These losses exclude amounts incurred above the District's SIR for each year.
- (C) From Appendix A, Page 1, Column (F).
- (D) $1 - 1/(C)$.
- (E) From Appendix C, Page 3, Column (H).
- (F) $(A) \times (D) \times (E)$.
- (G) $(B) + (F)$.

This exhibit shows the calculation of ultimate losses based on the assumption that there is an underlying relationship between losses and exposure that changes in regular ways over time. The method relies on the premise that the losses that are currently unreported will cost what this relationship would suggest.

Novato Fire Protection District - Workers' Compensation

Exposure and Development Method
Based on Paid Losses

Accident Year	Trended Payroll (\$00) (A)	Paid Losses as of 6/30/22 (B)	Loss Development Factor (C)	Percentage of Losses Yet to Be Paid (D)	Program Rate (E)	Incurred but not Paid (F)	Ultimate Program Losses (G)
2005-2006	\$132,887	\$252,421	1.115	0.103	\$3.437	\$47,043	\$299,464
2006-2007	145,241	493,327	1.129	0.114	3.217	53,265	546,592
2007-2008	171,214	92,328	1.144	0.126	0.945	20,386	112,714
2008-2009	178,925	471,542	1.162	0.139	4.535	112,788	584,330
2009-2010	158,062	605,434	1.182	0.154	4.232	103,013	708,447
2010-2011	135,003	503,338	1.207	0.171	4.746	109,564	612,902
2011-2012	135,585	566,621	1.236	0.191	5.088	131,763	698,384
2012-2013	133,382	227,101	1.273	0.214	5.258	150,083	377,184
2013-2014	133,162	415,567	1.319	0.242	5.557	179,075	594,642
Totals	1,323,461	\$3,627,679				\$906,980	\$4,534,659

Notes:

- (A) From Appendix M, Column (C).
- (B) Provided by the District. These losses exclude amounts paid above the District's SIR for each year.
- (C) From Appendix B, Page 1, Column (F).
- (D) $1 - 1/(C)$.
- (E) From Appendix C, Page 3, Column (H).
- (F) $(A) \times (D) \times (E)$.
- (G) $(B) + (F)$.

This exhibit shows the calculation of ultimate losses based on the assumption that there is an underlying relationship between losses and exposure that changes in regular ways over time. The method relies on the premise that the losses that are currently unpaid will cost what this relationship would suggest.

Novato Fire Protection District - Workers' Compensation

Exposure and Development Method

Accident Year	Trended Payroll (\$00) (A)	Ultimate Limited Losses (B)	Trend Factor (C)	Trended Limited Losses (D)	Trended Limited Loss Rate (E)	Limited Loss Rate (F)	Factor to SIR (G)	Program Loss Rate (H)
2005-2006	\$132,887	\$269,000	2.727	\$733,563	\$5.520	\$2.024	1.698	\$3.437
2006-2007	145,241	270,765	2.479	671,226	4.621	1.864	1.726	3.217
2007-2008	171,214	92,328	2.216	204,599	1.195	0.539	1.754	0.945
2008-2009	178,925	455,000	1.991	905,905	5.063	2.543	1.784	4.535
2009-2010	158,062	449,000	1.757	788,893	4.991	2.334	1.813	4.232
2010-2011	135,003	367,000	1.593	584,631	4.331	2.574	1.844	4.746
2011-2012	135,585	410,000	1.511	619,510	4.569	2.713	1.876	5.088
2012-2013	133,382	212,000	1.487	315,244	2.363	2.757	1.907	5.258
2013-2014	133,162	369,686	1.449	535,675	4.023	2.830	1.964	5.557
Total/Avg	1,323,461	\$2,894,779		\$5,359,246	\$4.049			
08/09-13/14	874,119	2,262,686		3,749,858	4.290			
10/11-13/14	537,132	1,358,686		2,055,060	3.826			
				Selected Limited Rate:	\$4.100			
				Prior:	\$4.000			

Notes:

- (A) From Appendix M, Column (C).
- (B) Selected average of results from Appendices A and B.
- (C) From Appendix E, Page 1, Column (B).
- (D) (B) x (C).
- (E) (D) / (A).
- (F) Selected Limited Rate / (C). For 2008-2009 and prior (B) / (A).
- (G) Based on a Weibull distribution, a mathematical model of claim sizes.
- (H) (F) x (G).

This exhibit shows the calculation of the underlying historical relationship between losses and exposure that is needed to apply the estimation methods shown on pages 1 and 2 of this Appendix.

Novato Fire Protection District - Workers' Compensation

Frequency and Severity Method

Accident Year	Ultimate Program Severity (A)	Adjusted Ultimate Claims (B)	Ultimate Program Losses (C)
Prior	\$8,936	213	\$1,903,368
1994-1995	11,663	31	361,553
1995-1996	5,161	32	165,152
1996-1997	19,391	34	659,294
1997-1998	18,901	26	491,426
1998-1999	29,728	31	921,568
1999-2000	13,876	31	430,156
2000-2001	17,447	26	453,622
2001-2002	34,434	24	826,416
2002-2003	9,714	30	291,420
2003-2004	23,081	31	715,511
2004-2005	17,379	20	347,580
2005-2006	16,917	27	456,759
2006-2007	20,317	23	467,291
2007-2008	8,995	18	161,910
2008-2009	35,283	23	811,509
2009-2010	26,845	26	697,970
2010-2011	29,104	19	552,976
2011-2012	30,145	19	572,755
2012-2013	30,102	23	692,346
2013-2014	30,734	30	922,020
Total		737	\$12,902,602

Notes:

- (A) From Appendix D, Page 2, Column (H).
- (B) From Appendix D, Page 2, Column (B).
- (C) (A) x (B).

This exhibit shows the calculation of the estimated ultimate losses for each year based on the observed average frequency and severity of claims.

Novato Fire Protection District - Workers' Compensation

Frequency and Severity Method

Accident Year	Ultimate Limited Losses (A)	Adjusted Ultimate Claims (B)	Ultimate Limited Severity (C)	Trend Factor (D)	Trended Limited Severity (E)	Limited Severity (F)	Factor to SIR (G)	Program Severity (H)
Prior	\$1,519,306	213	\$7,133	1.760	\$12,554	\$7,133	1.253	\$8,936
1994-1995	280,016	31	9,033	1.742	15,735	9,033	1.291	11,663
1995-1996	126,843	32	3,964	1.588	6,295	3,964	1.302	5,161
1996-1997	502,577	34	14,782	1.413	20,887	14,782	1.312	19,391
1997-1998	371,556	26	14,291	1.219	17,421	14,291	1.323	18,901
1998-1999	691,649	31	22,311	1.066	23,784	22,311	1.332	29,728
1999-2000	320,228	31	10,330	0.938	9,690	10,330	1.343	13,876
2000-2001	335,000	26	12,885	0.876	11,287	12,885	1.354	17,447
2001-2002	593,926	24	24,747	0.870	21,530	24,747	1.391	34,434
2002-2003	180,000	30	6,000	0.904	5,424	6,000	1.619	9,714
2003-2004	435,196	31	14,039	1.106	15,527	14,039	1.644	23,081
2004-2005	208,000	20	10,400	1.419	14,758	10,400	1.671	17,379
2005-2006	269,000	27	9,963	1.528	15,223	9,963	1.698	16,917
2006-2007	270,765	23	11,772	1.437	16,916	11,772	1.726	20,317
2007-2008	92,328	18	5,129	1.329	6,816	5,129	1.754	8,995
2008-2009	455,000	23	19,783	1.235	24,432	19,783	1.784	35,283
2009-2010	449,000	26	17,269	1.128	19,479	14,805	1.813	26,845
2010-2011	367,000	19	19,316	1.058	20,436	15,784	1.844	29,104
2011-2012	410,000	19	21,579	1.039	22,421	16,073	1.876	30,145
2012-2013	212,000	23	9,217	1.058	9,752	15,784	1.907	30,102
2013-2014	369,686	30	12,323	1.067	13,149	15,651	1.964	30,734

Average Limited Severity: \$15,406
Average 09/10-13/14 Limited Severity: 17,047
Average 10/11-13/14 Limited Severity: 16,440

Selected Limited Severity: \$16,700
Prior: \$16,700

Notes:

- (A) Selected average of results from Appendices A, B, and C.
- (B) Appendix D, Page 3, Column (C).
- (C) (A) / (B).
- (D) From Appendix E, Page 1, Column (D).
- (E) (C) x (D).
- (F) Selected Limited Severity / (D).
- (G) Based on a Weibull distribution, a mathematical model of claim sizes.
- (H) (F) x (G).

This exhibit shows the calculation of the historical average cost per claim, or severity. The observed average severity is used in the method shown on page 1 of this Appendix.

Novato Fire Protection District - Workers' Compensation

Frequency and Severity Method
Projection of Ultimate Claims

Accident Year	Reported Claim Development (A)	Closed Claim Development (B)	Selected Ultimate Claims (C)	Trended Payroll (\$000,000) (D)	Claim Frequency (E)	Trend Factor (F)	Trended Claim Frequency (G)
Prior	213	214	213			2.715	
1994-1995	31	31	31			2.623	
1995-1996	32	31	32			2.534	
1996-1997	34	34	34			2.448	
1997-1998	26	25	26			2.365	
1998-1999	31	31	31			2.285	
1999-2000	31	29	31			2.208	
2000-2001	26	26	26			2.133	
2001-2002	24	24	24			2.061	
2002-2003	30	30	30			1.991	
2003-2004	31	32	31			1.924	
2004-2005	20	20	20			1.859	
2005-2006	27	27	27	13.3	2.032	1.796	3.649
2006-2007	23	24	23	14.5	1.584	1.735	2.748
2007-2008	18	19	18	17.1	1.051	1.676	1.761
2008-2009	23	22	23	17.9	1.285	1.619	2.080
2009-2010	26	25	26	15.8	1.645	1.564	2.573
2010-2011	19	19	19	13.5	1.407	1.511	2.126
2011-2012	19	17	19	13.6	1.401	1.460	2.045
2012-2013	23	22	23	13.3	1.724	1.411	2.433
2013-2014	30	32	30	13.3	2.253	1.363	3.071
Total	737	734	737	132.3			2.465
06/07-09/10	90	90	90	65.3			2.265

Notes:

- (A) From Appendix D, Page 4, (C).
- (B) From Appendix D, Page 5, (C).
- (C) Selected from (A) and (B).
- (D) From Appendix M, Column (C) / 10,000.
- (E) (C) / (D).
- (F) From Appendix E, Page 1, Column (H).
- (G) (E) x (F).

This exhibit summarizes the estimated numbers of claims and shows the estimated frequencies per \$1,000,000 of trended payroll.

Novato Fire Protection District - Workers' Compensation

Frequency and Severity Method
Reported Claim Count Development

Accident Year	Claims Reported as of 6/30/2022 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
Prior	213	1.000	213	
1994-1995	31	1.000	31	
1995-1996	32	1.000	32	
1996-1997	34	1.000	34	
1997-1998	26	1.000	26	
1998-1999	31	1.000	31	
1999-2000	31	1.000	31	
2000-2001	26	1.000	26	
2001-2002	24	1.000	24	
2002-2003	30	1.000	30	
2003-2004	31	1.000	31	
2004-2005	20	1.000	20	
2005-2006	27	1.000	27	3.649
2006-2007	23	1.000	23	2.748
2007-2008	18	1.000	18	1.762
2008-2009	23	1.000	23	2.081
2009-2010	26	1.000	26	2.573
2010-2011	19	1.000	19	2.127
2011-2012	19	1.000	19	2.046
2012-2013	23	1.000	23	2.433
2013-2014	30	1.000	30	3.071
Total	737		737	2.465

Notes:

- (A) Provided by the District.
- (B) From Appendix D, Page 6.
- (C) (A) x (B).
- (D) (C) / [Appendix D, Page 3, (D)] x [Appendix D, Page 3, (F)].

This exhibit shows the calculation of estimated ultimate claims for each year based on reported claims as provided by the District. These numbers of claims tend to "develop" or change from period to period as more claims are filed. This development tends to follow quantifiable patterns over time.

Novato Fire Protection District - Workers' Compensation

Frequency and Severity Method
Closed Claim Count Development

Accident Year	Claims Closed as of 6/30/2022 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
Prior	213	1.003	214	
1994-1995	31	1.004	31	
1995-1996	31	1.006	31	
1996-1997	34	1.007	34	
1997-1998	25	1.010	25	
1998-1999	31	1.013	31	
1999-2000	29	1.016	29	
2000-2001	26	1.019	26	
2001-2002	23	1.022	24	
2002-2003	29	1.025	30	
2003-2004	31	1.028	32	
2004-2005	19	1.031	20	
2005-2006	26	1.034	27	3.649
2006-2007	23	1.037	24	2.867
2007-2008	18	1.041	19	1.860
2008-2009	21	1.045	22	1.991
2009-2010	24	1.050	25	2.474
2010-2011	18	1.055	19	2.127
2011-2012	16	1.060	17	1.831
2012-2013	21	1.066	22	2.327
2013-2014	30	1.073	32	3.275
Total	719		734	2.455

Notes:

- (A) Provided by the District.
- (B) From Appendix D, Page 7.
- (C) (A) x (B).
- (D) (C) / [Appendix D, Page 3, (D)] x [Appendix D, Page 3, (F)].

This exhibit shows the calculation of estimated ultimate claims for each year based on closed claims as provided by the District. These numbers of closed claims tend to "develop" or change from period to period as more claims are closed. This development tends to follow quantifiable patterns over time.

Novato Fire Protection District - Workers' Compensation
Reported Claim Count Development

Accident Year	Claims Reported as of:												
	108 Months	120 Months	132 Months	144 Months	156 Months	168 Months	180 Months	192 Months	204 Months	216 Months	228 Months	240 Months	252 Months
1993-1994													
1994-1995													
1995-1996													
1996-1997													
1997-1998													26
1998-1999												31	31
1999-2000											31	31	31
2000-2001						26	26	26	26	25	26	26	26
2001-2002					24	24	24	24	24	24	24	24	24
2002-2003				30	30	30	30	30	30	30	30	30	
2003-2004			31	31	31	31	31	31	31	31	31		
2004-2005		20	20	20	20	20	20	20	20	20			
2005-2006	27	27	27	27	27	27	27	27	27				
2006-2007	23	23	23	23	23	23	23	23					
2007-2008	18	18	18	18	18	18	18						
2008-2009	23	23	23	23	23	23							
2009-2010	26	26	26	26	26								
2010-2011	19	19	19	19									
2011-2012	19	19	19										
2012-2013	23	23											
2013-2014	30												

Reported Claim Count Development Factors:

	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months	228-240 Months	240-252 Months	252-264 Months
1993-1994													
1994-1995													
1995-1996													
1996-1997													
1997-1998													1.000
1998-1999												1.000	1.000
1999-2000											1.000	1.000	1.000
2000-2001						1.000	1.000	1.000	0.962	1.040	1.000	1.000	1.000
2001-2002					1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2002-2003				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2003-2004			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2004-2005		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2005-2006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2006-2007	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
2007-2008	1.000	1.000	1.000	1.000	1.000	1.000							
2008-2009	1.000	1.000	1.000	1.000	1.000								
2009-2010	1.000	1.000	1.000	1.000									
2010-2011	1.000	1.000	1.000										
2011-2012	1.000	1.000											
2012-2013	1.000												

	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months	228-240 Months	240-252 Months	252-264 Months
Average Claim-Weighted Averages	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.992	1.010	1.000	1.000	1.000
3-yr	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
4-yr	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.009	1.000	1.000	1.000
Comparative Factors	1.002	1.001	1.002	1.002	1.002	1.002	1.001	1.002	1.001	1.000	1.001	1.001	1.001
Prior	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Novato Fire Protection District - Workers' Compensation
Closed Claim Development

Accident Year	Claims Closed as of:												
	108 Months	120 Months	132 Months	144 Months	156 Months	168 Months	180 Months	192 Months	204 Months	216 Months	228 Months	240 Months	252 Months
1993-1994													
1994-1995													
1995-1996													
1996-1997													
1997-1998													25
1998-1999												30	30
1999-2000											29	29	29
2000-2001						25	25	25	25	24	25	25	25
2001-2002					22	22	22	22	23	23	23	23	23
2002-2003				29	29	29	29	29	29	29	29	29	
2003-2004			30	30	30	30	30	31	31	31	31		
2004-2005		19	19	19	19	19	19	19	19	19			
2005-2006	26	26	26	26	26	26	26	26	26				
2006-2007	23	23	23	23	23	23	23	23					
2007-2008	18	18	18	18	18	18	18						
2008-2009	20	21	21	21	21	21							
2009-2010	24	24	24	24	24								
2010-2011	17	16	18	18									
2011-2012	17	17	16										
2012-2013	21	21											
2013-2014	30												

Closed Claim Count Development Factors:

	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months	228-240 Months	240-252 Months	252-264 Months
1993-1994													
1994-1995													
1995-1996													
1996-1997													
1997-1998													1.000
1998-1999												1.000	1.000
1999-2000											1.000	1.000	1.000
2000-2001						1.000	1.000	1.000	0.960	1.042	1.000	1.000	1.040
2001-2002					1.000	1.000	1.000	1.045	1.000	1.000	1.000	1.000	
2002-2003				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2003-2004			1.000	1.000	1.000	1.000	1.033	1.000	1.000	1.000			
2004-2005		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2005-2006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2006-2007	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
2007-2008	1.000	1.000	1.000	1.000	1.000	1.000							
2008-2009	1.050	1.000	1.000	1.000	1.000								
2009-2010	1.000	1.000	1.000	1.000									
2010-2011	0.941	1.125	1.000										
2011-2012	1.000	0.941											
2012-2013	1.000												

	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-204 Months	204-216 Months	216-228 Months	228-240 Months	240-252 Months	252-264 Months
Average Claim-Weighted Averages	0.999	1.008	1.000	1.000	1.000	1.000	1.005	1.008	0.992	1.011	1.000	1.000	1.010
3-yr	0.982	1.018	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.012
4-yr	0.987	1.013	1.000	1.000	1.000	1.000	1.010	1.000	1.000	1.009	1.000	1.000	1.009
Comparative Factors	1.007	1.006	1.005	1.005	1.005	1.004	1.004	1.003	1.003	1.002	1.002	1.001	1.002
Prior	1.004	1.004	1.004	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002
Selected	1.007	1.006	1.005	1.005	1.005	1.004	1.004	1.003	1.003	1.003	1.003	1.003	1.003
Cumulated	1.073	1.066	1.060	1.055	1.050	1.045	1.041	1.037	1.034	1.031	1.028	1.025	1.022

Novato Fire Protection District - Workers' Compensation

Loss Trend Factors

Accident Year	Benefit Level Factor (A)	Factor to 2022-2023 Loss Rate Level (B)	Factor to 2022-2023 Frequency Level (C)	Factor to 2022-2023 Severity Level (D)
Prior	1.319	4.723	2.715	1.760
1994-1995	1.319	4.520	2.623	1.742
1995-1996	1.214	3.981	2.534	1.588
1996-1997	1.091	3.425	2.448	1.413
1997-1998	0.951	2.855	2.365	1.219
1998-1999	0.840	2.415	2.285	1.066
1999-2000	0.747	2.054	2.208	0.938
2000-2001	0.704	1.853	2.133	0.876
2001-2002	0.706	1.779	2.061	0.870
2002-2003	0.741	1.786	1.991	0.904
2003-2004	0.916	2.113	1.924	1.106
2004-2005	1.186	2.619	1.859	1.419
2005-2006	1.290	2.727	1.796	1.528
2006-2007	1.226	2.479	1.735	1.437
2007-2008	1.145	2.216	1.676	1.329
2008-2009	1.075	1.991	1.619	1.235
2009-2010	0.991	1.757	1.564	1.128
2010-2011	0.939	1.593	1.511	1.058
2011-2012	0.931	1.511	1.460	1.039
2012-2013	0.958	1.487	1.411	1.058
2013-2014	0.975	1.449	1.363	1.067

Notes:

- (A) Based on WCIRB.
- (B) (A) adjusted for a 4.5% annual loss rate trend.
- (C) 3.5% annual frequency trend.
- (D) (A) adjusted for a 1.0% annual severity trend.

ulation of the ways in which we expect claims costs to have changed over the changes in statutory workers' compensation benefit levels and changes in actual changes in payroll. Changes in the ways in which claims are filed as a result of workers' compensation benefits are not generally reflected in the statutory benefit level and may be part of the reason for changes in actual claims costs in excess of payroll.

Novato Fire Protection District - Workers' Compensation

Residual Trend Factors

Accident Year	Initial Estimate of Ultimate Limited Losses (A)	Ultimate Reported Claims (B)	BLF (C)	Adjusted Limited Severity (D)	Trended Payroll (\$00) (E)	Ultimate Frequency (F)
Prior	\$1,519,306	213	1.319	9,409		
1994-1995	280,016	31	1.319	11,915		
1995-1996	126,843	32	1.214	4,812		
1996-1997	502,577	34	1.091	16,134		
1997-1998	371,556	26	0.951	13,586		
1998-1999	691,649	31	0.840	18,749		
1999-2000	320,228	31	0.747	7,715		
2000-2001	335,000	26	0.704	9,069		
2001-2002	593,926	24	0.706	17,473		
2002-2003	180,000	30	0.741	4,444		
2003-2004	435,196	31	0.916	12,858		
2004-2005	208,000	20	1.186	12,336		
2005-2006	269,000	27	1.290	12,857	132,887	2.032
2006-2007	270,765	23	1.226	14,431	145,241	1.584
2007-2008	92,328	18	1.145	5,875	171,214	1.051
2008-2009	455,000	23	1.075	21,272	178,925	1.285
2009-2010	449,000	26	0.991	17,122	158,062	1.645
2010-2011	367,000	19	0.939	18,140	135,003	1.407
2011-2012	410,000	19	0.931	20,084	135,585	1.401
2012-2013	212,000	23	0.958	8,826	133,382	1.724
2013-2014	369,686	30	0.975	12,020	133,162	2.253

	<u>Severity Trend Factors</u>	<u>Frequency Trend Factors</u>
	Latest 9	1.009
	Latest 5	0.867
5-Yr Mvg. Wtd. Avg.	Latest 5	1.009
	Prior	1.015
	Default	1.025
Selected Residual Trend	1.010	1.035

Notes:

- (A) Selected average of results from Appendix A and Appendix B.
- (B) Appendix D, Page 3, Column (C).
- (C) Appendix E, Page 1, (A).
- (D) (A) x (C) / (B).
- (E) From Appendix M, Column (C).
- (F) (B) / (E) x 10,000.

Novato Fire Protection District - Workers' Compensation

Outstanding Liability for
Unallocated Loss Adjustment Expenses
as of 6/30/22

Fiscal Year (A)	Number of Claims Active During Fiscal Year (B)	Average ULAE Charge per Active Claim (C)	Inflation Trend Factor (D)	Trended ULAE Charge per Active Claim (E)	ULAE Paid During Year (F)
2022-2023	18.0	\$494	1.000	\$494	\$8,892
2023-2024	15.0	494	1.050	519	7,785
2024-2025	12.7	494	1.103	545	6,922
2025-2026	11.2	494	1.158	572	6,406
2026-2027	9.2	494	1.216	601	5,529
2027-2028	8.3	494	1.277	631	5,237
2028-2029	7.0	494	1.341	662	4,634
2029-2030	5.9	494	1.408	696	4,106
2030-2031	5.1	494	1.478	730	3,723
2031-2032	4.3	494	1.552	767	3,298
2032-2033	3.6	494	1.630	805	2,898
2033-2034	3.1	494	1.712	846	2,623
2034-2035	2.5	494	1.798	888	2,220
2035-2036	1.8	494	1.888	933	1,679
2036-2037	1.0	494	1.982	979	979
2037-2038	0.7	494	2.081	1,028	720
2038-2039	0.2	494	2.185	1,079	216
2039-2040	0.0	494	2.294	1,133	0

(G) Total ULAE Outstanding as of 6/30/22: \$67,867

Notes:

- (A) We assume fiscal years will be 7/1 to 6/30.
- (B) Based on an estimated claim closing pattern.
- (C) Based on claims administration payment information provided by the District.
- (D) We assume ULAE costs will increase at 5.0% per year.
- (E) (C) x (D).
- (F) (B) x (E).
- (G) Total of Column (F).

This exhibit shows the calculation of the outstanding ULAE based on the expected pattern of claims closings and assumptions about future claims administration costs per open claim.

Novato Fire Protection District - Workers' Compensation

Outstanding Liability for
Unallocated Loss Adjustment Expenses
as of 6/30/23

Fiscal Year (A)	Number of Claims Active During Fiscal Year (B)	Average ULAE Charge per Active Claim (C)	Inflation Trend Factor (D)	Trended ULAE Charge per Active Claim (E)	ULAE Paid During Year (F)
2023-2024	15.0	\$494	1.050	\$519	\$7,785
2024-2025	12.7	494	1.103	545	6,922
2025-2026	11.2	494	1.158	572	6,406
2026-2027	9.2	494	1.216	601	5,529
2027-2028	8.3	494	1.277	631	5,237
2028-2029	7.0	494	1.341	662	4,634
2029-2030	5.9	494	1.408	696	4,106
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2035-2036	1.8	494	1.888	933	1,679
2036-2037	1.0	494	1.982	979	979
2037-2038	0.7	494	2.081	1,028	720
2038-2039	0.2	494	2.185	1,079	216
2039-2040	0.0	494	2.294	1,133	0
2040-2041	0.0	494	2.409	1,190	0

(G) Total ULAE Outstanding as of 6/30/23: \$58,975

Notes:

- (A) We assume fiscal years will be 7/1 to 6/30.
- (B) Based on an estimated claim closing pattern.
- (C) Based on claims administration payment information provided by the District.
- (D) We assume ULAE costs will increase at 5.0% per year.
- (E) (C) x (D).
- (F) (B) x (E).
- (G) Total of Column (F).

This exhibit shows the calculation of the outstanding ULAE based on the expected pattern of claims closings and assumptions about future claims administration costs per open claim.

Novato Fire Protection District - Workers' Compensation
Payment and Reserve Forecast

Calendar Period

Accident Year	Calendar Period											
	7/1/2022 to 6/30/2022	7/1/2023 to 6/30/2023	7/1/2024 to 6/30/2024	7/1/2025 to 6/30/2025	7/1/2026 to 6/30/2026	7/1/2027 to 6/30/2027	7/1/2028 to 6/30/2028	7/1/2029 to 6/30/2029	7/1/2030 to 6/30/2030	7/1/2031 to 6/30/2031	7/1/2032 to 6/30/2032	
Prior												
Ultimate Loss	\$3,261,374	\$3,261,374	\$3,261,374	\$3,261,374	\$3,261,374	\$3,261,374	\$3,261,374	\$3,261,374	\$3,261,374	\$3,261,374	\$3,261,374	\$3,261,374
Paid in Calendar Period	-	4,967	4,333	2,894	2,041	1,488	1,265	1,080	917	781	663	663
Paid to Date	3,237,189	3,242,156	3,246,489	3,251,424	3,252,912	3,254,177	3,255,257	3,256,174	3,256,955	3,257,618	3,258,281	3,258,944
Undiscounted Outstanding Liability	24,185	19,218	14,885	11,991	9,950	8,462	7,197	5,200	4,419	3,756	3,093	2,431
1998-1999												
Ultimate Loss	\$988,000	\$988,000	\$988,000	\$988,000	\$988,000	\$988,000	\$988,000	\$988,000	\$988,000	\$988,000	\$988,000	\$988,000
Paid in Calendar Period	-	475	400	403	326	206	130	111	95	81	69	69
Paid to Date	985,316	985,791	986,191	986,594	986,920	987,126	987,256	987,367	987,462	987,543	987,612	987,681
Undiscounted Outstanding Liability	2,684	2,209	1,809	1,406	1,080	874	744	633	538	457	388	319
1999-2000												
Ultimate Loss	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000	\$440,000
Paid in Calendar Period	-	4,177	3,635	3,380	3,015	2,438	1,537	973	828	710	603	603
Paid to Date	415,286	419,463	423,098	426,478	429,493	431,931	433,468	434,441	435,269	435,979	436,582	437,185
Undiscounted Outstanding Liability	24,714	20,537	16,902	13,522	10,507	8,069	6,532	5,559	4,731	4,021	3,418	2,815
2000-2001												
Ultimate Loss	\$559,000	\$559,000	\$559,000	\$559,000	\$559,000	\$559,000	\$559,000	\$559,000	\$559,000	\$559,000	\$559,000	\$559,000
Paid in Calendar Period	-	843	747	651	605	540	436	275	174	148	127	127
Paid to Date	553,734	554,577	555,324	555,975	556,580	557,120	557,556	557,831	558,005	558,153	558,280	558,407
Undiscounted Outstanding Liability	5,266	4,423	3,676	3,025	2,420	1,880	1,444	1,169	995	847	720	603
2001-2002												
Ultimate Loss	\$1,085,000	\$1,085,000	\$1,085,000	\$1,085,000	\$1,085,000	\$1,085,000	\$1,085,000	\$1,085,000	\$1,085,000	\$1,085,000	\$1,085,000	\$1,085,000
Paid in Calendar Period	-	3,674	2,975	2,639	2,297	2,136	1,905	1,540	971	615	523	523
Paid to Date	1,062,735	1,066,409	1,069,384	1,072,023	1,074,320	1,076,456	1,078,361	1,079,901	1,080,872	1,081,487	1,082,010	1,082,533
Undiscounted Outstanding Liability	22,265	18,591	15,616	12,977	10,680	8,544	6,639	5,099	4,128	3,513	2,990	2,467
2002-2003												
Ultimate Loss	\$183,000	\$183,000	\$183,000	\$183,000	\$183,000	\$183,000	\$183,000	\$183,000	\$183,000	\$183,000	\$183,000	\$183,000
Paid in Calendar Period	-	4,690	2,424	1,963	1,741	1,516	1,409	1,257	1,016	641	406	406
Paid to Date	163,619	168,309	170,733	172,696	174,437	175,953	177,362	178,619	179,635	180,276	180,682	181,088
Undiscounted Outstanding Liability	19,381	14,691	12,267	10,304	8,563	7,047	5,638	4,381	3,365	2,724	2,318	1,912
2003-2004												
Ultimate Loss	\$2,004,301	\$2,004,301	\$2,004,301	\$2,004,301	\$2,004,301	\$2,004,301	\$2,004,301	\$2,004,301	\$2,004,301	\$2,004,301	\$2,004,301	\$2,004,301
Paid in Calendar Period	-	-	-	-	-	-	-	-	-	-	-	-
Paid to Date	2,004,301	2,004,301	2,004,301	2,004,301	2,004,301	2,004,301	2,004,301	2,004,301	2,004,301	2,004,301	2,004,301	2,004,301
Undiscounted Outstanding Liability	-	-	-	-	-	-	-	-	-	-	-	-

Novato Fire Protection District - Workers' Compensation
Payment and Reserve Forecast

Accident Year	Calendar Period											
	As of 6/30/2022	7/1/2022 to 6/30/2023	7/1/2023 to 6/30/2024	7/1/2024 to 6/30/2025	7/1/2025 to 6/30/2026	7/1/2026 to 6/30/2027	7/1/2027 to 6/30/2028	7/1/2028 to 6/30/2029	7/1/2029 to 6/30/2030	7/1/2030 to 6/30/2031	7/1/2031 to 6/30/2032	7/1/2031 to 6/30/2032
2004-2005												
Ultimate Loss	\$215,000	\$215,000	\$215,000	\$215,000	\$215,000	\$215,000	\$215,000	\$215,000	\$215,000	\$215,000	\$215,000	\$215,000
Paid in Calendar Period	-	5,424	6,021	5,848	5,511	4,463	3,959	3,446	3,205	2,858	2,311	2,311
Paid to Date	164,305	169,729	175,750	181,598	187,109	191,572	195,531	198,977	202,182	205,040	207,351	207,351
Undiscounted Outstanding Liability	50,695	45,271	39,250	33,402	27,891	23,428	19,469	16,023	12,818	9,960	7,649	7,649
2005-2006												
Ultimate Loss	\$274,000	\$274,000	\$274,000	\$274,000	\$274,000	\$274,000	\$274,000	\$274,000	\$274,000	\$274,000	\$274,000	\$274,000
Paid in Calendar Period	-	2,050	2,090	2,319	2,253	2,123	1,719	1,525	1,328	1,234	1,101	1,101
Paid to Date	252,421	254,471	256,561	258,880	261,133	263,256	264,975	266,500	267,828	269,062	270,163	270,163
Undiscounted Outstanding Liability	21,579	19,529	17,439	15,120	12,867	10,744	9,025	7,500	6,172	4,938	3,837	3,837
2006-2007												
Ultimate Loss	\$493,327	\$493,327	\$493,327	\$493,327	\$493,327	\$493,327	\$493,327	\$493,327	\$493,327	\$493,327	\$493,327	\$493,327
Paid in Calendar Period	-	493,327	493,327	493,327	493,327	493,327	493,327	493,327	493,327	493,327	493,327	493,327
Paid to Date	493,327	493,327	493,327	493,327	493,327	493,327	493,327	493,327	493,327	493,327	493,327	493,327
Undiscounted Outstanding Liability	-	-	-	-	-	-	-	-	-	-	-	-
2007-2008												
Ultimate Loss	\$92,328	\$92,328	\$92,328	\$92,328	\$92,328	\$92,328	\$92,328	\$92,328	\$92,328	\$92,328	\$92,328	\$92,328
Paid in Calendar Period	-	92,328	92,328	92,328	92,328	92,328	92,328	92,328	92,328	92,328	92,328	92,328
Paid to Date	92,328	92,328	92,328	92,328	92,328	92,328	92,328	92,328	92,328	92,328	92,328	92,328
Undiscounted Outstanding Liability	-	-	-	-	-	-	-	-	-	-	-	-
2008-2009												
Ultimate Loss	\$655,000	\$655,000	\$655,000	\$655,000	\$655,000	\$655,000	\$655,000	\$655,000	\$655,000	\$655,000	\$655,000	\$655,000
Paid in Calendar Period	-	17,795	15,241	14,591	12,904	13,153	14,600	14,181	13,364	10,821	9,601	9,601
Paid to Date	471,542	489,337	504,578	519,169	532,073	545,226	559,826	574,007	587,371	598,192	607,793	607,793
Undiscounted Outstanding Liability	183,458	165,663	150,422	135,831	122,927	109,774	95,174	80,993	67,629	56,808	47,207	47,207
2009-2010												
Ultimate Loss	\$691,000	\$691,000	\$691,000	\$691,000	\$691,000	\$691,000	\$691,000	\$691,000	\$691,000	\$691,000	\$691,000	\$691,000
Paid in Calendar Period	-	8,129	7,511	6,433	6,159	5,447	5,552	6,163	5,986	5,641	4,567	4,567
Paid to Date	605,434	613,563	621,074	627,507	633,666	639,113	644,665	650,828	656,814	662,455	667,022	667,022
Undiscounted Outstanding Liability	85,566	77,437	69,926	63,493	57,334	51,887	46,335	40,172	34,186	28,545	23,978	23,978
2010-2011												
Ultimate Loss	\$604,000	\$604,000	\$604,000	\$604,000	\$604,000	\$604,000	\$604,000	\$604,000	\$604,000	\$604,000	\$604,000	\$604,000
Paid in Calendar Period	-	10,268	8,587	7,935	6,796	6,506	5,754	5,865	6,510	6,324	5,959	5,959
Paid to Date	503,338	513,606	522,193	530,128	536,924	543,430	549,184	555,049	561,559	567,883	573,842	573,842
Undiscounted Outstanding Liability	100,662	90,394	81,807	73,872	67,076	60,570	54,816	48,951	42,441	36,117	30,158	30,158

Novato Fire Protection District - Workers' Compensation
Payment and Reserve Forecast

Accident Year	As of 6/30/2022	Calendar Period											
		7/1/2022 to 6/30/2023	7/1/2023 to 6/30/2024	7/1/2024 to 6/30/2025	7/1/2025 to 6/30/2026	7/1/2026 to 6/30/2027	7/1/2027 to 6/30/2028	7/1/2028 to 6/30/2029	7/1/2029 to 6/30/2030	7/1/2030 to 6/30/2031	7/1/2031 to 6/30/2032		
2011-2012													
Ultimate Loss	\$690,000	\$690,000	\$690,000	\$690,000	\$690,000	\$690,000	\$690,000	\$690,000	\$690,000	\$690,000	\$690,000	\$690,000	\$690,000
Paid in Calendar Period	-	11,301	9,452	8,734	7,480	7,161	6,333	6,456	7,166	7,166	6,960	6,960	6,960
Paid to Date	566,621	579,206	599,959	608,693	616,173	623,334	629,667	636,123	643,289	643,289	650,249	650,249	650,249
Outstanding Liability	123,379	110,794	99,493	90,041	81,307	73,827	66,666	53,877	46,711	46,711	39,751	39,751	39,751
2012-2013													
Ultimate Loss	\$341,000	\$341,000	\$341,000	\$341,000	\$341,000	\$341,000	\$341,000	\$341,000	\$341,000	\$341,000	\$341,000	\$341,000	\$341,000
Paid in Calendar Period	-	12,529	10,340	9,285	7,176	6,146	5,884	5,203	5,304	5,304	5,887	5,887	5,887
Paid to Date	227,101	239,630	249,970	259,255	274,197	280,343	286,227	291,430	296,734	296,734	302,621	302,621	302,621
Outstanding Liability	113,899	101,370	91,030	81,745	73,979	66,803	60,657	54,773	44,266	44,266	38,379	38,379	38,379
2013-2014													
Ultimate Loss	\$534,000	\$534,000	\$534,000	\$534,000	\$534,000	\$534,000	\$534,000	\$534,000	\$534,000	\$534,000	\$534,000	\$534,000	\$534,000
Paid in Calendar Period	-	13,383	11,556	9,536	7,162	6,619	5,668	5,427	4,799	4,799	4,892	4,892	4,892
Paid to Date	415,567	428,950	440,506	450,042	465,768	472,387	478,055	483,482	488,281	488,281	493,173	493,173	493,173
Outstanding Liability	118,433	105,050	93,494	83,958	75,394	68,232	61,613	55,945	45,719	45,719	40,827	40,827	40,827
Ultimate Loss	\$13,110,330	\$13,110,330	\$13,110,330	\$13,110,330	\$13,110,330	\$13,110,330	\$13,110,330	\$13,110,330	\$13,110,330	\$13,110,330	\$13,110,330	\$13,110,330	\$13,110,330
Ultimate Loss at 80%	13,426,000	13,426,000	13,426,000	13,426,000	13,426,000	13,426,000	13,426,000	13,426,000	13,426,000	13,426,000	13,426,000	13,426,000	13,426,000
Paid at Expected in Calendar Period	-	100,989	87,161	77,329	68,712	61,834	58,192	54,301	47,123	47,123	43,669	43,669	43,669
Paid at 80% in Calendar Period	-	136,757	117,842	104,549	92,899	83,600	78,676	73,415	69,601	69,601	63,710	63,710	63,710
Total Paid to Date at Expected	12,214,164	12,315,153	12,402,314	12,479,643	12,548,355	12,610,189	12,668,381	12,722,682	12,774,162	12,821,285	12,864,954	12,864,954	12,864,954
Total Paid to Date at 80%	12,350,921	12,468,762	12,573,311	12,666,210	12,749,809	12,828,485	12,901,900	12,971,501	13,035,211	13,035,211	13,094,252	13,094,252	13,094,252
Undiscounted Outstanding Liability at Expected	896,166	795,177	708,016	630,687	561,975	500,141	441,949	387,648	289,045	289,045	245,376	245,376	245,376
Undiscounted Outstanding Liability at 80%	1,211,616	1,075,079	957,238	852,689	759,790	676,191	597,515	524,100	390,789	390,789	331,748	331,748	331,748
Total Undiscounted Outstanding ULAE at Expected	67,867	58,975	51,190	44,268	37,862	32,383	27,697	23,689	20,261	20,261	14,821	14,821	14,821
Total Undiscounted Outstanding ULAE at 80%	91,756	79,734	69,209	59,850	51,189	43,782	37,446	32,027	23,429	23,429	20,038	20,038	20,038
Total Undiscounted Outstanding Liability at Expected	964,033	854,152	759,206	674,955	599,837	532,524	469,646	411,337	356,429	356,429	260,197	260,197	260,197
Total Undiscounted Outstanding Liability at 80%	1,303,373	1,154,814	1,026,447	912,539	810,980	719,972	634,961	556,127	481,892	481,892	414,218	414,218	414,218

Notes appear on the next page.

Novato Fire Protection District - Workers' Compensation
Payment and Reserve Forecast

Notes to previous page:

- Accident Year is associated with date of loss. Calendar Period is associated with date of transaction. For example, for the losses which occurred during 2008-2009, \$655,000 is expected to be paid between 7/1/22 and 6/30/23, \$489,337 will have been paid by 6/30/23, and the reserve for remaining payments on these claims should be \$165,663.
- Ultimate Losses for each accident year are from Exhibit 3, Page 1.
- Paid in Calendar Period is a proportion of the Undiscounted Outstanding Liability from the previous calendar period. These proportions are derived from the paid loss development pattern selected in Appendix B. For example, $\$17,795 = \$183,458 \times 9.7\%$.
- Paid to Date is Paid in Calendar Period plus Paid to Date from previous calendar period. For example, $\$489,337 = \$17,795 + \$471,542$.
- Outstanding Liability is Ultimate Loss minus Paid to Date. For example, $\$165,663 = \$183,458 - \$17,795$.

This exhibit shows the calculation of the liability for outstanding claims as of the date of evaluation, the end of the current fiscal year, and the end of the coming fiscal year. It also shows the expected claims payout during the remainder of the current fiscal year and the coming fiscal year. Refer to the Totals at the end of the exhibit for the balance sheet information. The top parts of the exhibit show information for each program year.

Novato Fire Protection District - Workers' Compensation

Short- and Long-Term Liabilities

<u>Liabilities as of 6/30/22:</u>		<u>Expected</u>	<u>Discounted</u>
<u>Current (Short Term)</u>	Loss and ALAE:	\$100,989	\$99,994
	ULAE:	8,892	8,804
	Short-Term Loss and LAE:	<u>\$109,881</u>	<u>\$108,798</u>
<u>Non-Current (Long Term)</u>	Loss and ALAE:	\$795,177	\$680,652
	ULAE:	58,975	50,315
	Long-Term Loss and LAE:	<u>\$854,152</u>	<u>\$730,967</u>
<u>Total Liability</u>	Loss and ALAE:	\$896,166	\$780,646
	ULAE:	67,867	59,119
	Total Loss and LAE:	<u>\$964,033</u>	<u>\$839,765</u>
<u>Liabilities as of 6/30/23:</u>			
<u>Current (Short Term)</u>	Loss and ALAE:	\$87,161	\$86,302
	ULAE:	7,785	7,708
	Short-Term Loss and LAE:	<u>\$94,946</u>	<u>\$94,010</u>
<u>Non-Current (Long Term)</u>	Loss and ALAE:	\$708,016	\$609,554
	ULAE:	51,190	43,901
	Long-Term Loss and LAE:	<u>\$759,206</u>	<u>\$653,455</u>
<u>Total Liability</u>	Loss and ALAE:	\$795,177	\$695,856
	ULAE:	58,975	51,609
	Total Loss and LAE:	<u>\$854,152</u>	<u>\$747,465</u>

		<u>Discounted with a Margin for Contingencies</u>				
		<u>70%</u>	<u>75%</u>	<u>80%</u>	<u>85%</u>	<u>90%</u>
		<u>Confidence</u>	<u>Confidence</u>	<u>Confidence</u>	<u>Confidence</u>	<u>Confidence</u>
<u>Liabilities as of 6/30/22:</u>						
<u>Current (Short Term)</u>	Loss and ALAE:	\$116,993	\$125,392	\$135,192	\$147,591	\$164,090
	ULAE:	10,301	11,040	11,903	12,995	14,447
	Short-Term Loss and LAE:	<u>\$127,294</u>	<u>\$136,432</u>	<u>\$147,095</u>	<u>\$160,586</u>	<u>\$178,537</u>
<u>Non-Current (Long Term)</u>	Loss and ALAE:	\$796,363	\$853,538	\$920,241	\$1,004,642	\$1,116,950
	ULAE:	58,868	63,095	68,026	74,265	82,567
	Long-Term Loss and LAE:	<u>\$855,231</u>	<u>\$916,633</u>	<u>\$988,267</u>	<u>\$1,078,907</u>	<u>\$1,199,517</u>
<u>Total Liability</u>	Loss and ALAE:	\$913,356	\$978,930	\$1,055,433	\$1,152,233	\$1,281,040
	ULAE:	69,169	74,135	79,929	87,260	97,014
	Total Loss and LAE:	<u>\$982,525</u>	<u>\$1,053,065</u>	<u>\$1,135,362</u>	<u>\$1,239,493</u>	<u>\$1,378,054</u>
<u>Liabilities as of 6/30/23:</u>						
<u>Current (Short Term)</u>	Loss and ALAE:	\$100,973	\$108,223	\$116,680	\$127,382	\$141,622
	ULAE:	9,018	9,666	10,421	11,377	12,649
	Short-Term Loss and LAE:	<u>\$109,991</u>	<u>\$117,889</u>	<u>\$127,101</u>	<u>\$138,759</u>	<u>\$154,271</u>
<u>Non-Current (Long Term)</u>	Loss and ALAE:	\$713,179	\$764,380	\$824,117	\$899,701	\$1,000,278
	ULAE:	51,364	55,052	59,355	64,798	72,041
	Long-Term Loss and LAE:	<u>\$764,543</u>	<u>\$819,432</u>	<u>\$883,472</u>	<u>\$964,499</u>	<u>\$1,072,319</u>
<u>Total Liability</u>	Loss and ALAE:	\$814,152	\$872,603	\$940,797	\$1,027,083	\$1,141,900
	ULAE:	60,382	64,718	69,776	76,175	84,690
	Total Loss and LAE:	<u>\$874,534</u>	<u>\$937,321</u>	<u>\$1,010,573</u>	<u>\$1,103,258</u>	<u>\$1,226,590</u>

Note: Current (short term) liabilities are the portion of the total estimated liability shown on Appendix G that is expected to be paid out within the coming year. Totals may vary from Exhibit 1, due to rounding.

Novato Fire Protection District - Workers' Compensation

Discount Factors to be Applied to Overall Reserves

Accident Year	Full Value of Reserve at 6/30/22 (A)	Discount Factor (B)	Discounted Reserve at 6/30/22 (C)	Full Value of Reserve at 6/30/23 (D)	Discount Factor (E)	Discounted Reserve at 6/30/23 (F)
2004-2005	50,695	0.898	45,519	45,271	0.906	40,999
2005-2006	21,579	0.890	19,203	19,529	0.898	17,535
2006-2007	0	0.882	0	0	0.890	0
2007-2008	0	0.875	0	0	0.882	0
2008-2009	183,458	0.869	159,487	165,663	0.875	144,975
2009-2010	85,566	0.864	73,927	77,437	0.869	67,319
2010-2011	100,662	0.860	86,598	90,394	0.864	78,098
2011-2012	123,379	0.857	105,695	110,794	0.860	95,314
2012-2013	113,899	0.854	97,321	101,370	0.857	86,841
2013-2014	118,433	0.852	100,958	105,050	0.854	89,760
Totals	\$896,166		\$780,646	\$795,177		\$695,856

(G) Discount Factor at 6/30/22 for Overall Reserve: 0.871

(H) Discount Factor at 6/30/23 for Overall Reserve: 0.875

Notes:

- (A) From Appendix G, Outstanding Liability at 6/30/22.
- (B) Based on Appendix I, Page 2, Column (E).
- (C) (A) x (B).
- (D) From Appendix G, Outstanding Liability at 6/30/23.
- (E) Based on Appendix I, Page 2, Column (E).
- (F) (D) x (E).
- (G) Total of (C) / Total of (A).
- (H) Total of (F) / Total of (D).

This exhibit shows the expected impact of anticipated investment income on the liability for outstanding claims at the date of evaluation and the end of the current fiscal year. For example, if the discount factor in item (G) is 0.871, the discounted liability for outstanding claims is 87.1% of the full value.

Novato Fire Protection District - Workers' Compensation

Calculation of Discount Factors

Payment Year (A)	Payment Pattern (B)	Return on Investment (C)	Discounted Reserves (D)	Undiscounted Reserves (E)	Discount Factor (F)
29+	2.1%	2.0%	0.020	0.021	0.990
28	0.6%	2.0%	0.026	0.026	0.975
27	0.6%	2.0%	0.031	0.032	0.962
26	0.7%	2.0%	0.037	0.038	0.951
25	0.8%	2.0%	0.044	0.047	0.943
24	0.8%	2.0%	0.051	0.055	0.934
23	1.1%	2.0%	0.061	0.065	0.928
22	1.0%	2.0%	0.069	0.075	0.920
21	1.1%	2.0%	0.078	0.086	0.913
20	1.1%	2.0%	0.088	0.097	0.906
19	1.0%	2.0%	0.096	0.107	0.898
18	1.0%	2.0%	0.104	0.117	0.890
17	1.1%	2.0%	0.113	0.128	0.882
16	1.1%	2.0%	0.122	0.139	0.875
15	1.3%	2.0%	0.133	0.153	0.869
14	1.4%	2.0%	0.144	0.167	0.864
13	1.7%	2.0%	0.158	0.184	0.860
12	1.8%	2.0%	0.173	0.202	0.857
11	2.2%	2.0%	0.191	0.224	0.854
10	2.4%	2.0%	0.211	0.248	0.852
9	7.6%	2.0%	0.282	0.323	0.872
8	10.8%	2.0%	0.383	0.431	0.889
7	5.4%	2.0%	0.429	0.485	0.884
6	6.0%	2.0%	0.480	0.545	0.881
5	5.4%	2.0%	0.524	0.599	0.875
4	6.2%	2.0%	0.575	0.661	0.870
3	8.8%	2.0%	0.651	0.749	0.869
2	13.6%	2.0%	0.773	0.885	0.873
1	11.5%	2.0%	0.872	1.000	0.872

Notes:

- (A) This is the year of payment relative to the accident year. For example, year 7 refers to payments made in the seventh year after the inception of the accident year. We assume that payments are made at midyear.
- (B) Percent of ultimate loss paid this year. This payment pattern is based on the paid loss development pattern selected in Appendix B, Page 2.
- (C) Assumed Investment Income Rates.
- (D) Discounted Reserves at the beginning of this year is next year's Discounted Reserves discounted one year plus this year's payments discounted six months. For example, in year 2, $77.3\% = [65.1\% / 1.020] + [13.6\% / (1.010)]$.
- (E) Summation of future (B) values. This is the percent of ultimate loss unpaid at the beginning of the year.
- (F) (D) / (E).

This exhibit shows the calculation of the effect of anticipated investment income on future claims costs. Thus, if the discount factor in item (F) is 0.88, on a discounted basis, \$0.88 must be budgeted for every \$1 that will actually be paid on claims that will be incurred in the next fiscal year.

Novato Fire Protection District - Workers' Compensation

Confidence Level Table

Probability	Projected Losses	Outstanding Losses
95%	3.348	1.918
90%	2.344	1.641
85%	1.833	1.476
80%	1.499	1.352
75%	1.256	1.254
70%	1.068	1.170
65%	0.915	1.097
60%	0.787	1.031
55%	0.677	0.971
50%	0.582	0.914
45%	0.498	0.861
40%	0.423	0.808
35%	0.355	0.756
30%	0.293	0.704
25%	0.235	0.652

To read table: For the above retention, there is a 90% chance that final loss settlements will be less than 2.344 times the average expected amount of losses.

This exhibit shows the loads that must be applied to bring estimated losses at the expected level to the various indicated confidence levels.

Novato Fire Protection District - Workers' Compensation

Program History

Policy Year Start Date	Policy Year End Date	Policy Year	Self-Insured Retention	
			Per Occurrence	Aggregate
7/1/1987	6/30/1994	Prior	\$275,000	(none)
7/1/1994	6/30/1995	1994-1995	275,000	(none)
7/1/1995	6/30/1996	1995-1996	275,000	(none)
7/1/1996	6/30/1997	1996-1997	275,000	(none)
7/1/1997	6/30/1998	1997-1998	275,000	(none)
7/1/1998	6/30/1999	1998-1999	275,000	(none)
7/1/1999	6/30/2000	1999-2000	275,000	(none)
7/1/2000	6/30/2001	2000-2001	275,000	(none)
7/1/2001	6/30/2002	2001-2002	300,000	(none)
7/1/2002	6/30/2003	2002-2003	1,000,000	(none)
7/1/2003	6/30/2004	2003-2004	1,000,000	(none)
7/1/2004	6/30/2005	2004-2005	1,000,000	(none)
7/1/2005	6/30/2006	2005-2006	1,000,000	(none)
7/1/2006	6/30/2007	2006-2007	1,000,000	(none)
7/1/2007	6/29/2008	2007-2008	1,000,000	(none)
7/1/2008	6/30/2009	2008-2009	1,000,000	(none)
7/1/2009	6/30/2010	2009-2010	1,000,000	(none)
7/1/2010	6/30/2011	2010-2011	1,000,000	(none)
7/1/2011	6/29/2012	2011-2012	1,000,000	(none)
7/1/2012	6/30/2013	2012-2013	1,000,000	(none)
7/1/2013	6/30/2014	2013-2014	1,250,000	(none)

Third Party Claims Administrator	Begin Date	End Date
Athens	7/1/1987	Current

This exhibit summarizes some of the key facts about the history of the program.

Novato Fire Protection District - Workers' Compensation

Incurred Losses as of 6/30/22

Accident Year (A)	Unlimited Incurred (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Incurred (E)	Incurred Over SIR (F)	Incurred Over \$100,000 (G)	Incurred Capped at \$100,000 (H)	Incurred \$100,000 to SIR Layer (I)	Incurred Capped at SIR (J)	Incurred Capped at SIR & Aggregate (K)
Prior	\$1,828,737	\$0	\$56,180	\$1,772,557	\$0	\$253,250	\$1,519,306	\$253,250	\$1,772,557	\$1,772,557
1994-1995	353,817	0	0	353,817	0	73,801	280,016	73,801	353,817	353,817
1995-1996	126,843	0	0	126,843	0	0	126,843	0	126,843	126,843
1996-1997	553,381	0	0	553,381	0	50,804	502,577	50,804	553,381	553,381
1997-1998	451,864	0	0	451,864	0	80,309	371,556	80,309	451,864	451,864
1998-1999	985,316	0	0	985,316	0	293,668	691,649	293,668	985,316	985,316
1999-2000	436,297	0	0	436,297	0	116,070	320,228	116,070	436,297	436,297
2000-2001	559,401	0	0	559,401	5,667	225,797	333,604	220,129	553,734	553,734
2001-2002	1,129,448	0	694	1,128,754	51,541	534,828	593,926	483,287	1,077,213	1,077,213
2002-2003	178,814	0	0	178,814	0	0	178,814	0	178,814	178,814
2003-2004	2,004,301	0	0	2,004,301	0	1,569,106	435,196	1,569,106	2,004,301	2,004,301
2004-2005	205,146	0	0	205,146	0	0	205,146	0	205,146	205,146
2005-2006	267,235	0	0	267,235	0	0	267,235	0	267,235	267,235
2006-2007	493,327	0	0	493,327	0	222,562	270,765	222,562	493,327	493,327
2007-2008	92,328	0	0	92,328	0	0	92,328	0	92,328	92,328
2008-2009	620,125	0	0	620,125	0	171,245	448,879	171,245	620,125	620,125
2009-2010	646,780	0	0	646,780	0	209,594	437,186	209,594	646,780	646,780
2010-2011	536,416	0	0	536,416	0	174,528	361,889	174,528	536,416	536,416
2011-2012	620,420	0	0	620,420	0	223,106	397,315	223,106	620,420	620,420
2012-2013	282,947	0	0	282,947	0	76,607	206,339	76,607	282,947	282,947
2013-2014	415,567	0	0	415,567	0	45,881	369,686	45,881	415,567	415,567
Total	\$12,788,511	\$0	\$56,875	\$12,731,637	\$57,208	\$4,321,154	\$8,410,483	\$4,263,946	\$12,674,429	\$12,674,429

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the District.
- (C)
- (D) Recoveries.
- (E) (B) + (C) - (D).
- (F) Sum of incurred losses in excess of SIR.
- (G) Sum of incurred losses in excess of \$100,000.
- (H) (E) - (G).
- (I) (G) - (F).
- (J) (E) - (F).
- (K) Minimum of (J) and the aggregate stop loss. See Appendix K.

Novato Fire Protection District - Workers' Compensation

Paid Losses as of 6/30/22

Accident Year (A)	Unlimited Paid (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Paid (E)	Paid Over SIR (F)	Paid Over \$100,000 (G)	Paid Capped at \$100,000 (H)	Paid \$100,000 to SIR Layer (I)	Paid Capped at SIR (J)	Paid Capped at SIR & Aggregate (K)
Prior	\$1,828,737	\$0	\$56,180	\$1,772,557	\$0	\$253,250	\$1,519,306	\$253,250	\$1,772,557	\$1,772,557
1994-1995	353,817	0	0	353,817	0	73,801	280,016	73,801	353,817	353,817
1995-1996	115,949	0	0	115,949	0	0	115,949	0	115,949	115,949
1996-1997	553,381	0	0	553,381	0	50,804	502,577	50,804	553,381	553,381
1997-1998	441,485	0	0	441,485	0	80,309	361,177	80,309	441,485	441,485
1998-1999	985,316	0	0	985,316	0	293,668	691,649	293,668	985,316	985,316
1999-2000	415,286	0	0	415,286	0	116,070	299,216	116,070	415,286	415,286
2000-2001	559,401	0	0	559,401	5,667	225,797	333,604	220,129	553,734	553,734
2001-2002	1,063,429	0	694	1,062,735	0	468,809	593,926	468,809	1,062,735	1,062,735
2002-2003	163,619	0	0	163,619	0	0	163,619	0	163,619	163,619
2003-2004	2,004,301	0	0	2,004,301	0	1,569,106	435,196	1,569,106	2,004,301	2,004,301
2004-2005	164,305	0	0	164,305	0	0	164,305	0	164,305	164,305
2005-2006	252,421	0	0	252,421	0	0	252,421	0	252,421	252,421
2006-2007	493,327	0	0	493,327	0	222,562	270,765	222,562	493,327	493,327
2007-2008	92,328	0	0	92,328	0	0	92,328	0	92,328	92,328
2008-2009	471,542	0	0	471,542	0	54,227	417,315	54,227	471,542	471,542
2009-2010	605,434	0	0	605,434	0	183,716	421,718	183,716	605,434	605,434
2010-2011	503,338	0	0	503,338	0	174,528	328,810	174,528	503,338	503,338
2011-2012	566,621	0	0	566,621	0	185,280	381,341	185,280	566,621	566,621
2012-2013	227,101	0	0	227,101	0	37,408	189,693	37,408	227,101	227,101
2013-2014	415,567	0	0	415,567	0	45,881	369,686	45,881	415,567	415,567
Total	\$12,276,704	\$0	\$56,875	\$12,219,830	\$5,667	\$4,035,214	\$8,184,616	\$4,029,546	\$12,214,162	\$12,214,162

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the District.
- (C)
- (D) Recoveries.
- (E) (B) + (C) - (D).
- (F) Sum of paid losses in excess of SIR.
- (G) Sum of paid losses in excess of \$100,000.
- (H) (E) - (G).
- (I) (G) - (F).
- (J) (E) - (F).
- (K) Minimum of (J) and the aggregate stop loss. See Appendix K.

Novato Fire Protection District - Workers' Compensation

Case Reserves as of 6/30/22

Accident Year (A)	Unlimited Reserves (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Reserves (E)	Reserves Over SIR (F)	Reserves Over \$100,000 (G)	Reserves Capped at \$100,000 (H)	Reserves \$100,000 to SIR Layer (I)	Reserves Capped at SIR (J)	Reserves Capped at SIR & Aggregate (K)
Prior	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1994-1995	0	0	0	0	0	0	0	0	0	0
1995-1996	10,895	0	0	10,895	0	0	10,895	0	10,895	10,895
1996-1997	0	0	0	0	0	0	0	0	0	0
1997-1998	10,379	0	0	10,379	0	0	10,379	0	10,379	10,379
1998-1999	0	0	0	0	0	0	0	0	0	0
1999-2000	21,012	0	0	21,012	0	0	21,012	0	21,012	21,012
2000-2001	0	0	0	0	0	0	0	0	0	0
2001-2002	66,019	0	0	66,019	51,541	66,019	0	14,478	14,478	14,478
2002-2003	15,196	0	0	15,196	0	0	15,196	0	15,196	15,196
2003-2004	0	0	0	0	0	0	0	0	0	0
2004-2005	40,840	0	0	40,840	0	0	40,840	0	40,840	40,840
2005-2006	14,814	0	0	14,814	0	0	14,814	0	14,814	14,814
2006-2007	0	0	0	0	0	0	0	0	0	0
2007-2008	0	0	0	0	0	0	0	0	0	0
2008-2009	148,583	0	0	148,583	0	117,018	31,565	117,018	148,583	148,583
2009-2010	41,346	0	0	41,346	0	25,879	15,468	25,879	41,346	41,346
2010-2011	33,078	0	0	33,078	0	0	33,078	0	33,078	33,078
2011-2012	53,800	0	0	53,800	0	37,825	15,974	37,825	53,800	53,800
2012-2013	55,846	0	0	55,846	0	39,199	16,647	39,199	55,846	55,846
2013-2014	0	0	0	0	0	0	0	0	0	0
Total	\$511,807	\$0	\$0	\$511,807	\$51,541	\$285,940	\$225,867	\$234,399	\$460,266	\$460,266

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Appendix L, Page 1, Column (B) - Appendix L, Page 2, Column (B).
- (C) Appendix L, Page 1, Column (C) - Appendix L, Page 2, Column (C).
- (D) Appendix L, Page 1, Column (D) - Appendix L, Page 2, Column (D).
- (E) (B) + (C) - (D).
- (F) Sum of case reserves in excess of SIR.
- (G) Sum of case reserves in excess of \$100,000.
- (H) (E) - (G).
- (I) (G) - (F).
- (J) (E) - (F).
- (K) Minimum of (J) and the aggregate stop loss. See Appendix K.

Novato Fire Protection District - Workers' Compensation

Claim Counts as of 6/30/22

Accident Year (A)	Reported Claims (B)	Additions to Reported Claims (C)	Subtractions from Reported Claims (D)	Adjusted Reported Claims (E)	Closed Claims (F)	Additions to Closed Claims (G)	Subtractions from Closed Claims (H)	Adjusted Closed Claims (I)	Open Claims (J)	Adjusted Open Claims (K)
Prior	231	0	18	213	231	0	18	213	0	0
1994-1995	33	0	2	31	33	0	2	31	0	0
1995-1996	35	0	3	32	34	0	3	31	1	1
1996-1997	39	0	5	34	39	0	5	34	0	0
1997-1998	28	0	2	26	27	0	2	25	1	1
1998-1999	34	0	3	31	34	0	3	31	0	0
1999-2000	31	0	0	31	29	0	0	29	2	2
2000-2001	28	0	2	26	28	0	2	26	0	0
2001-2002	25	0	1	24	24	0	1	23	1	1
2002-2003	30	0	0	30	29	0	0	29	1	1
2003-2004	35	0	4	31	35	0	4	31	0	0
2004-2005	25	0	5	20	24	0	5	19	1	1
2005-2006	29	0	2	27	28	0	2	26	1	1
2006-2007	25	0	2	23	25	0	2	23	0	0
2007-2008	20	0	2	18	20	0	2	18	0	0
2008-2009	24	0	1	23	22	0	1	21	2	2
2009-2010	27	0	1	26	25	0	1	24	2	2
2010-2011	25	0	6	19	24	0	6	18	1	1
2011-2012	24	0	5	19	21	0	5	16	3	3
2012-2013	24	0	1	23	22	0	1	21	2	2
2013-2014	34	0	4	30	34	0	4	30	0	0
Total	806	0	69	737	788	0	69	719	18	18

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the District.
- (C)
- (D) Closed claims with no payment
- (E) (B) + (C) - (D).
- (F) Provided by the District.
- (G)
- (H) Closed claims with no payment
- (I) (F) + (G) - (H).
- (J) (B) - (F).
- (K) (E) - (I).

Novato Fire Protection District - Workers' Compensation

Exposure Measures

Accident Year	Total Payroll (\$00) (A)	Inflation Trend Factor (B)	Trended Payroll (\$00) (C)
2005-2006	87,368	1.521	132,887
2006-2007	97,871	1.484	145,241
2007-2008	118,242	1.448	171,214
2008-2009	126,628	1.413	178,925
2009-2010	114,621	1.379	158,062
2010-2011	100,374	1.345	135,003
2011-2012	103,342	1.312	135,585
2012-2013	104,205	1.280	133,382
2013-2014	106,615	1.249	133,162

- Notes:
- (A) Provided by the District.
 - (B) Based on WCIRB.
 - (C) (A) x (B).