

1750 Creekside Oaks Drive, Suite 200, Sacramento, CA 95833 (800) 541-4591 Fax (916) 244-1199 <u>https://www.planjpa.org/</u>

SPECIAL BOARD OF DIRECTORS MEETING AGENDA

Thursday, March 23, 2023 10:00 a.m.

Burlingame Community Center 850 Burlingame Avenue Burlingame, CA 94010

In compliance with the Americans with Disabilities Act, if you need a disability-related modification or accommodation to participate in this meeting, please contact Katie Sullivan at (916) 244-1164 or (916) 244-1199 (fax). Requests must be made as early as possible and at least one full business day before the start of the meeting.

Documents and materials relating to an open session agenda item that are provided to the Pooled Liability Assurance Network (PLAN) JPA Board of Directors less than 72 hours prior to a regular meeting will be available for public inspection at 1750 Creekside Oaks Dr., Suite 200, Sacramento, CA 95833.

Page 1. CALL TO ORDER

2. INTRODUCTIONS

3. APPROVAL OF AGENDA AS POSTED (OR AMENDED)

4. **PUBLIC COMMENTS** - The Public may submit any questions in advance of the meeting by contacting Katie Sullivan at: katie.sullivan@sedgwick.com. This time is reserved for members of the public to address the Board relative to matters of the Board of Directors not on the agenda. No action may be taken on non-agenda items unless authorized by law. Comments will be limited to five minutes per person and twenty minutes in total.

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5.

GENERAL MANAGER'S REPORT

A. Report from PLAN JPA's General Manager *Recommendation: None.*

6. SEDGWICK CLAIMS ADMINISTRATION REPORT Page A. Review of Sedgwick Third Party Administrator Stewardship Report 4 Recommendation: None. 7. LIABILITY PROGRAM 5 *A. Actuarial Update for the General Liability Program Recommendation: None. 144 B. State of the Market - Liability Recommendation: None. C. PLAN JPA 2023/24 Projections – Liability 145 Recommendation: None. **PROPERTY AND GROUP PURCHASE PROGRAMS** 8. 146 *A. Actuarial Update for the Property Program Recommendation: None. 191 B. State of the Market – Property and Group Purchase Programs Recommendation: None. 192 C. PLAN JPA 2023/24 Projections – Property and Group Purchase Programs Recommendation: None. 9. FINANCIAL MATTERS 193 *A. Review of the PLAN JPA 2023/24 Preliminary Operating Budget

Recommendation: None.

10. CLOSING COMMENTS

This time is reserved for comments by Board members and/or staff and to identify matters for future Board business.

- A. Board of Directors
- B. Staff

11. ADJOURNMENT

NOTICES:

The next Executive Committee meeting will be held on April 20, 2023, at 10:00am. Location TBD.
The next Board of Directors meeting will be held on June 21, 2023, at 9:30am. Location TBD.

^{*} Reference materials attached with staff report.

PLAN JPA SPECIAL BOARD OF DIRECTORS MEETING

March 23, 2023

Agenda Item 5.A.

GENERAL MANAGER'S REPORT

SUBJECT: Report from PLAN JPA's General Manger

BACKGROUND AND HISTORY:

Governance

In December 2022, staff received direction from the Board of Directors to make some changes to governing documents and meeting schedules to reflect the combined responsibilities of the Claims Committee and the Executive Committee to include managing of claims. Staff is moving forward with legal reviews of documents and preparation of meeting resolutions to reflect the dissolution of the "Claims Committee" in its current structure. Staff will present changes to the Executive Committee in April and to the full Board of Directors in June.

Additionally, staff will perform further review of other governing documents regarding claims management and the respective authorities between the individual member and the claims administrator.

Renewals

The renewal market is extremely tough and being identified as a "hard market". PLAN members are likely to see renewal contributions that are higher than expected and, as staff is discovering, affecting the public entity market across the board, including excess JPAs that service primary pools.

<u>RECOMMENDATION</u>:

None.

REFERENCE MATERIALS ATTACHED:

None

PLAN JPA SPECIAL BOARD OF DIRECTORS MEETING

March 23, 2023

Agenda Item 6.A.

SEDGWICK CLAIMS ADMINISTRATION REPORT

SUBJECT: Review of Sedgwick Third Party Administrator Stewardship Report

BACKGROUND AND HISTORY:

Over the last 24-36 months, and likely a direct result of the employment challenges similar to those currently being endured by many public entities and valued partners, PLAN's third-party administrator, Sedgwick, has endured and managed several challenges.

Knowing these challenges have the inherent possibility of affecting the claims management process as well as associated claim file costs, staff has invited management from Sedgwick TPA to present a stewardship report regarding their services and the position of the pool.

<u>RECOMMENDATION</u>:

None.

<u>REFERENCE MATERIALS ATTACHED</u>:

None

PLAN JPA SPECIAL BOARD OF DIRECTORS MEETING

March 23, 2023

Agenda Item 7.A.

LIABILITY PROGRAM

SUBJECT: Actuarial Update for the General Liability Program

BACKGROUND AND HISTORY:

The draft actuarial report provides the funding information for the 2023/24 year. The actuary was able to compile the report using December 31, 2022, loss runs and estimated payroll data.

General Liability Program:

Below is PLAN's current General Liability program structure.



The actuarial analysis is composed of two main components: (1) a review of the estimates of the ultimate liabilities of the Liability Program projected to June 30, 2023; and (2) a loss forecasting analysis to determine the appropriate contribution for the Liability Program in the 2023/24 program year.

Agenda Item 7.A. Page 2

Part One – Review of Ultimate Liability Estimates

The estimate of Liability Programs' Ultimate Loss and Allocated Loss Adjustment Expense (ALAE) for all open program years have decreased by \$2,247,000 due to less than expected incurred claims development. Below is a chart from page 23 of the Draft Actuarial Report, illustrating the changes in ultimate losses:

Accident			
Year	Prior Report	Current Report	Change
1986-02	\$34,631,000	\$34,630,000	(\$1,000)
2002-03	8,812,000	8,812,000	0
2003-04	2,574,000	2,574,000	0
2004-05	1,874,000	1,874,000	0
2005-06	4,756,000	4,756,000	0
2006-07	1,662,000	1,662,000	0
2007-08	6,756,000	6,756,000	0
2008-09	3,472,000	3,473,000	1,000
2009-10	2,353,000	2,353,000	0
2010-11	2,077,000	2,047,000	(30,000)
2011-12	3,917,000	3,902,000	(15,000)
2012-13	3,845,000	4,105,000	260,000
2013-14	6,959,000	7,074,000	115,000
2014-15	5,644,000	5,566,000	(78,000)
2015-16	5,216,000	5,157,000	(59,000)
2016-17	8,049,000	8,351,000	302,000
2017-18	1,146,000	1,075,000	(71,000)
2018-19	2,871,000	2,079,000	(792,000)
2019-20	4,018,000	2,690,000	(1,328,000)
2020-21	8,808,000	8,725,000	(83,000)
2021-22	5,446,000	4,978,000	(468,000)
Total	\$124,886,000	\$122,639,000	(\$2,247,000)

Part Two – Loss Forecasting Analysis

The discounted contribution required to collect at the 60% confidence level (CL) for the upcoming 2023/24 program year at the \$1 million SIR is \$4,888,000, which decreased by 4.2%, or \$214,000 from the prior year.

The following is a comparison of the funding for the PLAN JPA Primary Pool Layer:

March 25, 2025

Agenda Item 7.A. Page 3

Liability	Discount			
Program	Factor	Expected	 60%	 70%
2023/24	2.0%	\$ 4,764,000	\$ 4,888,000	\$ 5,593,000
2022/23	2.0%	\$ 4,972,000	\$ 5,102,000	\$ 5,828,000
	Change	 (208,000)	(214,000)	 (235,000)
	% Change	-4.2%	-4.2%	-4.0%

With a change of methodology in the collection of actual payrolls from members based on DE9 reports, this resulted in better consistency on the data and estimated payroll for 2023/24. This report also includes changes to the contribution calculation method implemented during the 2021/22 year and continues through 2023/24. A plus or minus 30% cap was placed on the Ex-Mod year-over-year change. In addition, due to changes in the contribution calculation methodology, the Board recommended a phase-in period be utilized on contribution changes with a 40% cap in 2021/22, a 50% cap in 2022/23, and a 60% cap in 2023/24. The 2023/24 budget, the last year of capping, utilizes a 60% cap placed on contributions changes from prior year. *Currently, there are no members against the 60% cap*.

Ms. Becky Richard, ACAS, MAAA, Senior Actuarial Manager from Bickmore Actuarial, will be in attendance to review the Draft Actuarial Study for the Liability Program.

<u>RECOMMENDATION</u>:

None.

<u>REFERENCE MATERIALS ATTACHED</u>:

• Draft General Liability Program Actuarial Report as of March 13, 2023



Actuarial Review of the Self-Insured Liability Program

Outstanding Liabilities as of June 30, 2023 Forecast for Program Year 2023-24

Presented to **PLAN JPA**

March 13, 2023 - DRAFT



Monday, March 13, 2023

Pooled Liability Assurance Network Joint Powers Authority Attn: Eric Dahlen 1750 Creekside Oaks Drive, Suite 200 Sacramento, CA 95833

Re: Actuarial Review of the Self-Insured Liability Program

Dear Mr. Dahlen:

As you requested, we have completed our review of the Authority's self-insured liability program (the PLAN JPA). We estimate the ultimate cost of claims and expenses for claims incurred during the 2023-24 program year to be \$4,764,000 including allocated loss adjustment expenses (ALAE) and a discount for anticipated investment income (assuming a \$1 million retention). ALAE is basically the direct cost associated with the defense of individual claims. The discount for investment income is calculated based on the likely payout pattern of your claims, assuming a 2.0% return on investments per year. For budgeting purposes, the expected cost of 2023-24 claims translates to a rate of \$0.974 per \$100 payroll.

In addition, we estimate the program's liability for outstanding claims to be \$20,049,000 as of June 30, 2023, including ALAE, unallocated loss adjustment expenses (ULAE), and discounted for anticipated investment income, assuming a 2.0% discount rate. ULAE is the remainder of the cost to administer all claims to final settlement. Given estimated program assets of \$47,426,000 (including SIR Fund assets), the program is funded above the 95% confidence level (see Graph 1 on Page 8).

The \$20,049,000 estimate is the minimum liability to be booked by the PLAN in accordance with Governmental Accounting Standards Board (GASB) Statement #10. GASB #10 requires PLAN to accrue a liability on its financial statements for the ultimate cost of claims and expenses associated with all reported and unreported claims, including ALAE and ULAE. GASB #10 does not prohibit the discounting of losses to recognize investment income. Estimated Liability for Unpaid Loss and LAE

at June 30, 2023

	Expected	70% CL	75% CL	80% CL	85% CL	Minimum 90% CL
Loss and ALAE	\$18,626,000					
ULAE (Claims Administration)	2,328,000					
Investment Income Offset @ 2%	(905,000)					
Discounted Loss and LAE	\$20,049,000	\$22,234,000	\$23,157,000	\$24,239,000	\$25,623,000	\$27,467,000
Program Assets Includes SIR Fund	47,426,000					
Redundancy	\$27,377,000	\$25,192,000	\$24,269,000	\$23,187,000	\$21,803,000	\$19,959,000

The following table shows estimated liability for unpaid loss and LAE at various discount rate assumptions at the expected confidence level.

Estimated Liability for Unpaid Loss and LAE at June 30, 2023

Outstanding Liability
\$20,049,000
\$19,627,000
\$19,223,000

GASB #10 does not address an actual funding requirement for the program, but only speaks of the liability to be recorded on the PLAN's financial statements. Because actuarial estimates of claims costs are subject to some uncertainty, we recommend that an amount in addition to the discounted expected loss costs be set aside as a margin for contingencies.

We generally recommend that risk pools <u>maintain assets for historical liabilities</u> at no less than the <u>90% confidence level</u>.

It should be noted that the \$47,426,000 of program assets can be broken downs as follows:

- \$20,049,000 of assets backing discounted loss and LAE liabilities at expected level
- \$7,418,000 of assets backing discounted loss and LAE liabilities from the expected level to the 90% confidence level (Risk-Margin Fund)
- \$19,959,000 of assets backing discounted loss and LAE liabilities above the 90% confidence level (SIR Fund)

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The following tables show our funding recommendations for PLAN for the 2023-24 fiscal year assuming \$1 million limit at 2.0%, 3.0% and 4.0% discount rate assumptions.

	2.0%	3.0%	4.0%
Expected Loss and ALAE	\$5,100,000	\$5,100,000	\$5,100,000
Discounted Loss and ALAE	\$4,764,000	\$4,609,000	\$4,462,000
60% Confidence Level	4,888,000	4,729,000	4,578,000
70% Confidence Level	5,593,000	5,411,000	5,239,000
80% Confidence Level	6,517,000	6,305,000	6,105,000
90% Confidence Level	7,999,000	7,739,000	7,492,000

Loss and ALAE Funding Guidelines

The funding recommendations above are for losses and allocated loss adjustment expense only. They do not include any provision for claims administration, excess insurance, loss control, overhead, and other expenses associated with the program.

We generally recommend that risk pools fund for <u>future costs</u> between the <u>75% and 85%</u> <u>confidence levels</u>.

Please note, the estimates included in this report do not make any provision for the increased cost of general liability claims as a result of the coronavirus (COVID-19) pandemic.

The report that follows outlines the scope of our study, its background, and our conclusions, recommendations and assumptions. Judgments regarding the appropriateness of our conclusions and recommendations should be made only after studying the report in its entirety – including the graphs, attachments, exhibits and appendices. Our report has been developed for the PLAN's internal use. It is not intended for general circulation.

We appreciate the opportunity to be of service to PLAN in preparing this report. Please feel free to call Becky Richard at (916) 244-1183, Mike Harrington at (916) 244-1162 or David Kim at (916) 244-1166 with any questions you may have concerning this report.

Sincerely,

Bickmore Actuarial

DRAFT

Becky Richard, ACAS, MAAA Senior Actuarial Manager, Bickmore Actuarial Associate, Casualty Actuarial Society Member, American Academy of Actuaries

DRAFT

Mike Harrington, FCAS, MAAA President and Principal, Bickmore Actuarial Fellow, Casualty Actuarial Society Member, American Academy of Actuaries

DRAFT

David Kim Senior Actuarial Analyst, Bickmore Actuarial

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I. BACKGROUND

PLAN JPA began its self-insured excess liability program on June 2, 1986. Excess liability coverage up to \$5 million limits is written for accident years 1986-87 through 1997-98. For accident years 1998-99, 1999-00 and 2000-01 the excess liability coverage is \$7 million. For accident years 2001-02 through 2014-15, the excess liability coverage is \$5 million. For accident years 2015-16 through 2020-21, the excess liability coverage is \$2.5 million. PLAN currently purchases reinsurance in excess of \$1 million per occurrence as follows:

Loss Layer	<u>Reinsurer</u>
\$1M - \$10M per occurrence	CARMA
\$10M - \$15M per occurrence	Safety National
\$15M - \$20M per occurrence	Everest
\$20M - \$25M per occurrence	Hallmark
\$25M - \$30M per occurrence	AWAC

Each member city retains a portion of each claim. Deductible options are: \$25,000, \$50,000, \$100,000, \$250,000 and \$500,000. Appendix D, page 3 summarizes the member cities' deductibles by year.

Claims administration services are provided by York. As of June 30, 2023, the PLAN JPA is expected to have available assets of \$47,426,000 for the program including SIR Fund.

In PLAN's loss history, there have been claims made relating to property development actions, specifically inverse condemnation claims. Effective July 1, 2008, the PLAN JPA Program Memorandum of Coverage (MOC) was amended with the intent to exclude all regulatory inverse condemnation claims going forward. However, there exists tail exposure for claims occurring prior to this date. For these claims, an agreement was reached to provide each member a \$1 million SIR for defense coverage for all prior inverse claims reported by June 30, 2013 (5-year reporting window).

The purpose of this review is to provide a guide to PLAN JPA to determine reasonable funding levels for its self-insurance program according to the funding policy PLAN JPA has adopted to comply with Governmental Accounting Standards Board Statements #10

and #30. The specific objectives of the study are to estimate the Authority's liability for outstanding claims as of June 30, 2023, project ultimate loss cost for 2023-24 and provide funding guidelines to meet these liabilities and future costs.

II. CONCLUSIONS AND RECOMMENDATIONS

A. LIABILITY FOR OUTSTANDING CLAIMS AS OF JUNE 30, 2023

Graph 1 on the following page summarizes our assessment of the PLAN JPA's funding position as of June 30, 2023. The dark-colored bars indicate our estimates of the program's liability for outstanding claims before recognition of the investment income that can be earned on the assets held before the claim payments come due. The solid horizontal line across the graph indicates the PLAN JPA's available assets at June 30, 2023 including the SIR Fund.

Our best estimate of the full value of PLAN JPA's liability for outstanding claims within its self-insured retention (SIR) is \$20,954,000. This amount includes losses, allocated loss adjustment expenses (ALAE) and unallocated loss adjustment expenses (ULAE), and is shown at the far left of the graph. ALAE is basically the direct cost associated with the defense of individual claims (e.g. legal fees, investigation fees, court charges, etc.). ULAE is the additional cost to administer all claims to final settlement, which may be years into the future (e.g. claims adjusters' salaries, taxes, etc.), and is estimated to be 10% of outstanding loss and ALAE.

There is some measure of uncertainty associated with our best estimate because of the random nature of much of the process that determines ultimate claims costs. For this reason, we generally recommend that a program such as this include some funding margin for the possibility that actual loss costs will be greater than the best estimate. We generally measure the amount of this margin by thinking in terms of the probability distribution of actual possible results around our best estimate. As the margin grows, the probability that the corresponding funding amount will be sufficient to meet actual claim liabilities increases. We typically refer to this probability as the "confidence level" of funding. Graph 1 shows the liabilities for outstanding claims at several confidence levels that are typically of interest to risk managers in formulating funding policies for self-insurance programs.

50,000 47,426 45,000 40,000 35,000 Т h ₀30,000 27,467^{28,707} 26,779 u 25,623 25,333 s 25,000 a 24,202 24,239 23,238 23,157 22,234 20,954 20,049 n d 20,000 s 15,000 10,000 5,000 0 70% Expected 75% 80% 85% 90% **Confidence Levels** Discounted Undiscounted -Available Assets

PLAN JPA Available Assets vs Outstanding Liability (\$000's) at June 30, 2023

The PLAN can earn investment income on the assets it holds until claims payments come due. Assuming a long-term average annual return on investments of 2.0%, we estimate the impact of investment income earnings to be about 4.3% if the program is funded within the range indicated in Graph 1. Investment income earnings will be less than this when the program does not maintain sufficient funding, and more when there is excess funding. Thus, thinking in terms of liabilities discounted for investment income can actually mask funding deficiencies and redundancies that might otherwise be obvious. However, the discounted liabilities do represent legitimate funding targets. The light-colored bars on Graph 1 show our estimates of the PLAN's discounted liability for outstanding claims.

We estimate the program's expected discounted liability for outstanding claims to be \$20,049,000 again including ALAE and ULAE. With recognition of the investment income that can be earned on the assets held, the program is funded above the 90% confidence level. The information presented in Graph 1 is also summarized in tabular form below.

Liability for Outstanding Claims at 6/30/23						
Confidence Levels	Expected	70%	75%	80%	85%	90%
Not Discounted	\$20,954,000	\$23,238,000	\$24,202,000	\$25,333,000	\$26,779,000	\$28,707,000
Discounted	20,049,000	22,234,000	23,157,000	24,239,000	25,623,000	27,467,000
Assets Available at 6/30/23			\$47,426,000			

GASB #10 does not address an actual funding requirement for the program, but only speaks to the liability to be recorded on the PLAN's financial statements. Because actuarial estimates of claims costs are subject to some uncertainty, we recommend that an amount in addition to the discounted expected loss costs be set aside as a margin for contingencies.

We generally recommend that risk pools <u>maintain assets for historical liabilities</u> at no less than the <u>90% confidence level</u>.

The following chart shows the breakdown of PLAN's estimated assets available as of June 30, 2023. The discounted value of PLAN's estimated case reserves, IBNR and ULAE as of June 30, 2023 are \$5,509,000, \$12,313,000, and \$2,227,000, respectively. An additional \$7,418,000 increases the funding to 90% confidence.



B. COSTS OF 2023-24 CLAIMS

The following chart shows our funding recommendations for PLAN for the 2023-24 fiscal year assuming \$1 million limit at 2.0%, 3.0% and 4.0% discount rate assumptions.

	2.0%	3.0%	4.0%
Expected Loss and ALAE	\$5,100,000	\$5,100,000	\$5,100,000
Discounted Loss and ALAE	\$4,764,000	\$4,609,000	\$4,462,000
60% Confidence Level	4,888,000	4,729,000	4,578,000
70% Confidence Level	5,593,000	5,411,000	5,239,000
80% Confidence Level	6,517,000	6,305,000	6,105,000
90% Confidence Level	7,999,000	7,739,000	7,492,000

Loss and ALAE Funding Guidelines

The funding recommendations above are for losses and allocated loss adjustment expense only. They do not include any provision for claims administration, excess insurance, loss control, overhead, and other expenses associated with the program.

We generally recommend that risk pools fund for <u>future costs</u> between the <u>75% and 85%</u> <u>confidence levels</u>.

C. PROGRAM FUNDING: GOALS AND OBJECTIVES

As self-insurance programs have proliferated among public entities, it has become apparent that there is a large measure of inconsistency in the way in which these programs recognize and account for their claims costs. This is the result of the fact that there have been several different sources of guidance available, none of which has been completely relevant to public entity self-insurance programs.

According to the Governmental Accounting Standards Board (GASB), the most relevant source of guidance on the subject is Financial Accounting Standards Board Statement #60. A liability for unpaid claim costs, including all loss adjustment expenses, should be accrued at the time the self-insured events occur. This liability should include an allowance for incurred but not reported claims. It may be discounted for investment income at an appropriate rate of return, provided the discounting is disclosed. The regulations detailing the way in which this must be done are outlined in GASB's Statement #10.

GASB #10 does not address funding requirements. It does, however, allow a range of funded amounts to be recognized for accounting purposes, specifically GASB #10 allows recognition of a funding margin for unexpectedly adverse loss experience.

The amount of such a margin should be a question of long-term funding policy. We recommend that the margin be determined by thinking in terms of the probability that a given level of funding will prove to be adequate. If you elect to fund at a low confidence level, the chances are much greater that future events will prove that additional contributions should have been made for current claims.

We generally recommend that risk pools <u>maintain assets for historical liabilities</u> at no less than the <u>90% confidence level</u>, after recognition of investment income. The resulting risk margin is reasonably high that resulting funding should be sufficient to meet claim liabilities, yet the risk margin is not so large that they will cause most self-insured entities to experience undue financial hardship.

We generally recommend that risk pools fund for <u>future costs</u> between the <u>75% and 85%</u> <u>confidence levels</u>. The confidence level to which any future year is funded should be evaluated in light of the relative certainty of the assumptions underlying the actuarial analysis, PLAN JPA's other budgetary constraints, and the relative level of risk it is believed appropriate to assume. This means formulating both short- and long-term funding goals, which may be the same in some years, but different in others.

The following target funding ratios are used to further determine appropriate funding goals.

	Score	Score		
Funding Benchmarks	<u>(SIR: \$2.5M)</u>	<u>(SIR: \$1M)</u>	Target	<u>Result</u>
Net Assets to SIR	10.95	27.38	>5 : 1	Pass
SIR fund to SIR	7.98	19.96	> 2 : 1	Pass
Net Premium to Net Assets	0.18	0.18	< 2 : 1	Pass
Claim Reserve/IBNR to Net Assets	0.65	0.65	< 3 : 1	Pass
Ultimate Loss Development to Net Assets	-7%	-7%	< 20%	Pass

Net Assets to SIR ratio: Target >5:1

This ratio is a measure of the maximum amount net assets could decline due to a single full limits loss. A high ratio is desirable.

SIR Fund to SIR ratio: Target >2:1

This ratio is a measure of the maximum amount the SIR Fund could decline due to a single full limits loss. A high ratio is desirable.

Net Premium to Net Assets ratio: Target <2:1

This ratio measure whether adverse loss development can be absorbed by new premium. Net premium equals premium received by PLAN, less premium paid by PLAN to others. A low ratio is desirable.

Claim Reserve/IBNR to Net Assets ratio: Target <3:1

The ratio is a measure of how net assets are leveraged against total undiscounted reserves. A low ratio is desirable.

Ultimate Loss Development to Net Assets ratio: Target <20%

This ratio is a measure of the development in prior year's ultimate losses from one year to the next. A low ratio is desirable.

We provide the following comparison of deposit premiums, which include ultimate loss and ALAE, claims administration, loss prevention, other administration and excess insurance costs at the 60% confidence level on a discounted basis (2.0%). This is shown in further detail on Exhibit 1, page 1.

	2022-23	2023-24		
SIR/Excess	\$1.0M/\$30M	\$1.0M/\$30M		
	Actual	Proposed	Dollar	Percent
Member	Funding	Funding	Change	Change
American Canyon	\$442,170	\$516,501	\$74,331	16.8%
Atherton	305,924	281,072	-24,852	-8.1%
Benicia	911,472	1,091,443	179,971	19.7%
Burlingame	881,632	1,021,510	139,878	15.9%
Campbell	880,200	1,082,921	202,721	23.0%
Colma	121,850	145,561	23,711	19.5%
Cupertino	989,636	1,193,063	203,427	20.6%
Dublin	1,062,626	1,562,537	499,912	47.0%
East Palo Alto	733,568	695,403	-38,164	-5.2%
Foster City	663,276	775,265	111,989	16.9%
Half Moon Bay	270,263	301,799	31,536	11.7%
Hillsborough	381,149	391,098	9,950	2.6%
Los Altos Hills	208,820	216,808	7,987	3.8%
Los Gatos	620,909	744,334	123,425	19.9%
Millbrae	550,035	608,203	58,168	10.6%
Milpitas	1,825,156	2,059,789	234,633	12.9%
Morgan Hill	1,210,173	1,193,178	-16,994	-1.4%
Newark	1,064,725	1,101,002	36,277	3.4%
Pacifica	1,077,143	1,231,317	154,175	14.3%
Portola Valley	122,062	132,459	10,397	8.5%
Ross, Town of	93,667	92,136	-1,531	-1.6%
San Bruno	1,359,839	1,305,156	-54,682	-4.0%
San Carlos	800,706	831,379	30,673	3.8%
Saratoga	645,462	753,768	108,306	16.8%
South SF	1,419,281	1,426,768	7,487	0.5%
Suisun City	584,838	739,973	155,135	26.5%
Tiburon	239,493	268,004	28,511	11.9%
Woodside	164,383	160,554	-3,829	-2.3%
Total	\$19,630,455	\$21,923,000	\$2,292,545	11.7%

As shown in the previous table, total PLAN contributions are \$21,923,000, and can be broken down into four categories (1) Loss Funding, (2) Fixed Expenses, (3) Variable Expenses and (4) Loss Prevention Expenses. These costs are allocated to each individual member using the various methods discussed below.

The loss funding category actually can be broken down into two components: (1) PLAN loss fund contributions and (2) excess insurance. The PLAN loss fund contributions are based on the member's loss experience relative to the overall PLAN average and member's projected exposure (payroll) for 2023-24. The member's loss experience is factored into the allocation by using the experience modification factor developed in Exhibit 1, page 6. The experience modification factor calculation compares the prior five year's loss experience (2017-18 through 2021-22) per \$100 of payroll to the average of all PLAN members. A factor of 100% indicates that the member's loss experience is equal to the PLAN average.

The number of years of loss experience utilized depends on the degree of stability vs. responsiveness desired. Using more years in the calculation may stabilize year-to-year premium changes, but will not be responsive to changes in loss experience. On the other hand, using a limited number of years results in a quick response to changes in loss experience, but changes in year-to-year premiums by member will be dramatic. A five-year time period provides a reasonable balance between stability and responsiveness.

Furthermore, the experience modification factors are developed based on losses limited to \$250,000 per occurrence. Without such a loss limit, a member incurring one catastrophic loss will pay disproportionately higher premiums as long as that loss remains in the experience period. The member will not realize financial benefits from loss control, even though its claim frequency may have decreased.

The experience modification and deductible factors are applied to the selected funding rate to obtain the adjusted rate. The adjusted rate is multiplied by the members' payroll to determine the base deposit.

The excess insurance portion of the loss funding is allocated to each member based upon estimated member population. The assumption here is that losses in excess of the PLAN retention are random, and thus more appropriately related to exposure than loss experience. This calculation is shown on Exhibit 1, Page 3.

Total budgeted administrative costs for 2023-24 are \$2,436,000. Total PLAN administrative expenses of \$2,436,000 are split into \$1,948,800 for general liability and \$487,200 for property coverages then again split into fixed and variable portions. Thirty-three percent of these expenses are assumed to be fixed, and every individual member is initially allocated the same amount of fixed expense regardless of its size. Given total fixed expenses of \$803,880 and 28 members for the 2023-24 fiscal year, this results in an initial charge of \$28,710 per member.

The remaining sixty-seven percent of administrative expenses are assumed to vary by member and are initially allocated based upon one-third weight to reported claims greater than \$1 (i.e. excluding claims closed without payment) and two-thirds weight to paid

losses in the period 2017-18 through 2021-22. Liability and Property are treated separately for the allocation, then added into the premium in total.

In order to prevent extreme year-to-year fluctuations in each member's deposit, there is a limit in the annual change in deposit between the upcoming year and the current year. As directed by PLAN, the annual change in deposit is limited to 50%, assuming the member keeps the same deductible. The net impact of limiting the change in deposit is spread back to all members whose deposits are not already limited so that total deposit collected for the 2023-24 after limiting will be equal to prior deposit.

D. OTHER RESULTS

The following chart show each program year's ultimate loss broken down by paid losses, case reserves and IBNR reserves.



PLAN's pool loss rate per \$100 of payroll has varied significantly over the past ten years. The projected loss rate of \$0.99 per \$100 of payroll for the 2022-23 year is based on the long-term average at the \$1M limited layer.



Pool Layer Loss & ALAE Rate Trend¹ Ultimate Loss & ALAE / Payroll (\$100s)

¹ Losses are at expected (no risk margin) and are not discounted to reflect net present value.

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The program's cost per claim averaged \$218,000 per claim (limited to \$1M) during the period shown below. The projected severity for the 2022-23 program year of \$221,000 is based on this long term trend.



Average Claim Size Trend¹ Ultimate Loss & ALAE / Ultimate Reported Claims PLAN's claims frequency per \$1 million of payroll averaged 0.045 claims per \$1 million of payroll during the period shown below. The projected frequency for the 2022-23 program year of 0.045 is based on this long-term average.



Claim Frequency Trend Ultimate Reported Claims / Payroll (\$ Millions)

E. COMPARISON WITH OUR PREVIOUS RESULTS

The prior report for PLAN was dated March 15, 2022. In the table below we display actual versus expected development of incurred losses and ALAE by accident year between the December 31, 2021 evaluation date of the prior report and the December 31, 2022 evaluation date of the current report.

Accident Year	Expected Incurred Development	Actual Incurred Development	Actual Minus Expected
1986-02	\$1,000	(\$1,000)	(\$2,000)
2002-03	0	0	0
2003-04	0	0	0
2004-05	0	0	0
2005-06	0	0	0
2006-07	0	0	0
2007-08	0	0	0
2008-09	0	1,000	1,000
2009-10	0	0	0
2010-11	0	(30,000)	(30,000)
2011-12	15,000	0	(15,000)
2012-13	19,000	275,000	256,000
2013-14	0	10,000	10,000
2014-15	78,000	0	(78,000)
2015-16	59,000	10,000	(49,000)
2016-17	34,000	367,000	333,000
2017-18	93,000	2,000	(91,000)
2018-19	1,073,000	289,000	(784,000)
2019-20	1,884,000	335,000	(1,549,000)
2020-21	2,007,000	1,492,000	(515,000)
2021-22	1,126,000	454,000	(672,000)
Total	\$6,389,000	\$3,204,000	(\$3,185,000)

Actual Versus Expected Pool Incurred Loss and ALAE Development

As shown, actual pool incurred development was less than anticipated since the prior report. Based on the assumptions from the prior report, it was expected that incurred losses through accident year 2021-22 would increase by \$6,389,000 between the two evaluation dates. However, actual development was approximately \$3,204,000; or about \$3,185,000 less than expected.

In the table below we display actual versus expected development of paid losses and ALAE by accident year between the December 31, 2021 evaluation date of the prior report and the December 31, 2022 evaluation date of the current report.

Accident Year	Expected Paid Development	Actual Paid Development	Actual Minus Expected
1986-02	\$2,000	\$0	(\$2,000)
2002-03	0	0	0
2003-04	0	0	0
2004-05	0	0	0
2005-06	0	0	0
2006-07	0	0	0
2007-08	0	0	0
2008-09	0	1,000	1,000
2009-10	0	0	0
2010-11	0	(30,000)	(30,000)
2011-12	41,000	9,000	(32,000)
2012-13	156,000	116,000	(40,000)
2013-14	0	10,000	10,000
2014-15	106,000	0	(106,000)
2015-16	195,000	10,000	(185,000)
2016-17	695,000	280,000	(415,000)
2017-18	116,000	56,000	(60,000)
2018-19	883,000	347,000	(536,000)
2019-20	1,505,000	53,000	(1,452,000)
2020-21	1,046,000	1,398,000	352,000
2021-22	218,000	0	(218,000)
Total	\$4,963,000	\$2,250,000	(\$2,713,000)

Actual Versus Pool Expected Paid Loss and ALAE Development

As shown, actual pool paid development was less than anticipated since the prior report. Based on the assumptions from the prior report, it was expected that paid losses through accident year 2021-22 would increase by \$4,963,000 between the two evaluation dates. However, actual development was approximately \$2,250,000; or about \$2,713,000 less than expected. In the table below we display the change in our estimates of the program's ultimate losses and ALAE by accident year since our prior report.

Accident			
Year	Prior Report	Current Report	Change
1986-02	\$34,631,000	\$34,630,000	(\$1,000)
2002-03	8,812,000	8,812,000	0
2003-04	2,574,000	2,574,000	0
2004-05	1,874,000	1,874,000	0
2005-06	4,756,000	4,756,000	0
2006-07	1,662,000	1,662,000	0
2007-08	6,756,000	6,756,000	0
2008-09	3,472,000	3,473,000	1,000
2009-10	2,353,000	2,353,000	0
2010-11	2,077,000	2,047,000	(30,000)
2011-12	3,917,000	3,902,000	(15,000)
2012-13	3,845,000	4,105,000	260,000
2013-14	6,959,000	7,074,000	115,000
2014-15	5,644,000	5,566,000	(78,000)
2015-16	5,216,000	5,157,000	(59,000)
2016-17	8,049,000	8,351,000	302,000
2017-18	1,146,000	1,075,000	(71,000)
2018-19	2,871,000	2,079,000	(792,000)
2019-20	4,018,000	2,690,000	(1,328,000)
2020-21	8,808,000	8,725,000	(83,000)
2021-22	5,446,000	4,978,000	(468,000)
Total	\$124,886,000	\$122,639,000	(\$2,247,000)

Change in Pool Loss and ALAE Ultimate Losses

As shown, overall we have decreased our estimated ultimate losses by \$2,247,000 since our prior report. The changes in our estimates of ultimate losses take into account both the incurred and paid development listed on the previous two pages. The following table displays a comparison of the PLAN JPA's proposed 2022-23 funding and actual 2023-24 funding by member.

	2022-23	2023-24		
	Actual	Proposed	Dollar	Percent
Member	Funding	Funding	Change	Change
	0	0	0	0
American Canyon	\$442,170	\$516,501	\$74,331	16.8%
Atherton	305,924	281,072	-24,852	-8.1%
Benicia	911,472	1,091,443	179,971	19.7%
Burlingame	881,632	1,021,510	139,878	15.9%
Campbell	880,200	1,082,921	202,721	23.0%
Colma	121,850	145,561	23,711	19.5%
Cupertino	989,636	1,193,063	203,427	20.6%
Dublin	1,062,626	1,562,537	499,912	47.0%
East Palo Alto	733,568	695,403	-38,164	-5.2%
Foster City	663,276	775,265	111,989	16.9%
Half Moon Bay	270,263	301,799	31,536	11.7%
Hillsborough	381,149	391,098	9,950	2.6%
Los Altos Hills	208,820	216,808	7,987	3.8%
Los Gatos	620,909	744,334	123,425	19.9%
Millbrae	550,035	608,203	58,168	10.6%
Milpitas	1,825,156	2,059,789	234,633	12.9%
Morgan Hill	1,210,173	1,193,178	-16,994	-1.4%
Newark	1,064,725	1,101,002	36,277	3.4%
Pacifica	1,077,143	1,231,317	154,175	14.3%
Portola Valley	122,062	132,459	10,397	8.5%
Ross, Town of	93,667	92,136	-1,531	-1.6%
San Bruno	1,359,839	1,305,156	-54,682	-4.0%
San Carlos	800,706	831,379	30,673	3.8%
Saratoga	645,462	753,768	108,306	16.8%
South SF	1,419,281	1,426,768	7,487	0.5%
Suisun City	584,838	739,973	155,135	26.5%
Tiburon	239,493	268,004	28,511	11.9%
Woodside	164,383	160,554	-3,829	-2.3%
Total	\$19,630,455	\$21,923,000	\$2,292,545	11.7%

The following table displays PLAN JPA members' 2023-24 experience modification adjustment. This is the experience modification factor minus 100%, and shows how each member performs relative to the pool average. A negative percentage indicates better than average performance, while a positive percentage indicates worse than average performance. A detailed calculation of the experience modification factors is shown in Exhibit 1, page 6.



F. DATA ISSUES

Overall, the data utilized in preparing this report appears to be accurate as of the date of the current evaluation. However, it should be noted that certain assumptions have been made to allow for a lack of information on exposures.

We received loss data evaluated as of December 31, 2022. This data appeared to be consistent with the data provided for prior reviews.

We were provided with fiscal year payrolls for the 2021-22, 2022-23 and 2023-24 program years.

Excess insurance premium is estimated to be \$14,599,000 for the \$1 million to \$30 million layer. Premiums for individual layers are estimated based upon pool limits factors.

Tiburon has assumed liability coverage for the Tiburon-Belvedere library effective July 1, 2006. Tiburon-Belvedere library left the pool effective July 1, 2020.

III. ASSUMPTIONS AND LIMITATIONS

Any quantitative analysis is developed within a very specific framework of assumptions about conditions in the outside world, and actuarial analysis is no exception. We believe that it is important to review the assumptions we have made in developing the estimates presented in this report. By doing so, we hope you will gain additional perspective on the nature of the uncertainties involved in maintaining a self-insurance program. Our assumptions, and some observations about them, are as follows:

- Our analysis is based on loss experience, exposure data, and other general and specific information provided to us by PLAN. We have accepted all of this information without audit.
- We have also made use of loss statistics that have been developed from the information gathered and compiled from other California public entities with self-insured excess liability program.
- We have assumed that the future development of incurred and paid losses can be reasonably predicted on the basis of development of such losses in the recent past. We have also assumed that the historical development patterns for the participants of other California public entities with self-insured liability programs in the aggregate form a reasonable basis of comparison to the patterns from PLAN's data.
- We have made use of cost relationships for claims of various sizes derived from the most recent actuarial reviews of other California public entities with self-insured liability programs.
- We have assumed that there is a continuing relationship between past and future loss costs.
- It is not possible to predict future claim costs precisely. Most of the cost of liability claims arise from a small number of incidents involving serious injury. A relatively small number of such claims could generate enough loss dollars to significantly reduce, or even deplete, the self-insurance fund.
- We cannot predict and have not attempted to predict the impact of future law changes and court rulings on claims costs. This is one major reason why we believe our funding recommendations are reasonable now, but should not be extrapolated into the future.
- We have assumed that the loss costs associated with liability claims are increasing at 3.5% per year. We have assumed that the average claim size decreases at 0.5% per year and that the average number of claims per \$1 million increases at 3.0% per year.
- We have assumed that payroll and other inflation-sensitive exposure measures increase 2.5% annually due to inflation.
- We have assumed that assets held for investment will generate an annual return of 2%.
- The claims costs we have estimated include indemnity and medical payments, and all loss adjustment expenses. We have not provided estimates for excess insurance contributions, and other expenses associated with the program.
- Our funding recommendations do not include provision for catastrophic events not in the PLAN's history, such as earthquakes, flooding, mass civil disorder, or mass occupational disease.
- Our estimates assume that all excess insurance is valid and collectible. Further, our funding recommendations do not include a provision for losses greater than PLAN's excess coverage.
- PLAN available assets have been estimated to be \$47,426,000 as of June 30, 2023 for use in this report.

IV. 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, etc.)

Case Reserve - The amount left to be paid on a 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 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 anticipated investment income from assets held prior to actual claim payout.

Expected Losses - The best estimate of the full, ultimate value of loss costs.

Incurred but not Reported (IBNR) Losses - Losses for which the accident has occurred but the claim has not yet been reported. This is the ultimate value of losses, less any amount that has been set up as reported losses by the claims adjuster. It includes both amounts for claims incurred but not yet received by the administrator and loss development on already reported claims.

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 Section IV).

Loss Rate - Ultimate losses per \$100 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 adjusters' salaries, taxes, etc.)

Summary of 2023-24 Deposit by Retention Limit

		Total				
		Deposit				
		\$1 Million			Total	
	2022-23	Retention	Indicated	Indicated	Deposit	Total
	Premium	\$30 Million	Dollar	Percent	Capped at	Percent
Member	Deposit	Limit	Change	Change	+/- 60%	Change
(A)	(B)	(C)	(D)	(E)	(F)	(G)
American Canyon	\$442,170	\$516,501	\$74,331	16.8%	516,501	16.8%
Atherton	305,924	281,072	(24,852)	-8.1%	281,072	-8.1%
Benicia	911,472	1,091,443	179,971	19.7%	1,091,443	19.7%
Burlingame	881,632	1,021,510	139,878	15.9%	1,021,510	15.9%
Campbell	880,200	1,082,921	202,721	23.0%	1,082,921	23.0%
Colma	121,850	145,561	23,711	19.5%	145,561	19.5%
Cupertino	989,636	1,193,063	203,427	20.6%	1,193,063	20.6%
Dublin	1,062,626	1,562,537	499,912	47.0%	1,562,537	47.0%
East Palo Alto	733,568	695,403	(38,164)	-5.2%	695,403	-5.2%
Foster City	663,276	775,265	111,989	16.9%	775,265	16.9%
Half Moon Bay	270,263	301,799	31,536	11.7%	301,799	11.7%
Hillsborough	381,149	391,098	9,950	2.6%	391,098	2.6%
Los Altos Hills	208,820	216,808	7,987	3.8%	216,808	3.8%
Los Gatos	620,909	744,334	123,425	19.9%	744,334	19.9%
Millbrae	550,035	608,203	58,168	10.6%	608,203	10.6%
Milpitas	1,825,156	2,059,789	234,633	12.9%	2,059,789	12.9%
Morgan Hill	1,210,173	1,193,178	(16,994)	-1.4%	1,193,178	-1.4%
Newark	1,064,725	1,101,002	36,277	3.4%	1,101,002	3.4%
Pacifica	1,077,143	1,231,317	154,175	14.3%	1,231,317	14.3%
Portola Valley	122,062	132,459	10,397	8.5%	132,459	8.5%
Ross, Town of	93,667	92,136	(1,531)	-1.6%	92,136	-1.6%
San Bruno	1,359,839	1,305,156	(54,682)	-4.0%	1,305,156	-4.0%
San Carlos	800,706	831,379	30,673	3.8%	831,379	3.8%
Saratoga	645,462	753,768	108,306	16.8%	753,768	16.8%
South SF	1,419,281	1,426,768	7,487	0.5%	1,426,768	0.5%
Suisun City	584,838	739,973	155,135	26.5%	739,973	26.5%
Tiburon	239,493	268,004	28,511	11.9%	268,004	11.9%
Woodside	164,383	160,554	(3,829)	-2.3%	160,554	-2.3%
Total	\$19,630,455	\$21,923,000	\$2,292,545	11.7%	\$21,923,000	11.7%

(B) From provided by PLAN JPA.
(C) From Exhibit 1 - Page 2a
(D) (C) - (B)
(E) (C) / (B) - 1
(F) (E) Capped at +/-50%

Split of 2023-24 Deposit Between Loss Funding and Administrative Expenses \$1.0M Retention / \$30M Limit

Member (A)	Loss Funding (B)	Excess Insurance (C)	Admin Expenses (D)	Total Deposit (E)
American Canyon	\$69,916	\$376,529	\$70,056	\$516,501
Atherton	112,808	116,794	51,470	281,072
Benicia	501,055	463,420	126,968	1,091,443
Burlingame	214,117	526,476	280,917	1,021,510
Campbell	237,342	744,660	100,918	1,082,921
Colma	74,155	23,818	47,588	145,561
Cupertino	93,582	1,036,332	63,149	1,193,063
Dublin	198,621	1,267,938	95,978	1,562,537
East Palo Alto	118,607	503,528	73,269	695,403
Foster City	119,205	574,685	81,375	775,265
Half Moon Bay	65,124	196,592	40,083	301,799
Hillsborough	129,735	191,550	69,814	391,098
Los Altos Hills	38,492	146,036	32,280	216,808
Los Gatos	109,117	574,790	60,427	744,334
Millbrae	151,007	391,376	65,820	608,203
Milpitas	486,781	1,405,403	167,605	2,059,789
Morgan Hill	281,904	807,560	103,714	1,193,178
Newark	200,501	821,086	79,416	1,101,002
Pacifica	379,127	652,519	199,672	1,231,317
Portola Valley	26,070	74,565	31,824	132,459
Ross, Town of	22,603	40,003	29,530	92,136
San Bruno	400,129	741,583	163,444	1,305,156
San Carlos	221,338	518,722	91,318	831,379
Saratoga	160,308	533,152	60,308	753,768
South SF	207,859	1,121,207	97,703	1,426,768
Suisun City	171,890	502,363	65,720	739,973
Tiburon	63,624	155,702	48,678	268,004
Woodside	32,985	90,612	36,957	160,554
Total	\$4,888,000	\$14,599,000	\$2,436,000	\$21,923,000

- (B) From Exhibit 1, Page 2b.
 (C) From Exhibit 1, Page 2b.
 (D) From Exhibit 1, Page 2b.
 (E) (B) + (C) + (D)

2023-24 Deposit by Member \$1.0M Retention / \$30M Limit

Member (A)	Deductible	Deductible Factor (C)	Adjusted Experience Modification Factor	2023-24 Payroll (00) (F)	PLAN JPA Loss Fund Contribution (F)	Balanced PLAN JPA Loss Fund Contribution	Excess Insurance (H)	Adjusted Admin. Expenses	Indicated Total Deposit (J)
(/ ()	(D)	(0)	(D)	(⊏)	(1)	(0)	(11)	(1)	(0)
American Canyon	25,000	1.400	60%	84,318	67,122	69,916	376,529	70,056	516,501
Atherton	25,000	1.400	121%	67,427	108,299	112,808	116,794	51,470	281,072
Benicia	25,000	1.400	148%	245,404	481,027	501,055	463,420	126,968	1,091,443
Burlingame	250,000	0.624	132%	262,155	205,558	214,117	526,476	280,917	1,021,510
Campbell	100,000	1.000	92%	260,834	227,855	237,342	744,660	100,918	1,082,921
Colma	50,000	1.228	100%	61,136	71,191	74,155	23,818	47,588	145,561
Cupertino	250,000	0.624	57%	266,924	89,841	93,582	1,036,332	63,149	1,193,063
Dublin	50,000	1.228	142%	115,604	190,682	198,621	1,267,938	95,978	1,562,537
East Palo Alto	100,000	1.000	94%	128,250	113,866	118,607	503,528	73,269	695,403
Foster City	100,000	1.000	51%	237,446	114,440	119,205	574,685	81,375	775,265
Half Moon Bay	50,000	1.228	105%	51,009	62,521	65,124	196,592	40,083	301,799
Hillsborough	50,000	1.228	90%	119,182	124,549	129,735	191,550	69,814	391,098
Los Altos Hills	25,000	1.400	84%	32,965	36,953	38,492	146,036	32,280	216,808
Los Gatos	50,000	1.228	40%	225,148	104,756	109,117	574,790	60,427	744,334
Millbrae	100,000	1.000	160%	95.272	144,971	151,007	391,376	65.820	608.203
Milpitas	100,000	1.000	80%	616,709	467,324	486,781	1,405,403	167,605	2,059,789
Morgan Hill	100,000	1.000	83%	343,135	270,636	281,904	807,560	103,714	1,193,178
Newark	100.000	1.000	80%	254.843	192,486	200,501	821.086	79.416	1.101.002
Pacifica	50,000	1.228	153%	203,716	363,973	379,127	652,519	199,672	1,231,317
Portola Valley	25,000	1.400	81%	23,248	25,028	26,070	74,565	31,824	132,459
Ross, Town of	25,000	1.400	71%	22,901	21,699	22,603	40,003	29,530	92,136
San Bruno	100,000	1.000	125%	324,174	384,135	400,129	741,583	163,444	1,305,156
San Carlos	100,000	1.000	205%	109,458	212,491	221,338	518,722	91,318	831,379
Saratoga	25,000	1.400	141%	81,931	153,900	160,308	533,152	60,308	753,768
South SF	100,000	1.000	43%	492,215	199,550	207,859	1,121,207	97,703	1,426,768
Suisun City	25,000	1.400	123%	101,090	165,019	171,890	502,363	65,720	739,973
Tiburon	50,000	1.228	128%	40,881	61,081	63,624	155,702	48,678	268,004
Woodside	25,000	1.400	100%	23,803	31,666	32,985	90,612	36,957	160,554
Total		1.053	94%	4,891,178	4,692,623	4,888,000	14,599,000	2,436,000	21,923,000

(B) Provided by PLAN

(C) From Exhibit 2, Page 2.

(D) From Exhibit 1, Page 6.

(E) From Exhibit 2, Page 1.

 (G) { [\$4,888,000 / Total (E)] x [(C) / Weighted Average of (C)] x (D) x (E)}.
 \$4,888,000 is the discounted expected loss & ALAE at 60% CL from Exhibit 2, Page 1a. (2.0% Discount Rate). (H) From Exhibit 1, page 3.

(I) [Total fixed expenses / Total number of members].

Total fixed expenses are equal to 33% of total expenses. Total expenses of \$2,436,000 projected by PLAN JPA. (J) (G) + (H) + (I)

2023-24 Allocation of Excess Insurance Premium by Member

			2023-24
		Percent	Excess
	2023-24	2023-24	Insurance
Member	Population	Population	\$29M XS \$1M
(A)	(B)	(C)	(D)
American Canyon	21,658	2.58%	376,529
Atherton	6,718	0.80%	116,794
Benicia	26,656	3.17%	463,420
Burlingame	30,283	3.61%	526,476
Campbell	42,833	5.10%	744,660
Colma	1,370	0.16%	23,818
Cupertino	59,610	7.10%	1,036,332
Dublin	72,932	8.69%	1,267,938
East Palo Alto	28,963	3.45%	503,528
Foster City	33,056	3.94%	574,685
Half Moon Bay	11,308	1.35%	196,592
Hillsborough	11,018	1.31%	191,550
Los Altos Hills	8,400	1.00%	146,036
Los Gatos	33,062	3.94%	574,790
Millbrae	22,512	2.68%	391,376
Milpitas	80,839	9.63%	1,405,403
Morgan Hill	46,451	5.53%	807,560
Newark	47,229	5.62%	821,086
Pacifica	37,533	4.47%	652,519
Portola Valley	4,289	0.51%	74,565
Ross, Town of	2,301	0.27%	40,003
San Bruno	42,656	5.08%	741,583
San Carlos	29,837	3.55%	518,722
Saratoga	30,667	3.65%	533,152
South SF	64,492	7.68%	1,121,207
Suisun City	28,896	3.44%	502,363
Tiburon	8,956	1.07%	155,702
Woodside	5,212	0.62%	90,612
Total	839,737	100.0%	14,599,000

(B) Provided by PLAN JPA.
(C) (B) / Total (B)
(D) (C) X Total (D)

2023-24 Allocation of Variable Administrative Expenses by Member **Property Claims**

Member (A)	Property Reported Counts > \$1 2017-18 2021-22 (B)	Property Paid Losses 2017-18 2021-22 (C)	Percent Property Reported Counts > \$1 (D)	Percent Property Paid Losses 2017-18 2021-22 (E)	Percent Property Variable Administrative Expenses (G)	Property Variable Administrative Expenses (H)
American Canvon	18	464.791	9.18%	10.97%	10.38%	33.873
Atherton	2	22,479	1.02%	0.53%	0.69%	2,265
Benicia	20	414,212	10.20%	9.78%	9.92%	32,384
Burlingame	0	0	0.00%	0.00%	0.00%	0
Campbell	9	352,286	4.59%	8.32%	7.08%	23,096
Colma	3	22,087	1.53%	0.52%	0.86%	2,800
Cupertino	4	22,722	2.04%	0.54%	1.04%	3,388
Dublin	12	265,127	6.12%	6.26%	6.21%	20,283
East Palo Alto	11	198,543	5.61%	4.69%	5.00%	16,307
Foster City	14	355,853	7.14%	8.40%	7.98%	26,055
Half Moon Bay	0	0	0.00%	0.00%	0.00%	0
Hillsborough	9	45,095	4.59%	1.06%	2.24%	7,313
Los Altos Hills	1	33,797	0.51%	0.80%	0.70%	2,292
Los Gatos	10	33,427	5.10%	0.79%	2.23%	7,269
Millbrae	2	1,361	1.02%	0.03%	0.36%	1,180
Milpitas	16	245,806	8.16%	5.80%	6.59%	21,511
Morgan Hill	10	385,418	5.10%	9.10%	7.77%	25,353
Newark	10	169,565	5.10%	4.00%	4.37%	14,263
Pacifica	11	534,483	5.61%	12.62%	10.28%	33,567
Portola Valley	1	22,899	0.51%	0.54%	0.53%	1,732
Ross, Town of	0	0	0.00%	0.00%	0.00%	0
San Bruno	9	412,205	4.59%	9.73%	8.02%	26,175
San Carlos	4	19,318	2.04%	0.46%	0.98%	3,213
Saratoga	0	0	0.00%	0.00%	0.00%	0
South SF	11	163,231	5.61%	3.85%	4.44%	14,493
Suisun City	8	50,889	4.08%	1.20%	2.16%	7,056
Tiburon	1	0	0.51%	0.00%	0.17%	555
Woodside	0	0	0.00%	0.00%	0.00%	0
Total	196	4,235,593	100.00%	100.00%	100.00%	326,424

Based on reported claims count > \$1 for 2017-18 2021-22 from Appendix E, Page 8. Reported property claims for 2017-18 2021-22 included. Based on paid losses limited to SIR for 2017-18 2021-22 from Appendix E, Page 6b. Property paid losses limited to SIR for 2017-18 2021-22 are included. (B) / Total (B) (C) / Total (C) (D) x (1/3) + (E) x (2/3) (G) x Total of (H) (B)

(C)

(D)

(E)

(G)

(H)

(G) x Total of (H) Total variable liability expenses are equal to 13.4% of total expenses. Total expenses of \$2,436,000 projected by PLAN JPA.

2023-24 Allocation of Variable Administrative Expenses by Member Liability Claims

	Liability			Percent	Percent	
	Reported	Liability	Percent	Liability	Liability	Liability
	Counts > \$1	Paid Losses	Liability	Paid Losses	Variable	Variable
	2017-18	2017-18	Reported	2017-18	Administrative	Administrative
Member	2021-22	2021-22	Counts > \$1	2021-22	Expenses	Expenses
(A)	(B)	(C)	(D)	(E)	(G)	(H)
American Canyon	9	31,715	1.21%	0.25%	0.57%	7,473
Atherton	10	211,438	1.35%	1.68%	1.57%	20,495
Benicia	50	528,216	6.74%	4.20%	5.05%	65,874
Burlingame	71	3,043,335	9.57%	24.19%	19.32%	252,207
Campbell	38	387,677	5.12%	3.08%	3.76%	49,112
Colma	10	147,607	1.35%	1.17%	1.23%	16,078
Cupertino	29	202,939	3.91%	1.61%	2.38%	31,051
Dublin	17	534,971	2.29%	4.25%	3.60%	46,985
East Palo Alto	20	238,770	2.70%	1.90%	2.16%	28,251
Foster City	15	257,438	2.02%	2.05%	2.04%	26,610
Half Moon Bay	9	88,073	1.21%	0.70%	0.87%	11,373
Hillsborough	40	149,272	5.39%	1.19%	2.59%	33,790
Los Altos Hills	1	10,000	0.13%	0.08%	0.10%	1,278
Los Gatos	27	124,454	3.64%	0.99%	1.87%	24,448
Millbrae	31	256,493	4.18%	2.04%	2.75%	35,930
Milpitas	63	1,162,499	8.49%	9.24%	8.99%	117,384
Morgan Hill	42	361,547	5.66%	2.87%	3.80%	49,650
Newark	34	238,469	4.58%	1.90%	2.79%	36,442
Pacifica	26	1,765,405	3.50%	14.03%	10.52%	137,395
Portola Valley	2	3,027	0.27%	0.02%	0.11%	1,383
Ross, Town of	1	3,367	0.13%	0.03%	0.06%	820
San Bruno	66	1,009,521	8.89%	8.02%	8.31%	108,560
San Carlos	28	621,086	3.77%	4.94%	4.55%	59,395
Saratoga	10	371,919	1.35%	2.96%	2.42%	31,598
South SF	60	279,034	8.09%	2.22%	4.17%	54,500
Suisun City	18	280,342	2.43%	2.23%	2.29%	29,954
Tiburon	9	204,284	1.21%	1.62%	1.49%	19,413
Woodside	6	68,334	0.81%	0.54%	0.63%	8,247
Total	742	12,581,233	100.00%	100.00%	100.00%	1,305,696

(B) (C) (D) Based on reported claims count > \$1 for 2017-18 2021-22 from Appendix E, Page 8.

Based on paid losses limited to SIR for 2017-18 2021-22 from Appendix E, Page 6b.

(E)

(B) / Total (B) (C) / Total (C) (D) x (1/3) + (E) x (2/3)(G)

(H) (G) x Total of (H)

Total variable liability expenses are equal to 53.6% of total expenses. Total expenses of \$2,436,000 projected by PLAN JPA.

Calculation of Experience Modification Factors by Member

	2017-18 2021-22 Limited	2017-18 2021-22	Percent				2023-24 Indicated Experience	2022-23 Capped Experience	+/- 30% Capped Experience	Change In Experience
	Incurred	Payroll	Incurred	Percent	Indicated		Modification	Modification	Modification	Modification
Member	Losses	(00)	Losses	Payroll	Differential	Credibility	Factor	Factor	Factor	Factor
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
American Canyon	48,275	364,909	0.3%	1.7%	0.199	50%	60%	58.4%	59.9%	2.6%
Atherton	245,289	259,599	1.7%	1.2%	1.418	50%	121%	140.3%	120.9%	-13.8%
Benicia	1,434,682	1,044,948	9.9%	4.8%	2.061	80%	185%	113.5%	147.6%	30.0%
Burlingame	1,166,504	1,245,824	8.0%	5.7%	1.405	80%	132%	106.7%	132.4%	24.1%
Campbell	729,704	1,215,846	5.0%	5.6%	0.901	80%	92%	73.2%	92.1%	25.8%
Colma	147,607	221,887	1.0%	1.0%	0.999	40%	100%	99.9%	99.9%	0.1%
Cupertino	417,916	1,145,318	2.9%	5.3%	0.548	80%	64%	43.7%	56.8%	30.0%
Dublin	973,895	484,429	6.7%	2.2%	3.018	60%	221%	108.9%	141.6%	30.0%
East Palo Alto	303,773	510,666	2.1%	2.3%	0.893	60%	94%	132.0%	93.6%	-29.1%
Foster City	312,423	1,218,221	2.2%	5.6%	0.385	80%	51%	40.2%	50.8%	26.3%
Half Moon Bay	169,397	225,037	1.2%	1.0%	1.130	40%	105%	81.8%	105.2%	28.6%
Hillsborough	304,442	551,776	2.1%	2.5%	0.828	60%	90%	83.4%	89.7%	7.6%
Los Altos Hills	10,102	132,029	0.1%	0.6%	0.115	30%	73%	120.6%	84.4%	-30.0%
Los Gatos	157,666	949,835	1.1%	4.4%	0.249	80%	40%	39.3%	39.9%	1.5%
Millbrae	525,284	393,010	3.6%	1.8%	2.006	60%	160%	164.7%	160.4%	-2.6%
Milpitas	1,453,018	2,809,601	10.0%	12.9%	0.776	90%	80%	83.2%	79.9%	-4.0%
Morgan Hill	727,687	1,384,245	5.0%	6.4%	0.789	80%	83%	92.8%	83.1%	-10.4%
Newark	519,561	1,046,713	3.6%	4.8%	0.745	80%	80%	103.0%	79.6%	-22.7%
Pacifica	1,061,640	956,067	7.3%	4.4%	1.667	80%	153%	135.8%	153.3%	12.9%
Portola Valley	3,027	86,971	0.0%	0.4%	0.052	20%	81%	80.7%	81.0%	0.4%
Ross, Town of	3,367	114,021	0.0%	0.5%	0.044	30%	71%	70.0%	71.3%	1.9%
San Bruno	1,312,854	1,503,026	9.0%	6.9%	1.311	80%	125%	131.7%	124.9%	-5.2%
San Carlos	819,429	448,347	5.6%	2.1%	2.743	60%	205%	258.5%	204.6%	-20.9%
Saratoga	439,452	360,806	3.0%	1.7%	1.828	50%	141%	153.4%	141.4%	-7.8%
South SF	596,972	2,464,128	4.1%	11.3%	0.364	90%	43%	58.2%	42.7%	-26.6%
Suisun City	345,839	356,097	2.4%	1.6%	1.458	50%	123%	96.9%	122.9%	26.8%
Tiburon	214,879	189,077	1.5%	0.9%	1.706	40%	128%	102.9%	128.2%	24.6%
Woodside	68,436	102,207	0.5%	0.5%	1.005	30%	100%	128.9%	100.2%	-22.3%
Total	14,513,117	21,784,638	100.0%	100.0%	1.000	100%	101%		96%	

(B) Based on losses limited to \$250,000 for 2017-18 to 2021-22 from Exhibit 1, Page 7

(B) Based on losses limited to \$250,000 for 2017-18 to 2021-22 from Exhibit 1, Page 7
(C) Based on payroll for 2017-18 to 2021-22 from ,
(D) (B) / Total (B)
(E) (C) / Total (C)
(F) (D) / (E)
(G) [(C) / ((C) + 30,000,000)]. Limited to minimum of 10% and maximum of 90%, and rounded to the nearest 10%.
(H) ((F) x (G)) + (1.00 - (G))
(I) Prior X-Mod.
(I) Indicated x mod capped at ±/- 30%

(J) Indicated x-mod capped at +/- 30%. (K) (J) / (I) - 1

Limited Incurred Losses

Member	2017-18	2018-19	2019-20	2020-21	2021-22
(A)	(B)	(C)	(D)	(E)	(F)
American Canyon	30,538	0	230	2	17,505
Atherton	857	3,290	22,734	188,298	30,111
Benicia	232,424	22,137	211,917	914,718	53,486
Burlingame	167,689	67,816	130,567	407,889	392,542
Campbell	157,207	11,050	345,016	27,481	188,950
Colma	42,689	5,416	4,774	94,728	0
Cupertino	13,431	96,036	129,507	70,537	108,406
Dublin	1,434	250,530	31,707	370,184	320,040
East Palo Alto	142,207	2,373	127,783	3,896	27,513
Foster City	21,810	26,791	227,823	35,895	103
Half Moon Bay	8,914	1,200	151,164	7,919	200
Hillsborough	15,748	53,735	34,097	19,672	181,189
Los Altos Hills	0	0	10,000	0	102
Los Gatos	46,081	5,875	8,444	66,196	31,069
Millbrae	101,504	17,641	5,789	63,689	336,661
Milpitas	313,944	263,277	389,871	235,684	250,243
Morgan Hill	263,925	19,146	172,510	160,085	112,021
Newark	63,884	58,362	124,354	267,759	5,202
Pacifica	81,679	353,218	4,177	516,741	105,826
Portola Valley	2,027	0	0	0	1,000
Ross, Town of	0	0	0	3,367	0
San Bruno	499,624	67,238	311,016	303,206	131,770
San Carlos	38,641	534,884	220,974	10,517	14,412
Saratoga	6,559	332,995	99,110	0	788
South SF	126,262	40,173	39,329	83,099	308,110
Suisun City	10,468	48,660	122,744	162,990	976
Tiburon	0	0	21,676	187,444	5,759
Woodside	8,000	0	865	53,705	5,866
Total	2,397,546	2,281,843	2,948,177	4,255,701	2,629,851

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PLAN JPA Pool Layer

Funding Options for 2023-2024 Losses 2.0% Discount Rate

			\$1M Retention \$30M Limit	\$2M Retention \$30M Limit	\$2.5M Retention \$30M Limit	\$4M Retention \$30M Limit	\$5M Retention \$30M Limit
(A)	Payroll (\$00's)		4,891,178	4,891,178	4,891,178	4,891,178	4,891,178
(B)	Average SIR Discount factor:		105.3%	105.3%	105.3%	105.3%	105.3%
(C)	Base Loss Rate:		\$0.990	\$1.240	\$1.315	\$1.404	\$1.444
(D)	PLAN JPA Expected Losses:		\$5,100,000	\$6,387,000	\$6,775,000	\$7,234,000	\$7,440,000
(E)	Discount Factor for Future Funding: at 2% interest		93.4%	93.4%	93.4%	93.4%	93.4%
(F)	Estimated Cost of Excess Insurance		\$14,599,000	\$10,915,000	\$9,805,000	\$8,491,000	\$7,901,000
(G)	Estimated Administration Expenses		\$2,436,000	\$2,436,000	\$2,436,000	\$2,436,000	\$2,436,000
(H)	Discounted Losses w/ Excess Insurance		\$21,799,000	\$19,317,000	\$18,570,000	\$17,684,000	\$17,287,000
(I)	60% Confidence Margin 70% Confidence Margin 80% Confidence Margin 90% Confidence Margin	1.026 1.174 1.368 1.679	124,000 829,000 1,753,000 3,235,000	155,000 1,038,000 2,196,000 4,051,000	166,000 1,101,000 2,329,000 4,297,000	176,000 1,176,000 2,487,000 4,588,000	181,000 1,209,000 2,557,000 4,719,000
(J)	Funding at the 60% confidence Level: Funding at the 70% confidence Level: Funding at the 80% confidence Level: Funding at the 90% confidence Level:		21,923,000 22,628,000 23,552,000 25,034,000	19,472,000 20,355,000 21,513,000 23,368,000	18,736,000 19,671,000 20,899,000 22,867,000	17,860,000 18,860,000 20,171,000 22,272,000	17,468,000 18,496,000 19,844,000 22,006,000

(A) From , .(B) Based on , .(C) From Exhibit 2, Page 2.

(C) From Exhibit 2, Page 2.
(D) (A) x (B) x (C)
(E) Based on \$100K to \$1M Rate Analysis Appendix F
(F) Based on \$14,599,000 in Excess Insurance Premium for the \$1M to \$30M layer and ILF factors.
(G) Provided by PLAN JPA.
(H) (D) x (E) + (F) + (G)
(I) Based on \$100K to \$1M Rate Analysis Appendix G
(J) (H) + (I)

Exhibit 2 Page 1b

PLAN JPA Pool Layer

Funding Options for 2023-2024 Losses 2.0% Discount Rate

		\$1M Retention \$30M Limit
(A)	Payroll (\$00's)	4,891,178
(B)	Average SIR Discount factor:	105.3%
(C)	Base Loss Rate:	\$0.990
(D)	PLAN JPA Expected Losses:	\$5,100,000
(E)	Discount Factor for Future Funding: at 2% interest	93.4%
(F)	Estimated Cost of Excess Insurance	\$14,599,000
(G)	Estimated Administration Expenses	\$2,436,000
(H)	Discounted Losses w/ Excess Insurance	\$21,799,000
(I)	60% Confidence Margin 70% Confidence Margin 80% Confidence Margin 90% Confidence Margin	124,000 829,000 1,753,000 3,235,000
(J)	Funding at the 60% confidence Level: Funding at the 70% confidence Level: Funding at the 80% confidence Level: Funding at the 90% confidence Level:	21,923,000 22,628,000 23,552,000 25,034,000
(A) (B) (C) (D) (E) (F) (G) (H) (J)	From , . Based on , . From Exhibit 2, Page 2. (A) x (B) x (C) Based on \$100K to \$1M Rate Analysis Appendix F Provided by PLAN JPA. (D) x (E) + (F) + (G) Based on \$100K to \$1M Rate Analysis Appendix G (H) + (I)	

PLAN JPA Pool Layer

Selected 2023-2024 Base Loss Rate (\$100K - \$1M Layer)

		Current 2023-2024	Prior 2022-2023
(A)	Estimated based on \$1M Ultimate Less \$100K Ultimate	\$0.979	\$1.051
(B)	Estimated based on \$100K - \$1M Analysis:	0.994	1.061
(C)	Estimated based on \$100K Analysis & Size of Loss Factors:	1.024	1.055
(D)	Selected Base Loss Rate (\$100K - \$1M Layer):	0.990	1.060
(E)	Factor to \$1.0M Retention Factor to \$2.0M Retention Factor to \$2.5M Retention Factor to \$3.0M Retention Factor to \$3.5M Retention Factor to \$4.0M Retention Factor to \$5.0M Retention	1.000 1.252 1.328 1.379 1.403 1.418 1.459	1.000 1.244 1.291 1.362 1.378 1.401 1.436
(F)	Selected Base Loss Rate for \$1.0M Retention : Selected Base Loss Rate for \$2.0M Retention : Selected Base Loss Rate for \$2.5M Retention : Selected Base Loss Rate for \$3.0M Retention : Selected Base Loss Rate for \$3.5M Retention : Selected Base Loss Rate for \$4.0M Retention : Selected Base Loss Rate for \$5.0M Retention :	\$0.990 1.240 1.315 1.365 1.389 1.404 1.444	\$1.060 1.319 1.369 1.444 1.460 1.485 1.522

(A) (B) (C) (D) (E) (F)

From PLAN JPA - Liability Program (\$100K and \$1M Analysis), Appendix B, Page 1. From PLAN JPA - Liability Program (\$100K to \$1M Analysis), \$100K to \$1M Rate Analysis Exhibit 1, Page 1. From PLAN JPA - Liability Program (\$100K and \$1M Analysis), \$100K and \$1M Rate Analysis Exhibit 1, Page 1. Based on (A) - (C). Based on PLAN JPA and Industry experience.

(D) x (E).

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		I		X-MOD E	Experience Pe	riod					-	Historical Payr	oll By Membe	-											
Aember	2023-24	2022-23	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12 2	010-11 20	009-10 20	08-09 20	07-08 20	106-07 20	005-06 2	004-05 2	2003-04 2	002-03	001-02 2	000-01	00-6661
American Canyon	84,318	81,862	75,657	67,674	76,546	71,504	73,529	69,561	64,947	62,832	59,261	56,164	53,981	56,022	33,972 (33,432 5	8,502 5	54,210 4	18,886	41,573	34,774	28,801	23,329	21,177	20,203
Atherton	67,427	65,463	65,711	51,210	48,404	48,829	45,445	43,565	41,078	38,491	34,000	34,592	36,802	45,381	50,023	50,796 4	5,874 4	15,055 4	15,194	43,882	41,735	40,574	32,989	26,438	30,492
Senicia	245,404	238,256	233,973	220,431	204,187	195,449	190,907	174,580	173,400	168,219	161,532	169,601	171,303 1	32,687 1	38,410 22	25,356 21	8,184 20	12,790 18	36,246 1	76,805 1	168,413 1	59,140	48,155 1	33,716 1	122,153
surlingame	262,155	254,520	263,815	259,984	251,855	244,121	226,049	196,142	211,620	204,811	226,244	212,587	222,592 1	96,076 2	20,383 2:	32,482 23	0,073 21	18,855 2'	10,827 2	06,682 2	205,824 2	05,991	95,222 1	73,377 1	46,875
Campbell	260,834	253,237	247,731	238,045	255,640	241,923	232,507	224,565	219,292	202,300	186,236	182,094	174,092 1	59,237 1	32,687 17	9,241 17	3,961 16	35,454 16	32,011 1	63,179 1	162,967 1	55,318 1	42,395 1	30,119 1	120,874
Colma	61,136	59,356	46,184	46,434	44,486	44,629	40,153	39,739	36,261	32,798	34,461	33,463	36,130	34,548	33,406	35,110 3	5,426 3	35,236	30,768	27,803	25,229	21,834	20,656	19,108	16,198
Supertino	266,924	259,149	248,562	236,636	231,368	218,591	210,161	195,661	173,727	161,102	151,388	147,032	140,904 1	40,719 1	40,147 1:	35,281 12	8,347 12	21,432 1	15,840 1	15,054 1	112,134 1	09,351	94,215	84,590	90,186
Jublin	115,604	112,237	103,779	93,603	97,221	95,973	93,851	92,564	81,926	78,962	78,640	73,368	69,240	56,029	33,211 6	35,236 6	3,642 6	30,646 5	57,682	54,531	50,196	44,190	37,820	32,110	26,570
East Palo Alto	128,250	124,515	117,596	107,001	93,099	105,529	87,442	81,680	80,370	82,125	96,655	95,638	98,599 1	18,795 1	35,568 12	24,042 10	9,195 10	04,812 10	02,953	95,207	76,975	55,607	45,547	39,093	0
oster City	237,446	230,530	231,985	220,415	226,687	263,534	275,599	263,920	245,194	234,067	197,640	236,679	215,001 2	29,560 2	33,752 26	30,152 25	0,629 23	37,184 2;	30,622 2	27,263 2	27,324 2	25,614 2	09,424 1	89,817 1	177,968
lalf Moon Bay	51,009	49,523	46,287	42,032	50,635	44,685	41,399	30,328	25,309	19,966	23,164	18,107	18,675	42,436	53,954 6	34,070 7	2,572 7	72,027 (36,403	58,039	53,898	53,734	49,001	41,546	36,128
lillsborough	119,182	115,710	122,349	116,374	109,048	102,940	101,065	94,966	85,298	78,341	84,635	85,353	82,436	91,127	94,376 9	35,120 8	9,252 8	32,257	78,219	69,089	61,053	58,055	59,743	57,700	50,339
os Altos Hills	32,965	32,005	29,685	29,198	27,922	24,483	20,742	19,424	18,097	17,831	17,747	19,300	18,321	18,579	18,952	17,168 1	6,045 1	16,038	15,289	14,424	14,484	14,819	13,461	11,175	10,538
os Gatos	225,148	218,590	203,594	204,277	191,197	182,860	167,907	160,411	156,997	152,590	153,503	155,665	157,468 1	52,679 1	55,119 16	35,399 15	7,508 15	50,600 12	18,037 1	44,536 1	143,117 1	42,289 1	32,046 1	16,501 1	04,685
Aillbrae	95,272	92,497	80,937	70,605	78,661	84,069	78,738	67,563	63,586	76,638	73,789	70,939	68,090	37,768	37,446 (37,519 6	6,372 6	34,075 6	39,650	71,640	69,901	79,854	80,879	70,992	65,384
Ailpitas	616,709	598,747	621,777	621,624	573,193	525,414	467,593	448,655	419,722	381,307	356,375	403,269	103,269 4	28,492 5	16,308 52	25,480 51	9,865 50	06,534 5	10,706 5	17,325 5	513,319 4	93,543 2	17,319 3	80,864 3	390,828
Aorgan Hill	343,135	333,141	295,746	272,857	274,915	273,262	267,465	251,938	239,627	202,443	183,195	167,140	165,875 1	37,044 2	00,536 20	14,796 19	0,530 17	72,093 14	19,919 1	37,728 1	124,354 1	14,774	13,909 1	00,320	82,561
lewark	254,843	247,421	214,646	199,877	211,197	213,924	207,069	193,612	179,059	175,394	172,576	160,389	162,569 1	54,950 2	59,438 29	38,331 30	5,613 30	00,480 28	38,155 2	94,338 2	289,438 2	53,146 2	22,808 2	06,155 1	88,202
acifica	203,716	197,783	206,612	198,237	186,500	187,895	176,823	184,874	168,836	164,792	163,285	163,989	170,266 1	38,468 1	74,664 17	8,353 17	5,683 17	0,265 15	58,652 1	51,102 1	147,091 1	43,911 1	37,863 1	25,728 1	14,410
ortola Valley	23,248	22,571	20,621	17,163	16,549	16,001	16,637	14,979	12,541	13,637	12,265	10,881	12,035	12,308	11,973	11,341 1	0,378	9,112	8,314	8,311	8,167	7,505	6,758	6,420	5,936
town of	22,901	22,234	24,525	21,610	23,395	22,187	22,304	20,655	18,705	17,852	13,324	15,066	25,237	25,270	24,782	24,902 2	1,107 1	8,825	17,180	15,697	14,306	12,401	12,583	12,980	12,988
san Bruno	324,174	314,732	315,419	295,367	306,329	299,858	286,052	285,710	269,032	253,278	242,461	236,970	230,690 2	30,925 2	33,714 22	20,779 20	2,857 20	06,998 20	07,920 2	03,992 2	204,509 2	01,479	90,694 1	69,400 1	146,259
san Carlos	109,458	106,270	101,577	90,744	92,075	84,072	79,879	80,196	69,256	65,545	62,150	88,708	73,340	78,628 1	16,455 1	10,995 10	7,921 11	11,044 1-	10,501 1	05,698 1	106,674 1	05,202 1	00,681	90,088	76,508
saratoga	81,931	79,544	81,287	74,247	71,248	68,692	65,333	63,691	61,993	57,618	56,508	54,527	53, 195	53,060	32,759 5	53,711 4	9,948 4	15,739 4	41,102	38,859	39,497	39,416	35,396	29,873	26,608
south SF	492,215	477,879	493,276	465,097	471,026	486,223	548,505	530,076	481,353	509,905	492,016	487,646	185,590 4	35,791 4	33,074 5'	16,356 49	8,645 43	39,070 4-	13,129 4	35,324 4	124,355 4	09,682	90,542 3	59,016 3	331,372
buisun City	101,090	98,146	86,073	75,233	71,140	64,867	58,784	55,650	56,250	53,967	54,988	57,679	65,699	37,250	35,158 6	38,617 5	9,200 5	57,315 5	50,974	51,221	50,443	50,101	48,106	44,248	40,541
iburon	40,881	39,690	38,150	39,549	41,159	35,379	34,840	32,874	23,351	22,110	21,997	21,895	21,658	24,396	24,670	25,801 2	4,651 1	7,072	14,394	14,107	13,989	13,313	11,851	10,344	9,276
Voodside	23,803	23,110	23,082	21,284	20,468	18,755	18,618	18,785	20,385	21,603	19,994	21,440	24,433	26,217	25,788	29,573 2	7,389 1	9,923	17,941	16,600	16,971	15,628	12,982	11,488	10,144

4,891,178 4,748,717 4,640,638 4,396,808 4,346,148 4,265,647 4,135,396 3,396,364 3,697,212 3,550,523 3,430,128 3,457,490 3,544,43 3,940,725 4,049,436 3,909,370 3,705,140 3,557,514 3,500,006 3,401,137 3,255,273 2,986,375 2,694,385 2,454,227

Total

Exhibit 2 Page 1

Exhibit 2 Page 2

PLAN JPA

Member Deductibles

Member	2023-24	2022-23
American Canvon	25.000	25.000
Atherton	25.000	25.000
Benicia	25.000	25.000
Burlingame	250,000	250,000
Campbell	100,000	100,000
Colma	50,000	50,000
Cupertino	250,000	250,000
Dublin	50,000	50,000
East Palo Alto	100,000	100,000
Foster City	100,000	100,000
Half Moon Bay	50,000	50,000
Hillsborough	50,000	50,000
Los Altos Hills	25,000	25,000
Los Gatos	50,000	50,000
Millbrae	100,000	100,000
Milpitas	100,000	100,000
Morgan Hill	100,000	100,000
Newark	100,000	100,000
Pacifica	50,000	50,000
Portola Valley	25,000	25,000
Ross, Town of	25,000	25,000
San Bruno	100,000	100,000
San Carlos	100,000	100,000
Saratoga	25,000	25,000
South SF	100,000	100,000
Suisun City	25,000	25,000
Tiburon	50,000	50,000
Woodside	25,000	25,000

Funding Guidelines for Outstanding Liabilities and Funding Options for Program Year 2023-2024

At Various Discount Rates and Confidence Levels

I. Funding Guidelines for Discounted Outstanding Liabilities at 6/30/23

Investment Rate	Expected Confidence Level	70% Confidence Level	75% Confidence Level	80% Confidence Level	85% Confidence Level	90% Confidence Level
1.0%	\$20,491,000	\$22,725,000	\$23,667,000	\$24,774,000	\$26,187,000	\$28,073,000
1.5%	20,267,000	22,476,000	23,408,000	24,503,000	25,901,000	27,766,000
2.0%	20,049,000	22,234,000	23,157,000	24,239,000	25,623,000	27,467,000
2.5%	19,835,000	21,997,000	22,909,000	23,981,000	25,349,000	27,174,000
3.0%	19,627,000	21,766,000	22,669,000	23,729,000	25,083,000	26,889,000
3.5%	19,422,000	21,539,000	22,432,000	23,481,000	24,821,000	26,608,000
4.0%	19,223,000	21,318,000	22,203,000	23,241,000	24,567,000	26,336,000

II. Funding Options for Program Year 2023-2024

Investment Rate	Expected Confidence Level	60% Confidence Level	70% Confidence Level	80% Confidence Level	90% Confidence Level
1.0%	\$21,962,000	\$22,090,000	\$22,819,000	\$23,775,000	\$25,308,000
1.5%	21,879,000	22,005,000	22,722,000	23,662,000	25,168,000
2.0%	21,799,000	21,923,000	22,628,000	23,552,000	25,034,000
2.5%	21,720,000	21,842,000	22,535,000	23,444,000	24,901,000
3.0%	21,644,000	21,764,000	22,446,000	23,340,000	24,774,000
3.5%	21,570,000	21,688,000	22,359,000	23,239,000	24,649,000
4.0%	21,497,000	21,613,000	22,273,000	23,139,000	24,527,000

Selection of Projected Limited Loss Rate and Projection of Program Losses and ULAE

Accident Year	Ultimate Limited Losses (A)	Trend Factor (B)	Trended Limited Losses (C)	Trended Payroll (\$00) (D)	Trended Limited Loss Rate (E)
2001-2002	2,848,456	1.862	5,303,825	4,913,815	1.079
2002-2003	4,646,965	1.808	8,401,713	5,332,137	1.576
2003-2004	3,509,537	1.755	6,159,237	5,435,017	1.133
2004-2005	2,444,607	1.704	4,165,610	5,456,509	0.763
2005-2006	2,947,359	1.654	4,874,932	5,410,979	0.901
2006-2007	3,128,576	1.606	5,024,493	5,498,428	0.914
2007-2008	3,147,259	1.559	4,906,577	5,660,768	0.867
2008-2009	2,711,703	1.513	4,102,807	5,721,853	0.717
2009-2010	2,538,522	1.469	3,729,089	5,434,260	0.686
2010-2011	2,013,526	1.426	2,871,288	4,753,826	0.604
2011-2012	2,825,000	1.385	3,912,625	4,536,227	0.863
2012-2013	3,309,000	1.345	4,450,605	4,454,630	0.999
2013-2014	2,229,780	1.306	2,912,093	4,284,105	0.680
2014-2015	2,938,392	1.267	3,722,943	4,328,088	0.860
2015-2016	3,129,000	1.231	3,851,799	4,395,985	0.876
2016-2017	2,932,000	1.195	3,503,740	4,566,182	0.767
2017-2018	1,857,000	1.160	2,154,120	4,681,268	0.460
2018-2019	1,587,000	1.126	1,786,962	4,709,274	0.379
2019-2020	2,539,000	1.093	2,775,127	4,680,801	0.593
2020-2021	3,128,000	1.061	3,318,808	4,621,045	0.718
2021-2022	3,447,000	1.030	3,550,410	4,756,654	0.746
Totals	\$59,857,682		\$85,478,803	103,631,851	\$0.825
14/15-19/20	14,982,392		17,794,691	27,361,598	0.650
20/21-21/22	6,575,000		6,869,218	9,377,699	0.733
			(F) Selecte	d Limited Rate:	\$0.735
				Prior \$100K:	\$0.800
			Prior	\$100K to \$1M:	\$1.051
			\$1,000,000	\$100,000	\$1,000,000
Program Year:			2022-2023	2023-2024	2023-2024
(G) Factor to S	SIR:		2.303	1.000	2.353
(H) Trend Fact	or:		1.000	1.030	1.030
(I) Program Ra	ite:		\$1.693	\$0.757	\$1.781
(J) Trended Pag	yroll (\$00):		4,748,717	4,748,717	4,891,178
(K) Projected F	Program Losses:		8,040,000	3,595,000	8,711,000
(L) Projected L	JLAE:		0	0	0
(M) Projected I	Loss and ULAE:		\$8,040,000	\$3,595,000	\$8,711,000

Notes appear on the next page.

Selection of Projected Limited Loss Rate and Projection of Program Losses and ULAE

Notes:

- (A) From \$100K and \$1M Rate Analysis Not Included, Page 2, Column (F). For purposes of projecting future losses, losses are capped at \$100,000 per occurrence.
- (B) From \$100K and \$1M Rate Analysis Appendix E, Page 1, Column (B).
- (C) (A) x (B).
- (D) From \$100K and \$1M Rate Analysis Appendix I, Column (C).
- (E) (C) / (D).
- (F) Selected based on (E).
- (G) Based on a Burr distribution, a mathematical model of claim sizes.
- (H) From \$100K and \$1M Rate Analysis Appendix E.
- (I) (F) x (G) x (H).
- (J) From \$100K and \$1M Rate Analysis Appendix I, Column (C).
- (K) (I) x (J).
- (L) Based on an estimated claim closing pattern and the Authority's historical claims administration expenses.
- (M) (K) + (L).

This exhibit shows the calculation of future loss costs based on the past loss rates. The projections will be accurate only to the extent that what has happened in the past is representative of what will happen in the future.

Reported Loss Development

	Limited	Reported		Program	Reported	
	Reported	Loss	Ultimate	Reported	Loss	Ultimate
Accident	Losses as	Development	Limited	Losses	Development	Program
Year	of 12/31/22	Factor	Losses	of 12/31/22	Factor	Losses
(A)	(B)	(C)	(D)	(E)	(F)	(G)
2001-2002	\$2,848,456	1.000	\$2,848,456	\$5,797,997	1.000	\$5,797,997
2002-2003	4,646,965	1.000	4,646,965	8,884,428	1.000	8,884,428
2003-2004	3,509,537	1.000	3,509,537	5,715,419	1.000	5,715,419
2004-2005	2,444,607	1.000	2,444,607	3,869,337	1.000	3,869,337
2005-2006	2,947,359	1.000	2,947,359	5,631,680	1.000	5,631,680
2006-2007	3,128,576	1.000	3,128,576	4,547,760	1.000	4,547,760
2007-2008	3,147,259	1.000	3,147,259	5,798,628	1.000	5,798,628
2008-2009	2,711,703	1.000	2,711,703	5,365,088	1.000	5,365,088
2009-2010	2,538,522	1.000	2,538,522	3,874,500	1.000	3,874,500
2010-2011	2,013,526	1.000	2,013,526	3,571,075	1.001	3,574,646
2011-2012	2,824,647	1.000	2,824,647	6,293,156	1.003	6,312,035
2012-2013	3,308,601	1.000	3,308,601	7,008,017	1.005	7,043,057
2013-2014	2,229,780	1.000	2,229,780	4,318,084	1.007	4,348,311
2014-2015	2,938,392	1.000	2,938,392	6,737,773	1.012	6,818,626
2015-2016	3,125,745	1.001	3,128,871	6,260,691	1.020	6,385,905
2016-2017	2,925,720	1.002	2,931,571	8,245,173	1.024	8,443,057
2017-2018	1,849,975	1.004	1,857,375	2,625,026	1.030	2,703,777
2018-2019	1,570,788	1.007	1,581,784	2,598,995	1.045	2,715,950
2019-2020	2,491,627	1.017	2,533,985	2,948,177	1.137	3,352,077
2020-2021	2,901,375	1.078	3,127,682	6,173,658	1.454	8,976,499
2021-2022	2,085,409	1.665	3,472,206	2,654,851	2.608	6,923,851
Totals	\$58,188,569		\$59,871,404	\$108,919,513		\$117,082,628

Notes:

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

Selected

Cumulated

6.750

11.239

1.545

1.665

1.060

1.078

1.010

1.017

1.003

1.0007

1.002

1.004

1.001

1.002

1.001

1.001

1.000

1.000

1.000

1.000

1.000

517000

PLAN JPA - Liability Program (\$100K and \$1M Analysis) Reported Loss Development

		Limited Loss	ses Reported	as of:							
Accident	6	18	30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002		2,356,125	2,422,293	2,794,437	2,851,519	2,940,724	2,987,766	2,939,481	2,956,981	2,951,981	3,039,481
2002-2003	1,341,283	3,829,893	4,293,424	4,604,949	4,740,657	4,821,491	4,811,984	4,901,984	4,966,984	5,011,984	4,977,421
2003-2004	702,623	2,248,188	2,863,892	3,229,117	3,366,140	3,528,698	3,560,692	3,460,542	3,560,542	3,560,542	3,560,542
2004-2005	909,032	2,172,504	3,103,889	2,811,093	3,026,321	2,861,424	2,893,524	2,858,702	2,866,202	2,866,202	2,866,155
2005-2006	584,388	2,569,384	3,328,173	3,524,433	3,669,875	3,689,497	3,765,682	3,770,624	3,795,674	3,789,394	3,789,394
2006-2007	776,086	2,403,595	2,905,504	3,039,627	3,179,650	3,297,534	3,391,424	3,394,986	3,394,936	3,394,936	3,394,936
2007-2008	1,054,492	2,921,920	3,743,710	4,332,780	4,420,360	4,381,184	4,358,070	4,259,056	4,259,284	4,259,284	4,259,284
2008-2009	543,401	2,839,064	3,484,984	3,288,639	3,398,037	3,430,417	3,345,621	3,347,708	3,346,029	3,347,708	3,336,906
2009-2010	763,697	3,371,740	3,848,137	3,115,304	3,131,959	3,127,921	3,127,921	3,127,921	3,127,921	3,127,921	3,127,921
2010-2011	510,509	2,770,955	2,742,484	2,650,741	2,519,762	2,455,668	2,409,001	2,409,001	2,396,051	2,396,051	2,396,051
2011-2012	602,255	3,518,281	3,631,019	3,415,805	3,302,356	3,237,194	3,127,725	3,127,725	3,127,725	3,127,725	3,127,725
2012-2013	465,105	4,254,395	3,881,185	3,547,144	3,502,651	3,489,052	3,450,659	3,459,906	3,559,906	3,559,906	3,559,906
2013-2014	842,948	2,251,578	2,694,553	2,631,490	2,671,389	2,539,618	2,539,618	2,539,618	2,539,618	2,529,575	
2014-2015	325,035	2,666,242	3,946,907	3,795,367	3,350,810	3,291,420	3,281,784	3,281,784	3,281,784		
2015-2016	371,511	2,328,347	3,291,200	3,149,726	3,155,562	3,143,331	3,135,461	3,125,745			
2016-2017	290,633	1,930,274	2,754,128	2,812,484	2,851,248	2,931,044	2,925,720				
2017-2018	199,803	1,368,867	1,871,566	1,908,433	1,873,364	1,849,975					
2018-2019	65,888	691,395	1,364,408	1,596,209	1,570,788						
2019-2020	184,043	934,320	2,260,330	2,491,627							
2020-2021	299,593	2,532,027	2,901,375								
2021-2022	415,421	2,085,409									
2022-2023	113,903										
		Reported Lo	ss Developn	nent Factors	<u>.</u>						

Months	Months
Monaria Monaria Monaria Monaria Monaria Monaria Monaria Monaria Monaria	
2001-2002 1.028 1.154 1.020 1.031 1.016 0.984 1.006 0.998 1.030	0.987
2002-2003 2.855 1.121 1.073 1.029 1.017 0.998 1.019 1.013 1.009 0.993	1.000
2003-2004 3.200 1.274 1.128 1.042 1.048 1.009 0.972 1.029 1.000 1.000	1.000
2004-2005 2.390 1.429 0.906 1.077 0.946 1.011 0.988 1.003 1.000 1.000	1.001
2005-2006 4.397 1.295 1.059 1.041 1.005 1.021 1.001 1.007 0.998 1.000	1.000
2006-2007 3.097 1.209 1.046 1.046 1.037 1.028 1.001 1.000 1.000 1.000	1.000
2007-2008 2.771 1.281 1.157 1.020 0.991 0.995 0.977 1.000 1.000 1.000	0.977
2008-2009 5.225 1.228 0.944 1.033 1.010 0.975 1.001 0.999 1.001 0.997	1.003
2009-2010 4.415 1.141 0.810 1.005 0.999 1.000 1.000 1.000 1.000 1.000	1.000
2010-2011 5.428 0.990 0.967 0.951 0.975 0.981 1.000 0.995 1.000 1.000	1.000
2011-2012 5.842 1.032 0.941 0.967 0.980 0.966 1.000 1.000 1.000 1.000	1.000
2012-2013 9.147 0.912 0.914 0.987 0.996 0.989 1.003 1.029 1.000 1.000	
2013-2014 2.671 1.197 0.977 1.015 0.951 1.000 1.000 1.000 0.996	
2014-2015 8.203 1.480 0.962 0.883 0.982 0.997 1.000 1.000	
2015-2016 6.267 1.414 0.957 1.002 0.996 0.997 0.997	
2016-2017 6.642 1.427 1.021 1.014 1.028 0.998	
2017-2018 6.851 1.367 1.020 0.982 0.988	
2018-2019 10.493 1.973 1.170 0.984	
2019-2020 5.077 2.419 1.102	
2020-2021 8.452 1.146	
2021-2022 5.020	
6-18 18-30 30-42 42-54 54-66 66-78 78-90 90-102 102-114 114-126	126-138
Months	Months
Average 5.422 1.318 1.016 1.005 0.999 0.999 0.996 1.006 1.000 1.002	0.997
Dollar-Weighted	
Averages	4 000
3-yr 0.175 1.570 1.091 0.997 1.006 0.998 0.999 1.011 0.999 1.000	1.000
4-yi 0.470 1.313 1.000 0.330 0.333 0.330 1.000 1.000 0.399 1.000 Comparative	1.001
Factors 3.155 1.344 1.039 1.006 1.001 1.002 1.003 1.005 1.005 1.003	1.002
Prior 6.650 1.558 1.020 1.010 1.003 1.002 1.001 1.001 1.000 1.000	1.000

PLAN JPA - Liability Program (\$100K and \$1M Analysis) Reported Loss Development

	Limited Loss	ses Reported	as of:	·							
Accident Year	138 Months	150 Months	162 Months	174 Months	186 Months	198 Months	210 Months	222 Months	234 Months	246 Months	258 Months
2001-2002	3.000.035	3.027.919	3.012.173	3.012.173	3.012.173	3.012.173	3.012.173	3.012.173	3.012.173	3.012.173	3.013.572
2002-2003	4.977.421	4.977.421	4.977.421	4.977.421	4.977.421	4.977.421	4.977.421	4.977.421	4.977.421	4.977.421	- , , -
2003-2004	3.560.542	3.560.542	3,560,542	3,560,542	3.560.542	3.560.542	3.560.542	3.560.542	3.560.542	.,	
2004-2005	2 867 654	2 867 654	2 867 654	2 867 654	2 867 654	2 867 654	2 867 654	2 867 654	0,000,012		
2005-2006	3 789 394	3 788 958	3 788 958	3 788 958	3 788 958	3 788 958	3 788 958	_,			
2006-2007	3 394 936	3 400 836	3 400 836	3 425 837	3 408 506	3 408 506	0,1 00,000				
2007-2008	4 159 284	4 259 284	4 259 284	4 259 284	4 259 284	0,100,000					
2008-2009	3 347 708	3 347 708	3 347 708	3 347 708	.,						
2009-2010	3.127.921	3.127.921	3.127.921	-, ,							
2010-2011	2.396.051	2.396.051	-,,								
2011-2012	3,127,725	, ,									
2012-2013	-, , -										
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
2021-2022											
2022-2023											
	Reported Lo	ss Developm	nent Factors:	<u>-</u>							
	138-150	150-162	162-174	174-186	186-198	198-210	210-222	222-234	234-246	246-258	258-Ult.
	Months										
2001-2002	1.009	0.995	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	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				
2005-2006	1.000	1.000	1.000	1.000	1.000	1.000					
2006-2007	1.002	1.000	1.007	0.995	1.000						
2007-2008	1.024	1.000	1.000	1.000							
2008-2009	1.000	1.000	1.000								
2009-2010	1.000	1.000									
2010-2011	1.000										
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
2021-2022											
	138-150	150-162	162-174	174-186	186-198	198-210	210-222	222-234	234-246	246-258	258-Ult.
	Months										
Average	1.004	0.999	1.001	0.999	1.000	1.000	1.000	1.000	1.000	1.000	
Dollar-Weighted											
Averages	1 000	1 000	1 000	0 0 0 0	1 000	1 000	1 000	1 000			
3-yı 4-vr	1.000	1 000	1.002	0.990	1.000	1 000	1.000	1.000			
Comparative	1.000	1.000	1.002	0.000	1.000	1.000	1.000				
Factors	1.003	1.003	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.002
Prior	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
Cumulated	1.000	1.000	1.000	1.000	1. 600	1.000	1.000	1.000	1.000	1.000	518000

Paid Loss Development

	Limited			Program		
	Paid	Paid Loss	Ultimate	Paid	Paid Loss	Ultimate
Accident	Losses as	Development	Limited	Losses	Development	Program
Year	of 12/31/22	Factor	Losses	of 12/31/22	Factor	Losses
(A)	(B)	(C)	(D)	(E)	(F)	(G)
2001-2002	\$2,848,456	1.000	\$2,848,456	\$5,797,997	1.000	\$5,797,997
2002-2003	4,646,965	1.000	4,646,965	8,884,428	1.000	8,884,428
2003-2004	3,509,537	1.000	3,509,537	5,715,419	1.000	5,715,419
2004-2005	2,444,607	1.000	2,444,607	3,869,337	1.000	3,869,337
2005-2006	2,947,359	1.000	2,947,359	5,631,680	1.000	5,631,680
2006-2007	3,128,576	1.000	3,128,576	4,547,760	1.000	4,547,760
2007-2008	3,147,259	1.000	3,147,259	5,798,628	1.000	5,798,628
2008-2009	2,711,703	1.000	2,711,703	5,365,088	1.000	5,365,088
2009-2010	2,538,522	1.000	2,538,522	3,874,500	1.000	3,874,500
2010-2011	2,013,526	1.000	2,013,526	3,571,075	1.001	3,574,646
2011-2012	2,824,647	1.001	2,827,472	6,237,994	1.004	6,262,946
2012-2013	3,308,601	1.002	3,315,218	6,532,045	1.005	6,564,705
2013-2014	2,229,780	1.004	2,238,699	4,318,084	1.009	4,356,947
2014-2015	2,938,392	1.007	2,958,961	6,737,773	1.014	6,832,102
2015-2016	3,125,745	1.011	3,160,128	6,127,124	1.036	6,347,700
2016-2017	2,883,289	1.019	2,938,071	7,573,955	1.067	8,081,410
2017-2018	1,848,975	1.031	1,906,293	2,624,026	1.134	2,975,645
2018-2019	1,545,763	1.057	1,633,871	2,337,555	1.226	2,865,842
2019-2020	1,716,520	1.137	1,951,683	1,735,905	1.488	2,583,027
2020-2021	1,741,631	1.616	2,814,476	3,680,643	2.578	9,488,698
2021-2022	597,050	3.529	2,106,989	597,050	6.667	3,980,532
Totals	\$54,696,903		\$57,788,371	\$101,558,066		\$113,399,037

Notes:

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

Selected

Cumulated

18.000

63.522

2.184

3.529

1.421

1.616

1.076

1.137

1.025

1.**53**7

1.012

1.031

1.008

1.019

1.004

1.011

1.003

1.007

1.002

1.004

1.001

60002

PLAN JPA - Liability Program (\$100K and \$1M Analysis) Paid Loss Development

		Limited Loss	es Paid as c	of:		,					
Accident	6	18	30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002		1,331,577	1,898,744	2,493,146	2,814,747	2,835,674	2,838,647	2,939,481	2,939,481	2,939,481	2,998,047
2002-2003	368,341	1,921,924	3,419,382	4,159,574	4,572,735	4,708,622	4,811,984	4,820,255	4,893,323	4,930,307	4,962,508
2003-2004	173,413	1,278,587	2,112,645	2,806,518	3,216,963	3,398,305	3,452,557	3,460,542	3,560,542	3,560,542	3,560,542
2004-2005	92,583	901,463	2,122,845	2,612,734	2,848,049	2,845,394	2,853,463	2,858,654	2,866,154	2,866,154	2,866,154
2005-2006	91,777	1,099,067	1,733,718	3,299,822	3,599,286	3,654,071	3,764,224	3,766,533	3,780,292	3,789,394	3,789,394
2006-2007	178,735	1,234,100	2,253,938	2,920,430	3,103,547	3,253,555	3,391,424	3,394,936	3,394,936	3,394,936	3,394,936
2007-2008	149,993	1,300,794	2,635,467	3,650,448	4,101,554	4,208,833	4,228,474	4,256,077	4,259,284	4,259,284	4,259,284
2008-2009	161,539	1,020,079	2,186,680	2,792,089	3,110,459	3,338,980	3,345,621	3,347,708	3,346,029	3,347,708	3,336,906
2009-2010	301,727	1,046,459	2,274,617	2,817,091	2,998,274	3,072,132	3,115,424	3,127,921	3,127,921	3,127,921	3,127,921
2010-2011	106,645	872,432	1,692,195	2,287,500	2,319,013	2,395,143	2,396,051	2,396,051	2,396,051	2,396,051	2,396,051
2011-2012	114,916	832,713	2,112,380	2,750,332	3,122,242	3,118,744	3,127,725	3,127,725	3,127,725	3,127,725	3,127,725
2012-2013	98,607	934,308	2,290,004	3,124,392	3,371,990	3,450,380	3,450,659	3,459,906	3,559,906	3,559,906	3,559,906
2013-2014	130,461	888,140	1,780,866	2,316,155	2,654,568	2,539,618	2,539,618	2,539,618	2,539,618	2,529,575	
2014-2015	91,368	1,387,749	2,717,926	3,379,346	3,268,352	3,281,784	3,281,784	3,281,784	3,281,784		
2015-2016	98,110	679,755	1,782,598	2,795,127	2,999,838	3,135,716	3,135,461	3,125,745			
2016-2017	30,679	920,995	1,975,490	2,421,836	2,773,661	2,834,023	2,883,289				
2017-2018	31,268	758,485	1,188,193	1,713,864	1,800,791	1,848,975					
2018-2019	16,322	417,918	867,701	1,337,293	1,545,763						
2019-2020	65,521	413,661	1,128,779	1,716,520							
2020-2021	54,421	793,126	1,741,631								
2021-2022	40,902	597,050									
2022-2023	19,868										
		Paid Loss D	evelopment	Factors:							
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002		1.426	1.313	1.129	1.007	1.001	1.036	1.000	1.000	1.020	1.001
2002-2003	5.218	1.779	1.216	1.099	1.030	1.022	1.002	1.015	1.008	1.007	1.003
2003-2004	7.373	1.652	1.328	1.146	1.056	1.016	1.002	1.029	1.000	1.000	1.000
2004-2005	9.737	2.355	1.231	1.090	0.999	1.003	1.002	1.003	1.000	1.000	1.001
2005-2006	11.975	1.577	1.903	1.091	1.015	1.030	1.001	1.004	1.002	1.000	1.000
2006-2007	6.905	1.826	1.296	1.063	1.048	1.042	1.001	1.000	1.000	1.000	1.000
2007-2008	8.672	2.026	1.385	1.124	1.026	1.005	1.007	1.001	1.000	1.000	0.977
2008-2009	6.315	2.144	1.277	1.114	1.073	1.002	1.001	0.999	1.001	0.997	1.003
2009-2010	3.468	2.174	1.238	1.064	1.025	1.014	1.004	1.000	1.000	1.000	1.000
2010-2011	8.181	1.940	1.352	1.014	1.033	1.000	1.000	1.000	1.000	1.000	1.000
2011-2012	7.246	2.537	1.302	1.135	0.999	1.003	1.000	1.000	1.000	1.000	1.000
2012-2013	9.475	2.451	1.364	1.079	1.023	1.000	1.003	1.029	1.000	1.000	
2013-2014	6.808	2.005	1.301	1.146	0.957	1.000	1.000	1.000	0.996		
2014-2015	15.189	1.959	1.243	0.967	1.004	1.000	1.000	1.000			
2015-2016	6.928	2.622	1.568	1.073	1.045	1.000	0.997				
2016-2017	30.020	2.145	1.226	1.145	1.022	1.017					
2017-2018	24.258	1.567	1.442	1.051	1.027						
2018-2019	25.605	2.076	1.541	1.156							
2019-2020	6.313	2.729	1.521								
2020-2021	14.574	2.196									
2021-2022	14.597										
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	11.443	2.059	1.371	1.094	1.023	1.010	1.004	1.006	1.001	1.002	0.999
Dollar-Weighted											
Averages		.					c		c		
3-yr	11.215	2.301	1.497	1.118	1.032	1.005	0.999	1.011	0.999	1.000	1.000
4-yr	12.541	2.067	1.393	1.103	1.024	1.004	1.000	1.008	0.999	1.000	1.001
Factors	4 760	2 200	1 444	1 145	1 044	1 010	1 015	1 011	1 000	1 008	1 006
Prior	16.544	2.033	1.373	1.076	1.025	1.012	1.008	1.004	1.003	1.002	1.001

61,000

1.000

1.000

PLAN JPA - Liability Program (\$100K and \$1M Analysis) Paid Loss Development

	Limited Loss	ses Paid as c	of:								
Accident Year 2001-2002 2002-2003 2003-2004 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023	138 Months 3,000,035 4,977,421 3,560,542 2,867,654 3,789,394 3,394,936 4,159,284 3,347,708 3,127,921 2,396,051 3,127,725	150 Months 3,000,611 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836 4,259,284 3,347,708 3,127,921 2,396,051	162 Months 3,012,173 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836 4,259,284 3,347,708 3,127,921	174 Months 3,012,173 4,977,421 3,560,542 2,867,654 3,788,958 3,403,249 4,259,284 3,347,708	186 Months 3,012,173 4,977,421 3,560,542 2,867,654 3,788,958 3,408,506 4,259,284	198 Months 3,012,173 4,977,421 3,560,542 2,867,654 3,788,958 3,408,506	210 Months 3,012,173 4,977,421 3,560,542 2,867,654 3,788,958	222 Months 3,012,173 4,977,421 3,560,542 2,867,654	234 Months 3,012,173 4,977,421 3,560,542	246 Months 3,012,173 4,977,421	258 Months 3,013,572
2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022	Paid Loss D 138-150 Months 1.000 1.000 1.000 1.000 1.002 1.024 1.000 1.000 1.000	evelopment 150-162 Months 1.004 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Factors: 162-174 Months 1.000 1.000 1.000 1.000 1.001 1.000 1.000	174-186 Months 1.000 1.000 1.000 1.000 1.002 1.000	186-198 Months 1.000 1.000 1.000 1.000 1.000	198-210 Months 1.000 1.000 1.000 1.000	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000	234-246 Months 1.000 1.000	246-258 Months 1.000	258-Ult. Months
Average Dollar-Weighted Averages 3-yr	138-150 Months 1.003	150-162 Months 1.000	162-174 Months 1.000	174-186 Months 1.000	186-198 Months 1.000	198-210 Months 1.000	210-222 Months 1.000	222-234 Months 1.000	234-246 Months 1.000	246-258 Months 1.000	258-Ult. Months
Comparative Factors	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.002	1.002	1.001	1.002
Selected	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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Cumulated

Exposure and Development Method Based on Reported Losses

				Percentage		Incurred	
	Trended	Reported	Loss	of Losses		but not	Ultimate
Accident	Payroll	Losses as	Development	Yet to Be	Program	Reported	Program
Year	(\$00)	of 12/31/22	Factor	Reported	Rate	(IBNR)	Losses
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
2001-2002	4,913,815	5,797,997	1.000	0.000	0.877	0	5,797,997
2002-2003	5,332,137	8,884,428	1.000	0.000	1.341	0	8,884,428
2003-2004	5,435,017	5,715,419	1.000	0.000	1.012	0	5,715,419
2004-2005	5,456,509	3,869,337	1.000	0.000	0.714	0	3,869,337
2005-2006	5,410,979	5,631,680	1.000	0.000	0.885	0	5,631,680
2006-2007	5,498,428	4,547,760	1.000	0.000	0.942	0	4,547,760
2007-2008	5,660,768	5,798,628	1.000	0.000	0.939	0	5,798,628
2008-2009	5,721,853	5,365,088	1.000	0.000	0.816	0	5,365,088
2009-2010	5,434,260	3,874,500	1.000	0.000	0.820	0	3,874,500
2010-2011	4,753,826	3,571,075	1.001	0.001	0.760	3,613	3,574,688
2011-2012	4,536,227	6,293,156	1.003	0.003	1.139	15,500	6,308,656
2012-2013	4,454,630	7,008,017	1.005	0.005	1.388	30,915	7,038,932
2013-2014	4,284,105	4,318,084	1.007	0.007	0.992	29,749	4,347,833
2014-2015	4,328,088	6,737,773	1.012	0.012	1.322	68,661	6,806,434
2015-2016	4,395,985	6,260,691	1.020	0.020	1.415	124,406	6,385,097
2016-2017	4,566,182	8,245,173	1.024	0.023	1.304	136,949	8,382,122
2017-2018	4,681,268	2,625,026	1.030	0.029	1.297	176,077	2,801,103
2018-2019	4,709,274	2,598,995	1.045	0.043	1.364	276,208	2,875,203
2019-2020	4,680,801	2,948,177	1.137	0.120	1.434	805,472	3,753,649
2020-2021	4,621,045	6,173,658	1.454	0.312	1.510	2,177,067	8,350,725
2021-2022	4,756,654	2,654,851	2.608	0.617	1.588	4,660,551	7,315,402
Totals	103,631,851	\$108,919,513				\$8,505,168	\$117,424,681

Notes:

- (A) From \$100K and \$1M Rate Analysis Appendix I, Column (C).
- (B) Provided by the Authority. These losses exclude amounts incurred above the Authority's SIR for each year.
- (C) From \$100K and \$1M Rate Analysis Appendix A, Page 1, Column (F).
- (D) 1 1/(C).
- (E) From \$100K and \$1M Rate Analysis Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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.

Exposure and Development Method Based on Paid Losses

				Percentage			
	Trended	Paid	Loss	of Losses		Incurred	Ultimate
Accident	Payroll	Losses as	Development	Yet to Be	Program	but not	Program
Year	(\$00)	of 12/31/22	Factor	Paid	Rate	Paid	Losses
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
2001-2002	4,913,815	5,797,997	1.000	0.000	0.877	0	5,797,997
2002-2003	5,332,137	8,884,428	1.000	0.000	1.341	0	8,884,428
2003-2004	5,435,017	5,715,419	1.000	0.000	1.012	0	5,715,419
2004-2005	5,456,509	3,869,337	1.000	0.000	0.714	0	3,869,337
2005-2006	5,410,979	5,631,680	1.000	0.000	0.885	0	5,631,680
2006-2007	5,498,428	4,547,760	1.000	0.000	0.942	0	4,547,760
2007-2008	5,660,768	5,798,628	1.000	0.000	0.939	0	5,798,628
2008-2009	5,721,853	5,365,088	1.000	0.000	0.816	0	5,365,088
2009-2010	5,434,260	3,874,500	1.000	0.000	0.820	0	3,874,500
2010-2011	4,753,826	3,571,075	1.001	0.001	0.760	3,613	3,574,688
2011-2012	4,536,227	6,237,994	1.004	0.004	1.139	20,667	6,258,661
2012-2013	4,454,630	6,532,045	1.005	0.005	1.388	30,915	6,562,960
2013-2014	4,284,105	4,318,084	1.009	0.009	0.992	38,248	4,356,332
2014-2015	4,328,088	6,737,773	1.014	0.014	1.322	80,104	6,817,877
2015-2016	4,395,985	6,127,124	1.036	0.035	1.415	217,711	6,344,835
2016-2017	4,566,182	7,573,955	1.067	0.063	1.304	375,121	7,949,076
2017-2018	4,681,268	2,624,026	1.134	0.118	1.297	716,449	3,340,475
2018-2019	4,709,274	2,337,555	1.226	0.184	1.364	1,181,915	3,519,470
2019-2020	4,680,801	1,735,905	1.488	0.328	1.434	2,201,624	3,937,529
2020-2021	4,621,045	3,680,643	2.578	0.612	1.510	4,270,400	7,951,043
2021-2022	4,756,654	597,050	6.667	0.850	1.588	6,420,532	7,017,582
Totals	103,631,851	\$101,558,066				\$15,557,299	\$117,115,365

Notes:

- (A) From \$100K and \$1M Rate Analysis Appendix I, Column (C).
- (B) Provided by the Authority. These losses exclude amounts paid above the Authority's SIR for each year.
- (C) From \$100K and \$1M Rate Analysis Appendix B, Page 1, Column (F).
- (D) 1 1/(C).
- (E) From \$100K and \$1M Rate Analysis Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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.

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)
2001-2002	4,913,815	2,848,456	1.862	5,303,825	1.079	0.580	1.513	0.877
2002-2003	5,332,137	4,646,965	1.808	8,401,713	1.576	0.872	1.538	1.341
2003-2004	5,435,017	3,509,537	1.755	6,159,237	1.133	0.646	1.566	1.012
2004-2005	5,456,509	2,444,607	1.704	4,165,610	0.763	0.448	1.594	0.714
2005-2006	5,410,979	2,947,359	1.654	4,874,932	0.901	0.545	1.623	0.885
2006-2007	5,498,428	3,128,576	1.606	5,024,493	0.914	0.569	1.655	0.942
2007-2008	5,660,768	3,147,259	1.559	4,906,577	0.867	0.556	1.688	0.939
2008-2009	5,721,853	2,711,703	1.513	4,102,807	0.717	0.474	1.722	0.816
2009-2010	5,434,260	2,538,522	1.469	3,729,089	0.686	0.467	1.755	0.820
2010-2011	4,753,826	2,013,526	1.426	2,871,288	0.604	0.424	1.793	0.760
2011-2012	4,536,227	2,825,000	1.385	3,912,625	0.863	0.623	1.828	1.139
2012-2013	4,454,630	3,309,000	1.345	4,450,605	0.999	0.743	1.868	1.388
2013-2014	4,284,105	2,229,780	1.306	2,912,093	0.680	0.520	1.907	0.992
2014-2015	4,328,088	2,938,392	1.267	3,722,943	0.860	0.679	1.947	1.322
2015-2016	4,395,985	3,129,000	1.231	3,851,799	0.876	0.712	1.988	1.415
2016-2017	4,566,182	2,932,000	1.195	3,503,740	0.767	0.642	2.031	1.304
2017-2018	4,681,268	1,857,000	1.160	2,154,120	0.460	0.625	2.075	1.297
2018-2019	4,709,274	1,582,000	1.126	1,781,332	0.378	0.644	2.118	1.364
2019-2020	4,680,801	2,534,000	1.093	2,769,662	0.592	0.663	2.163	1.434
2020-2021	4,621,045	3,128,000	1.061	3,318,808	0.718	0.683	2.211	1.510
2021-2022	4,756,654	3,472,000	1.030	3,576,160	0.752	0.704	2.256	1.588
Total/Avg	103,631,851	\$59,872,682		\$85,493,458	\$0.825			
15/16-19/20	23,033,510	12,034,000		14,060,653	0.610			
17/18-21/22	23,449,042	12,573,000		13,600,082	0.580			
			Selecte	d Limited Rate:	\$0.725			
				Prior:	\$0.750			

Notes:

- (A) From \$100K and \$1M Rate Analysis Appendix I, Column (C).
- (B) Selected average of results from Appendices and .
- (C) From \$100K and \$1M Rate Analysis Appendix E, Page 1, Column (B).
- (D) (B) x (C).
- (E) (D) / (A).
- (F) Selected Limited Rate / (C). For 2016-2017 and prior (B) / (A).
- (G) Based on a Burr 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.

Frequency and Severity Method

	Ultimate	Adjusted	Ultimate
Accident	Program	Ultimate	Program
Year	Severity	Claims	Losses
	(A)	(B)	(C)
2001-2002	\$6,346	679	\$4,308,934
2002-2003	9,469	755	7,149,095
2003-2004	8,765	627	5,495,655
2004-2005	6,883	566	3,895,778
2005-2006	8,512	562	4,783,744
2006-2007	8,972	577	5,176,844
2007-2008	8,026	662	5,313,212
2008-2009	7,913	590	4,668,670
2009-2010	8,603	518	4,456,354
2010-2011	8,636	418	3,609,848
2011-2012	11,927	433	5,164,391
2012-2013	12,510	494	6,179,940
2013-2014	9,686	439	4,252,154
2014-2015	12,248	467	5,719,816
2015-2016	13,522	460	6,220,120
2016-2017	12,204	488	5,955,552
2017-2018	13,087	470	6,150,890
2018-2019	13,838	414	5,728,932
2019-2020	14,632	416	6,086,912
2020-2021	15,482	352	5,449,664
2021-2022	16,348	390	6,375,720
Total		10,777	\$112,142,225

Notes:

(A) From \$100K and \$1M Rate Analysis Appendix D, Page 2, Colu

(B) From \$100K and \$1M Rate Analysis Appendix D, Page 2, Colu

(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.

Frequency and Severity Method

	Ultimate	Adjusted	Ultimate		Trended			
Accident	Limited	Ultimate	Limited	Trend	Limited	Limited	Factor to	Program
Year	Losses	Claims	Severity	Factor	Severity	Severity	SIR	Severity
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
2001-2002	\$2,848,456	679	\$4,195	2.062	\$8,650	\$4,195	1.513	\$6,346
2002-2003	4,646,965	755	6,155	1.993	12,267	6,155	1.538	9,469
2003-2004	3,509,537	627	5,597	1.925	10,774	5,597	1.566	8,765
2004-2005	2,444,607	566	4,319	1.860	8,033	4,319	1.594	6,883
2005-2006	2,947,359	562	5,244	1.797	9,423	5,244	1.623	8,512
2006-2007	3,128,576	577	5,422	1.736	9,413	5,422	1.655	8,972
2007-2008	3,147,259	662	4,754	1.678	7,977	4,754	1.688	8,026
2008-2009	2,711,703	590	4,596	1.621	7,450	4,596	1.722	7,913
2009-2010	2,538,522	518	4,901	1.566	7,675	4,901	1.755	8,603
2010-2011	2,013,526	418	4,817	1.513	7,288	4,817	1.793	8,636
2011-2012	2,825,000	433	6,524	1.461	9,532	6,524	1.828	11,927
2012-2013	3,309,000	494	6,698	1.412	9,458	6,698	1.868	12,510
2013-2014	2,229,780	439	5,079	1.364	6,928	5,079	1.907	9,686
2014-2015	2,938,392	467	6,292	1.318	8,293	6,292	1.947	12,248
2015-2016	3,129,000	460	6,802	1.273	8,659	6,802	1.988	13,522
2016-2017	2,932,000	488	6,008	1.230	7,390	6,008	2.031	12,204
2017-2018	1,857,000	470	3,951	1.189	4,698	6,308	2.075	13,087
2018-2019	1,587,000	414	3,833	1.148	4,400	6,533	2.118	13,838
2019-2020	2,539,000	416	6,103	1.109	6,768	6,763	2.163	14,632
2020-2021	3,128,000	352	8,886	1.071	9,517	7,003	2.211	15,482
2021-2022	3,447,000	390	8,838	1.035	9,147	7,246	2.256	16,348

Average Limited Severity:	\$8,273
Average 16/17-19/20 Limited Severity:	5,814
Average 19/20-21/22 Limited Severity:	8,477
Selected Limited Severity	\$7,500

Selected Limited	Seventy.	$\psi_{1},500$
	Prior:	\$6,200

Notes:

- (A) Selected average of results from Appendices $\ , \ ,$ and $\ .$
- (B) \$100K and \$1M Rate Analysis Appendix D, Page 3, Column (C).

(C) (A) / (B).

(D) From \$100K and \$1M Rate Analysis Appendix E, Page 1, Column (J).

(E) (C) x (D).

- (F) Selected Limited Severity / (D).
- (G) Based on a Burr 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.

Frequency and Severity Method Projection of Ultimate Claims

2001-2002 679 679 491.4 1.382 0.897 2002-2003 755 755 755 533.2 1.416 0.902 2003-2004 627 627 627 543.5 1.154 0.906 2004-2005 566 566 566 545.7 1.037 0.910 2005-2006 562 562 562 541.1 1.039 0.914 2008-2007 577 577 577 549.8 1.049 0.924 2008-2009 590 590 572.2 1.031 0.929 2009-2010 518 519 518 543.4 0.953 0.934 2012-2011 418 419 418 475.4 0.879 0.939 2012-2013 494 495 494.4 455 1.109 0.949 2013-2014 439 441 439 428.4 1.025 0.954 2014-2015 467 470 467 432.8	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)
2002-2003 755 755 755 533.2 1.416 0.902 2003-2004 627 627 627 543.5 1.154 0.906 2004-2005 566 566 566 566 545.7 1.037 0.910 2005-2006 562 562 562 541.1 1.039 0.914 2006-2007 577 577 577 549.8 1.049 0.924 2008-2009 590 590 572.2 1.031 0.929 2009-2010 518 519 518 543.4 0.953 0.934 2012-2013 494 419 418 475.4 0.879 0.939 2013-2014 433 433 433 453.6 0.955 0.944 2014-2015 467 470 467 432.8 1.079 0.959 2015-2016 460 464 460 439.6 1.046 0.964 2016-2017 488 491 488 456.6 1.089 0.970 2017-2018 470 477	2001-2002	679	679	679	491.4	1.382	0.897	1.240
2003-2004 627 627 543.5 1.154 0.906 2004-2005 566 566 566 545.7 1.037 0.910 2005-2006 562 562 562 541.1 1.039 0.914 2006-2007 577 577 577 549.8 1.049 0.924 2008-2009 590 590 590 572.2 1.031 0.929 2009-2010 518 519 518 543.4 0.953 0.934 2010-2011 418 419 418 475.4 0.879 0.939 2011-2012 433 433 433 453.6 0.955 0.944 2012-2013 494 495 494 445.5 1.109 0.949 2013-2014 439 441 439 428.4 1.025 0.954 2014-2015 467 470 467 432.8 1.079 0.969 2014-2017 488 491 488	2002-2003	755	755	755	533.2	1.416	0.902	1.277
2004-2005 566 566 545.7 1.037 0.910 2005-2006 562 562 562 541.1 1.039 0.914 2006-2007 577 577 577 549.8 1.049 0.919 2007-2008 662 662 566.1 1.169 0.924 2008-2009 590 590 572.2 1.031 0.929 2009-2010 518 519 518 543.4 0.953 0.934 2012-2013 494 4495 441.5 1.109 0.949 2013-2014 439 441 439 428.4 1.025 0.954 2014-2015 467 470 467 432.8 1.079 0.959 2015-2016 460 464 460 439.6 1.046 0.964 2016-2017 488 491 488 456.6 1.069 0.970 2018-2019 414 418 414 470.9 0.879 0.980	2003-2004	627	627	627	543.5	1.154	0.906	1.046
2005-2006 562 562 541.1 1.039 0.914 2006-2007 577 577 577 548.8 1.049 0.919 2007-2008 662 662 662 566.1 1.169 0.924 2008-2009 590 590 572.2 1.031 0.929 2009-2010 518 519 518 543.4 0.879 0.939 2011-2011 418 419 418 475.4 0.879 0.939 2012-2013 494 495 494 445.5 1.109 0.949 2013-2014 439 441 439 428.4 1.025 0.954 2014-2015 467 470 467 432.8 1.079 0.959 2015-2016 460 464 460 439.6 1.046 0.964 2016-2017 488 491 488 456.6 1.069 0.970 2017-2018 470 477 470 468.1	2004-2005	566	566	566	545.7	1.037	0.910	0.944
2006-2007 577 577 549.8 1.049 0.919 2007-2008 662 662 566.1 1.169 0.924 2008-2009 590 590 572.2 1.031 0.929 2009-2010 518 519 518 543.4 0.953 0.934 2010-2011 418 419 418 475.4 0.879 0.939 2011-2012 433 433 433 453.6 0.955 0.944 2012-2013 494 495 494 445.5 1.109 0.949 2013-2014 439 441 439 428.4 1.025 0.954 2014-2015 467 470 467 432.8 1.079 0.959 2015-2016 460 464 460 439.6 1.046 0.964 2016-2017 488 491 488 456.6 1.069 0.970 2017-2018 470 477 470 468.1 0.889	2005-2006	562	562	562	541.1	1.039	0.914	0.950
2007-2008 662 662 566.1 1.169 0.924 2008-2009 590 590 590 572.2 1.031 0.929 2009-2010 518 519 518 543.4 0.953 0.934 2010-2011 418 419 418 475.4 0.879 0.939 2011-2012 433 433 433 453.6 0.955 0.944 2012-2013 494 495 494 445.5 1.109 0.949 2013-2014 439 441 439 428.4 1.025 0.954 2014-2015 467 470 467 432.8 1.079 0.959 2015-2016 460 464 460 439.6 1.046 0.964 2016-2017 488 491 488 456.6 1.069 0.970 2017-2018 470 477 470 468.1 0.889 0.985 2020-2021 352 333 352	2006-2007	577	577	577	549.8	1.049	0.919	0.964
2008-2009 590 590 572.2 1.031 0.929 2009-2010 518 519 518 543.4 0.953 0.934 2010-2011 418 419 418 475.4 0.879 0.939 2011-2012 433 433 433 453.6 0.955 0.944 2012-2013 494 495 494 445.5 1.109 0.949 2013-2014 439 441 439 428.4 1.025 0.954 2014-2015 467 470 467 432.8 1.079 0.959 2015-2016 460 464 460 439.6 1.046 0.964 2016-2017 488 491 488 456.6 1.069 0.970 2018-2019 414 418 414 470.9 0.879 0.980 2020-2021 352 333 352 462.1 0.762 0.990 2021-2022 390 311 390	2007-2008	662	662	662	566.1	1.169	0.924	1.080
2009-2010 518 519 518 543.4 0.953 0.934 2010-2011 418 419 418 475.4 0.879 0.939 2011-2012 433 433 433 453.6 0.955 0.944 2012-2013 494 495 494 445.5 1.109 0.949 2013-2014 439 441 439 428.4 1.025 0.954 2014-2015 467 470 467 432.8 1.079 0.959 2015-2016 460 464 460 439.6 1.046 0.964 2016-2017 488 491 488 456.6 1.069 0.970 2017-2018 470 477 470 468.1 1.004 0.975 2018-2019 414 418 414 470.9 0.879 0.980 2019-2020 416 399 416 468.1 0.889 0.985 2020-2021 352 333	2008-2009	590	590	590	572.2	1.031	0.929	0.958
2010-2011 418 419 418 475.4 0.879 0.939 2011-2012 433 433 433 453.6 0.955 0.944 2012-2013 494 495 494 445.5 1.109 0.949 2013-2014 439 441 439 428.4 1.025 0.954 2014-2015 467 470 467 432.8 1.079 0.959 2015-2016 460 464 460 439.6 1.046 0.964 2016-2017 488 491 488 456.6 1.069 0.970 2017-2018 470 477 470 468.1 1.004 0.975 2018-2019 414 418 414 470.9 0.879 0.980 2019-2020 416 399 416 468.1 0.889 0.985 2020-2021 352 333 352 462.1 0.762 0.990 2014-2022 390 311 390 475.7 0.820 0.995 Total 10.777 10.6	2009-2010	518	519	518	543.4	0.953	0.934	0.890
2011-2012 433 433 433 453.6 0.955 0.944 2012-2013 494 495 494 445.5 1.109 0.949 2013-2014 439 441 439 428.4 1.025 0.954 2014-2015 467 470 467 432.8 1.079 0.959 2015-2016 460 464 460 439.6 1.046 0.964 2016-2017 488 491 488 456.6 1.069 0.970 2017-2018 470 477 470 468.1 1.004 0.975 2018-2019 414 418 414 470.9 0.879 0.980 2019-2020 416 399 416 468.1 0.889 0.985 2020-2021 352 333 352 462.1 0.762 0.990 201-2022 390 311 390 475.7 0.820 0.995 Total 10,777 10,688 10,777 10,363.2 0.400 0.400 0.400 16/17-20/21	2010-2011	418	419	418	475.4	0.879	0.939	0.825
2012-2013 494 495 494 445.5 1.109 0.949 2013-2014 439 441 439 428.4 1.025 0.954 2014-2015 467 470 467 432.8 1.079 0.959 2015-2016 460 464 460 439.6 1.046 0.964 2016-2017 488 491 488 456.6 1.069 0.970 2017-2018 470 477 470 468.1 1.004 0.975 2018-2019 414 418 414 470.9 0.879 0.980 2019-2020 416 399 416 468.1 0.889 0.985 2020-2021 352 333 352 462.1 0.762 0.990 2021-2022 390 311 390 475.7 0.820 0.995 Total 10,777 10,688 10,777 10,363.2 10.772 0.820 0.995 16/17-20/21 2,140 2,118 2,140 2,325.9 (H) Selected Frequency: Prior: Prior: </td <td>2011-2012</td> <td>433</td> <td>433</td> <td>433</td> <td>453.6</td> <td>0.955</td> <td>0.944</td> <td>0.902</td>	2011-2012	433	433	433	453.6	0.955	0.944	0.902
2013-2014439441439428.41.0250.9542014-2015467470467432.81.0790.9592015-2016460464460439.61.0460.9642016-2017488491488456.61.0690.9702017-2018470477470468.11.0040.9752018-2019414418414470.90.8790.9802019-2020416399416468.10.8890.9852020-2021352333352462.10.7620.9902021-2022390311390475.70.8200.995Total10,77710,68810,77710,363.216/17-20/212,1402,1182,1402,325.9(H) Selected Frequency: Prior:	2012-2013	494	495	494	445.5	1.109	0.949	1.052
2014-2015 467 470 467 432.8 1.079 0.959 2015-2016 460 464 460 439.6 1.046 0.964 2016-2017 488 491 488 456.6 1.069 0.970 2017-2018 470 477 470 468.1 1.004 0.975 2018-2019 414 418 414 470.9 0.879 0.980 2019-2020 416 399 416 468.1 0.889 0.985 2020-2021 352 333 352 462.1 0.762 0.990 2021-2022 390 311 390 475.7 0.820 0.995 Total 10,777 10,688 10,777 10,363.2 16/17-20/21 2,140 2,318 2,140 2,325.9 (H) Selected Frequency: Prior:	2013-2014	439	441	439	428.4	1.025	0.954	0.978
2015-2016 460 464 460 439.6 1.046 0.964 2016-2017 488 491 488 456.6 1.069 0.970 2017-2018 470 477 470 468.1 1.004 0.975 2018-2019 414 418 414 470.9 0.879 0.980 2019-2020 416 399 416 468.1 0.889 0.985 2020-2021 352 333 352 462.1 0.762 0.990 2021-2022 390 311 390 475.7 0.820 0.995 Total 10,777 10,688 10,777 10,363.2 10,164 2,325.9 (H) Selected Frequency: Prior: Prior: Prior: 10,164 10,164 10,164	2014-2015	467	470	467	432.8	1.079	0.959	1.035
2016-2017 488 491 488 456.6 1.069 0.970 2017-2018 470 477 470 468.1 1.004 0.975 2018-2019 414 418 414 470.9 0.879 0.980 2019-2020 416 399 416 468.1 0.889 0.985 2020-2021 352 333 352 462.1 0.762 0.990 2021-2022 390 311 390 475.7 0.820 0.995 Total 10,777 10,688 10,777 10,363.2 10,118 2,140 2,325.9 (H) Selected Frequency: Prior:	2015-2016	460	464	460	439.6	1.046	0.964	1.008
2017-2018 470 477 470 468.1 1.004 0.975 2018-2019 414 418 414 470.9 0.879 0.980 2019-2020 416 399 416 468.1 0.889 0.985 2020-2021 352 333 352 462.1 0.762 0.990 2021-2022 390 311 390 475.7 0.820 0.995 Total 10,777 10,688 10,777 10,363.2 16/17-20/21 2,140 2,318 2,140 2,325.9 (H) Selected Frequency: Prior:	2016-2017	488	491	488	456.6	1.069	0.970	1.037
2018-2019 414 418 414 470.9 0.879 0.980 2019-2020 416 399 416 468.1 0.889 0.985 2020-2021 352 333 352 462.1 0.762 0.990 2021-2022 390 311 390 475.7 0.820 0.995 Total 10,777 10,688 10,777 10,363.2 16/17-20/21 2,140 2,118 2,140 2,325.9	2017-2018	470	477	470	468.1	1.004	0.975	0.979
2019-2020 416 399 416 468.1 0.889 0.985 2020-2021 352 333 352 462.1 0.762 0.990 2021-2022 390 311 390 475.7 0.820 0.995 Total 10,777 10,688 10,777 10,363.2 (H) Selected Frequency: Prior:	2018-2019	414	418	414	470.9	0.879	0.980	0.861
2020-2021 352 333 352 462.1 0.762 0.990 2021-2022 390 311 390 475.7 0.820 0.995 Total 10,777 10,688 10,777 10,363.2 16/17-20/21 2,140 2,118 2,140 2,325.9 (H) Selected Frequency: Prior:	2019-2020	416	399	416	468.1	0.889	0.985	0.876
2021-2022 390 311 390 475.7 0.820 0.995 Total 10,777 10,688 10,777 10,363.2 10,177 2,140 2,325.9 (H) Selected Frequency: Prior:	2020-2021	352	333	352	462.1	0.762	0.990	0.754
Total 10,777 10,688 10,777 10,363.2 16/17-20/21 2,140 2,118 2,140 2,325.9 (H) Selected Frequency: Prior:	2021-2022	390	311	390	475.7	0.820	0.995	0.816
16/17-20/21 2,140 2,118 2,140 2,325.9 (H) Selected Frequency: Prior:	Total	10,777	10,688	10,777	10,363.2			0.977
(H) Selected Frequency: Prior:	16/17-20/21	2,140	2,118	2,140	2,325.9			0.901
Prior:						(H) Sele	cted Frequency:	0.850
						× /	Prior:	1.100

Program Year:	2022-2023	2023-2024
(I) Trend Factor:	1.000	0.995
(J) Selected Frequency:	0.850	0.846
(K) Est. Payroll (\$000,000):	474.9	489.1
(L) Ultimate Claims:	404	414

Notes:

- (A) From \$100K and \$1M Rate Analysis Appendix D, Page 4, (C).
- (B) From \$100K and \$1M Rate Analysis Appendix D, Page 5, (C).
- (C) Selected from (A) and (B).
- (D) From \$100K and \$1M Rate Analysis Appendix I, Column (C) / 10,000.
- (E) (C) / (D).
- (F) From \$100K and \$1M Rate Analysis Appendix E, Page 1, Column (H).

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

- (G) (E) x (F).
- (H) The selected frequency of 0.850 is based on (G).
- (I) From \$100K and \$1M Rate Analysis Appendix E, Page 1
- (J) (H) x (I).
- (K) From \$100K and \$1M Rate Analysis Appendix I, Column
- (L) (J) x (K).

Frequency and Severity Method Reported Claim Count Development

	Claims	Reported		
	Reported	Claim		Trended
Accident	as of	Development	Ultimate	Claim
Year	12/31/2022	Factor	Claims	Frequency
	(A)	(B)	(C)	(D)
2001-2002	679	1.000	679	1.239
2002-2003	755	1.000	755	1.277
2003-2004	627	1.000	627	1.045
2004-2005	566	1.000	566	0.944
2005-2006	562	1.000	562	0.949
2006-2007	577	1.000	577	0.964
2007-2008	662	1.000	662	1.081
2008-2009	590	1.000	590	0.958
2009-2010	518	1.000	518	0.890
2010-2011	418	1.000	418	0.826
2011-2012	433	1.000	433	0.901
2012-2013	494	1.000	494	1.052
2013-2014	439	1.000	439	0.978
2014-2015	467	1.000	467	1.035
2015-2016	460	1.000	460	1.009
2016-2017	488	1.001	488	1.037
2017-2018	469	1.003	470	0.979
2018-2019	412	1.006	414	0.862
2019-2020	412	1.010	416	0.875
2020-2021	346	1.017	352	0.754
2021-2022	370	1.054	390	0.816
Total	10,744		10,777	0.977

Notes:

(A) Provided by the Authority.

(B) From \$100K and \$1M Rate Analysis Appendix D, Page 6.

(C) (A) x (B).

(D) (C) / [\$100K and \$1M Rate Analysis Appendix D, Page 3, (D)] x [\$100K and \$1M Rate Analysis 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 Authority. 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.

Frequency and Severity Method Closed Claim Count Development

Accident Year	Claims Closed as of 12/31/2022 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2001-2002	679	1.000	679	1.239
2002-2003	755	1.000	755	1.277
2003-2004	627	1.000	627	1.045
2004-2005	566	1.000	566	0.944
2005-2006	562	1.000	562	0.949
2006-2007	577	1.000	577	0.964
2007-2008	662	1.000	662	1.081
2008-2009	590	1.000	590	0.958
2009-2010	518	1.001	519	0.892
2010-2011	418	1.002	419	0.828
2011-2012	432	1.003	433	0.901
2012-2013	493	1.004	495	1.055
2013-2014	439	1.005	441	0.982
2014-2015	467	1.007	470	1.041
2015-2016	459	1.010	464	1.018
2016-2017	484	1.014	491	1.043
2017-2018	468	1.019	477	0.993
2018-2019	407	1.026	418	0.870
2019-2020	383	1.041	399	0.840
2020-2021	299	1.115	333	0.713
2021-2022	189	1.648	311	0.651
Total	10,474		10,688	0.968

Notes:

- (A) Provided by the Authority.
- (B) From \$100K and \$1M Rate Analysis Appendix D, Page 7.
- (C) (A) x (B).
- (D) (C) / [\$100K and \$1M Rate Analysis Appendix D, Page 3, (D)] x [\$100K and \$1M Rate Ai

This exhibit shows the calculation of estimated ultimate claims for each year based on closed claims as provided by the Authority. 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.

PLAN JPA - Liability Program (\$100K and \$1M Analysis) Reported Claim Count Development

		Claims R	eported as	s of:										
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002		686	717	719	707	709	710	710	722	722	723	723	723	723
2002-2003	253	775	796	790	791	792	792	806	807	807	807	807	807	807
2003-2004	206	637	631	652	656	656	668	667	668	666	667	667	667	667
2004-2005	244	619	720	721	723	728	729	730	730	730	731	731	731	731
2005-2006	192	669	695	697	706	708	710	710	711	711	711	711	711	711
2006-2007	234	660	677	696	696	700	701	702	702	702	702	702	703	703
2007-2008	242	659	803	809	814	814	814	814	814	814	814	810	814	814
2008-2009	243	693	716	721	724	724	724	724	724	724	709	724	724	724
2009-2010	238	632	647	646	646	646	646	646	647	647	647	647	647	647
2010-2011	168	494	505	506	508	509	510	510	510	510	513	514	514	
2011-2012	129	452	465	467	470	471	471	470	470	470	470	470		
2012-2013	169	499	520	523	523	524	525	527	528	528	526			
2013-2014	144	455	467	471	473	466	466	466	467	460				
2014-2015	161	489	510	514	502	503	504	512	492					
2015-2016	170	487	502	490	492	492	497	460						
2016-2017	108	501	508	511	512	512	488							
2017-2018	152	473	481	483	489	469								
2018-2019	123	394	421	430	412									
2019-2020	144	413	431	412										
2020-2021	124	353	346											
2021-2022	151	370												
2022-2023	116													
		Reported	Claim Co	unt Devel	opment Fa	actors:								
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174

	0-10	10-30	30-42	42-04	54-00	00-70	10-90	90-102	102-114	114-120	120-130	130-130	100-102	102-174
	Months	Months	Months	Months	Months	Months	Months	Months						
2001-2002		1.045	1.003	0.983	1.003	1.001	1.000	1.017	1.000	1.001	1.000	1.000	1.000	1.000
2002-2003	3.063	1.027	0.992	1.001	1.001	1.000	1.018	1.001	1.000	1.000	1.000	1.000	1.000	1.000
2003-2004	3.092	0.991	1.033	1.006	1.000	1.018	0.999	1.001	0.997	1.002	1.000	1.000	1.000	1.000
2004-2005	2.537	1.163	1.001	1.003	1.007	1.001	1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.000
2005-2006	3.484	1.039	1.003	1.013	1.003	1.003	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000
2006-2007	2.821	1.026	1.028	1.000	1.006	1.001	1.001	1.000	1.000	1.000	1.000	1.001	1.000	1.001
2007-2008	2.723	1.219	1.007	1.006	1.000	1.000	1.000	1.000	1.000	1.000	0.995	1.005	1.000	1.000
2008-2009	2.852	1.033	1.007	1.004	1.000	1.000	1.000	1.000	1.000	0.979	1.021	1.000	1.000	1.000
2009-2010	2.655	1.024	0.998	1.000	1.000	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	
2010-2011	2.940	1.022	1.002	1.004	1.002	1.002	1.000	1.000	1.000	1.006	1.002	1.000		
2011-2012	3.504	1.029	1.004	1.006	1.002	1.000	0.998	1.000	1.000	1.000	1.000			
2012-2013	2.953	1.042	1.006	1.000	1.002	1.002	1.004	1.002	1.000	0.996				
2013-2014	3.160	1.026	1.009	1.004	0.985	1.000	1.000	1.002	0.985					
2014-2015	3.037	1.043	1.008	0.977	1.002	1.002	1.016	0.961						
2015-2016	2.865	1.031	0.976	1.004	1.000	1.010	0.926							
2016-2017	4.639	1.014	1.006	1.002	1.000	0.953								
2017-2018	3.112	1.017	1.004	1.012	0.959									
2018-2019	3.203	1.069	1.021	0.958										
2019-2020	2.868	1.044	0.956											
2020-2021	2.847	0.980												
2021-2022	2.450													
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months						
Average	3.040	1.044	1.003	0.999	0.998	1.000	0.998	0.999	0.999	0.999	1.002	1.001	1.000	1.000
Claim-Weighted														
Averages	0 744	4 000	0.004	0.000	0.007	0.000	0.000	0.000	0.005	4 004	4 004	1 000	4 000	4 000
3-yr	2.711	1.033	0.994	0.992	0.987	0.988	0.980	0.988	0.995	1.001	1.001	1.000	1.000	1.000
4-yi Comparative	2.025	1.020	0.997	0.995	0.990	0.991	0.900	0.991	0.990	1.000	1.007	1.001	1.000	1.000
Factors	2.653	1,144	1.017	1.010	1.006	1.004	1.005	1.004	1.003	1.003	1.003	1.002	1.003	1.002
Prior	3.063	1.040	1.007	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Soloctod	2 000	1.036	1 007	1 004	1 003	1 002	1 001	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Gelecieu	2.909	1.030	1.007	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	3.066	1.054	1.017	1.010	1.006	1.003	52 1.001	1.000	1.000	1.000	1.000	1.000	1.000	70.000

PLAN JPA - Liability Program (\$100K and \$1M Analysis) Closed Claim Development

		Claims Cl	osed as o	<u>f:</u>										
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002		474	664	700	698	705	707	709	721	721	722	723	722	723
2002-2003	44	536	734	766	783	789	791	805	805	805	806	806	806	806
2003-2004	36	465	585	636	648	649	662	663	666	666	667	667	667	667
2004-2005	54	414	668	706	712	726	727	730	730	730	730	731	731	731
2005-2006	50	487	637	672	692	701	707	707	707	710	711	711	711	711
2006-2007	83	518	632	681	687	692	699	701	702	702	702	702	703	702
2007-2008	94	480	742	786	800	808	811	813	814	814	814	810	814	814
2008-2009	89	509	664	704	712	718	723	724	724	724	709	724	724	724
2009-2010	45	464	599	631	643	644	645	645	647	647	647	647	647	647
2010-2011	46	331	470	497	503	507	509	509	510	510	513	514	514	
2011-2012	27	285	421	451	459	467	470	469	469	469	469	469		
2012-2013	36	332	471	506	515	518	524	526	527	527	525			
2013-2014	28	304	430	456	467	464	465	466	467	460				
2014-2015	23	354	457	491	492	501	504	512	492					
2015-2016	43	336	450	470	481	488	496	459						
2016-2017	19	316	465	491	499	506	484							
2017-2018	22	310	445	473	486	468								
2018-2019	19	234	366	411	407									
2019-2020	36	227	363	383										
2020-2021	18	209	299											
2021-2022	41	189												
2022-2023	23													
Closed Claim Count Development Factors														
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months

					monuro	monure			monure		monure		monuro	
2001-2002		1.401	1.054	0.997	1.010	1.003	1.003	1.017	1.000	1.001	1.001	0.999	1.001	1.000
2002-2003	12.182	1.369	1.044	1.022	1.008	1.003	1.018	1.000	1.000	1.001	1.000	1.000	1.000	1.000
2003-2004	12.917	1.258	1.087	1.019	1.002	1.020	1.002	1.005	1.000	1.002	1.000	1.000	1.000	1.000
2004-2005	7.667	1.614	1.057	1.008	1.020	1.001	1.004	1.000	1.000	1.000	1.001	1.000	1.000	1.000
2005-2006	9.740	1.308	1.055	1.030	1.013	1.009	1.000	1.000	1.004	1.001	1.000	1.000	1.000	1.000
2006-2007	6.241	1.220	1.078	1.009	1.007	1.010	1.003	1.001	1.000	1.000	1.000	1.001	0.999	1.001
2007-2008	5.106	1.546	1.059	1.018	1.010	1.004	1.002	1.001	1.000	1.000	0.995	1.005	1.000	1.000
2008-2009	5.719	1.305	1.060	1.011	1.008	1.007	1.001	1.000	1.000	0.979	1.021	1.000	1.000	1.000
2009-2010	10.311	1.291	1.053	1.019	1.002	1.002	1.000	1.003	1.000	1.000	1.000	1.000	1.000	
2010-2011	7.196	1.420	1.057	1.012	1.008	1.004	1.000	1.002	1.000	1.006	1.002	1.000		
2011-2012	10.556	1.477	1.071	1.018	1.017	1.006	0.998	1.000	1.000	1.000	1.000			
2012-2013	9.222	1.419	1.074	1.018	1.006	1.012	1.004	1.002	1.000	0.996				
2013-2014	10.857	1.414	1.060	1.024	0.994	1.002	1.002	1.002	0.985					
2014-2015	15.391	1.291	1.074	1.002	1.018	1.006	1.016	0.961						
2015-2016	7.814	1.339	1.044	1.023	1.015	1.016	0.925							
2016-2017	16.632	1.472	1.056	1.016	1.014	0.957								
2017-2018	14.091	1.435	1.063	1.027	0.963									
2018-2019	12.316	1.564	1.123	0.990										
2019-2020	6.306	1.599	1.055											
2020-2021	11.611	1.431												
2021-2022	4.610													
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	9.824	1.409	1.064	1.015	1.007	1.004	0.999	1.000	0.999	0.999	1.002	1.001	1.000	1.000
Claim-Weighted														
Averages	6 570	1 501	1 070	1 0 1 0	0.007	0 002	0.001	0 000	0.005	1 001	1 001	1 000	1 000	1 000
3-yr	0.079	1.534	1.079	1.012	1 003	0.993	0.901	0.900	0.995	1.001	1.001	1.000	1.000	1.000
Comparative	7.555	1.505	1.075	1.015	1.005	0.335	0.307	0.331	0.330	1.000	1.007	1.001	1.000	1.000
Factors	3.720	1.528	1.096	1.038	1.019	1.011	1.009	1.008	1.008	1.006	1.004	1.005	1.004	1.004
Prior	10.093	1.466	1.068	1.018	1.007	1.005	1.004	1.003	1.002	1.001	1.001	1.001	1.001	1.001
Selected	8.508	1.478	1.071	1.015	1.007	1.005	1.004	1.003	1.002	1.001	1.001	1.001	1.001	1.001
Cumulated	14.021	1.648	1.115	1.041	1.026	1.019	63 1.014	1.010	1.007	1.005	1.004	1.003	1.002	7 1 .001

Loss Trend Factors

	Factor to	Factor to	Factor to	Factor to	Factor to	Factor to	Factor to	Factor to	Factor to
Benefit	2022-2023	2023-2024	2024-2025	2025-2026	2022-2023	2023-2024	2024-2025	2025-2026	2022-2023
Level	Loss Rate	Loss Rate	Loss Rate	Loss Rate	Frequency	Frequency	Frequency	Frequency	Severity
Factor	Level	Level	Level	Level	Level	Level	Level	Level	Level
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1.000	1.862	1.918	1.976	2.035	0.897	0.893	0.888	0.884	2.062
1.000	1.808	1.862	1.918	1.976	0.902	0.897	0.892	0.888	1.993
1.000	1.755	1.808	1.862	1.918	0.906	0.901	0.896	0.892	1.925
1.000	1.704	1.755	1.808	1.862	0.910	0.905	0.901	0.896	1.860
1.000	1.654	1.704	1.755	1.808	0.914	0.909	0.905	0.900	1.797
1.000	1.606	1.654	1.704	1.755	0.919	0.914	0.910	0.905	1.736
1.000	1.559	1.606	1.654	1.704	0.924	0.919	0.915	0.910	1.678
1.000	1.513	1.559	1.606	1.654	0.929	0.924	0.920	0.915	1.621
1.000	1.469	1.514	1.559	1.606	0.934	0.929	0.925	0.920	1.566
1.000	1.426	1.469	1.514	1.559	0.939	0.934	0.930	0.925	1.513
1.000	1.385	1.427	1.470	1.514	0.944	0.939	0.935	0.930	1.461
1.000	1.345	1.385	1.427	1.470	0.949	0.944	0.940	0.935	1.412
1.000	1.306	1.345	1.385	1.427	0.954	0.949	0.945	0.940	1.364
1.000	1.267	1.305	1.345	1.385	0.959	0.955	0.950	0.945	1.318
1.000	1.231	1.268	1.306	1.345	0.964	0.960	0.955	0.950	1.273
1.000	1.195	1.231	1.268	1.306	0.970	0.965	0.960	0.955	1.230
1.000	1.160	1.195	1.231	1.268	0.975	0.970	0.965	0.960	1.189
1.000	1.126	1.160	1.195	1.231	0.980	0.975	0.970	0.965	1.148
1.000	1.093	1.126	1.160	1.195	0.985	0.980	0.975	0.970	1.109
1.000	1.061	1.093	1.126	1.160	0.990	0.985	0.980	0.975	1.071
1.000	1.030	1.061	1.093	1.126	0.995	0.990	0.985	0.980	1.035
1.000	1.000	1.030	1.061	1.093	1.000	0.995	0.990	0.985	1.000
1.000		1.000	1.030	1.061		1.000	0.995	0.990	
1.000			1.000	1.030			1.000	0.995	
1.000				1.000				1.000	
	Benefit Level Factor (A) 1.000	Factor to Benefit 2022-2023 Level Loss Rate Factor Level (A) (B) 1.000 1.862 1.000 1.862 1.000 1.755 1.000 1.654 1.000 1.654 1.000 1.654 1.000 1.513 1.000 1.469 1.000 1.385 1.000 1.345 1.000 1.267 1.000 1.267 1.000 1.160 1.000 1.126 1.000 1.033 1.000 1.030 1.000 1.030 1.000 1.030 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 <tr t=""> 1.000 </tr>	Factor toFactor toBenefit2022-20232023-2024LevelLoss RateLoss RateFactorLevelLevel(A)(B)(C)1.0001.8621.9181.0001.8081.8621.0001.7551.8081.0001.6541.7041.0001.6541.7041.0001.6541.7041.0001.6541.7041.0001.6541.7041.0001.5591.6061.0001.5131.5591.0001.4691.5141.0001.3851.4271.0001.3061.3451.0001.2671.3051.0001.2311.2681.0001.1601.1951.0001.0331.1261.0001.0331.0611.0001.0301.0611.0001.0301.0611.0001.0001.0301.0001.0001.0001.0001.000	Factor to BenefitFactor to 2022-2023Factor to 2023-2024Factor to 2024-2025Level LevelLoss RateLoss RateLoss RateLoss RateFactor (A)LevelLevelLevelLevel(A)(B)(C)(D)1.0001.8621.9181.9761.0001.8621.9181.9761.0001.7551.8081.8621.0001.7551.8081.8621.0001.6541.7041.7551.0001.6541.7041.7551.0001.6541.6641.7041.0001.5131.5591.6061.0001.4691.5141.5591.0001.4261.4691.5141.0001.3451.3851.4271.0001.2671.3051.3451.0001.2311.2681.3061.0001.1601.1951.2311.0001.0301.0611.0931.0001.0301.0611.0931.0001.0301.0611.0931.0001.0301.0611.0931.0001.0301.0611.0931.0001.0301.0611.0931.0001.0301.0611.0931.0001.0301.0611.0931.0001.0301.0611.0931.0001.0301.0611.0301.0001.0001.000 </td <td>Factor to BenefitFactor to 2022-2023Factor to 2023-2024Factor to 2024-2025Factor to 2025-2026Level LevelLoss RateLoss RateLoss RateLoss RateFactor (A)LevelLevelLevelLevel(B)(C)(D)(E)1.0001.8621.9181.9761.0001.8621.9181.9761.0001.7551.8081.8621.9181.0001.7551.8081.8621.9181.0001.6541.7041.7551.8081.0001.6541.7041.7551.8081.0001.6541.7041.7551.8081.0001.5131.5591.6061.6541.0001.5131.5591.6061.6541.0001.4691.5141.5591.6061.0001.3851.4271.4701.5141.0001.3451.3851.4271.4701.0001.2671.3051.3451.3851.0001.2311.2681.3061.3451.0001.1601.1951.2311.2681.0001.0301.0611.0931.1261.0001.0301.0611.0931.1261.0001.0301.0611.0931.1261.0001.0301.0611.0931.0611.0001.0301.0611.0931.1261.0001.0301.0611.0931.06</td> <td>Factor to Factor to Factor to Factor to Factor to Factor to Factor to State Loss Rate Level Loss Rate NOD NOD NOD NOD NOD NOD NOD NOD NOD NOD</td> <td>Factor to Factor to Factor to Factor to Factor to Factor to Factor to Benefit 2022-2023 2023-2024 2024-2025 2025-2026 2022-2023 2023-2024 Level Los L</td> <td>Factor to Factor to Factor to Factor to Factor to Factor to Factor to Benefit 2022-2023 2023-2024 2024-2025 2025-2026 2022-2023 2023-2024 2024-2025 Level Lou Lou Lou Lou Lou Lou<!--</td--><td>Factor to Factor to <!--</td--></td></td>	Factor to BenefitFactor to 2022-2023Factor to 2023-2024Factor to 2024-2025Factor to 2025-2026Level LevelLoss RateLoss RateLoss RateLoss RateFactor (A)LevelLevelLevelLevel(B)(C)(D)(E)1.0001.8621.9181.9761.0001.8621.9181.9761.0001.7551.8081.8621.9181.0001.7551.8081.8621.9181.0001.6541.7041.7551.8081.0001.6541.7041.7551.8081.0001.6541.7041.7551.8081.0001.5131.5591.6061.6541.0001.5131.5591.6061.6541.0001.4691.5141.5591.6061.0001.3851.4271.4701.5141.0001.3451.3851.4271.4701.0001.2671.3051.3451.3851.0001.2311.2681.3061.3451.0001.1601.1951.2311.2681.0001.0301.0611.0931.1261.0001.0301.0611.0931.1261.0001.0301.0611.0931.1261.0001.0301.0611.0931.0611.0001.0301.0611.0931.1261.0001.0301.0611.0931.06	Factor to State Loss Rate Level Loss Rate NOD NOD NOD NOD NOD NOD NOD NOD NOD NOD	Factor to Benefit 2022-2023 2023-2024 2024-2025 2025-2026 2022-2023 2023-2024 Level Los L	Factor to Benefit 2022-2023 2023-2024 2024-2025 2025-2026 2022-2023 2023-2024 2024-2025 Level Lou Lou Lou Lou Lou Lou </td <td>Factor to Factor to <!--</td--></td>	Factor to Factor to </td

Notes:

(A) No benefit level adjustment applied.

- (B) (E) (A) adjusted for a 3.0% annual loss rate trend.
- (F) (I) (A) adjusted for a -0.5% annual frequency trend.
 - (J) (A) adjusted for a 3.5% annual severity trend.

This exhibit shows the calculation of the ways in which we expect claims costs to have changed over the past twenty years due to changes in inflation.
Residual Trend Factors

	Initial					
Accident Year	Estimate of Ultimate Limited Losses	Ultimate Reported Claims	BLF	Adjusted Limited Severity	Trended Payroll (\$00)	Ultimate Frequency
	(A)	(B)	(C)	(D)	(E)	(F)
2001-2002	\$2,848,456	679	1.000	4,195	4,913,815	1.382
2002-2003	4,646,965	755	1.000	6,155	5,332,137	1.416
2003-2004	3,509,537	627	1.000	5,597	5,435,017	1.154
2004-2005	2,444,607	566	1.000	4,319	5,456,509	1.037
2005-2006	2,947,359	562	1.000	5,244	5,410,979	1.039
2006-2007	3,128,576	577	1.000	5,422	5,498,428	1.049
2007-2008	3,147,259	662	1.000	4,754	5,660,768	1.169
2008-2009	2,711,703	590	1.000	4,596	5,721,853	1.031
2009-2010	2,538,522	518	1.000	4,901	5,434,260	0.953
2010-2011	2,013,526	418	1.000	4,817	4,753,826	0.879
2011-2012	2,825,000	433	1.000	6,524	4,536,227	0.955
2012-2013	3,309,000	494	1.000	6,698	4,454,630	1.109
2013-2014	2,229,780	439	1.000	5,079	4,284,105	1.025
2014-2015	2,938,392	467	1.000	6,292	4,328,088	1.079
2015-2016	3,129,000	460	1.000	6,802	4,395,985	1.046
2016-2017	2,932,000	488	1.000	6,008	4,566,182	1.069
2017-2018	1,857,000	470	1.000	3,951	4,681,268	1.004
2018-2019	1,582,000	414	1.000	3,821	4,709,274	0.879
2019-2020	2,534,000	416	1.000	6,091	4,680,801	0.889
2020-2021	3,128,000	352	1.000	8,886	4,621,045	0.762
2021-2022	3,472,000	390	1.000	8,903	4,756,654	0.820

<u>Severity T</u>	rend Factors	Frequency Trend Factors
2010-2011 through 2019-2020	0.978	0.995
2011-2012 through 2020-2021	0.995	0.973
2016-2017 through 2020-2021	1.129	0.923
Prior	1.025	1.005
Default	1.030	0.975
Selected Residual Trend	1.035	0.995

Notes:

(A) Selected average of results from \$100K and \$1M Rate Analysis Appendix A and \$100K

(B) \$100K and \$1M Rate Analysis Appendix D, Page 3, Column (C).

(C) \$100K and \$1M Rate Analysis Appendix E, Page 1, (A).

(D) (A) x (C) / (B).

(E) From \$100K and \$1M Rate Analysis Appendix I, Column (C).

(F) (B) / (E) x 10,000.

Calculation of Discount Factors

Payment	Payment	Return on	Discounted	Undiscounted	Discount
Year	Pattern	Investment	Reserves	Reserves	Factor
(A)	(B)	(C)	(D)	(E)	(F)
22	0.0%	2.0%	0.000	0.000	1.000
21	0.0%	2.0%	0.000	0.000	1.000
20	0.0%	2.0%	0.000	0.000	1.000
19	0.0%	2.0%	0.000	0.000	1.000
18	0.0%	2.0%	0.000	0.000	1.000
17	0.0%	2.0%	0.000	0.000	1.000
16	0.0%	2.0%	0.000	0.000	1.000
15	0.0%	2.0%	0.000	0.000	1.000
14	0.1%	2.0%	0.001	0.001	0.990
13	0.2%	2.0%	0.003	0.003	0.984
12	0.2%	2.0%	0.005	0.005	0.975
11	0.3%	2.0%	0.008	0.008	0.968
10	0.5%	2.0%	0.012	0.013	0.965
9	1.4%	2.0%	0.026	0.027	0.969
8	2.6%	2.0%	0.051	0.053	0.970
7	4.4%	2.0%	0.094	0.097	0.969
6	6.4%	2.0%	0.156	0.162	0.966
5	10.7%	2.0%	0.259	0.269	0.964
4	21.4%	2.0%	0.466	0.483	0.965
3	25.6%	2.0%	0.711	0.739	0.961
2	18.3%	2.0%	0.878	0.922	0.952
1	7.8%	2.0%	0.938	1.000	0.938
		(G) Discount Factor	for Future Funding:	2022-2023	0.947

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 \$100K and \$1M Rate Analysis Appendix B, Page 2.

2023-2024

0.947

- (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, 87.8% = [71.1% / 1.020] + [18.3% / (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).
- (G) (F) at year 1, with interest accumulated for six months. We assume that the required funding is deposited at the middle of the first year.

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 0.95, on a discounted basis, \$0.95 must be budgeted for every \$1 that will actually be paid on claims that will be incurred in the next fiscal year.

Confidence Level Table

Probability	Projected Losses	Outstanding Losses
95%	1.820	1.550
90%	1.577	1.378
85%	1.431	1.284
80%	1.321	1.214
75%	1.232	1.159
70%	1.157	1.112
65%	1.091	1.072
60%	1.031	1.034
55%	0.977	1.001
50%	0.925	0.969
45%	0.876	0.938
40%	0.827	0.908
35%	0.780	0.878
30%	0.732	0.849
25%	0.682	0.817

To read table:	For the above retention, there is a 90% chance
	that final loss settlements will be less than
	1.577 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.

Incurred Losses as of 12/31/22

										Incurred
		Additions	Subtractions			Incurred	Incurred	Incurred	Incurred	Capped at
Accident	Unlimited	to	from	Adjusted	Incurred	Over	Capped at	\$100,000	Capped at	SIR &
Year	Incurred	Losses	Losses	Incurred	Over SIR	\$100,000	\$100,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
2001-2002	\$7,250,903	\$0	\$0	\$7,250,903	\$1,452,906	\$4,402,447	\$2,848,456	\$2,949,541	\$5,797,997	\$5,797,997
2002-2003	12,459,622	0	0	12,459,622	3,575,194	7,812,657	4,646,965	4,237,463	8,884,428	8,884,428
2003-2004	5,715,419	0	0	5,715,419	0	2,205,881	3,509,537	2,205,881	5,715,419	5,715,419
2004-2005	3,909,704	0	0	3,909,704	40,367	1,465,098	2,444,607	1,424,731	3,869,337	3,869,337
2005-2006	7,274,863	0	0	7,274,863	1,643,182	4,327,503	2,947,359	2,684,321	5,631,680	5,631,680
2006-2007	4,547,760	0	0	4,547,760	0	1,419,184	3,128,576	1,419,184	4,547,760	4,547,760
2007-2008	5,982,106	0	0	5,982,106	183,478	2,834,846	3,147,259	2,651,369	5,798,628	5,798,628
2008-2009	5,485,923	0	0	5,485,923	120,835	2,774,220	2,711,703	2,653,385	5,365,088	5,365,088
2009-2010	3,874,500	0	0	3,874,500	0	1,335,978	2,538,522	1,335,978	3,874,500	3,874,500
2010-2011	3,571,075	0	0	3,571,075	0	1,557,549	2,013,526	1,557,549	3,571,075	3,571,075
2011-2012	6,315,380	0	0	6,315,380	22,224	3,490,733	2,824,647	3,468,509	6,293,156	6,293,156
2012-2013	7,108,017	0	0	7,108,017	100,000	3,799,416	3,308,601	3,699,416	7,008,017	7,008,017
2013-2014	9,703,564	0	0	9,703,564	5,385,480	7,473,784	2,229,780	2,088,304	4,318,084	4,318,084
2014-2015	7,286,913	0	0	7,286,913	549,140	4,348,520	2,938,392	3,799,381	6,737,773	6,737,773
2015-2016	8,501,264	0	0	8,501,264	2,240,574	5,375,520	3,125,745	3,134,946	6,260,691	6,260,691
2016-2017	36,062,292	0	0	36,062,292	27,817,119	33,136,572	2,925,720	5,319,453	8,245,173	8,245,173
2017-2018	2,625,026	0	0	2,625,026	0	775,051	1,849,975	775,051	2,625,026	2,625,026
2018-2019	2,598,995	0	0	2,598,995	0	1,028,207	1,570,788	1,028,207	2,598,995	2,598,995
2019-2020	2,948,177	0	0	2,948,177	0	456,550	2,491,627	456,550	2,948,177	2,948,177
2020-2021	15,350,458	0	0	15,350,458	9,176,800	12,449,083	2,901,375	3,272,283	6,173,658	6,173,658
2021-2022	2,654,851	0	0	2,654,851	0	569,442	2,085,409	569,442	2,654,851	2,654,851
2022-2023	113,903	0	0	113,903	0	0	113,903	0	113,903	113,903
Total	\$161,340,714	\$0	\$0	\$161,340,714	\$52,307,298	\$103,038,242	\$58,302,472	\$50,730,944	\$109,033,416	\$109,033,416

Notes:

(A) Years are 7/1 to 6/30.

(B) Provided by the Authority.

(C) (D)

(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 \$100K and \$1M Rate Analysis Not Included.

Paid Losses as of 12/31/22

										Paid
		Additions	Subtractions			Paid	Paid	Paid	Paid	Capped at
Accident	Unlimited	to	from	Adjusted	Paid	Over	Capped at	\$100,000	Capped at	SIR &
Year	Paid	Losses	Losses	Paid	Over SIR	\$100,000	\$100,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
2001-2002	\$7,250,903	\$0	\$0	\$7,250,903	\$1,452,906	\$4,402,447	\$2,848,456	\$2,949,541	\$5,797,997	\$5,797,997
2002-2003	12,459,622	0	0	12,459,622	3,575,194	7,812,657	4,646,965	4,237,463	8,884,428	8,884,428
2003-2004	5,715,419	0	0	5,715,419	0	2,205,881	3,509,537	2,205,881	5,715,419	5,715,419
2004-2005	3,909,704	0	0	3,909,704	40,367	1,465,098	2,444,607	1,424,731	3,869,337	3,869,337
2005-2006	7,274,863	0	0	7,274,863	1,643,182	4,327,503	2,947,359	2,684,321	5,631,680	5,631,680
2006-2007	4,547,760	0	0	4,547,760	0	1,419,184	3,128,576	1,419,184	4,547,760	4,547,760
2007-2008	5,982,106	0	0	5,982,106	183,478	2,834,846	3,147,259	2,651,369	5,798,628	5,798,628
2008-2009	5,485,923	0	0	5,485,923	120,835	2,774,220	2,711,703	2,653,385	5,365,088	5,365,088
2009-2010	3,874,500	0	0	3,874,500	0	1,335,978	2,538,522	1,335,978	3,874,500	3,874,500
2010-2011	3,571,075	0	0	3,571,075	0	1,557,549	2,013,526	1,557,549	3,571,075	3,571,075
2011-2012	6,260,218	0	0	6,260,218	22,224	3,435,571	2,824,647	3,413,347	6,237,994	6,237,994
2012-2013	6,532,045	0	0	6,532,045	0	3,223,444	3,308,601	3,223,444	6,532,045	6,532,045
2013-2014	9,703,564	0	0	9,703,564	5,385,480	7,473,784	2,229,780	2,088,304	4,318,084	4,318,084
2014-2015	7,286,913	0	0	7,286,913	549,140	4,348,520	2,938,392	3,799,381	6,737,773	6,737,773
2015-2016	8,367,697	0	0	8,367,697	2,240,574	5,241,953	3,125,745	3,001,379	6,127,124	6,127,124
2016-2017	34,766,444	0	0	34,766,444	27,192,489	31,883,155	2,883,289	4,690,666	7,573,955	7,573,955
2017-2018	2,624,026	0	0	2,624,026	0	775,051	1,848,975	775,051	2,624,026	2,624,026
2018-2019	2,337,555	0	0	2,337,555	0	791,792	1,545,763	791,792	2,337,555	2,337,555
2019-2020	1,735,905	0	0	1,735,905	0	19,385	1,716,520	19,385	1,735,905	1,735,905
2020-2021	12,786,696	0	0	12,786,696	9,106,053	11,045,065	1,741,631	1,939,012	3,680,643	3,680,643
2021-2022	597,050	0	0	597,050	0	0	597,050	0	597,050	597,050
2022-2023	19,868	0	0	19,868	0	0	19,868	0	19,868	19,868
Total	\$153,089,855	\$0	\$0	\$153,089,855	\$51,511,921	\$98,373,085	\$54,716,770	\$46,861,164	\$101,577,934	\$101,577,934

Notes:

(A) Years are 7/1 to 6/30.

(B) Provided by the Authority.

(C)

(D)

(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 \$100K and \$1M Rate Analysis Not Included.

Case Reserves as of 12/31/22

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)
2001-2002	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2002-2003	0	0	0	0	0	0	0	0	0	0
2003-2004	0	0	0	0	0	0	0	0	0	0
2004-2005	0	0	0	0	0	0	0	0	0	0
2005-2006	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0
2009-2010	0	0	0	0	0	0	0	0	0	0
2010-2011	0	0	0	0	0	0	0	0	0	0
2011-2012	55,162	0	0	55,162	0	55,162	0	55,162	55,162	55,162
2012-2013	575,972	0	0	575,972	100,000	575,972	0	475,972	475,972	475,972
2013-2014	0	0	0	0	0	0	0	0	0	0
2014-2015	0	0	0	0	0	0	0	0	0	0
2015-2016	133,567	0	0	133,567	0	133,567	0	133,567	133,567	133,567
2016-2017	1,295,848	0	0	1,295,848	624,630	1,253,417	42,432	628,787	671,218	671,218
2017-2018	1,000	0	0	1,000	0	0	1,000	0	1,000	1,000
2018-2019	261,441	0	0	261,441	0	236,415	25,026	236,415	261,441	261,441
2019-2020	1,212,272	0	0	1,212,272	0	437,165	775,107	437,165	1,212,272	1,212,272
2020-2021	2,563,762	0	0	2,563,762	70,747	1,404,018	1,159,744	1,333,271	2,493,015	2,493,015
2021-2022	2,057,800	0	0	2,057,800	0	569,442	1,488,358	569,442	2,057,800	2,057,800
2022-2023	94,036	0	0	94,036	0	0	94,036	0	94,036	94,036
Total	\$8,250,859	\$0	\$0	\$8,250,859	\$795,377	\$4,665,157	\$3,585,702	\$3,869,780	\$7,455,482	\$7,455,482

Notes:

(A) Years are 7/1 to 6/30.

(B) \$100K and \$1M Rate Analysis Appendix H, Page 1, Column (B) - \$100K and \$1M Rate Analysis Appendix H, Page 2, Column (B).

(C) \$100K and \$1M Rate Analysis Appendix H, Page 1, Column (C) - \$100K and \$1M Rate Analysis Appendix H, Page 2, Column (C).

(D) \$100K and \$1M Rate Analysis Appendix H, Page 1, Column (D) - \$100K and \$1M Rate Analysis Appendix H, 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 \$100K and \$1M Rate Analysis Not Included.

e aggregate stop loss. See \$100K

Claim Counts as of 12/31/22

		Additions to	Subtractions	Adjusted		Additions to	Subtractions from	Adjusted		Adjusted
Accident	Reported	Reported	Reported	Reported	Closed	Closed	Closed	Closed	Onen	Open
Year	Claims	Claims	Claims	Claims	Claims	Claims	Claims	Claims	Claims	Claims
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
2001-2002	679	0	0	679	679	0	0	679	0	0
2002-2003	755	0	0	755	755	0	0	755	0	0
2003-2004	627	0	0	627	627	0	0	627	0	0
2004-2005	566	0	0	566	566	0	0	566	0	0
2005-2006	562	0	0	562	562	0	0	562	0	0
2006-2007	577	0	0	577	577	0	0	577	0	0
2007-2008	662	0	0	662	662	0	0	662	0	0
2008-2009	590	0	0	590	590	0	0	590	0	0
2009-2010	518	0	0	518	518	0	0	518	0	0
2010-2011	418	0	0	418	418	0	0	418	0	0
2011-2012	433	0	0	433	432	0	0	432	1	1
2012-2013	494	0	0	494	493	0	0	493	1	1
2013-2014	439	0	0	439	439	0	0	439	0	0
2014-2015	467	0	0	467	467	0	0	467	0	0
2015-2016	460	0	0	460	459	0	0	459	1	1
2016-2017	488	0	0	488	484	0	0	484	4	4
2017-2018	469	0	0	469	468	0	0	468	1	1
2018-2019	412	0	0	412	407	0	0	407	5	5
2019-2020	412	0	0	412	383	0	0	383	29	29
2020-2021	346	0	0	346	299	0	0	299	47	47
2021-2022	370	0	0	370	189	0	0	189	181	181
2022-2023	116	0	0	116	23	0	0	23	93	93
Total	10,860	0	0	10,860	10,497	0	0	10,497	363	363

Notes:

- (A) Years are 7/1 to 6/30.
 (B) Provided by the Authority.
 (C)
 (D)
 (E) (B) + (C) (D).
 (F) Provided by the Authority.
- (G) (H)
- (H) (I) (F) + (G) (H). (J) (B) (F). (K) (E) (I).

Exposure Measures

Accident Year	Total Payroll (\$00) (A)	Inflation Trend Factor (B)	Trended Payroll (\$00) (C)
2001-2002	2,926,632	1.679	4,913,815
2002-2003	3,255,273	1.638	5,332,137
2003-2004	3,401,137	1.598	5,435,017
2004-2005	3,500,006	1.559	5,456,509
2005-2006	3,557,514	1.521	5,410,979
2006-2007	3,705,140	1.484	5,498,428
2007-2008	3,909,370	1.448	5,660,768
2008-2009	4,049,436	1.413	5,721,853
2009-2010	3,940,725	1.379	5,434,260
2010-2011	3,534,443	1.345	4,753,826
2011-2012	3,457,490	1.312	4,536,227
2012-2013	3,480,180	1.280	4,454,630
2013-2014	3,430,028	1.249	4,284,105
2014-2015	3,550,523	1.219	4,328,088
2015-2016	3,697,212	1.189	4,395,985
2016-2017	3,936,364	1.160	4,566,182
2017-2018	4,135,396	1.132	4,681,268
2018-2019	4,265,647	1.104	4,709,274
2019-2020	4,346,148	1.077	4,680,801
2020-2021	4,396,808	1.051	4,621,045
2021-2022	4,640,638	1.025	4,756,654
2022-2023	4,748,717	1.000	4,748,717
2023-2024	4,891,178	1.000	4,891,178

- Notes:
- (A)
- Provided by the Authority. Based on industry factors.
- (B) (C) (A) x (B).

Selection of Projected Limited Loss Rate and Projection of Program Losses and ULAE

Accident Year	Ultimate Limited Losses (A)	Trend Factor (B)	Trended Limited Losses (C)	Trended Payroll (\$00) (D)	Trended Limited Loss Rate (E)
2001-2002	2,949,541	1.679	4,952,279	4,913,815	1.008
2002-2003	4,237,463	1.638	6,940,964	5,332,137	1.302
2003-2004	2,205,881	1.598	3,524,998	5,435,017	0.649
2004-2005	1,424,731	1.559	2,221,156	5,456,509	0.407
2005-2006	2,684,321	1.521	4,082,852	5,410,979	0.755
2006-2007	1,419,184	1.484	2,106,069	5,498,428	0.383
2007-2008	2,651,368	1.448	3,839,181	5,660,768	0.678
2008-2009	2,653,385	1.412	3,746,580	5,721,853	0.655
2009-2010	1,335,978	1.378	1,840,978	5,434,260	0.339
2010-2011	1,557,549	1.344	2,093,346	4,753,826	0.440
2011-2012	3,489,000	1.312	4,577,568	4,536,227	1.009
2012-2013	3,736,000	1.280	4,782,080	4,454,630	1.074
2013-2014	2,088,304	1.249	2,608,292	4,284,105	0.609
2014-2015	3,799,380	1.218	4,627,645	4,328,088	1.069
2015-2016	3,260,000	1.188	3,872,880	4,395,985	0.881
2016-2017	5,569,000	1.160	6,460,040	4,566,182	1.415
2017-2018	1,233,000	1.132	1,395,756	4,681,268	0.298
2018-2019	1,614,000	1.104	1,781,856	4,709,274	0.378
2019-2020	1,773,000	1.077	1,909,521	4,680,801	0.408
2020-2021	5,082,000	1.051	5,341,182	4,621,045	1.156
2021-2022	3,856,000	1.025	3,952,400	4,756,654	0.831
Totals	\$58,619,085		\$76,657,623	103,631,851	\$0.740
12/13-17/18	19,685,684		23,746,693	26,710,258	0.889
12/13-20/21	8,938,000		9,293,582	9,377,699	0.991
			(F) Selecte	ed Limited Rate:	\$0.970
				Prior:	\$1.020
Program Year:		2022-2023	2023-2024		
(G) Factor to S	IR:	1.000	1.000		
(H) Trend Fact	or:	1.000	1.025		
(I) Program Ra	ite:	\$0.970	\$0.994		
(J) Trended Pag	yroll (\$00):	4,748,717	4,891,178		
(K) Projected F	Program Losses:	4,606,000	4,862,000		
(L) Projected L	JLAE:	0	0		
(M) Projected I	Loss and ULAE:	\$4,606,000	\$4,862,000		

Notes appear on the next page.

Selection of Projected Limited Loss Rate and Projection of Program Losses and ULAE

Notes:

- (A) From \$100K to \$1M Rate Analysis Not Included, Page 2, Column (F). For purposes of projecting future losses, losses are capped at \$100,000 per occurrence.
- (B) From \$100K to \$1M Rate Analysis Appendix E, Page 1, Column (B).
- (C) (A) x (B).
- (D) From \$100K to \$1M Rate Analysis Appendix I, Column (C).
- (E) (C) / (D).
- (F) Selected based on (E).
- (G) Based on a Burr distribution, a mathematical model of claim sizes.
- (H) From \$100K to \$1M Rate Analysis Appendix E.
- (I) (F) x (G) x (H).
- (J) From \$100K to \$1M Rate Analysis Appendix I, Column (C).
- (K) (I) x (J).
- (L) Based on an estimated claim closing pattern and the Authority's historical claims administration expenses.
- (M) (K) + (L).

This exhibit shows the calculation of future loss costs based on the past loss rates. The projections will be accurate only to the extent that what has happened in the past is representative of what will happen in the future.

Reported Loss Development

	Limited	Reported		Program	Reported	
	Reported	Loss	Ultimate	Reported	Loss	Ultimate
Accident	Losses as	Development	Limited	Losses	Development	Program
Year	of 12/31/22	Factor	Losses	of 12/31/22	Factor	Losses
(A)	(B)	(C)	(D)	(E)	(F)	(G)
2001-2002	\$2,949,541	1.000	\$2,949,541	\$2,949,541	1.000	\$2,949,541
2002-2003	4,237,463	1.000	4,237,463	4,237,463	1.000	4,237,463
2003-2004	2,205,881	1.000	2,205,881	2,205,881	1.000	2,205,881
2004-2005	1,424,731	1.000	1,424,731	1,424,731	1.000	1,424,731
2005-2006	2,684,321	1.000	2,684,321	2,684,321	1.000	2,684,321
2006-2007	1,419,184	1.000	1,419,184	1,419,184	1.000	1,419,184
2007-2008	2,651,368	1.000	2,651,368	2,651,368	1.000	2,651,368
2008-2009	2,653,385	1.000	2,653,385	2,653,385	1.000	2,653,385
2009-2010	1,335,978	1.001	1,337,314	1,335,978	1.001	1,337,314
2010-2011	1,557,549	1.003	1,562,222	1,557,549	1.003	1,562,222
2011-2012	3,468,509	1.006	3,489,320	3,468,509	1.006	3,489,320
2012-2013	3,699,416	1.010	3,736,410	3,699,416	1.010	3,736,410
2013-2014	2,088,304	1.015	2,119,629	2,088,304	1.015	2,119,629
2014-2015	3,799,380	1.025	3,894,365	3,799,380	1.025	3,894,365
2015-2016	3,134,946	1.040	3,260,344	3,134,946	1.040	3,260,344
2016-2017	5,319,453	1.047	5,569,467	5,319,453	1.047	5,569,467
2017-2018	775,051	1.056	818,454	775,051	1.056	818,454
2018-2019	1,028,207	1.082	1,112,520	1,028,207	1.082	1,112,520
2019-2020	456,550	1.265	577,536	456,550	1.265	577,536
2020-2021	3,272,283	2.043	6,685,274	3,272,283	2.043	6,685,274
2021-2022	569,442	4.750	2,704,850	569,442	4.750	2,704,850
Totals	\$50,730,942		\$57,093,579	\$50,730,942		\$57,093,579

Notes:

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

Selected

Cumulated

5.500

26.125

2.325

4.750

1.615

2.043

1.169

1.265

1.024

1.07862

PLAN JPA - Liability Program (\$100K to \$1M Analysis) Reported Loss Development

			D (
	-	Limited Loss	ses Reported	l as of:							
Accident	6	18	30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002		365,699	1,446,885	1,633,894	2,059,086	2,967,377	2,941,383	2,955,718	2,943,619	2,943,619	2,959,541
2002-2003	365,543	1,476,042	3,953,355	3,589,550	4,887,581	4,262,606	4,441,309	4,439,396	4,497,701	4,495,632	4,437,327
2003-2004		66,478	363,636	398,884	890,862	986,705	1,227,451	1,518,119	2,427,012	2,205,001	2,205,881
2004-2005		586,598	1,140,449	1,700,075	1,700,074	1,675,074	1,675,074	1,675,074	1,675,074	1,675,074	1,675,074
2005-2006	25,000	331,278	1,741,278	2,362,206	2,728,549	2,867,756	2,979,841	3,131,757	3,206,757	3,045,410	3,008,029
2006-2007	200,000	292,450	332,811	374,101	717,777	1,013,370	1,474,688	1,413,760	1,413,623	1,413,623	1,413,623
2007-2008	100,000	633,000	1,573,836	2,796,222	3,688,008	4,360,051	4,253,945	4,203,645	4,203,645	4,203,645	4,203,645
2008-2009		267,405	1,881,941	3,667,001	3,485,698	3,032,463	2,796,842	2,751,812	2,751,812	2,751,812	2,751,812
2009-2010	588,210	2,839,236	3,579,153	3,176,666	2,837,525	2,823,031	2,079,066	2,059,066	2,036,496	2,036,496	2,036,496
2010-2011		1,983,751	4,432,358	2,267,822	1,756,558	1,759,837	1,709,837	1,709,837	1,709,837	1,709,837	1,709,837
2011-2012		5,467,351	5,436,904	4,482,628	3,623,434	3,455,028	3,603,332	3,672,332	3,672,332	3,672,332	3,672,332
2012-2013		4,426,268	2,923,860	1,852,321	1,745,668	2,223,502	2,145,524	2,274,806	3,563,734	3,563,734	3,738,734
2013-2014	307,000	1,025,000	1,218,912	2,036,429	2,549,713	2,720,508	2,696,970	2,609,433	2,609,434	2,619,477	
2014-2015		2,287,736	2,959,162	3,811,606	4,292,047	4,271,609	4,273,028	4,273,028	4,273,028		
2015-2016		575,005	2,175,661	2,839,484	3,255,772	3,254,877	3,125,229	3,134,946			
2016-2017	10,002	1,597,500	2,927,832	4,486,306	5,196,650	5,165,945	5,319,453				
2017-2018		145,002	597,690	818,662	773,258	775,051					
2018-2019			391,223	717,128	1,028,207						
2019-2020			66,812	456,550							
2020-2021	905,000	2,019,771	3,272,283								
2021-2022	50,000	569,442									
2022-2023											

		Reported Lo	ss Developm	ent Factors:							
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002		3.956	1.129	1.260	1.441	0.991	1.005	0.996	1.000	1.005	0.997
2002-2003	4.038	2.678	0.908	1.362	0.872	1.042	1.000	1.013	1.000	0.987	1.017
2003-2004		5.470	1.097	2.233	1.108	1.244	1.237	1.599	0.909	1.000	1.000
2004-2005		1.944	1.491	1.000	0.985	1.000	1.000	1.000	1.000	1.000	1.000
2005-2006	13.251	5.256	1.357	1.155	1.051	1.039	1.051	1.024	0.950	0.988	1.000
2006-2007	1.462	1.138	1.124	1.919	1.412	1.455	0.959	1.000	1.000	1.000	1.000
2007-2008	6.330	2.486	1.777	1.319	1.182	0.976	0.988	1.000	1.000	1.000	0.955
2008-2009		7.038	1.949	0.951	0.870	0.922	0.984	1.000	1.000	1.000	1.000
2009-2010	4.827	1.261	0.888	0.893	0.995	0.736	0.990	0.989	1.000	1.000	1.000
2010-2011		2.234	0.512	0.775	1.002	0.972	1.000	1.000	1.000	1.000	1.000
2011-2012		0.994	0.824	0.808	0.954	1.043	1.019	1.000	1.000	1.000	1.000
2012-2013		0.661	0.634	0.942	1.274	0.965	1.060	1.567	1.000	1.049	
2013-2014	3.339	1.189	1.671	1.252	1.067	0.991	0.968	1.000	1.004		
2014-2015		1.293	1.288	1.126	0.995	1.000	1.000	1.000			
2015-2016		3.784	1.305	1.147	1.000	0.960	1.003				
2016-2017	159.718	1.833	1.532	1.158	0.994	1.030					
2017-2018		4.122	1.370	0.945	1.002						
2018-2019			1.833	1.434							
2019-2020			6.833								
2020-2021	2.232	1.620									
2021-2022	11.389										
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	22.954	2.720	1.554	1.204	1.071	1.023	1.018	1.085	0.989	1.002	0.997
Dollar-Weighted											
Averages			1 0 0 7	1 160	0.007	1 002	0.002	1 1 1 1	1 001	1 0 2 0	1 000
3-yi 4-vr			1.626	1.102	0.997	1.002	1 004	1.141	1.001	1.020	1.000
Comparative			1.020	1.107	0.000	1.000	1.004	1.100	1.001	1.010	1.000
Factors	2.945	1.254	1.006	0.965	0.972	1.000	1.000	1.000	1.000	1.000	1.000
Prior	5.500	2.325	1.393	1.152	1.033	1.010	1.011	1.015	1.010	1.005	1.004

1.009

1.056

1.006

1.047

1.015

1.040

1.010

1.025

1.005

1.015

1.004

84010

PLAN JPA - Liability Program (\$100K to \$1M Analysis) Reported Loss Development

	Limited Loss	ses Reported	l as of:	. topolitot							
Accident Year	138 Months	150 Months	162 Months	174 Months	186 Months	198 Months	210 Months	222 Months	234 Months	246 Months	258 Months
2001-2002	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541
2002-2003	4,512,327	4,509,757	4,509,756	4,509,756	4,509,756	4,478,397	4,478,397	4,478,397	4,478,397	4,478,397	
2003-2004	2,205,881	2,205,881	2,205,881	2,205,881	2,205,881	2,205,881	2,205,881	2,205,881	2,205,881		
2004-2005	1,675,074	1,675,074	1,675,074	1,675,074	1,675,074	1,675,074	1,675,074	1,675,074			
2005-2006	3,008,029	3,008,029	3,008,029	3,008,029	3,008,029	3,008,029	3,008,029				
2006-2007	1,413,623	1,413,623	1,436,261	1,419,184	1,419,184	1,419,184					
2007-2008	4,015,369	4,203,645	4,203,645	4,203,645	4,203,645						
2008-2009	2,751,812	2,751,812	2,750,770	2,751,812							
2009-2010	2,036,496	2,036,496	2,036,496								
2010-2011	1,709,837	1,709,837									
2011-2012	3,672,332										
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2010-2010											
2020-2021											
2020-2021											
2022-2023											
	Reported Lo	ss Developn	nent Factors:	174 100	106 100	100 010	010 000	000 004	004 046	046 059	250 1 114
	Nontha	Montho	Nontha	Montho	Montho	190-210 Montho	ZIU-ZZZ Montho	ZZZ-ZJ4 Montho	Z34-Z40 Montho	Z40-Z00 Montho	200-UIL
2001 2002	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	WORLINS
2001-2002	1.000	1.000	1.000	1.000	0.002	1.000	1.000	1.000	1.000	1.000	
2002-2003	0.999	1.000	1.000	1.000	0.993	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				
2005-2006	1.000	1.000	1.000	1.000	1.000	1.000					
2006-2007	1.000	1.016	0.988	1.000	1.000						
2007-2008	1.047	1.000	1.000	1.000							
2008-2009	1.000	1.000	1.000								
2009-2010	1.000	1.000									
2010-2011	1.000										
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
2021-2022											
	138-150	150-162	162-174	174-186	186-198	198-210	210-222	222-234	234-246	246-258	258-Ult.
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	1.005	1.002	0.999	1.000	0.999	1.000	1.000	1.000	1.000	1.000	
Dollar-Weighted											
Averages	1 000	1.000	0.000	1.000	1 000	1 0 0 0	1.000	1 0 0 0			
3-yr	1.000	1.000	0.998	1.000	1.000	1.000	1.000	1.000			
4-yr	1.018	1.002	0.999	1.000	1.000	1.000	1.000				
Factors	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Prior	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1 003	1 002	1 001	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	1.006	1.003	1.001	1.000	1. 907 0	1.000	1.000	1.000	1.000	1.000	8 ⁵⁰⁰⁰

Paid Loss Development

	Limited			Program		
	Paid	Paid Loss	Ultimate	Paid	Paid Loss	Ultimate
Accident	Losses as	Development	Limited	Losses	Development	Program
Year	of 12/31/22	Factor	Losses	of 12/31/22	Factor	Losses
(A)	(B)	(C)	(D)	(E)	(F)	(G)
2001-2002	\$2,949,541	1.000	\$2,949,541	\$2,949,541	1.000	\$2,949,541
2002-2003	4,237,463	1.000	4,237,463	4,237,463	1.000	4,237,463
2003-2004	2,205,881	1.000	2,205,881	2,205,881	1.000	2,205,881
2004-2005	1,424,731	1.000	1,424,731	1,424,731	1.000	1,424,731
2005-2006	2,684,321	1.000	2,684,321	2,684,321	1.000	2,684,321
2006-2007	1,419,184	1.000	1,419,184	1,419,184	1.000	1,419,184
2007-2008	2,651,369	1.000	2,651,369	2,651,369	1.000	2,651,369
2008-2009	2,653,385	1.000	2,653,385	2,653,385	1.000	2,653,385
2009-2010	1,335,978	1.001	1,337,314	1,335,978	1.001	1,337,314
2010-2011	1,557,549	1.003	1,562,222	1,557,549	1.003	1,562,222
2011-2012	3,413,347	1.007	3,437,240	3,413,347	1.007	3,437,240
2012-2013	3,223,444	1.009	3,252,455	3,223,444	1.009	3,252,455
2013-2014	2,088,304	1.014	2,117,540	2,088,304	1.014	2,117,540
2014-2015	3,799,381	1.022	3,882,967	3,799,381	1.022	3,882,967
2015-2016	3,001,379	1.063	3,190,466	3,001,379	1.063	3,190,466
2016-2017	4,690,666	1.117	5,239,474	4,690,666	1.117	5,239,474
2017-2018	775,051	1.250	968,814	775,051	1.250	968,814
2018-2019	791,792	1.430	1,132,263	791,792	1.430	1,132,263
2019-2020	19,385	2.027	39,293	19,385	2.027	39,293
2020-2021	1,939,012	5.072	9,834,669	1,939,012	5.072	9,834,669
2021-2022	0	22.824	0	0	22.824	0
Totals	\$46,861,163		\$56,220,592	\$46,861,163		\$56,220,592

Notes:

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

PLAN JPA - Liability Program (\$100K to \$1M Analysis) Paid Loss Development

		Limited Loss	ses Paid as c	of:							
Accident	6	18	30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002		309,735	1,022,186	1,490,294	1,947,824	2,029,466	2,041,384	2,943,619	2,943,619	2,943,619	2,949,541
2002-2003	75,543	903,527	2,226,102	3,446,317	3,946,802	3,910,106	4,427,910	4,439,396	4,439,396	4,432,327	4,432,327
2003-2004		15,692	363,636	379,734	682,512	766,935	1,013,004	1,283,354	2,244,553	2,205,001	2,205,881
2004-2005		6,598	310,953	1,675,075	1,675,075	1,675,075	1,675,075	1,675,075	1,675,075	1,675,075	1,675,075
2005-2006		208,642	211,412	862,224	2,089,131	2,710,478	2,891,138	2,950,433	2,986,634	2,989,043	3,008,028
2006-2007	6,182	15,240	69,317	308,983	521,929	942,901	1,426,352	1,413,623	1,413,623	1,413,623	1,413,623
2007-2008		54,284	602,929	1,401,455	2,571,860	3,424,876	4,203,946	4,203,646	4,203,646	4,203,646	4,203,646
2008-2009		19,904	228,676	1,724,990	2,057,605	2,253,588	2,717,684	2,751,812	2,751,812	2,751,812	2,751,812
2009-2010	219,495	285,835	559,909	1,786,817	1,978,733	1,997,847	2,029,066	2,033,765	2,036,496	2,036,496	2,036,496
2010-2011		244,011	492,996	847,767	1,631,751	1,709,837	1,709,837	1,709,837	1,709,837	1,709,837	1,709,837
2011-2012		183,567	1,126,697	2,824,229	3,464,935	3,421,881	3,558,192	3,581,744	3,592,130	3,606,084	3,608,407
2012-2013		325,184	714,607	1,364,385	1,590,037	1,843,015	2,095,870	2,177,287	3,128,107	3,146,370	3,262,762
2013-2014		45,594	562,912	1,541,662	2,337,114	2,372,509	2,583,001	2,609,433	2,609,433	2,619,477	
2014-2015		1,560,730	1,844,263	2,180,858	4,183,215	4,271,609	4,273,028	4,273,028	4,273,028		
2015-2016			155,478	1,714,285	2,562,714	2,787,512	2,991,237	3,001,379			
2016-2017			1,417,546	2,996,157	3,400,847	4,466,711	4,690,666				
2017-2018		56,752	356,919	681,757	719,295	775,051					
2018-2019			73,233	515,432	791,792						
2019-2020				19,385							
2020-2021		947,057	1,939,012								
2021-2022											
2022-2023											

	ļ	Paid Loss De	evelopment F	actors:							
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002		3.300	1.458	1.307	1.042	1.006	1.442	1.000	1.000	1.002	1.000
2002-2003	11.960	2.464	1.548	1.145	0.991	1.132	1.003	1.000	0.998	1.000	1.005
2003-2004		23.173	1.044	1.797	1.124	1.321	1.267	1.749	0.982	1.000	1.000
2004-2005		47.128	5.387	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005-2006		1.013	4.078	2.423	1.297	1.067	1.021	1.012	1.001	1.006	1.000
2006-2007	2.465	4.548	4.458	1.689	1.807	1.513	0.991	1.000	1.000	1.000	1.000
2007-2008		11.107	2.324	1.835	1.332	1.227	1.000	1.000	1.000	1.000	0.955
2008-2009		11.489	7.543	1.193	1.095	1.206	1.013	1.000	1.000	1.000	1.000
2009-2010	1.302	1.959	3.191	1.107	1.010	1.016	1.002	1.001	1.000	1.000	1.000
2010-2011		2.020	1.720	1.925	1.048	1.000	1.000	1.000	1.000	1.000	1.000
2011-2012		6.138	2.507	1.227	0.988	1.040	1.007	1.003	1.004	1.001	1.002
2012-2013		2.198	1.909	1.165	1.159	1.137	1.039	1.437	1.006	1.037	
2013-2014		12.346	2.739	1.516	1.015	1.089	1.010	1.000	1.004		
2014-2015		1.182	1.183	1.918	1.021	1.000	1.000	1.000			
2015-2016			11.026	1.495	1.088	1.073	1.003				
2016-2017			2.114	1.135	1.313	1.050					
2017-2018		6.289	1.910	1.055	1.078						
2018-2019			7.038	1.536							
2019-2020											
2020-2021		2.047									
2021-2022											

	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	5.242	8.650	3.510	1.470	1.142	1.117	1.053	1.086	1.000	1.004	0.997
Dollar-Weighted											
Averages											
3-yr				1.171	1.201	1.037	1.004	1.105	1.005	1.014	1.001
4-yr				1.265	1.132	1.046	1.010	1.076	1.004	1.011	1.001
Comparative											
Factors	4.218	2.117	1.446	1.151	1.057	1.033	1.015	1.010	1.008	1.008	1.006
Prior	9.100	4.500	2.502	1.400	1.145	1.120	1.050	1.025	1.010	1.005	1.004
Selected	9.100	4.500	2.502	1.418	1.144	1.119	1.051	1.040	1.008	1.005	1.002
Cumulated	207.698	22.824	5.072	2.027	1. 73 0	1.250	1.117	1.063	1.022	1.014	817.009

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PLAN JPA - Liability Program (\$100K to \$1M Analysis) Paid Loss Development

	Limited Loss	ses Paid as c	of:								
Accident	138	150	162	174	186	198	210	222	234	246	258
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541	2,949,541
2002-2003	4,455,192	4,470,710	4,477,671	4,478,398	4,478,398	4,478,398	4,478,398	4,478,398	4,478,398	4,478,398	
2003-2004	2,205,881	2,205,881	2,205,881	2,205,881	2,205,881	2,205,881	2,205,881	2,205,881	2,205,881		
2004-2005	1,675,075	1,675,075	1,675,075	1,675,075	1,675,075	1,675,075	1,675,075	1,675,075			
2005-2006	3,008,028	3,008,028	3,008,028	3,008,028	3,008,028	3,008,028	3,008,028				
2006-2007	1,413,623	1,413,623	1,413,623	1,419,184	1,419,184	1,419,184					
2007-2008	4,015,369	4,203,646	4,203,646	4,203,646	4,203,646						
2008-2009	2,751,812	2,751,812	2,750,770	2,751,812							
2009-2010	2,036,496	2,036,496	2,036,496								
2010-2011	1,709,837	1,709,837									
2011-2012	3,617,170										
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
2021-2022											
	Paid Loss D	evelopment	Factors:								
	138-150	150-162	162-174	174-186	186-198	198-210	210-222	222-234	234-246	246-258	258-Ult.
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2002-2003	1.003	1.002	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				
2005-2006	1.000	1.000	1.000	1.000	1.000	1.000					
2006-2007	1.000	1.000	1.004	1.000	1.000						
2007-2008	1.047	1.000	1.000	1.000							
2008-2009	1.000	1.000	1.000								
2009-2010	1.000	1.000									
2010-2011	1.000										
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2010-2017											
2017-2010											
2010-2019											
2019-2020											
2020-2021											
	138-150	150-162	162-174	174-186	186-198	198-210	210-222	222-234	234-246	246-258	258-Ult.
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	1.005	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Dollar-Weighted											
Averages 3-vr	1 000	1 000	1 001	1 000	1 000	1 000	1 000	1 000			
4-vr	1.000	1 000	1 001	1 000	1 000	1 000	1.000	1.000			
Comparative	1.010	1.000	1.001	1.000			1.000				
Factors	1.006	1.004	1.004	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.000
Prior	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1 004	1 002	1 001	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
25100104	1.004	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

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Cumulated

Exposure and Development Method Based on Reported Losses

Accident Year	Trended Payroll (\$00) (A)	Reported Losses as of 12/31/22 (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)
2001-2002	4,913,815	2,949,541	1.000	0.000	0.600	0	2,949,541
2002-2003	5,332,137	4,237,463	1.000	0.000	0.795	0	4,237,463
2003-2004	5,435,017	2,205,881	1.000	0.000	0.406	0	2,205,881
2004-2005	5,456,509	1,424,731	1.000	0.000	0.261	0	1,424,731
2005-2006	5,410,979	2,684,321	1.000	0.000	0.496	0	2,684,321
2006-2007	5,498,428	1,419,184	1.000	0.000	0.258	0	1,419,184
2007-2008	5,660,768	2,651,368	1.000	0.000	0.468	0	2,651,368
2008-2009	5,721,853	2,653,385	1.000	0.000	0.464	0	2,653,385
2009-2010	5,434,260	1,335,978	1.001	0.001	0.246	1,337	1,337,315
2010-2011	4,753,826	1,557,549	1.003	0.003	0.328	4,678	1,562,227
2011-2012	4,536,227	3,468,509	1.006	0.006	0.769	20,930	3,489,439
2012-2013	4,454,630	3,699,416	1.010	0.010	0.839	37,374	3,736,790
2013-2014	4,284,105	2,088,304	1.015	0.015	0.487	31,295	2,119,599
2014-2015	4,328,088	3,799,380	1.025	0.024	0.878	91,201	3,890,581
2015-2016	4,395,985	3,134,946	1.040	0.038	0.742	123,949	3,258,895
2016-2017	4,566,182	5,319,453	1.047	0.045	1.220	250,683	5,570,136
2017-2018	4,681,268	775,051	1.056	0.053	0.773	191,787	966,838
2018-2019	4,709,274	1,028,207	1.082	0.076	0.793	283,819	1,312,026
2019-2020	4,680,801	456,550	1.265	0.209	0.812	794,369	1,250,919
2020-2021	4,621,045	3,272,283	2.043	0.511	0.833	1,967,008	5,239,291
2021-2022	4,756,654	569,442	4.750	0.789	0.854	3,205,062	3,774,504
Totals	103,631,851	\$50,730,942				\$7,003,492	\$57,734,434

Notes:

- (A) From \$100K to \$1M Rate Analysis Appendix I, Column (C).
- (B) Provided by the Authority. These losses exclude amounts incurred above the Authority's SIR for each year.
- (C) From \$100K to \$1M Rate Analysis Appendix A, Page 1, Column (F).
- (D) 1 1/(C).
- (E) From \$100K to \$1M Rate Analysis Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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.

Exposure and Development Method Based on Paid Losses

				Percentage			
	Trended	Paid	Loss	of Losses		Incurred	Ultimate
Accident	Payroll	Losses as	Development	Yet to Be	Program	but not	Program
Year	(\$00)	of 12/31/22	Factor	Paid	Rate	Paid	Losses
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
2001-2002	4,913,815	2,949,541	1.000	0.000	0.600	0	2,949,541
2002-2003	5,332,137	4,237,463	1.000	0.000	0.795	0	4,237,463
2003-2004	5,435,017	2,205,881	1.000	0.000	0.406	0	2,205,881
2004-2005	5,456,509	1,424,731	1.000	0.000	0.261	0	1,424,731
2005-2006	5,410,979	2,684,321	1.000	0.000	0.496	0	2,684,321
2006-2007	5,498,428	1,419,184	1.000	0.000	0.258	0	1,419,184
2007-2008	5,660,768	2,651,369	1.000	0.000	0.468	0	2,651,369
2008-2009	5,721,853	2,653,385	1.000	0.000	0.464	0	2,653,385
2009-2010	5,434,260	1,335,978	1.001	0.001	0.246	1,337	1,337,315
2010-2011	4,753,826	1,557,549	1.003	0.003	0.328	4,678	1,562,227
2011-2012	4,536,227	3,413,347	1.007	0.007	0.769	24,419	3,437,766
2012-2013	4,454,630	3,223,444	1.009	0.009	0.839	33,637	3,257,081
2013-2014	4,284,105	2,088,304	1.014	0.014	0.487	29,209	2,117,513
2014-2015	4,328,088	3,799,381	1.022	0.022	0.878	83,601	3,882,982
2015-2016	4,395,985	3,001,379	1.063	0.059	0.742	192,447	3,193,826
2016-2017	4,566,182	4,690,666	1.117	0.105	1.220	584,928	5,275,594
2017-2018	4,681,268	775,051	1.250	0.200	0.773	723,724	1,498,775
2018-2019	4,709,274	791,792	1.430	0.301	0.793	1,124,071	1,915,863
2019-2020	4,680,801	19,385	2.027	0.507	0.812	1,927,011	1,946,396
2020-2021	4,621,045	1,939,012	5.072	0.803	0.833	3,091,012	5,030,024
2021-2022	4,756,654		22.824	0.956	0.854	3,883,446	3,883,446
Totals	103,631,851	\$46,861,163				\$11,703,520	\$58,564,683

Notes:

- (A) From \$100K to \$1M Rate Analysis Appendix I, Column (C).
- (B) Provided by the Authority. These losses exclude amounts paid above the Authority's SIR for each year.
- (C) From \$100K to \$1M Rate Analysis Appendix B, Page 1, Column (F).
- (D) 1 1/(C).
- (E) From \$100K to \$1M Rate Analysis Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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.

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)
2001-2002	4,913,815	2,949,541	1.679	4,952,279	1.008	0.600	1.000	0.600
2002-2003	5,332,137	4,237,463	1.638	6,940,964	1.302	0.795	1.000	0.795
2003-2004	5,435,017	2,205,881	1.598	3,524,998	0.649	0.406	1.000	0.406
2004-2005	5,456,509	1,424,731	1.559	2,221,156	0.407	0.261	1.000	0.261
2005-2006	5,410,979	2,684,321	1.521	4,082,852	0.755	0.496	1.000	0.496
2006-2007	5,498,428	1,419,184	1.484	2,106,069	0.383	0.258	1.000	0.258
2007-2008	5,660,768	2,651,368	1.448	3,839,181	0.678	0.468	1.000	0.468
2008-2009	5,721,853	2,653,385	1.412	3,746,580	0.655	0.464	1.000	0.464
2009-2010	5,434,260	1,335,978	1.378	1,840,978	0.339	0.246	1.000	0.246
2010-2011	4,753,826	1,557,549	1.344	2,093,346	0.440	0.328	1.000	0.328
2011-2012	4,536,227	3,489,000	1.312	4,577,568	1.009	0.769	1.000	0.769
2012-2013	4,454,630	3,736,000	1.280	4,782,080	1.074	0.839	1.000	0.839
2013-2014	4,284,105	2,088,304	1.249	2,608,292	0.609	0.487	1.000	0.487
2014-2015	4,328,088	3,799,380	1.218	4,627,645	1.069	0.878	1.000	0.878
2015-2016	4,395,985	3,260,000	1.188	3,872,880	0.881	0.742	1.000	0.742
2016-2017	4,566,182	5,569,000	1.160	6,460,040	1.415	1.220	1.000	1.220
2017-2018	4,681,268	818,000	1.132	925,976	0.198	0.773	1.000	0.773
2018-2019	4,709,274	1,113,000	1.104	1,228,752	0.261	0.793	1.000	0.793
2019-2020	4,680,801	578,000	1.077	622,506	0.133	0.812	1.000	0.812
2020-2021	4,621,045	5,200,000	1.051	5,465,200	1.183	0.833	1.000	0.833
2021-2022	4,756,654	3,729,000	1.025	3,822,225	0.804	0.854	1.000	0.854
Total/Avg	103,631,851	\$56,499,085		\$74,341,567	\$0.717			
15/16-19/20	23,033,510	11,338,000		13,110,154	0.569			
16/17-20/21	23,258,570	13,278,000		14,702,474	0.632			
			Selecte	d Limited Rate:	\$0.875			
				Prior:	\$0.900			

Notes:

- (A) From \$100K to \$1M Rate Analysis Appendix I, Column (C).
- (B) Selected average of results from Appendices \$ and \$.
- (C) From \$100K to \$1M Rate Analysis Appendix E, Page 1, Column (B).
- (D) (B) x (C).
- (E) (D) / (A).
- (F) Selected Limited Rate / (C). For 2016-2017 and prior (B) / (A).
- (G) Based on a Burr 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.

Frequency and Severity Method

	Ultimate	Adjusted	Ultimate
Accident	Program	Ultimate	Program
Year	Severity	Claims	Losses
	(A)	(B)	(C)
2001-2002	\$294,954	10	\$2,949,540
2002-2003	211,873	20	4,237,460
2003-2004	183,823	12	2,205,876
2004-2005	356,183	4	1,424,732
2005-2006	223,693	12	2,684,316
2006-2007	109,168	13	1,419,184
2007-2008	220,947	12	2,651,364
2008-2009	241,217	11	2,653,387
2009-2010	95,427	14	1,335,978
2010-2011	173,061	9	1,557,549
2011-2012	249,214	14	3,488,996
2012-2013	249,067	15	3,736,005
2013-2014	232,034	9	2,088,306
2014-2015	422,153	9	3,799,377
2015-2016	203,750	16	3,260,000
2016-2017	397,786	14	5,569,004
2017-2018	297,414	6	1,784,484
2018-2019	306,394	7	2,144,758
2019-2020	315,645	8	2,525,160
2020-2021	325,165	18	5,852,970
2021-2022	334,951	10	3,349,510
Total		243	\$60,717,956

Notes:

- (A) From \$100K to \$1M Rate Analysis Appendix D, Page 2, Colum
- (B) From \$100K to \$1M Rate Analysis Appendix D, Page 2, Colum
- (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.

Frequency and Severity Method

	Ultimate	Adjusted	Ultimate		Trended			
Accident	Limited	Ultimate	Limited	Trend	Limited	Limited	Factor to	Program
Year	Losses	Claims	Severity	Factor	Severity	Severity	SIR	Severity
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
2001-2002	\$2,949,541	10	\$294,954	1.862	\$549,204	\$294,954	1.000	\$294,954
2002-2003	4,237,463	20	211,873	1.808	383,066	211,873	1.000	211,873
2003-2004	2,205,881	12	183,823	1.755	322,609	183,823	1.000	183,823
2004-2005	1,424,731	4	356,183	1.704	606,936	356,183	1.000	356,183
2005-2006	2,684,321	12	223,693	1.654	369,988	223,693	1.000	223,693
2006-2007	1,419,184	13	109,168	1.606	175,324	109,168	1.000	109,168
2007-2008	2,651,368	12	220,947	1.559	344,456	220,947	1.000	220,947
2008-2009	2,653,385	11	241,217	1.513	364,961	241,217	1.000	241,217
2009-2010	1,335,978	14	95,427	1.469	140,182	95,427	1.000	95,427
2010-2011	1,557,549	9	173,061	1.426	246,785	173,061	1.000	173,061
2011-2012	3,489,000	14	249,214	1.385	345,161	249,214	1.000	249,214
2012-2013	3,736,000	15	249,067	1.345	334,995	249,067	1.000	249,067
2013-2014	2,088,304	9	232,034	1.306	303,036	232,034	1.000	232,034
2014-2015	3,799,380	9	422,153	1.267	534,868	422,153	1.000	422,153
2015-2016	3,260,000	16	203,750	1.231	250,816	203,750	1.000	203,750
2016-2017	5,569,000	14	397,786	1.195	475,354	397,786	1.000	397,786
2017-2018	1,233,000	6	205,500	1.160	238,380	297,414	1.000	297,414
2018-2019	1,614,000	7	230,571	1.126	259,623	306,394	1.000	306,394
2019-2020	1,599,000	8	199,875	1.093	218,463	315,645	1.000	315,645
2020-2021	5,135,000	18	285,278	1.061	302,680	325,165	1.000	325,165
2021-2022	3,829,000	10	382,900	1.030	394,387	334,951	1.000	334,951

Average Limited Severity:	\$341,013
Average 16/17-21/22 Limited Severity:	314,815
Average 20/21-21/22 Limited Severity:	348,534

Selected Limited Severity:	\$345,000
Prior:	\$368,000

Notes:

- (A) Selected average of results from Appendices \$, \$, and \$.
- (B) \$100K to \$1M Rate Analysis Appendix D, Page 3, Column (C).

(C) (A) / (B).

(D) From \$100K to \$1M Rate Analysis Appendix E, Page 1, Column (J).

(E) (C) x (D).

- (F) Selected Limited Severity / (D).
- (G) Based on a Burr 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.

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)
2001-2002	10	10	10	491.4	0.020	0.897	0.018
2002-2003	20	20	20	533.2	0.038	0.902	0.034
2003-2004	12	12	12	543.5	0.022	0.906	0.020
2004-2005	4	4	4	545.7	0.007	0.910	0.006
2005-2006	12	12	12	541.1	0.022	0.914	0.020
2006-2007	13	13	13	549.8	0.024	0.919	0.022
2007-2008	12	12	12	566.1	0.021	0.924	0.019
2008-2009	11	11	11	572.2	0.019	0.929	0.018
2009-2010	14	14	14	543.4	0.026	0.934	0.024
2010-2011	9	9	9	475.4	0.019	0.939	0.018
2011-2012	14	13	14	453.6	0.031	0.944	0.029
2012-2013	15	14	15	445.5	0.034	0.949	0.032
2013-2014	9	9	9	428.4	0.021	0.954	0.020
2014-2015	9	9	9	432.8	0.021	0.959	0.020
2015-2016	16	15	16	439.6	0.036	0.964	0.035
2016-2017	14	11	14	456.6	0.031	0.970	0.030
2017-2018	6	6	6	468.1	0.013	0.975	0.013
2018-2019	7	5	7	470.9	0.015	0.980	0.015
2019-2020	8	0	8	468.1	0.017	0.985	0.017
2020-2021	18	14	18	462.1	0.039	0.990	0.039
2021-2022	22	0	10	475.7	0.020	0.995	0.020
Total	255	213	243	10,363.2			0.022
16/17-20/21	53	36	53	2,325.9			0.022
					(H) Select	ed Frequency:	0.028
					~ /	Prior:	0.028
	Program Year:			2022-2023	2023-2024		
(I)	Trend Factor:			1.000	0.995		
(J)	Selected Frequenc	Y:		0.028	0.028		

(J) Selected Frequency: (K) Est. Payroll (\$000,000):

(L) Ultimate Claims:

Notes:

(A) From \$100K to \$1M Rate Analysis Appendix D, Page 4, (C).

(B) From \$100K to \$1M Rate Analysis Appendix D, Page 5, (C).

- (C) Selected from (A) and (B).
- (D) From \$100K to \$1M Rate Analysis Appendix I, Column (C) / 10,000.
- (E) (C) / (D).
- (F) From \$100K to \$1M Rate Analysis Appendix E, Page 1, Column (H).

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

(G) (E) x (F).

474.9

13

(H) The selected frequency of 0.028 is based on (G).

489.1

14

- (I) From \$100K to \$1M Rate Analysis Appendix E, Page
- (J) (H) x (I).
- (K) From \$100K to \$1M Rate Analysis Appendix I, Colur
- (L) (J) x (K).

Frequency and Severity Method Reported Claim Count Development

Accident Year	Claims Reported as of 12/31/2022 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2001-2002	10	1.000	10	0.018
2002-2003	20	1.000	20	0.034
2003-2004	12	1.000	12	0.020
2004-2005	4	1.000	4	0.007
2005-2006	12	1.000	12	0.020
2006-2007	13	1.000	13	0.022
2007-2008	12	1.000	12	0.020
2008-2009	11	1.000	11	0.018
2009-2010	14	1.000	14	0.024
2010-2011	9	1.001	9	0.018
2011-2012	14	1.001	14	0.029
2012-2013	15	1.001	15	0.032
2013-2014	9	1.002	9	0.020
2014-2015	9	1.003	9	0.020
2015-2016	16	1.004	16	0.035
2016-2017	14	1.005	14	0.030
2017-2018	6	1.015	6	0.012
2018-2019	7	1.040	7	0.015
2019-2020	7	1.204	8	0.017
2020-2021	12	1.461	18	0.039
2021-2022	7	3.201	22	0.046
Total	233		255	0.023

Notes:

(A) Provided by the Authority.

(B) From \$100K to \$1M Rate Analysis Appendix D, Page 6.

(C) (A) x (B).

(D) (C) / [\$100K to \$1M Rate Analysis Appendix D, Page 3, (D)] x [\$100K to \$1M Rate Analy

This exhibit shows the calculation of estimated ultimate claims for each year based on reported claims as provided by the Authority. 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.

Frequency and Severity Method Closed Claim Count Development

	Claims	Closed		- · ·
	Closed	Claim		Irended
Accident	as of	Development	Ultimate	Claim
Year	12/31/2022	Factor	Claims	Frequency
	(A)	(B)	(C)	(D)
2001-2002	10	1.000	10	0.018
2002-2003	20	1.000	20	0.034
2003-2004	12	1.000	12	0.020
2004-2005	4	1.000	4	0.007
2005-2006	12	1.000	12	0.020
2006-2007	13	1.000	13	0.022
2007-2008	12	1.000	12	0.020
2008-2009	11	1.000	11	0.018
2009-2010	14	1.001	14	0.024
2010-2011	9	1.002	9	0.018
2011-2012	13	1.003	13	0.027
2012-2013	14	1.004	14	0.030
2013-2014	9	1.005	9	0.020
2014-2015	9	1.006	9	0.020
2015-2016	15	1.007	15	0.033
2016-2017	11	1.008	11	0.023
2017-2018	6	1.033	6	0.012
2018-2019	4	1.150	5	0.010
2019-2020	0	1.480	0	
2020-2021	3	4.588	14	0.030
2021-2022	0	15.140	0	
Total	201		213	0.019

Notes:

(A) Provided by the Authority.

(B) From \$100K to \$1M Rate Analysis Appendix D, Page 7.

(C) (A) x (B).

(D) (C) / [\$100K to \$1M Rate Analysis Appendix D, Page 3, (D)] x [\$100K to \$1M Rate Analy

This exhibit shows the calculation of estimated ultimate claims for each year based on closed claims as provided by the Authority. 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.

PLAN JPA - Liability Program (\$100K to \$1M Analysis) Reported Claim Count Development

		Claims R	eported as	<u>s of:</u>										
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002							8	8	8	8	8	7	10	10
2002-2003						7	7	7	7	7	11	21	21	21
2003-2004					9	10	10	10	10	22	12	12	12	12
2004-2005				17	20	20	20	20	12	5	5	5	5	5
2005-2006			4	7	9	10	11	5	15	15	15	15	15	15
2006-2007		3	8	6	6	5	16	13	13	13	13	13	13	13
2007-2008	1	5	9	11	14	11	19	18	18	18	18	17	18	18
2008-2009	2	6	8	8	19	14	13	13	13	13	13	13	13	13
2009-2010	3	5	14	14	16	16	16	16	16	16	16	16	16	16
2010-2011		6	21	14	13	12	11	11	11	11	11	11	11	
2011-2012	3	11	19	17	17	16	16	16	16	16	17	16		
2012-2013	3	22	22	15	15	16	15	15	15	16	16			
2013-2014	3	4	8	10	11	11	11	11	11	11				
2014-2015	3	8	15	12	12	12	12	12	12					
2015-2016		4	10	15	16	16	16	16						
2016-2017		4	11	12	16	15	14							
2017-2018		2	4	12	6	6								
2018-2019			4	5	7									
2019-2020			4	7										
2020-2021		12	12											
2021-2022 2022-2023	1	7												

		Reported	Claim Co	unt Develo	opment Fa	actors:								
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002							1.000	1.000	1.000	1.000	0.875	1.429	1.000	1.000
2002-2003						1.000	1.000	1.000	1.000	1.571	1.909	1.000	1.000	1.000
2003-2004					1.111	1.000	1.000	1.000	2.200	0.545	1.000	1.000	1.000	1.000
2004-2005				1.176	1.000	1.000	1.000	0.600	0.417	1.000	1.000	1.000	1.000	1.000
2005-2006			1.750	1.286	1.111	1.100	0.455	3.000	1.000	1.000	1.000	1.000	1.000	1.000
2006-2007		2.667	0.750	1.000	0.833	3.200	0.813	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007-2008	5.000	1.800	1.222	1.273	0.786	1.727	0.947	1.000	1.000	1.000	0.944	1.059	1.000	1.000
2008-2009	3.000	1.333	1.000	2.375	0.737	0.929	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009-2010	1.667	2.800	1.000	1.143	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2010-2011		3.500	0.667	0.929	0.923	0.917	1.000	1.000	1.000	1.000	1.000	1.000		
2011-2012	3.667	1.727	0.895	1.000	0.941	1.000	1.000	1.000	1.000	1.063	0.941			
2012-2013	7.333	1.000	0.682	1.000	1.067	0.938	1.000	1.000	1.067	1.000				
2013-2014	1.333	2.000	1.250	1.100	1.000	1.000	1.000	1.000	1.000					
2014-2015	2.667	1.875	0.800	1.000	1.000	1.000	1.000	1.000						
2015-2016		2.500	1.500	1.067	1.000	1.000	1.000							
2016-2017		2.750	1.091	1.333	0.938	0.933								
2017-2018		2.000	3.000	0.500	1.000									
2018-2019			1.250	1.400										
2019-2020			1.750											
2020-2021		1.000												
2021-2022	7.000													
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	3.958	2.073	1.240	1.172	0.963	1.183	0.948	1.114	1.053	1.015	1.061	1.049	1.000	1.000
Claim-Weighted														
Averages			2 000	1 000	0.074	0.077	1 000	1 000	1 004	1 0 0 0	0.077	1 000	1 000	1 000
3-yr			2.000	1.000	0.974	0.977	1.000	1.000	1.024	1.023	0.977	1.000	1.000	1.000
Comparative			1.505	1.025	0.300	0.301	1.000	1.000	1.013	1.017	0.302	1.010	1.000	1.000
Factors	2.633	1,136	1.018	1.005	1.005	1.004	1.004	1.002	1.002	1.001	1.000	1.000	1.000	1.000
Prior	3.700	2.250	1.200	1.150	1.025	1.010	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.000
Selected	3.786	2.191	1.213	1.157	1.025	1.010	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.000
Cumulated	12.119	3.201	1.461	1.204	1.040	1.015	89 1.005	1.004	1.003	1.002	1.001	1.001	1.001	97.000

6-18

PLAN JPA - Liability Program (\$100K to \$1M Analysis) Closed Claim Development

		Claims C	osed as c	of:										
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002							8	8	8	8	8	7	10	10
2002-2003						6	7	7	7	7	10	20	20	20
2003-2004					6	7	8	10	10	20	12	12	12	12
2004-2005				12	17	18	19	20	10	5	5	5	5	5
2005-2006			4	4	5	5	6	5	13	14	15	15	15	15
2006-2007		1	1	5	5	5	13	13	13	13	13	13	13	12
2007-2008			1	6	8	8	18	18	18	18	18	17	18	18
2008-2009		1	2	6	12	10	12	13	13	13	13	13	13	13
2009-2010			1	6	13	14	15	15	16	16	16	16	16	16
2010-2011		1	4	7	10	11	11	11	11	11	11	11	11	
2011-2012			2	8	10	14	16	15	15	15	16	15		
2012-2013		1	5	10	11	15	14	14	14	15	15			
2013-2014			3	5	10	9	10	10	11	11				
2014-2015		2	5	9	8	12	12	12	12					
2015-2016			2	6	10	15	15	15						
2016-2017			1	5	10	9	11							
2017-2018			1	5	4	6								
2018-2019			1	1	4									
2019-2020														
2020-2021			3											
2021-2022														
2022-2023														
		Closed C	laim Caun	t Davalan	mant Fast									
		Closed C		IL Develop	Closed Claim Count Development Factors:									

18-30 30-42 42-54 54-66 66-78 78-90 90-102 102-114 114-126 126-138 138-150 150-162 162-174

	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002							1.000	1.000	1.000	1.000	0.875	1.429	1.000	1.000
2002-2003						1.167	1.000	1.000	1.000	1.429	2.000	1.000	1.000	1.000
2003-2004					1.167	1.143	1.250	1.000	2.000	0.600	1.000	1.000	1.000	1.000
2004-2005				1.417	1.059	1.056	1.053	0.500	0.500	1.000	1.000	1.000	1.000	1.000
2005-2006			1.000	1.250	1.000	1.200	0.833	2.600	1.077	1.071	1.000	1.000	1.000	1.000
2006-2007		1.000	5.000	1.000	1.000	2.600	1.000	1.000	1.000	1.000	1.000	1.000	0.923	1.000
2007-2008			6.000	1.333	1.000	2.250	1.000	1.000	1.000	1.000	0.944	1.059	1.000	1.000
2008-2009		2.000	3.000	2.000	0.833	1.200	1.083	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009-2010			6.000	2.167	1.077	1.071	1.000	1.067	1.000	1.000	1.000	1.000	1.000	
2010-2011		4.000	1.750	1.429	1.100	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2011-2012			4.000	1.250	1.400	1.143	0.938	1.000	1.000	1.067	0.938			
2012-2013		5.000	2.000	1.100	1.364	0.933	1.000	1.000	1.071	1.000				
2013-2014			1.667	2.000	0.900	1.111	1.000	1.100	1.000					
2014-2015		2.500	1.800	0.889	1.500	1.000	1.000	1.000						
2015-2016			3.000	1.667	1.500	1.000	1.000							
2016-2017			5.000	2.000	0.900	1.222								
2017-2018			5.000	0.800	1.500									
2018-2019			1.000	4.000										
2019-2020														
2020-2021														
2021-2022														
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average		2.900	3.301	1.620	1.153	1.273	1.010	1.091	1.050	1.014	1.069	1.049	0.991	1.000
Claim-Weighted														
Averages														
3-yr				1.636	1.250	1.056	1.000	1.028	1.025	1.024	0.977	1.000	1.000	1.000
4-yr				1.647	1.313	1.067	1.000	1.020	1.020	1.018	0.982	1.018	0.983	1.000
Factors	3 387	1 4 9 5	1 1 2 2	1 051	1 033	1 020	1 012	1 0 1 0	1 007	1 005	1 005	1 003	1 003	1 001
Prior	4 000	3 500	3 000	1 050	1 001	1 001	1 001	1.010	1 001	1.003	1 001	1.000	1.000	1.001
Selected	4.000	3.300	3.100	1.287	1.113	1.025	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Cumulated	60.560	15.140	4.588	1.480	1.150	1.033	90 1.008	1.007	1.006	1.005	1.004	1.003	1.002	98 .001

Loss Trend Factors

		Factor to								
	Benefit	2022-2023	2023-2024	2024-2025	2025-2026	2022-2023	2023-2024	2024-2025	2025-2026	2022-2023
Accident	Level	Loss Rate	Loss Rate	Loss Rate	Loss Rate	Frequency	Frequency	Frequency	Frequency	Severity
Year	Factor	Level								
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
2001-2002	1.000	1.679	1.720	1.764	1.808	0.897	0.893	0.888	0.884	1.862
2002-2003	1.000	1.638	1.678	1.721	1.764	0.902	0.897	0.892	0.888	1.808
2003-2004	1.000	1.598	1.637	1.679	1.721	0.906	0.901	0.896	0.892	1.755
2004-2005	1.000	1.559	1.598	1.638	1.679	0.910	0.905	0.901	0.896	1.704
2005-2006	1.000	1.521	1.559	1.598	1.638	0.914	0.909	0.905	0.900	1.654
2006-2007	1.000	1.484	1.520	1.559	1.598	0.919	0.914	0.910	0.905	1.606
2007-2008	1.000	1.448	1.483	1.521	1.559	0.924	0.919	0.915	0.910	1.559
2008-2009	1.000	1.412	1.447	1.484	1.521	0.929	0.924	0.920	0.915	1.513
2009-2010	1.000	1.378	1.412	1.448	1.484	0.934	0.929	0.925	0.920	1.469
2010-2011	1.000	1.344	1.378	1.413	1.448	0.939	0.934	0.930	0.925	1.426
2011-2012	1.000	1.312	1.344	1.379	1.413	0.944	0.939	0.935	0.930	1.385
2012-2013	1.000	1.280	1.312	1.345	1.379	0.949	0.944	0.940	0.935	1.345
2013-2014	1.000	1.249	1.280	1.312	1.345	0.954	0.949	0.945	0.940	1.306
2014-2015	1.000	1.218	1.248	1.280	1.312	0.959	0.955	0.950	0.945	1.267
2015-2016	1.000	1.188	1.218	1.249	1.280	0.964	0.960	0.955	0.950	1.231
2016-2017	1.000	1.160	1.188	1.219	1.249	0.970	0.965	0.960	0.955	1.195
2017-2018	1.000	1.132	1.160	1.189	1.219	0.975	0.970	0.965	0.960	1.160
2018-2019	1.000	1.104	1.131	1.160	1.189	0.980	0.975	0.970	0.965	1.126
2019-2020	1.000	1.077	1.104	1.132	1.160	0.985	0.980	0.975	0.970	1.093
2020-2021	1.000	1.051	1.077	1.104	1.132	0.990	0.985	0.980	0.975	1.061
2021-2022	1.000	1.025	1.050	1.077	1.104	0.995	0.990	0.985	0.980	1.030
2022-2023	1.000	1.000	1.025	1.051	1.077	1.000	0.995	0.990	0.985	1.000
2023-2024	1.000		1.000	1.025	1.051		1.000	0.995	0.990	
2024-2025	1.000			1.000	1.025			1.000	0.995	
2025-2026	1.000				1.000				1.000	

Notes:

(A) No benefit level adjustment applied.

- (B) (E) (A) adjusted for a 2.5% annual loss rate trend.
- (F) (I) (A) adjusted for a -0.5% annual frequency trend.
 - (J) (A) adjusted for a 3.0% annual severity trend.

This exhibit shows the calculation of the ways in which we expect claims costs to have changed over the past twenty years due to changes in inflation.

Residual Trend Factors

	Initial					
	Estimate of					
	Ultimate	Ultimate		Adjusted	Trended	
Accident	Limited	Reported		Limited	Payroll	Ultimate
Year	Losses	Claims	BLF	Severity	(\$00)	Frequency
	(A)	(B)	(C)	(D)	(E)	(F)
2001-2002	\$2,949,541	10	1.000	294,954	4,913,815	0.020
2002-2003	4,237,463	20	1.000	211,873	5,332,137	0.038
2003-2004	2,205,881	12	1.000	183,823	5,435,017	0.022
2004-2005	1,424,731	4	1.000	356,183	5,456,509	0.007
2005-2006	2,684,321	12	1.000	223,693	5,410,979	0.022
2006-2007	1,419,184	13	1.000	109,168	5,498,428	0.024
2007-2008	2,651,368	12	1.000	220,947	5,660,768	0.021
2008-2009	2,653,385	11	1.000	241,217	5,721,853	0.019
2009-2010	1,335,978	14	1.000	95,427	5,434,260	0.026
2010-2011	1,557,549	9	1.000	173,061	4,753,826	0.019
2011-2012	3,489,000	14	1.000	249,214	4,536,227	0.031
2012-2013	3,736,000	15	1.000	249,067	4,454,630	0.034
2013-2014	2,088,304	9	1.000	232,034	4,284,105	0.021
2014-2015	3,799,380	9	1.000	422,153	4,328,088	0.021
2015-2016	3,260,000	16	1.000	203,750	4,395,985	0.036
2016-2017	5,569,000	14	1.000	397,786	4,566,182	0.031
2017-2018	818,000	6	1.000	136,333	4,681,268	0.013
2018-2019	1,113,000	7	1.000	159,000	4,709,274	0.015
2019-2020	578,000	8	1.000	72,250	4,680,801	0.017
2020-2021	5,200,000	18	1.000	288,889	4,621,045	0.039
2021-2022	3,729,000	10	1.000	372,900	4,756,654	0.021

Severity T	rend Factors	Frequency Trend Factors
2008-2009 through 2017-2018	1.045	0.995
2009-2010 through 2018-2019	1.032	0.956
2010-2011 through 2019-2020	0.923	0.946
Prior	1.030	1.010
Default	1.030	0.975
Selected Residual Trend	1.030	0.995

Notes:

(A) Selected average of results from \$100K to \$1M Rate Analysis Appendix A and \$100K to

(B) \$100K to \$1M Rate Analysis Appendix D, Page 3, Column (C).

(C) \$100K to \$1M Rate Analysis Appendix E, Page 1, (A).

(D) (A) x (C) / (B).

(E) From \$100K to \$1M Rate Analysis Appendix I, Column (C).

(F) (B) / (E) x 10,000.

Calculation of Discount Factors

Payment	Payment	Return on	Discounted	Undiscounted	Discount
Year	Pattern	Investment	Reserves	Reserves	Factor
(A)	(B)	(C)	(D)	(E)	(F)
22	0.0%	2.0%	0.000	0.000	1.000
21	0.0%	2.0%	0.000	0.000	1.000
20	0.0%	2.0%	0.000	0.000	1.000
19	0.0%	2.0%	0.000	0.000	1.000
18	0.0%	2.0%	0.000	0.000	1.000
17	0.0%	2.0%	0.000	0.000	1.000
16	0.0%	2.0%	0.000	0.000	1.000
15	0.0%	2.0%	0.000	0.000	1.000
14	0.2%	2.0%	0.002	0.002	0.990
13	0.3%	2.0%	0.005	0.005	0.982
12	0.3%	2.0%	0.008	0.008	0.973
11	0.3%	2.0%	0.010	0.011	0.964
10	0.7%	2.0%	0.017	0.018	0.962
9	2.3%	2.0%	0.039	0.040	0.970
8	4.1%	2.0%	0.079	0.082	0.971
7	7.1%	2.0%	0.148	0.153	0.970
6	9.8%	2.0%	0.242	0.250	0.966
5	15.3%	2.0%	0.389	0.404	0.963
4	25.1%	2.0%	0.630	0.655	0.962
3	22.5%	2.0%	0.840	0.880	0.955
2	9.6%	2.0%	0.919	0.976	0.942
1	2.4%	2.0%	0.925	1.000	0.925
		(G) Discount Factor	for Future Funding:	2022-2023	0.934

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 \$100K to \$1M Rate Analysis Appendix B, Page 2.

2023-2024

0.934

- (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, 91.9% = [84.0% / 1.020] + [9.6% / (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).
- (G) (F) at year 1, with interest accumulated for six months. We assume that the required funding is deposited at the middle of the first year.

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 0.93, on a discounted basis, \$0.93 must be budgeted for every \$1 that will actually be paid on claims that will be incurred in the next fiscal year.

Confidence Level Table

Probability	Projected Losses	Outstanding Losses
95%	1.978	1.527
90%	1.679	1.372
85%	1.501	1.279
80%	1.368	1.211
75%	1.263	1.155
70%	1.174	1.108
65%	1.095	1.067
60%	1.026	1.029
55%	0.962	0.995
50%	0.902	0.962
45%	0.844	0.930
40%	0.790	0.899
35%	0.737	0.869
30%	0.683	0.838
25%	0.629	0.805

To read table:	For the above retention, there is a 90% chance
	that final loss settlements will be less than
	1 679 times the average expected amount of losses
	1.079 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.

Incurred Losses as of 12/31/22

										Incurred
		Additions	Subtractions			Incurred	Incurred	Incurred	Incurred	Capped at
Accident	Unlimited	to	from	Adjusted	Incurred	Over	Capped at	\$100,000	Capped at	SIR &
Year	Incurred	Losses	Losses	Incurred	Over SIR	\$100,000	to SIR Layer	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
2001-2002	\$7,250,903	\$0	\$0	\$7,250,903	\$1,452,906	\$4,402,447	\$2,848,456	\$2,949,541	\$5,797,997	\$5,797,997
2002-2003	12,459,622	0	0	12,459,622	3,575,194	7,812,657	4,646,965	4,237,463	8,884,428	8,884,428
2003-2004	5,715,419	0	0	5,715,419	0	2,205,881	3,509,537	2,205,881	5,715,419	5,715,419
2004-2005	3,909,704	0	0	3,909,704	40,367	1,465,098	2,444,607	1,424,731	3,869,337	3,869,337
2005-2006	7,274,863	0	0	7,274,863	1,643,182	4,327,503	2,947,359	2,684,321	5,631,680	5,631,680
2006-2007	4,547,760	0	0	4,547,760	0	1,419,184	3,128,576	1,419,184	4,547,760	4,547,760
2007-2008	5,982,106	0	0	5,982,106	183,478	2,834,846	3,147,259	2,651,369	5,798,628	5,798,628
2008-2009	5,485,923	0	0	5,485,923	120,835	2,774,220	2,711,703	2,653,385	5,365,088	5,365,088
2009-2010	3,874,500	0	0	3,874,500	0	1,335,978	2,538,522	1,335,978	3,874,500	3,874,500
2010-2011	3,571,075	0	0	3,571,075	0	1,557,549	2,013,526	1,557,549	3,571,075	3,571,075
2011-2012	6,315,380	0	0	6,315,380	22,224	3,490,733	2,824,647	3,468,509	6,293,156	6,293,156
2012-2013	7,108,017	0	0	7,108,017	100,000	3,799,416	3,308,601	3,699,416	7,008,017	7,008,017
2013-2014	9,703,564	0	0	9,703,564	5,385,480	7,473,784	2,229,780	2,088,304	4,318,084	4,318,084
2014-2015	7,286,913	0	0	7,286,913	549,140	4,348,520	2,938,392	3,799,381	6,737,773	6,737,773
2015-2016	8,501,264	0	0	8,501,264	2,240,574	5,375,520	3,125,745	3,134,946	6,260,691	6,260,691
2016-2017	36,062,292	0	0	36,062,292	27,817,119	33,136,572	2,925,720	5,319,453	8,245,173	8,245,173
2017-2018	2,625,026	0	0	2,625,026	0	775,051	1,849,975	775,051	2,625,026	2,625,026
2018-2019	2,598,995	0	0	2,598,995	0	1,028,207	1,570,788	1,028,207	2,598,995	2,598,995
2019-2020	2,948,177	0	0	2,948,177	0	456,550	2,491,627	456,550	2,948,177	2,948,177
2020-2021	15,350,458	0	0	15,350,458	9,176,800	12,449,083	2,901,375	3,272,283	6,173,658	6,173,658
2021-2022	2,654,851	0	0	2,654,851	0	569,442	2,085,409	569,442	2,654,851	2,654,851
2022-2023	113,903	0	0	113,903	0	0	113,903	0	113,903	113,903
Total	\$161,340,714	\$0	\$0	\$161,340,714	\$52,307,298	\$103,038,242	\$58,302,472	\$50,730,944	\$109,033,416	\$109,033,416

Notes:

(A) Years are 7/1 to 6/30.

(B) Provided by the Authority.

(C) (D)

- (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 \$100K to \$1M Rate Analysis Not Included.

Paid Losses as of 12/31/22

										Paid
		Additions	Subtractions			Paid	Paid	Paid	Paid	Capped at
Accident	Unlimited	to	from	Adjusted	Paid	Over	Capped at	\$100,000	Capped at	SIR &
Year	Paid	Losses	Losses	Paid	Over SIR	\$100,000	\$100,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
2001-2002	\$7,250,903	\$0	\$0	\$7,250,903	\$1,452,906	\$4,402,447	\$2,848,456	\$2,949,541	\$5,797,997	\$5,797,997
2002-2003	12,459,622	0	0	12,459,622	3,575,194	7,812,657	4,646,965	4,237,463	8,884,428	8,884,428
2003-2004	5,715,419	0	0	5,715,419	0	2,205,881	3,509,537	2,205,881	5,715,419	5,715,419
2004-2005	3,909,704	0	0	3,909,704	40,367	1,465,098	2,444,607	1,424,731	3,869,337	3,869,337
2005-2006	7,274,863	0	0	7,274,863	1,643,182	4,327,503	2,947,359	2,684,321	5,631,680	5,631,680
2006-2007	4,547,760	0	0	4,547,760	0	1,419,184	3,128,576	1,419,184	4,547,760	4,547,760
2007-2008	5,982,106	0	0	5,982,106	183,478	2,834,846	3,147,259	2,651,369	5,798,628	5,798,628
2008-2009	5,485,923	0	0	5,485,923	120,835	2,774,220	2,711,703	2,653,385	5,365,088	5,365,088
2009-2010	3,874,500	0	0	3,874,500	0	1,335,978	2,538,522	1,335,978	3,874,500	3,874,500
2010-2011	3,571,075	0	0	3,571,075	0	1,557,549	2,013,526	1,557,549	3,571,075	3,571,075
2011-2012	6,260,218	0	0	6,260,218	22,224	3,435,571	2,824,647	3,413,347	6,237,994	6,237,994
2012-2013	6,532,045	0	0	6,532,045	0	3,223,444	3,308,601	3,223,444	6,532,045	6,532,045
2013-2014	9,703,564	0	0	9,703,564	5,385,480	7,473,784	2,229,780	2,088,304	4,318,084	4,318,084
2014-2015	7,286,913	0	0	7,286,913	549,140	4,348,520	2,938,392	3,799,381	6,737,773	6,737,773
2015-2016	8,367,697	0	0	8,367,697	2,240,574	5,241,953	3,125,745	3,001,379	6,127,124	6,127,124
2016-2017	34,766,444	0	0	34,766,444	27,192,489	31,883,155	2,883,289	4,690,666	7,573,955	7,573,955
2017-2018	2,624,026	0	0	2,624,026	0	775,051	1,848,975	775,051	2,624,026	2,624,026
2018-2019	2,337,555	0	0	2,337,555	0	791,792	1,545,763	791,792	2,337,555	2,337,555
2019-2020	1,735,905	0	0	1,735,905	0	19,385	1,716,520	19,385	1,735,905	1,735,905
2020-2021	12,786,696	0	0	12,786,696	9,106,053	11,045,065	1,741,631	1,939,012	3,680,643	3,680,643
2021-2022	597,050	0	0	597,050	0	0	597,050	0	597,050	597,050
2022-2023	19,868	0	0	19,868	0	0	19,868	0	19,868	19,868
Total	\$153,089,855	\$0	\$0	\$153,089,855	\$51,511,921	\$98,373,085	\$54,716,770	\$46,861,164	\$101,577,934	\$101,577,934

Notes:

(A) Years are 7/1 to 6/30.

(B) Provided by the Authority.

(C)

(D)

(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 \$100K to \$1M Rate Analysis Not Included.

Case Reserves as of 12/31/22

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 to SIR Layer (H)	Reserves \$100,000 to SIR Layer (I)	Reserves Capped at SIR (J)	Reserves Capped at SIR & Aggregate (K)
2001-2002	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2002-2003	0	0	0	0	0	0	0	0	0	0
2003-2004	0	0	0	0	0	0	0	0	0	0
2004-2005	0	0	0	0	0	0	0	0	0	0
2005-2006	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0
2009-2010	0	0	0	0	0	0	0	0	0	0
2010-2011	0	0	0	0	0	0	0	0	0	0
2011-2012	55,162	0	0	55,162	0	55,162	0	55,162	55,162	55,162
2012-2013	575,972	0	0	575,972	100,000	575,972	0	475,972	475,972	475,972
2013-2014	0	0	0	0	0	0	0	0	0	0
2014-2015	0	0	0	0	0	0	0	0	0	0
2015-2016	133,567	0	0	133,567	0	133,567	0	133,567	133,567	133,567
2016-2017	1,295,848	0	0	1,295,848	624,630	1,253,417	42,432	628,787	671,218	671,218
2017-2018	1,000	0	0	1,000	0	0	1,000	0	1,000	1,000
2018-2019	261,441	0	0	261,441	0	236,415	25,026	236,415	261,441	261,441
2019-2020	1,212,272	0	0	1,212,272	0	437,165	775,107	437,165	1,212,272	1,212,272
2020-2021	2,563,762	0	0	2,563,762	70,747	1,404,018	1,159,744	1,333,271	2,493,015	2,493,015
2021-2022	2,057,800	0	0	2,057,800	0	569,442	1,488,358	569,442	2,057,800	2,057,800
2022-2023	94,036	0	0	94,036	0	0	94,036	0	94,036	94,036
Total	\$8,250,859	\$0	\$0	\$8,250,859	\$795,377	\$4,665,157	\$3,585,702	\$3,869,780	\$7,455,482	\$7,455,482

Notes:

(A) Years are 7/1 to 6/30.

(B) \$100K to \$1M Rate Analysis Appendix H, Page 1, Column (B) - \$100K to \$1M Rate Analysis Appendix H, Page 2, Column (B).

(C) \$100K to \$1M Rate Analysis Appendix H, Page 1, Column (C) - \$100K to \$1M Rate Analysis Appendix H, Page 2, Column (C).

(D) \$100K to \$1M Rate Analysis Appendix H, Page 1, Column (D) - \$100K to \$1M Rate Analysis Appendix H, 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 \$100K to \$1M Rate Analysis Not Included.

regate stop loss See \$100K to \$1M

Claim Counts as of 12/31/22 in Excess of \$100K

		Additions to	Subtractions from	Adjusted		Additions to	Subtractions from	Adjusted		Adjusted
Accident	Reported	Reported	Reported	Reported	Closed	Closed	Closed	Closed	Open	Open
Year	Claims	Claims	Claims	Claims	Claims	Claims	Claims	Claims	Claims	Claims
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
2001-2002	10	0	0	10	10	0	0	10	0	C
2002-2003	20	0	0	20	20	0	0	20	0	C
2003-2004	12	0	0	12	12	0	0	12	0	C
2004-2005	4	0	0	4	4	0	0	4	0	C
2005-2006	12	0	0	12	12	0	0	12	0	C
2006-2007	13	0	0	13	13	0	0	13	0	C
2007-2008	12	0	0	12	12	0	0	12	0	C
2008-2009	11	0	0	11	11	0	0	11	0	C
2009-2010	14	0	0	14	14	0	0	14	0	C
2010-2011	9	0	0	9	9	0	0	9	0	C
2011-2012	14	0	0	14	13	0	0	13	1	1
2012-2013	15	0	0	15	14	0	0	14	1	1
2013-2014	9	0	0	9	9	0	0	9	0	C
2014-2015	9	0	0	9	9	0	0	9	0	C
2015-2016	16	0	0	16	15	0	0	15	1	1
2016-2017	14	0	0	14	11	0	0	11	3	3
2017-2018	6	0	0	6	6	0	0	6	0	C
2018-2019	7	0	0	7	4	0	0	4	3	3
2019-2020	7	0	0	7	0	0	0	0	7	7
2020-2021	12	0	0	12	3	0	0	3	9	g
2021-2022	7	0	0	7	0	0	0	0	7	7
2022-2023	0	0	0	0	0	0	0	0	0	C
Total	233	0	0	233	201	0	0	201	32	32

Notes:

(A) Years are 7/1 to 6/30.
(B) Provided by the Authority.
(C)
(D)
(E) (B) + (C) - (D).
(F) Provided by the Authority.

(G)

(H)

(I) (F) + (G) - (H).(J) (B) - (F).(K) (E) - (I).

Exposure Measures

Accident Year	Total Payroll (\$00) (A)	Inflation Trend Factor (B)	Trended Payroll (\$00) (C)
2001-2002	2,926,632	1.679	4,913,815
2002-2003	3,255,273	1.638	5,332,137
2003-2004	3,401,137	1.598	5,435,017
2004-2005	3,500,006	1.559	5,456,509
2005-2006	3,557,514	1.521	5,410,979
2006-2007	3,705,140	1.484	5,498,428
2007-2008	3,909,370	1.448	5,660,768
2008-2009	4,049,436	1.413	5,721,853
2009-2010	3,940,725	1.379	5,434,260
2010-2011	3,534,443	1.345	4,753,826
2011-2012	3,457,490	1.312	4,536,227
2012-2013	3,480,180	1.280	4,454,630
2013-2014	3,430,028	1.249	4,284,105
2014-2015	3,550,523	1.219	4,328,088
2015-2016	3,697,212	1.189	4,395,985
2016-2017	3,936,364	1.160	4,566,182
2017-2018	4,135,396	1.132	4,681,268
2018-2019	4,265,647	1.104	4,709,274
2019-2020	4,346,148	1.077	4,680,801
2020-2021	4,396,808	1.051	4,621,045
2021-2022	4,640,638	1.025	4,756,654
2022-2023	4,748,717	1.000	4,748,717
2023-2024	4,891,178	1.000	4,891,178

- Notes:
- (A)
- Provided by the Authority. Based on industry factors.
- (B) (C) (A) x (B).

PLAN JPA - Liability

Funding Guidelines for Outstanding Liabilities at June 30, 2023

(A)	Estimated Ultimate Losses Incurred through 6/30/23: (From Reserve Appendix F)			\$127,359,000		
(B)	Estimated Paid Losses through 6/30/23: (From Reserve Appendix F)			108,733,000		
(C)	Estimated Liability for Claims Outstanding at 6/30/23: (From Reserve Appendix F)			\$18,626,000		
(D)	Estimated Liability for Outstanding Claims Administration Fees at 6/30/23: (From Reserve Not Included)			2,328,000		
(E)	Total Outstanding Liability for Claims at 6/30/23: ((C) + (D))			\$20,954,000		
(F)	Reserve Discount Factor (Based on a Discount (Reserve Appendix H, Page 1, (H))	Rate of 2.0%.):		0.957		
(G)	Discounted Outstanding Liability for Claims at 6/30/23: ((E) x (F))			\$20,049,000		
		Marginally		Decemanded		Concernation
	Confidence Level of Adequacy:	70%	75%	80%	85%	90%
(H)	Confidence Level Factor: (From Reserve Appendix I)	1.109	1.155	1.209	1.278	1.370
(I)	Margin for Adverse Experience: ((G) x [(H) - 1])	2,185,000	3,108,000	4,190,000	5,574,000	7,418,000
(J)	Total Required Assets at 6/30/23: ((G) + (I))	\$22,234,000	\$23,157,000	\$24,239,000	\$25,623,000	\$27,467,000
(K)	Estimated Total Assets at 6/30/23: (From Reserve Appendix K)	47,426,000	47,426,000	47,426,000	47,426,000	47,426,000
(L)	Indicated Funding Redundancy/ (Deficiency): ((K) - (J))	\$25,192,000	\$24,269,000	\$23,187,000	\$21,803,000	\$19,959,000
IBNR as of 6/30/23 at Expected Claims Level

				Estimated Percent of IBNR		
			Estimated IBNR	Reported Between	Estimated	Estimated IBNR
Accident	Estimated	Reported	as of	1/1/23 and	IBNR	as of
Year	Ultimate	as of 12/31/22	12/31/22	6/30/23	Reported	6/30/23
	(A)	(B)	(C)	(D)	(E)	(F)
1986-2002	\$34,629,654	\$34,629,654	\$0	100.0%	\$0	\$0
2002-2003	8,812,482	8,812,482	0	100.0%	0	0
2003-2004	2,574,481	2,574,481	0	100.0%	0	0
2004-2005	1,874,487	1,874,487	0	100.0%	0	0
2005-2006	4,756,022	4,756,022	0	100.0%	0	0
2006-2007	1,662,124	1,662,124	0	100.0%	0	0
2007-2008	6,755,660	6,755,660	0	100.0%	0	0
2008-2009	3,472,680	3,472,680	0	100.0%	0	0
2009-2010	2,352,952	2,352,952	0	100.0%	0	0
2010-2011	2,046,846	2,046,846	0	33.3%	0	0
2011-2012	3,902,000	3,878,185	23,815	33.2%	8,000	15,815
2012-2013	4,105,000	4,063,438	41,562	37.8%	16,000	25,562
2013-2014	7,074,000	6,969,125	104,875	19.8%	21,000	83,875
2014-2015	5,566,000	5,429,951	136,049	19.6%	27,000	109,049
2015-2016	5,157,000	4,957,912	199,088	19.4%	39,000	160,088
2016-2017	8,351,000	8,211,756	139,244	8.2%	11,000	128,244
2017-2018	1,075,000	870,473	204,527	22.8%	47,000	157,527
2018-2019	2,079,000	1,291,645	787,355	14.8%	117,000	670,355
2019-2020	2,690,000	701,961	1,988,039	32.0%	636,000	1,352,039
2020-2021	8,725,000	5,611,045	3,113,955	29.4%	916,000	2,197,955
2021-2022	4,978,000	514,442	4,463,558	17.7%	790,000	3,673,558
2022-2023	4,720,000		2,360,000	9.0%	425,000	4,295,000
Totals	\$127,359,388	\$111,437,321	\$13,562,067		\$3,053,000	\$12,869,067

Notes:

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

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)	Frequency- Severity Method (E)	Selected Estimate of Ultimate Losses (F)
1986-2002	\$34,629,654	\$34,629,654			\$27,734,976	\$34,629,654
2002-2003	8,812,482	8,812,482	8,812,482	8,812,482	6,056,820	8,812,482
2003-2004	2,574,481	2,574,481	2,574,481	2,574,481	2,881,140	2,574,481
2004-2005	1,874,487	1,874,487	1,874,487	1,874,487	2,117,187	1,874,487
2005-2006	4,756,022	4,756,022	4,756,022	4,756,022	3,673,824	4,756,022
2006-2007	1,662,124	1,662,124	1,662,124	1,662,124	1,903,146	1,662,124
2007-2008	6,755,660	6,755,660	6,755,660	6,755,660	5,684,280	6,755,660
2008-2009	3,472,680	3,472,680	3,472,680	3,472,680	3,936,486	3,472,680
2009-2010	2,355,305	2,355,305	2,355,716	2,355,716	2,767,280	2,352,952
2010-2011	2,052,987	2,052,987	2,054,149	2,054,149	2,439,073	2,046,846
2011-2012	3,901,454	3,849,784	3,906,321	3,855,848	4,688,920	3,902,000
2012-2013	4,104,072	3,518,853	4,113,401	3,532,432	4,996,698	4,105,000
2013-2014	7,073,662	7,066,693	7,025,854	7,022,072	3,784,395	7,074,000
2014-2015	5,565,700	5,549,410	5,576,914	5,564,668	6,125,364	5,566,000
2015-2016	5,156,228	5,128,279	5,127,632	5,087,858	4,466,500	5,157,000
2016-2017	8,597,709	7,772,465	8,538,055	7,719,704	7,227,360	8,351,000
2017-2018	919,219	1,088,091	1,229,484	2,225,232	2,230,641	1,075,000
2018-2019	1,397,560	1,508,980	1,839,597	3,225,410	3,196,400	2,079,000
2019-2020	887,981	220,428	2,231,741	3,819,743	4,488,372	2,690,000
2020-2021	7,812,865	5,167,816	9,613,615	10,118,581	9,362,215	8,725,000
2021-2022	2,443,600		5,727,359	6,316,285	6,186,875	4,978,000

Totals

\$122,639,388

Projected Losses for the Year 2022-2023 (G) \$4,720,000 Projected Losses for the Year 2023-2024 (H) \$5,100,000

Notes:

- (A) From Reserve Appendix A, Page 1, Column (G).
- (B) From Reserve Appendix B, Page 1, Column (G).
- (C) From Reserve Appendix C, Page 1, Column (G).
- (D) From Reserve Appendix C, Page 2, Column (G).
- (E) From Reserve Appendix D, Page 1, Column (C).
 (F) Selected averages of (A), (B), (C), (D), and (E).
- (G) From Reserve Not Included, Page 1, Line (K).
- (H) From Reserve Not Included, Page 1, Line (K).

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.

Estimated Ultimate Limited Losses Capped at \$1,000,000 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)
1986-2002	\$25,985,454	\$25,985,454			\$25,985,472	\$25,985,454
2002-2003	5,437,289	5,437,289	5,437,289	5,437,289	5,437,292	5,437,289
2003-2004	2,574,481	2,574,481	2,574,481	2,574,481	2,574,480	2,574,481
2004-2005	1,874,487	1,874,487	1,874,487	1,874,487	1,874,484	1,874,487
2005-2006	3,237,840	3,237,840	3,237,840	3,237,840	3,237,840	3,237,840
2006-2007	1,662,124	1,662,124	1,662,124	1,662,124	1,662,122	1,662,124
2007-2008	4,919,885	4,919,885	4,919,885	4,919,885	4,919,880	4,919,885
2008-2009	3,376,845	3,376,845	3,376,845	3,376,845	3,376,846	3,376,845
2009-2010	2,355,305	2,355,305	2,355,302	2,355,302	2,352,960	2,352,952
2010-2011	2,052,987	2,052,987	2,052,979	2,052,979	2,046,850	2,046,846
2011-2012	3,901,454	3,849,784	3,901,592	3,850,331	3,901,000	3,901,000
2012-2013	4,104,072	3,518,853	4,104,479	3,524,403	4,104,009	4,104,000
2013-2014	3,115,162	3,112,093	3,115,136	3,112,069	3,069,120	3,069,125
2014-2015	5,028,457	5,013,740	5,023,516	5,013,707	4,905,810	5,028,000
2015-2016	3,700,228	3,640,079	3,698,566	3,642,729	3,700,000	3,700,000
2016-2017	6,034,645	5,624,053	6,030,665	5,657,766	5,911,000	5,911,000
2017-2018	919,219	1,088,091	1,160,510	1,964,953	1,801,471	1,100,000
2018-2019	1,397,560	1,508,980	1,728,647	2,785,988	2,549,430	2,310,000
2019-2020	887,981	220,428	1,907,242	3,032,562	3,536,078	2,526,000
2020-2021	6,564,563	4,651,510	7,336,470	7,397,699	7,257,395	7,297,000
2021-2022	2,443,600		5,727,359	6,316,285	6,186,875	4,978,000

Totals

\$97,392,328

Projected Losses for the Year 2022-2023 ((G)	\$4,720,000
Projected Losses for the Year 2023-2024 ((H)	\$5,100,000

Notes:

- (A) From Reserve Appendix A, Page 1, Column (D).
- (B) From Reserve Appendix B, Page 1, Column (D).
- (C) Based on results in Reserve Appendix C, Page 1.
- (D) Based on results in Reserve Appendix C, Page 2.
- (E) Based on results in Reserve Appendix D, Page 1.
- (F) Selected averages of (A), (B), (C), (D), and (E).
- (G) From Reserve Not Included, Page 1, Line (K) / Line (G1.
- (H) From Reserve Not Included, Page 1, Line (K) / Line (G1.

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.

Reported Loss Development

	Program	Reported		Program	Reported	
	Reported	Loss	Ultimate	Reported	Loss	Ultimate
Accident	Losses as	Development	Program	Losses	Development	Program
Year	of 12/31/22	Factor	Losses	of 12/31/22	Factor	Losses
(A)	(B)	(C)	(D)	(E)	(F)	(G)
1986-2002	\$25,985,454	1.000	\$25,985,454	\$34,629,654	1.000	\$34,629,654
2002-2003	5,437,289	1.000	5,437,289	8,812,482	1.000	8,812,482
2003-2004	2,574,481	1.000	2,574,481	2,574,481	1.000	2,574,481
2004-2005	1,874,487	1.000	1,874,487	1,874,487	1.000	1,874,487
2005-2006	3,237,840	1.000	3,237,840	4,756,022	1.000	4,756,022
2006-2007	1,662,124	1.000	1,662,124	1,662,124	1.000	1,662,124
2007-2008	4,919,885	1.000	4,919,885	6,755,660	1.000	6,755,660
2008-2009	3,376,845	1.000	3,376,845	3,472,680	1.000	3,472,680
2009-2010	2,352,952	1.001	2,355,305	2,352,952	1.001	2,355,305
2010-2011	2,046,846	1.003	2,052,987	2,046,846	1.003	2,052,987
2011-2012	3,878,185	1.006	3,901,454	3,878,185	1.006	3,901,454
2012-2013	4,063,438	1.010	4,104,072	4,063,438	1.010	4,104,072
2013-2014	3,069,125	1.015	3,115,162	6,969,125	1.015	7,073,662
2014-2015	4,905,812	1.025	5,028,457	5,429,951	1.025	5,565,700
2015-2016	3,557,912	1.040	3,700,228	4,957,912	1.040	5,156,228
2016-2017	5,763,749	1.047	6,034,645	8,211,756	1.047	8,597,709
2017-2018	870,473	1.056	919,219	870,473	1.056	919,219
2018-2019	1,291,645	1.082	1,397,560	1,291,645	1.082	1,397,560
2019-2020	701,961	1.265	887,981	701,961	1.265	887,981
2020-2021	4,234,245	2.043	6,564,563	5,611,045	2.043	7,812,865
2021-2022	514,442	4.750	2,443,600	514,442	4.750	2,443,600
Totals	\$86,319,190		\$91,573,638	\$111,437,321		\$116,805,932

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Authority. These losses exclude amounts over the SIR.
- (C) From Reserve Appendix A, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over the SIR.
- (E) Losses capped at the Authority's SIR. Amounts are provided by the Authority.
- (F) From Reserve Appendix A, Page 2.
- (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.

PLAN JPA - Liability Reported Loss Development

		Program Lo	sses Reporte	ed as of:							
Accident	6	18	30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002		486,199	2,720,670	2,906,359	3,303,530	4,806,236	6,530,242	4,585,777	4,573,678	4,573,678	4,664,570
2002-2003	567,543	1,906,336	4,062,177	8,370,243	9,217,066	8,542,877	8,721,640	8,719,727	8,808,032	8,850,963	8,792,658
2003-2004	4,001	184,321	558,456	670,955	1,173,162	1,318,511	1,591,251	1,881,919	2,790,812	2,568,802	2,569,681
2004-2005		671,598	1,275,449	1,852,243	1,904,110	1,876,140	1,884,486	1,876,140	1,876,140	1,876,140	1,876,140
2005-2006	25,000	422,143	1,922,276	2,886,625	3,514,764	4,881,587	4,993,818	5,096,734	5,171,734	4,812,387	4,775,006
2006-2007	250,000	429,839	388,247	544,541	885,717	1,181,310	1,717,627	1,656,699	1,656,563	1,656,563	1,656,563
2007-2008	228,140	748,802	1,944,679	3,425,750	4,743,123	7,031,234	6,805,660	6,755,660	6,755,660	6,755,660	6,755,660
2008-2009	40,000	593,853	2,272,388	4,424,148	5,587,036	5,819,751	3,573,895	3,528,864	3,528,864	3,528,864	3,528,864
2009-2010	588,210	3,130,545	3,852,129	3,616,630	3,528,002	3,528,002	2,483,987	2,463,987	2,441,417	2,441,417	2,441,417
2010-2011		3,235,361	13,599,043	6,660,508	1,961,674	2,096,846	2,046,846	2,046,846	2,076,846	2,076,846	2,076,846
2011-2012	25,000	6,136,433	10,300,736	3,657,810	3,711,615	3,660,880	3,809,185	3,878,185	3,878,185	3,878,185	3,878,185
2012-2013	25,000	4,721,268	2,820,517	2,142,134	2,006,231	2,383,230	2,320,228	2,449,510	3,788,438	3,788,438	4,063,438
2013-2014	357,000	1,085,300	1,453,782	6,394,575	6,948,858	7,070,156	7,046,618	6,959,081	6,959,081	3,069,125	
2014-2015		2,581,639	3,391,765	4,496,980	5,649,691	5,428,532	5,429,951	5,429,951	4,905,812		
2015-2016		816,550	4,031,962	4,652,451	5,078,739	5,077,844	4,948,195	3,557,912			
2016-2017	10,002	1,838,105	4,617,897	6,101,188	7,084,535	7,845,241	5,763,749				
2017-2018		213,377	680,850	921,662	868,680	870,473					
2018-2019		5,000	568,156	1,002,487	1,291,645						
2019-2020		63,500	367,323	701,961							
2020-2021	2,330,000	4,118,968	4,234,245								
2021-2022	60,000	514,442									
2022-2023											
		Reported Lo	oss Developn	nent Factors	<u>.</u>						

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	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002		5.596	1.068	1.137	1.455	1.359	0.702	0.997	1.000	1.020	0.989
2002-2003	3.359	2.131	2.061	1.101	0.927	1.021	1.000	1.010	1.005	0.993	1.008
2003-2004	46.069	3.030	1.201	1.748	1.124	1.207	1.183	1.483	0.920	1.000	1.000
2004-2005		1.899	1.452	1.028	0.985	1.004	0.996	1.000	1.000	1.000	1.000
2005-2006	16.886	4.554	1.502	1.218	1.389	1.023	1.021	1.015	0.931	0.992	1.000
2006-2007	1.719	0.903	1.403	1.627	1.334	1.454	0.965	1.000	1.000	1.000	1.000
2007-2008	3.282	2.597	1.762	1.385	1.482	0.968	0.993	1.000	1.000	1.000	0.965
2008-2009	14.846	3.827	1.947	1.263	1.042	0.614	0.987	1.000	1.000	1.000	1.000
2009-2010	5.322	1.230	0.939	0.975	1.000	0.704	0.992	0.991	1.000	1.000	1.000
2010-2011		4.203	0.490	0.295	1.069	0.976	1.000	1.015	1.000	1.000	1.000
2011-2012	245.457	1.679	0.355	1.015	0.986	1.041	1.018	1.000	1.000	1.000	1.000
2012-2013	188.851	0.597	0.759	0.937	1.188	0.974	1.056	1.547	1.000	1.073	
2013-2014	3.040	1.340	4.399	1.087	1.017	0.997	0.988	1.000	0.441		
2014-2015		1.314	1.326	1.256	0.961	1.000	1.000	0.903			
2015-2016		4.938	1.154	1.092	1.000	0.974	0.719				
2016-2017	183.774	2.512	1.321	1.161	1.107	0.735					
2017-2018		3.191	1.354	0.943	1.002						
2018-2019		113.631	1.764	1.288							
2019-2020		5.785	1.911								
2020-2021	1.768	1.028									
2021-2022	8.574										
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	55.611	8.299	1.483	1.142	1.122	1.003	0.975	1.069	0.946	1.007	0.997
Dollar-Weighted											
Averages		1 0 2 5	1 625	1 150	1 059	0 000	0.015	1 055	0 724	1 0 2 9	1 000
3-yi 4-vr		1.200	1.025	1.132	1.030	0.000	0.913	1.035	0.734	1.020	1.000
Comparative		1.020	1.400	1.100	1.025	0.012	0.002	1.044	0.707	1.020	1.000
Factors	2.945	1.254	1.006	0.965	0.972	1.000	1.000	1.000	1.000	1.000	1.000
Prior	5.500	2.325	1.393	1.152	1.033	1.010	1.011	1.015	1.010	1.005	1.004
Selected	5.500	2.325	1.615	1.169	1.024	1.009	1.006	1.015	1.010	1.005	1.004
Cumulated	26.125	4.750	2.043	1.265	1: P05	1.056	1.047	1.040	1.025	1.015	1 113 010
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PLAN JPA - Liability Reported Loss Development

	Program Los	sses Reporte	ed as of:								
Accident Year 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2013-2014 2013-2016 2015-2016 2015-2016 2015-2018 2018-2019 2019-2020 2020-2021	Program Los 138 Months 4,615,125 8,866,771 2,569,681 1,876,140 4,775,006 1,656,563 6,517,383 3,528,864 2,441,417 2,076,846 3,878,185	ISS Reported 150 Months 4,643,008 8,864,201 2,569,681 1,876,140 4,775,006 1,656,563 6,755,660 3,528,864 2,441,417 2,046,846	ad as of: 162 Months 4,627,263 8,864,200 2,569,681 1,876,140 4,775,006 1,679,200 6,755,660 3,527,823 2,441,417	174 Months 4,627,263 8,864,200 2,569,681 1,876,140 4,775,006 1,662,124 6,755,660 3,433,029	186 Months 4,627,263 8,864,200 2,569,681 1,876,140 4,775,006 1,662,124 4,919,885	198 Months 4,627,263 8,832,841 2,569,681 1,876,140 4,775,006 1,662,124	210 Months 4,627,263 8,832,841 2,569,681 1,876,140 3,256,823	222 Months 4,627,263 8,832,841 2,569,681 1,876,140	234 Months 4,627,263 8,832,841 2,569,681	246 Months 4,627,263 5,457,648	258 Months 3,299,357
2021-2022											
2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022	Reported Lo 138-150 Months 1.006 1.000 1.000 1.000 1.000 1.037 1.000 1.037 1.000 0.986	ss Developm 150-162 Months 0.997 1.000 1.000 1.000 1.000 1.000 1.000 1.000	nent Factors: 162-174 Months 1.000 1.000 1.000 0.990 1.000 0.973	174-186 Months 1.000 1.000 1.000 1.000 0.728	186-198 Months 1.000 0.996 1.000 1.000 1.000	198-210 Months 1.000 1.000 1.000 0.682	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000	234-246 Months 1.000 0.618	246-258 Months 0.713	258-Ult. Months
Average Dollar-Weighted Averages 3-yr 4-yr	138-150 Months 1.003 0.996 1.014	150-162 Months 1.001 1.000 1.002	162-174 Months 0.995 0.991 0.993	174-186 Months 0.961 0.861 0.878	186-198 Months 0.999 1.000 1.000	198-210 Months 0.936 0.835 0.916	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000	234-246 Months 0.809	246-258 Months 0.713	258-Ult. Months
Comparative Factors	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Prior	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	1.006	1.003	1.001	1.000	1: 106	1.000	1.000	1.000	1.000	1.000	114000

Paid Loss Development

	Program			Program		
	Paid	Paid Loss	Ultimate	Paid	Paid Loss	Ultimate
Accident	Losses as	Development	Program	Losses	Development	Program
Year	of 12/31/22	Factor	Losses	of 12/31/22	Factor	Losses
(A)	(B)	(C)	(D)	(E)	(F)	(G)
1986-2002	\$25,985,454	1.000	\$25,985,454	\$34,629,654	1.000	\$34,629,654
2002-2003	5,437,289	1.000	5,437,289	8,812,482	1.000	8,812,482
2003-2004	2,574,481	1.000	2,574,481	2,574,481	1.000	2,574,481
2004-2005	1,874,487	1.000	1,874,487	1,874,487	1.000	1,874,487
2005-2006	3,237,840	1.000	3,237,840	4,756,022	1.000	4,756,022
2006-2007	1,662,124	1.000	1,662,124	1,662,124	1.000	1,662,124
2007-2008	4,919,885	1.000	4,919,885	6,755,660	1.000	6,755,660
2008-2009	3,376,845	1.000	3,376,845	3,472,680	1.000	3,472,680
2009-2010	2,352,952	1.001	2,355,305	2,352,952	1.001	2,355,305
2010-2011	2,046,846	1.003	2,052,987	2,046,846	1.003	2,052,987
2011-2012	3,823,023	1.007	3,849,784	3,823,023	1.007	3,849,784
2012-2013	3,487,466	1.009	3,518,853	3,487,466	1.009	3,518,853
2013-2014	3,069,125	1.014	3,112,093	6,969,125	1.014	7,066,693
2014-2015	4,905,812	1.022	5,013,740	5,429,951	1.022	5,549,410
2015-2016	3,424,345	1.063	3,640,079	4,824,345	1.063	5,128,279
2016-2017	5,034,962	1.117	5,624,053	6,958,339	1.117	7,772,465
2017-2018	870,473	1.250	1,088,091	870,473	1.250	1,088,091
2018-2019	1,055,231	1.430	1,508,980	1,055,231	1.430	1,508,980
2019-2020	108,746	2.027	220,428	108,746	2.027	220,428
2020-2021	2,522,774	5.072	4,651,510	3,828,828	5.072	5,167,816
2021-2022	0	22.824	0	0	22.824	0
Totals	\$81,770,160		\$85,704,308	\$106,292,915		\$109,816,681

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Authority. These losses exclude amounts over the SIR.
- (C) From Reserve Appendix B, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over the SIR.
- (E) Losses capped at the Authority's SIR. Amounts are provided by the Authority.
- (F) From Reserve Appendix B, Page 2.
- (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.

PLAN JPA - Liability Paid Loss Development

					I GIG E		inone				
	<u> </u>	Program Los	sses Paid as	of:							
Accident	6	18	30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002		309,735	1,134,971	2,673,383	3,181,741	3,268,324	3,280,242	4,573,678	4,573,678	4,573,678	4,613,136
2002-2003	150,543	1,228,821	1,665,669	6,933,745	8,246,287	8,190,377	8,708,241	8,719,727	8,719,727	8,742,645	8,772,745
2003-2004	4,000	77,051	495,103	608,305	921,312	1,087,642	1,376,804	1,647,154	2,608,353	2,568,802	2,569,681
2004-2005		81,598	417,717	1,814,469	1,878,960	1,876,140	1,876,140	1,876,140	1,876,140	1,876,140	1,876,140
2005-2006		247,187	294,551	1,141,504	2,514,423	3,122,718	4,717,976	4,734,927	4,753,612	4,756,021	4,775,006
2006-2007	6,182	16,629	124,634	476,923	689,869	1,110,840	1,669,292	1,656,563	1,656,563	1,656,563	1,656,563
2007-2008		73,131	687,414	1,833,480	3,126,455	5,793,113	6,755,660	6,755,660	6,755,660	6,755,660	6,755,660
2008-2009	20,033	75,913	531,423	2,267,616	2,681,095	3,030,640	3,494,736	3,528,864	3,528,864	3,528,864	3,528,864
2009-2010	219,495	304,644	724,295	2,093,891	2,352,952	2,372,163	2,421,490	2,438,686	2,441,417	2,441,417	2,441,417
2010-2011		249,199	684,682	1,176,359	1,846,866	2,046,846	2,046,846	2,046,846	2,076,846	2,076,846	2,076,846
2011-2012	14,083	197,650	1,183,434	2,859,227	3,523,538	3,619,018	3,764,045	3,787,597	3,797,983	3,811,937	3,814,260
2012-2013		550,184	901,080	1,725,493	1,819,616	2,017,440	2,270,574	2,351,992	3,352,812	3,371,074	3,487,466
2013-2014		128,965	746,799	5,850,808	6,724,237	6,722,157	6,932,649	6,959,081	6,959,081	3,069,125	
2014-2015		1,676,100	2,183,993	2,667,604	5,339,202	5,428,532	5,429,951	5,429,951	4,905,812		
2015-2016		16,532	226,123	3,422,237	4,335,681	4,610,479	4,814,203	3,424,345			
2016-2017		900	1,406,078	4,536,037	4,970,143	6,678,653	5,034,962				
2017-2018		56,752	356,919	777,179	814,717	870,473					
2018-2019			167,664	707,921	1,055,231						
2019-2020			56,239	108,746							
2020-2021		2,431,166	2,522,774								
2021-2022											
2022-2023											

		Paid Loss De	evelopment l	actors:							
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002		3.664	2.355	1.190	1.027	1.004	1.394	1.000	1.000	1.009	1.000
2002-2003	8.163	1.356	4.163	1.189	0.993	1.063	1.001	1.000	1.003	1.003	1.004
2003-2004	19.263	6.426	1.229	1.515	1.181	1.266	1.196	1.584	0.985	1.000	1.000
2004-2005		5.119	4.344	1.036	0.998	1.000	1.000	1.000	1.000	1.000	1.000
2005-2006		1.192	3.875	2.203	1.242	1.511	1.004	1.004	1.001	1.004	1.000
2006-2007	2.690	7.495	3.827	1.446	1.610	1.503	0.992	1.000	1.000	1.000	1.000
2007-2008		9.400	2.667	1.705	1.853	1.166	1.000	1.000	1.000	1.000	0.965
2008-2009	3.789	7.000	4.267	1.182	1.130	1.153	1.010	1.000	1.000	1.000	1.000
2009-2010	1.388	2.378	2.891	1.124	1.008	1.021	1.007	1.001	1.000	1.000	1.000
2010-2011		2.748	1.718	1.570	1.108	1.000	1.000	1.015	1.000	1.000	1.000
2011-2012	14.035	5.988	2.416	1.232	1.027	1.040	1.006	1.003	1.004	1.001	1.002
2012-2013		1.638	1.915	1.055	1.109	1.125	1.036	1.426	1.005	1.035	
2013-2014		5.791	7.835	1.149	1.000	1.031	1.004	1.000	0.441		
2014-2015		1.303	1.221	2.001	1.017	1.000	1.000	0.903			
2015-2016		13.678	15.134	1.267	1.063	1.044	0.711				
2016-2017		1,562.309	3.226	1.096	1.344	0.754					
2017-2018		6.289	2.177	1.048	1.068						
2018-2019			4.222	1.491							
2019-2020			1.934								
2020-2021		1.038									
2021-2022											
	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months

	0-10	10-30	30-42	42-34	54-00	00-70	70-90	90-102	102-114	114-120	120-130
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	8.221	91.378	3.759	1.361	1.163	1.105	1.024	1.067	0.957	1.004	0.997
Dollar-Weighted											
Averages											
3-yr			2.744	1.136	1.201	0.914	0.921	1.032	0.727	1.013	1.001
4-yr			3.085	1.183	1.138	0.948	0.934	1.026	0.762	1.010	1.001
Comparative											
Factors	4.218	2.117	1.446	1.151	1.057	1.033	1.015	1.010	1.008	1.008	1.006
Prior	9.100	4.500	2.502	1.400	1.145	1.120	1.050	1.025	1.010	1.005	1.004
Selected	9.100	4.500	2.502	1.418	1.144	1.119	1.051	1.040	1.008	1.005	1.002
Cumulated	207.698	22.824	5.072	2.027	1. 198	1.250	1.117	1.063	1.022	1.014	116009

DRAFT

Cumulated

1.007

1.003

1.001

1117.000

1.000

PLAN JPA - Liability Paid Loss Development

	Program Los	sses Paid as	of:								
Accident Year 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013	Program Los 138 Months 4,615,125 8,809,636 2,569,681 1,876,140 4,775,006 1,656,563 6,517,383 3,528,864 2,441,417 2,076,846 3,823,023	Sees Paid as 150 Months 4,615,701 8,825,154 2,569,681 1,876,140 4,775,006 1,656,563 6,755,660 3,528,864 2,441,417 2,046,846	of: 162 Months 4,627,263 8,832,114 2,569,681 1,876,140 4,775,006 1,656,563 6,755,660 3,527,823 2,441,417	174 Months 4,627,263 8,832,841 2,569,681 1,876,140 4,775,006 1,662,124 6,755,660 3,433,029	186 Months 4,627,263 8,832,841 2,569,681 1,876,140 4,775,006 1,662,124 4,919,885	198 Months 4,627,263 8,832,841 2,569,681 1,876,140 4,775,006 1,662,124	210 Months 4,627,263 8,832,841 2,569,681 1,876,140 3,256,823	222 Months 4,627,263 8,832,841 2,569,681 1,876,140	234 Months 4,627,263 8,832,841 2,569,681	246 Months 4,627,263 5,457,648	258 Months 3,299,357
2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023											
	Paid Loss D 138-150	evelopment 150-162	Factors: 162-174	174-186	186-198	198-210	210-222	222-234	234-246	246-258	258-Ult
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002	1.000	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.713	
2002-2003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	0.618		
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				
2005-2006	1.000	1.000	1.000	1.000	1.000	0.682					
2006-2007	1.000	1.000	1.003	1.000	1.000						
2007-2008	1.037	1.000	1.000	0.728							
2008-2009	1.000	1.000	0.973								
2009-2010	1.000	1.000									
2010-2011	0.986										
2011-2012											
2012-2013											
2013-2014											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
2021-2022											
	138-150	150-162	162-174	17/1-126	186-108	198-210	210-222	222-234	234-246	246-258	258-1 11+
Average Dollar-Weighted	Months 1.003	Months 1.000	Months 0.997	Months 0.961	Months 1.000	Months 0.936	Months 1.000	Months 1.000	Months 0.809	Months 0.713	Months
3-vr	0 996	1 000	0.993	0 861	1 000	0.835	1 000	1 000			
4-yr	1.014	1.000	0.995	0.878	1.000	0.916	1.000				
Comparative											
Factors	1.006	1.004	1.004	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.000
Prior	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.004	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

1.**599**

1.000

1.000

1.000

1.000

1.000

Exposure and Development Method Based on Reported Losses

Accident Year	Trended Payroll (\$00) (A)	Reported Losses as of 12/31/22 (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)
1986-2002	0		1.000	0.000	0.625	0	
2002-2003	5,636,399	8,812,482	1.000	0.000	1.075	0	8,812,482
2003-2004	5,747,065	2,574,481	1.000	0.000	0.501	0	2,574,481
2004-2005	6,561,932	1,874,487	1.000	0.000	0.323	0	1,874,487
2005-2006	6,538,260	4,756,022	1.000	0.000	0.562	0	4,756,022
2006-2007	6,684,323	1,662,124	1.000	0.000	0.285	0	1,662,124
2007-2008	6,906,572	6,755,660	1.000	0.000	0.823	0	6,755,660
2008-2009	6,964,700	3,472,680	1.000	0.000	0.565	0	3,472,680
2009-2010	6,564,472	2,352,952	1.001	0.001	0.421	2,764	2,355,716
2010-2011	5,908,601	2,046,846	1.003	0.003	0.412	7,303	2,054,149
2011-2012	4,925,749	3,878,185	1.006	0.006	0.952	28,136	3,906,321
2012-2013	4,695,731	4,063,438	1.010	0.010	1.064	49,963	4,113,401
2013-2014	4,551,061	6,969,125	1.015	0.015	0.831	56,729	7,025,854
2014-2015	4,618,008	5,429,951	1.025	0.024	1.326	146,963	5,576,914
2015-2016	4,395,985	4,957,912	1.040	0.038	1.016	169,720	5,127,632
2016-2017	4,566,182	8,211,756	1.047	0.045	1.588	326,299	8,538,055
2017-2018	4,681,268	870,473	1.056	0.053	1.447	359,011	1,229,484
2018-2019	4,709,274	1,291,645	1.082	0.076	1.531	547,952	1,839,597
2019-2020	4,526,605	701,961	1.265	0.209	1.617	1,529,780	2,231,741
2020-2021	4,564,579	5,611,045	2.043	0.511	1.716	4,002,570	9,613,615
2021-2022	4,756,654	514,442	4.750	0.789	1.389	5,212,917	5,727,359
Totals	108,503,420	\$76,807,667				\$12,440,107	\$89,247,774

Notes:

- (A) From Reserve Appendix M, Column (C).
- (B) Provided by the Authority. These losses exclude amounts incurred above the Authority's SIR for each year.
- (C) From Reserve Appendix A, Page 1, Column (F).
- (D) 1 1/(C).
- (E) From Reserve Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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.

Exposure and Development Method Based on Paid Losses

Accident Year	Trended Payroll (\$00) (A)	Paid Losses as of 12/31/22 (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)
1986-2002	0		1.000	0.000	0.625	0	
2002-2003	5,636,399	8,812,482	1.000	0.000	1.075	0	8,812,482
2003-2004	5,747,065	2,574,481	1.000	0.000	0.501	0	2,574,481
2004-2005	6,561,932	1,874,487	1.000	0.000	0.323	0	1,874,487
2005-2006	6,538,260	4,756,022	1.000	0.000	0.562	0	4,756,022
2006-2007	6,684,323	1,662,124	1.000	0.000	0.285	0	1,662,124
2007-2008	6,906,572	6,755,660	1.000	0.000	0.823	0	6,755,660
2008-2009	6,964,700	3,472,680	1.000	0.000	0.565	0	3,472,680
2009-2010	6,564,472	2,352,952	1.001	0.001	0.421	2,764	2,355,716
2010-2011	5,908,601	2,046,846	1.003	0.003	0.412	7,303	2,054,149
2011-2012	4,925,749	3,823,023	1.007	0.007	0.952	32,825	3,855,848
2012-2013	4,695,731	3,487,466	1.009	0.009	1.064	44,966	3,532,432
2013-2014	4,551,061	6,969,125	1.014	0.014	0.831	52,947	7,022,072
2014-2015	4,618,008	5,429,951	1.022	0.022	1.326	134,717	5,564,668
2015-2016	4,395,985	4,824,345	1.063	0.059	1.016	263,513	5,087,858
2016-2017	4,566,182	6,958,339	1.117	0.105	1.588	761,365	7,719,704
2017-2018	4,681,268	870,473	1.250	0.200	1.447	1,354,759	2,225,232
2018-2019	4,709,274	1,055,231	1.430	0.301	1.531	2,170,179	3,225,410
2019-2020	4,526,605	108,746	2.027	0.507	1.617	3,710,997	3,819,743
2020-2021	4,564,579	3,828,828	5.072	0.803	1.716	6,289,753	10,118,581
2021-2022	4,756,654		22.824	0.956	1.389	6,316,285	6,316,285
Totals	108,503,420	\$71,663,261				\$21,142,373	\$92,805,634

Notes:

- (A) From Reserve Appendix M, Column (C).
- (B) Provided by the Authority. These losses exclude amounts paid above the Authority's SIR for each year.
- (C) From Reserve Appendix B, Page 1, Column (F).
- (D) 1 1/(C).
- (E) From Reserve Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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.

Exposure and Development Method

Accident	Trended	Ultimate	Trend	Trended	Trended	Program	Eactor to	Program
Vear	(\$00)	Losses	Factor	Losses	Loss Rate	Loss Rate	SIR	Loss Rate
1 Cal	(400) (A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1986-2002	0		2.473			0.586	1.067	0.625
2002-2003	5,636,399	5,437,289	2.368	12,875,500	2.284	0.965	1.114	1.075
2003-2004	5,747,065	2,574,481	2.268	5,838,923	1.016	0.448	1.119	0.501
2004-2005	6,561,932	1,874,487	2.172	4,071,386	0.620	0.286	1.129	0.323
2005-2006	6,538,260	3,237,840	2.081	6,737,945	1.031	0.495	1.135	0.562
2006-2007	6,684,323	1,662,124	1.993	3,312,613	0.496	0.249	1.145	0.285
2007-2008	6,906,572	4,919,885	1.909	9,392,060	1.360	0.712	1.155	0.823
2008-2009	6,964,700	3,376,845	1.828	6,172,873	0.886	0.485	1.166	0.565
2009-2010	6,564,472	2,352,952	1.750	4,117,666	0.627	0.358	1.176	0.421
2010-2011	5,908,601	2,046,846	1.677	3,432,561	0.581	0.346	1.192	0.412
2011-2012	4,925,749	3,901,000	1.606	6,265,006	1.272	0.792	1.202	0.952
2012-2013	4,695,731	4,104,000	1.539	6,316,056	1.345	0.874	1.218	1.064
2013-2014	4,551,061	3,069,125	1.474	4,523,890	0.994	0.674	1.233	0.831
2014-2015	4,618,008	4,905,812	1.411	6,922,101	1.499	1.062	1.249	1.326
2015-2016	4,395,985	3,700,000	1.351	4,998,700	1.137	0.842	1.207	1.016
2016-2017	4,566,182	5,932,000	1.294	7,676,008	1.681	1.299	1.223	1.588
2017-2018	4,681,268	919,000	1.240	1,139,560	0.243	1.169	1.238	1.447
2018-2019	4,709,274	1,398,000	1.188	1,660,824	0.353	1.221	1.254	1.531
2019-2020	4,526,605	888,000	1.138	1,010,544	0.223	1.274	1.269	1.617
2020-2021	4,564,579	6,565,000	1.090	7,155,850	1.568	1.330	1.290	1.716
2021-2022	4,756,654	3,711,000	1.044	3,874,284	0.814	1.389	1.000	1.389
Total/Avg	108,503,420	\$66,575,686		\$107,494,350	\$0.991			
20/21-21/22	9,321,233	10,276,000		11,030,134	1.183			

Selected Program	Rate:	\$1.450
	Prior:	\$1.550

Notes:

- (A) From Reserve Appendix M, Column (C).
- (B) Selected average of results from Appendices p and p.
- (C) From Reserve Appendix E, Page 1, Column (B).
- (D) (B) x (C).
- (E) (D) / (A).
- (F) Selected Program Rate / (C). For 2016-2017 and prior (B) / (A).
- (G) Based on a Burr 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.

Frequency and Severity Method

Accident Year	Ultimate Program Severity (A)	Adjusted Ultimate Claims (B)	Ultimate Program Losses (C)
1986-2002	\$144,453	192	\$27,734,976
2002-2003	216,315	28	6,056,820
2003-2004	144,057	20	2,881,140
2004-2005	235,243	9	2,117,187
2005-2006	229,614	16	3,673,824
2006-2007	135,939	14	1,903,146
2007-2008	236,845	24	5,684,280
2008-2009	231,558	17	3,936,486
2009-2010	138,364	20	2,767,280
2010-2011	187,621	13	2,439,073
2011-2012	234,446	20	4,688,920
2012-2013	237,938	21	4,996,698
2013-2014	252,293	15	3,784,395
2014-2015	340,298	18	6,125,364
2015-2016	223,325	20	4,466,500
2016-2017	361,368	20	7,227,360
2017-2018	318,663	7	2,230,641
2018-2019	319,640	10	3,196,400
2019-2020	320,598	14	4,488,372
2020-2021	322,835	29	9,362,215
2021-2022	247,475	25	6,186,875
Total		552	\$115,947,952

Notes:

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

Frequency and Severity Method

	Ultimate	Adjusted	Ultimate		Trended			
Accident	Program	Ultimate	Program	Trend	Program	Program	Factor to	Program
Year	Losses	Claims	Severity	Factor	Severity	Severity	SIR	Severity
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1986-2002	\$25,985,454	192	\$135,341	0.810	\$109,626	\$135,341	1.067	\$144,453
2002-2003	5,437,289	28	194,189	0.819	159,041	194,189	1.114	216,315
2003-2004	2,574,481	20	128,724	0.827	106,455	128,724	1.119	144,057
2004-2005	1,874,487	9	208,276	0.835	173,910	208,276	1.129	235,243
2005-2006	3,237,840	16	202,365	0.843	170,594	202,365	1.135	229,614
2006-2007	1,662,124	14	118,723	0.852	101,152	118,723	1.145	135,939
2007-2008	4,919,885	24	204,995	0.860	176,296	204,995	1.155	236,845
2008-2009	3,376,845	17	198,638	0.868	172,418	198,638	1.166	231,558
2009-2010	2,352,952	20	117,648	0.877	103,177	117,648	1.176	138,364
2010-2011	2,046,846	13	157,450	0.887	139,658	157,450	1.192	187,621
2011-2012	3,901,000	20	195,050	0.896	174,765	195,050	1.202	234,446
2012-2013	4,104,000	21	195,429	0.905	176,863	195,429	1.218	237,938
2013-2014	3,069,125	15	204,608	0.914	187,012	204,608	1.233	252,293
2014-2015	4,905,812	18	272,545	0.924	251,832	272,545	1.249	340,298
2015-2016	3,700,000	20	185,000	0.933	172,605	185,000	1.207	223,325
2016-2017	5,911,000	20	295,550	0.942	278,408	295,550	1.223	361,368
2017-2018	1,144,000	7	163,429	0.952	155,584	257,353	1.238	318,663
2018-2019	1,592,000	10	159,200	0.961	152,991	254,943	1.254	319,640
2019-2020	2,470,000	14	176,429	0.970	171,136	252,577	1.269	320,598
2020-2021	7,367,000	29	254,034	0.979	248,699	250,255	1.290	322,835
2021-2022	6,022,000	25	240,880	0.990	238,471	247,475	1.000	247,475

Average Program Severity:	\$172,414
Average 20/21-21/22 Program Severity:	243,585

Selected Program Severity:	\$245,000
Prior:	\$400,000

Notes:

- (A) Selected average of results from Appendices p, p, and p.
- (B) Reserve Appendix D, Page 3, Column (C).
- (C) (A) / (B).
- (D) From Reserve Appendix E, Page 1, Column (J).
- (E) (C) x (D).
- (F) Selected Limited Severity / (D).
- (G) Based on a Burr 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.

Frequency and Severity Method Projection of Ultimate Claims

	Reported	Closed	Selected	Trended		—	Trended
Accident	Claim	Claim	Ultimate	Payroll	Claim	Irend	Claim
Year	Development	Development	Claims	(\$000,000)	Frequency	Factor	Frequency
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
1986-2002	192	192	192	0.0		3.078	
2002-2003	28	28	28	563.6	0.050	2.918	0.146
2003-2004	20	20	20	574.7	0.035	2.766	0.097
2004-2005	9	9	9	656.2	0.014	2.622	0.037
2005-2006	16	16	16	653.8	0.024	2.486	0.060
2006-2007	14	14	14	668.4	0.021	2.356	0.049
2007-2008	24	24	24	690.7	0.035	2.233	0.078
2008-2009	17	17	17	696.5	0.024	2.117	0.051
2009-2010	20	20	20	656.4	0.030	2.006	0.060
2010-2011	13	13	13	590.9	0.022	1.901	0.042
2011-2012	20	19	20	492.6	0.041	1.802	0.074
2012-2013	21	20	21	469.6	0.045	1.709	0.077
2013-2014	15	15	15	455.1	0.033	1.619	0.053
2014-2015	18	18	18	461.8	0.039	1.535	0.060
2015-2016	20	19	20	439.6	0.045	1.455	0.065
2016-2017	20	17	20	456.6	0.044	1.379	0.061
2017-2018	7	7	7	468.1	0.015	1.307	0.020
2018-2019	10	8	10	470.9	0.021	1.239	0.026
2019-2020	14	3	14	452.7	0.031	1.175	0.036
2020-2021	29	32	29	456.5	0.064	1.113	0.071
2021-2022	35	0	25	475.7	0.054	1.055	0.057
Total	562	511	552	10,850.3			0.061
16/17-20/21	80	67	80	2,304.8			0.042
					(H) Select	ted Frequency:	0.045
						Prior:	0.035
	Program Year	:		2022-2023	2023-2024		
(I)	Trend Factor:			1.000	1.055		
(J)	Selected Freq	uency:		0.045	0.047		
(K)	Est. Payroll (\$	000,000):		474.9	489.1		

NI	otoo	
IN	oles.	

(A) From Reserve Appendix D, Page 4, (C).

(B) From Reserve Appendix D, Page 5, (C).

- (C) Selected from (A) and (B).
- (D) From Reserve Appendix M, Column (C) / 10,000.

(L) Ultimate Claims:

- (E) (C) / (D).
- (F) From Reserve Appendix E, Page 1, Column (H).

(G) (E) x (F).

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(H) The selected frequency of 0.045 is based on (G).

(I) From Reserve Appendix E, Page 1, Column (H).

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(J) (H) x (I).

(L) (J) x (K).

(K) From Reserve Appendix M, Column (C) / 10,000.

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

Frequency and Severity Method Reported Claim Count Development

	Claims	Reported		
	Reported	Claim		Trended
Accident	as of	Development	Ultimate	Claim
Year	12/31/2022	Factor	Claims	Frequency
	(A)	(B)	(C)	(D)
1986-2002	192	1.000	192	
2002-2003	28	1.000	28	0.145
2003-2004	20	1.000	20	0.096
2004-2005	9	1.000	9	0.036
2005-2006	16	1.000	16	0.061
2006-2007	14	1.000	14	0.049
2007-2008	24	1.000	24	0.078
2008-2009	17	1.000	17	0.052
2009-2010	20	1.000	20	0.061
2010-2011	13	1.001	13	0.042
2011-2012	20	1.001	20	0.073
2012-2013	21	1.001	21	0.076
2013-2014	15	1.002	15	0.053
2014-2015	18	1.003	18	0.060
2015-2016	20	1.004	20	0.066
2016-2017	20	1.005	20	0.060
2017-2018	7	1.015	7	0.020
2018-2019	10	1.040	10	0.026
2019-2020	12	1.204	14	0.036
2020-2021	20	1.461	29	0.071
2021-2022	11	3.201	35	0.078
Total	527		562	0.062

Notes:

(A) Provided by the Authority.

(B) From Reserve Appendix D, Page 6.

(C) (A) x (B).

(D) (C) / [Reserve Appendix D, Page 3, (D)] x [Reserve 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 Authority. 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.

Frequency and Severity Method Closed Claim Count Development

	Claims	Closed		
	Closed	Claim		Trended
Accident	as of	Development	Ultimate	Claim
Year	12/31/2022	Factor	Claims	Frequency
	(A)	(B)	(C)	(D)
1986-2002	192	1.000	192	
2002-2003	28	1.000	28	0.145
2003-2004	20	1.000	20	0.096
2004-2005	9	1.000	9	0.036
2005-2006	16	1.000	16	0.061
2006-2007	14	1.000	14	0.049
2007-2008	24	1.000	24	0.078
2008-2009	17	1.000	17	0.052
2009-2010	20	1.001	20	0.061
2010-2011	13	1.002	13	0.042
2011-2012	19	1.003	19	0.070
2012-2013	20	1.004	20	0.073
2013-2014	15	1.005	15	0.053
2014-2015	18	1.006	18	0.060
2015-2016	19	1.007	19	0.063
2016-2017	17	1.008	17	0.051
2017-2018	7	1.033	7	0.020
2018-2019	7	1.150	8	0.021
2019-2020	2	1.480	3	0.008
2020-2021	7	4.588	32	0.078
2021-2022	0	15.140	0	
Total	484		511	0.057

Notes:

(A) Provided by the Authority.

(B) From Reserve Appendix D, Page 7.

(C) (A) x (B).

(D) (C) / [Reserve Appendix D, Page 3, (D)] x [Reserve 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 Authority. 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.

PLAN JPA - Liability
Reported Claim Count Development

		<u>Claims R</u>	eported as	s of:										
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002					13	13	14	14	14	14	15	15	15	15
2002-2003				26	25	27	27	27	29	29	28	28	28	28
2003-2004			11	12	18	19	19	19	20	20	20	20	20	20
2004-2005		4	5	9	10	9	10	9	9	9	9	9	9	9
2005-2006	1	4	13	13	14	16	16	16	16	16	16	16	16	16
2006-2007	1	9	11	10	11	12	14	14	14	14	14	14	14	14
2007-2008	3	7	16	23	25	25	25	24	24	24	24	23	24	24
2008-2009	1	12	16	17	17	17	17	17	17	17	17	17	17	17
2009-2010	3	18	25	20	20	20	20	20	20	20	20	20	20	20
2010-2011		15	18	16	14	14	13	13	13	13	13	13	13	
2011-2012	1	19	19	20	20	20	20	20	20	20	20	20		
2012-2013	1	23	23	22	22	21	20	20	21	21	21			
2013-2014	3	7	14	15	16	15	15	15	15	15				
2014-2015		11	21	21	18	18	18	18	18					
2015-2016		10	18	20	20	20	20	20						
2016-2017	1	6	19	19	21	21	20							
2017-2018		4	8	7	7	7								
2018-2019		1	5	8	10									
2019-2020		2	9	12										
2020-2021	2	21	20											
2021-2022 2022-2023	2	11												
		Reported	Claim Co	unt Devel	opment Fa	actors:								

	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002					1.000	1.077	1.000	1.000	1.000	1.071	1.000	1.000	1.000	1.000
2002-2003				0.962	1.080	1.000	1.000	1.074	1.000	0.966	1.000	1.000	1.000	1.000
2003-2004			1.091	1.500	1.056	1.000	1.000	1.053	1.000	1.000	1.000	1.000	1.000	1.000
2004-2005		1.250	1.800	1.111	0.900	1.111	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005-2006	4.000	3.250	1.000	1.077	1.143	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006-2007	9.000	1.222	0.909	1.100	1.091	1.167	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007-2008	2.333	2.286	1.438	1.087	1.000	1.000	0.960	1.000	1.000	1.000	0.958	1.043	1.000	1.000
2008-2009	12.000	1.333	1.063	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009-2010	6.000	1.389	0.800	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2010-2011		1.200	0.889	0.875	1.000	0.929	1.000	1.000	1.000	1.000	1.000	1.000		
2011-2012	19.000	1.000	1.053	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2012-2013	23.000	1.000	0.957	1.000	0.955	0.952	1.000	1.050	1.000	1.000				
2013-2014	2.333	2.000	1.071	1.067	0.938	1.000	1.000	1.000	1.000					
2014-2015		1.909	1.000	0.857	1.000	1.000	1.000	1.000						
2015-2016		1.800	1.111	1.000	1.000	1.000	1.000							
2016-2017	6.000	3.167	1.000	1.105	1.000	0.952								
2017-2018		2.000	0.875	1.000	1.000									
2018-2019		5.000	1.600	1.250										
2019-2020		4.500	1.333											
2020-2021	10.500	0.952												
2021-2022	5.500													
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	9.061	2.074	1.117	1.058	1.010	1.012	0.991	1.013	1.000	1.003	0.996	1.004	1.000	1.000
Claim-Weighted														
Averages 3_vr		1 4 1 7	1 227	1 1 1 8	1 000	0 983	1 000	1 0 1 0	1 000	1 000	1 000	1 000	1 000	1 000
4-vr		1.500	1 122	1.110	1 000	0.986	1 000	1.013	1 000	1 000	1 000	1 014	1 000	1 000
Comparative			==			0.000								
Factors	2.633	1.136	1.018	1.005	1.005	1.004	1.004	1.002	1.002	1.001	1.000	1.000	1.000	1.000
Prior	#######	1.700	1.200	1.150	1.025	1.010	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.000
Selected	3.786	2.191	1.213	1.157	1.025	1.010	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.000
Cumulated	12.119	3.201	1.461	1.204	1.040	1.01 5 1	18 1.005	1.004	1.003	1.002	1.001	1.001	1.001 1	261.000

PLAN JPA - Liability Closed Claim Development

		Claims Cl	losed as o	<u>f:</u>										
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002					8	11	12	14	14	14	14	15	14	15
2002-2003				15	23	25	26	27	27	27	27	27	27	27
2003-2004			9	11	13	13	14	15	18	20	20	20	20	20
2004-2005		1	1	7	7	9	9	9	9	9	9	9	9	9
2005-2006		2	3	9	11	12	14	14	14	15	16	16	16	16
2006-2007		1	3	7	8	9	12	14	14	14	14	14	14	13
2007-2008			2	11	17	22	24	24	24	24	24	23	24	24
2008-2009		1	5	9	11	13	16	17	17	17	17	17	17	17
2009-2010		2	6	13	18	18	19	19	20	20	20	20	20	20
2010-2011			4	9	11	13	13	13	13	13	13	13	13	
2011-2012		1	3	11	13	18	19	20	19	19	19	19		
2012-2013		1	5	15	17	17	20	19	20	20	20			
2013-2014		1	6	9	12	15	14	15	15	15				
2014-2015		3	7	8	18	18	18	18	18					
2015-2016		1	3	20	14	17	19	19						
2016-2017		1	19	10	11	15	17							
2017-2018		4	1	2	5	7								
2018-2019			1	3	7									
2019-2020				2										
2020-2021			7											
2021-2022														
2022-2023														
		Closed C	laim Coun	t Develop	ment Fact	ors.								
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2001-2002					1.375	1.091	1.167	1.000	1.000	1.000	1.071	0.933	1.071	1.000
2002-2003				1.533	1.087	1.040	1.038	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003-2004			1.222	1.182	1.000	1.077	1.071	1.200	1.111	1.000	1.000	1.000	1.000	1.000
2004-2005		1.000	7.000	1.000	1.286	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005-2006		1.500	3.000	1.222	1.091	1.167	1.000	1.000	1.071	1.067	1.000	1.000	1.000	1.000
2006-2007		3.000	2.333	1.143	1.125	1.333	1.167	1.000	1.000	1.000	1.000	1.000	0.929	1.077
2007-2008			5.500	1.545	1.294	1.091	1.000	1.000	1.000	1.000	0.958	1.043	1.000	1.000
2008-2009		5.000	1.800	1.222	1.182	1.231	1.063	1.000	1.000	1.000	1.000	1.000	1.000	1.000

2008-2009		5.000	1.800	1.222	1.182	1.231	1.063	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009-2010		3.000	2.167	1.385	1.000	1.056	1.000	1.053	1.000	1.000	1.000	1.000	1.000	
2010-2011			2.250	1.222	1.182	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2011-2012		3.000	3.667	1.182	1.385	1.056	1.053	0.950	1.000	1.000	1.000			
2012-2013		5.000	3.000	1.133	1.000	1.176	0.950	1.053	1.000	1.000				
2013-2014		6.000	1.500	1.333	1.250	0.933	1.071	1.000	1.000					
2014-2015		2.333	1.143	2.250	1.000	1.000	1.000	1.000						
2015-2016		3.000	6.667	0.700	1.214	1.118	1.000							
2016-2017		19.000	0.526	1.100	1.364	1.133								
2017-2018		0.250	2.000	2.500	1.400									
2018-2019			3.000	2.333										
2019-2020														
2020-2021														
2021-2022														
	0.40	40.00	20.40	40.54	F 4 00	00.70	70.00	00 400	400 444	444 400	400 400	400 450	450 400	400 474
	0-10 Months	10-30 Monthe	30-42 Months	42-04 Months	04-00 Months	00-70 Months	70-90 Monthe	90-102 Months	102-114 Months	Months	120-130 Months	Nonthe	100-102 Months	Months
Average	MONUIS	4 340	2 923	1 411	1 190	1 094	1 039	1 018	1 014	1 006	1 003	0.998	1 000	1 010
Claim-Weighted		1.010	2.020		1.100	1.001	1.000	1.010	1.011	1.000	1.000	0.000	1.000	1.010
Averages														
3-yr				1.533	1.300	1.080	1.020	1.019	1.000	1.000	1.000	1.000	1.000	1.019
4-yr				1.057	1.188	1.046	1.000	1.000	1.000	1.000	1.000	1.014	0.987	1.014
Comparative														
Factors	3.387	1.495	1.122	1.051	1.033	1.020	1.012	1.010	1.007	1.005	1.005	1.003	1.003	1.001
Prior	0.000	3.500	3.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Selected	4.000	3.300	3.100	1.287	1.113	1.025	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Cumulated	60.560	15.140	4.588	1.480	1.150	1.03	19 1.008	1.007	1.006	1.005	1.004	1.003	1.002	271.001

Loss Trend Factors

		Factor to								
	Benefit	2022-2023	2023-2024	2024-2025	2025-2026	2022-2023	2023-2024	2024-2025	2025-2026	2022-2023
Accident	Level	Loss Rate	Loss Rate	Loss Rate	Loss Rate	Frequency	Frequency	Frequency	Frequency	Severity
Year	Factor	Level								
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1986-2002	1.000	2.473	2.582	2.695	2.814	3.078	3.247	3.426	3.614	0.810
2002-2003	1.000	2.368	2.472	2.581	2.695	2.918	3.078	3.247	3.426	0.819
2003-2004	1.000	2.268	2.368	2.472	2.581	2.766	2.917	3.078	3.247	0.827
2004-2005	1.000	2.172	2.268	2.368	2.472	2.622	2.765	2.918	3.078	0.835
2005-2006	1.000	2.081	2.172	2.268	2.368	2.486	2.622	2.766	2.918	0.843
2006-2007	1.000	1.993	2.081	2.172	2.268	2.356	2.485	2.622	2.766	0.852
2007-2008	1.000	1.909	1.993	2.080	2.172	2.233	2.356	2.485	2.622	0.860
2008-2009	1.000	1.828	1.908	1.992	2.080	2.117	2.233	2.355	2.485	0.868
2009-2010	1.000	1.750	1.828	1.908	1.992	2.006	2.116	2.232	2.355	0.877
2010-2011	1.000	1.677	1.750	1.828	1.908	1.901	2.005	2.116	2.232	0.887
2011-2012	1.000	1.606	1.677	1.751	1.828	1.802	1.901	2.006	2.116	0.896
2012-2013	1.000	1.539	1.606	1.677	1.751	1.709	1.802	1.901	2.006	0.905
2013-2014	1.000	1.474	1.539	1.606	1.677	1.619	1.708	1.802	1.901	0.914
2014-2015	1.000	1.411	1.473	1.538	1.606	1.535	1.619	1.708	1.802	0.924
2015-2016	1.000	1.351	1.411	1.473	1.538	1.455	1.535	1.619	1.708	0.933
2016-2017	1.000	1.294	1.351	1.411	1.473	1.379	1.455	1.535	1.619	0.942
2017-2018	1.000	1.240	1.294	1.352	1.411	1.307	1.379	1.455	1.535	0.952
2018-2019	1.000	1.188	1.240	1.295	1.352	1.239	1.307	1.379	1.455	0.961
2019-2020	1.000	1.138	1.188	1.240	1.295	1.175	1.239	1.307	1.379	0.970
2020-2021	1.000	1.090	1.138	1.188	1.240	1.113	1.174	1.239	1.307	0.979
2021-2022	1.000	1.044	1.090	1.138	1.188	1.055	1.113	1.174	1.239	0.990
2022-2023	1.000	1.000	1.044	1.090	1.138	1.000	1.055	1.113	1.174	1.000
2023-2024	1.000		1.000	1.044	1.090		1.000	1.055	1.113	
2024-2025	1.000			1.000	1.044			1.000	1.055	
2025-2026	1.000				1.000				1.000	

Notes:

(A) No benefit level adjustment applied.

- (B) (E) (A) adjusted for a 4.4% annual loss rate trend.
- (F) (I) (A) adjusted for a 5.5% annual frequency trend.
 - (J) (A) adjusted for a -1.0% annual severity trend.

This exhibit shows the calculation of the ways in which we expect claims costs to have changed over the past twenty years due to changes in inflation.

Residual Trend Factors

	Initial					
	Estimate of					
	Ultimate	Ultimate		Adjusted	Trended	
Accident	Limited	Reported		Limited	Payroll	Ultimate
Year	Losses	Claims	BLF	Severity	(\$00)	Frequency
	(A)	(B)	(C)	(D)	(E)	(F)
1986-2002	\$25,985,454	192	1.000	135,341		
2002-2003	5,437,289	28	1.000	194,189	5,636,399	0.050
2003-2004	2,574,481	20	1.000	128,724	5,747,065	0.035
2004-2005	1,874,487	9	1.000	208,276	6,561,932	0.014
2005-2006	3,237,840	16	1.000	202,365	6,538,260	0.024
2006-2007	1,662,124	14	1.000	118,723	6,684,323	0.021
2007-2008	4,919,885	24	1.000	204,995	6,906,572	0.035
2008-2009	3,376,845	17	1.000	198,638	6,964,700	0.024
2009-2010	2,352,952	20	1.000	117,648	6,564,472	0.030
2010-2011	2,046,846	13	1.000	157,450	5,908,601	0.022
2011-2012	3,901,000	20	1.000	195,050	4,925,749	0.041
2012-2013	4,104,000	21	1.000	195,429	4,695,731	0.045
2013-2014	3,069,125	15	1.000	204,608	4,551,061	0.033
2014-2015	4,905,812	18	1.000	272,545	4,618,008	0.039
2015-2016	3,700,000	20	1.000	185,000	4,395,985	0.045
2016-2017	5,932,000	20	1.000	296,600	4,566,182	0.044
2017-2018	919,000	7	1.000	131,286	4,681,268	0.015
2018-2019	1,398,000	10	1.000	139,800	4,709,274	0.021
2019-2020	888,000	14	1.000	63,429	4,526,605	0.031
2020-2021	6,565,000	29	1.000	226,379	4,564,579	0.064
2021-2022	3,711,000	25	1.000	148,440	4,756,654	0.053

Severity T	rend Factors	Frequency Trend Factors
2008-2009 through 2017-2018	1.028	1.008
2009-2010 through 2018-2019	1.015	0.968
2010-2011 through 2019-2020	0.931	0.965
Prior	1.000	1.065
Default	1.030	0.975
Selected Residual Trend	0.990	1.055

Notes:

(A) Selected average of results from Reserve Appendix A and Reserve Appendix B.

(B) Reserve Appendix D, Page 3, Column (C).

(C) Reserve Appendix E, Page 1, (A).

(D) (A) x (C) / (B).

(E) From Reserve Appendix M, Column (C).

(F) (B) / (E) x 10,000.

Payment and Reserve Forecast

		<u>Calendar</u>	Period
Accident Year	As of <u>12/31/2022</u>	1/1/2023 to <u>6/30/2023</u>	7/1/2023 to <u>6/30/2024</u>
Prior Ultimate Loss Paid in Calendar Period	\$52,647,126	\$52,647,126	\$52,647,126
Paid to Date Outstanding Liability	52,647,126	52,647,126	52,647,126
2006-2007 Ultimate Loss	\$1,662,124	\$1,662,124	\$1,662,124
Paid in Calendar Period Paid to Date Outstanding Liability	- 1,662,124	1,662,124	1,662,124
2007-2008	¢6 755 660	¢6 755 660	¢6.755.660
Paid in Calendar Period	\$0,755,000 -	\$0,7 <i>5</i> 5,000	\$0,755,000
Paid to Date Outstanding Liability	6,755,660	6,755,660	6,755,660
2008-2009 Ultimate Loss	\$3,472,680	\$3,472,680	\$3,472,680
Paid in Calendar Period Paid to Date Outstanding Liability	- 3,472,680	3,472,680	3,472,680
2009-2010			
Ultimate Loss	\$2,352,952	\$2,352,952	\$2,352,952
Paid to Date Outstanding Liability	- 2,352,952	2,352,952	2,352,952
2010-2011 Ultimate Loss	\$2,046,846	\$2,046,846	\$2,046,846
Paid in Calendar Period Paid to Date Outstanding Liability	- 2,046,846	2,046,846	2,046,846
2011-2012			
Ultimate Loss	\$3,902,000	\$3,902,000	\$3,902,000
Paid in Calendar Period Paid to Date	- 3 823 023	22,429 3 845 452	33,872 3 879 324
Outstanding Liability	78,977	56,548	22,676
2012-2013			
Ultimate Loss Paid in Calendar Period	\$4,105,000	\$4,105,000 67 020	\$4,105,000
Paid to Date	- 3,487,466	3,555,395	3,760,398
Outstanding Liability	617,534	549,605	344,602

Payment and Reserve Forecast

		<u>Calendar</u>	Period
Accident Year	As of <u>12/31/2022</u>	1/1/2023 to <u>6/30/2023</u>	7/1/2023 to <u>6/30/2024</u>
0010 0011			
2013-2014 Ultimate Loss Paid in Calendar Period	\$7,074,000	\$7,074,000 15 154	\$7,074,000 24 314
Paid to Date Outstanding Liability	6,969,125 104,875	6,984,279 89,721	7,008,593 65,407
2014-2015			
Ultimate Loss Paid in Calendar Period	\$5,566,000 -	\$5,566,000 24,353	\$5,566,000 43.003
Paid to Date	5,429,951	5,454,304	5,497,307
Outstanding Liability	136,049	111,696	68,693
2015-2016			
Ultimate Loss	\$5,157,000	\$5,157,000	\$5,157,000
Paid in Calendar Period	-	49,898	158,627
Paid to Date	4,824,345	4,874,243	5,032,870
Outstanding Liability	332,000	282,757	124,130
2016-2017			
Ultimate Loss	\$8,351,000	\$8,351,000	\$8,351,000
Paid in Calendar Period	-	139,266	635,471
Outstanding Liability	0,956,559	1,253,395	617,924
	.,,	.,,	
2017-2018	* 4 075 000	# 4 075 000	* 4 075 000
Ultimate Loss Paid in Calendar Period	\$1,075,000	\$1,075,000 27 304	\$1,075,000
Paid to Date	870,473	897,777	980,008
Outstanding Liability	204,527	177,223	94,992
0010 0010			
2018-2019 Ultimate Loss	\$2 079 000	\$2 079 000	\$2 079 000
Paid in Calendar Period	-	170,969	333,445
Paid to Date	1,055,231	1,226,200	1,559,645
Outstanding Liability	1,023,769	852,800	519,355
2019-2020			
Ultimate Loss	\$2,690,000	\$2,690,000	\$2,690,000
Paid in Calendar Period	-	523,995	781,758
Paid to Date	108,746	632,741	1,414,499
Outstanding Liability	2,581,254	2,057,259	1,275,501
2020-2021			
Ultimate Loss	\$8,725,000	\$8,725,000	\$8,725,000
Paid in Calendar Period	-	905,792	1,528,316
Outstanding Liability	3,020,828 4,896.172	4,734,620 3,990,380	2,462.064
<u> </u>	, , =	, ,	, . ,. . .

Payment and Reserve Forecast

		<u>Calenda</u>	r Period
Accident Year	As of <u>12/31/2022</u>	1/1/2023 to <u>6/30/2023</u>	7/1/2023 to <u>6/30/2024</u>
2021-2022 Ultimate Loss Paid in Calendar Period Paid to Date	\$4,978,000 -	\$4,978,000 398,240 398,240	\$4,978,000 1,172,419 1,570,659
Outstanding Liability	4,978,000	4,579,760	3,407,341
2022-2023 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$2,360,000 - - 2,360,000	\$4,720,000 94,400 94,400 4,625,600	\$4,720,000 457,934 552,334 4,167,666
2023-2024 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	- - -	- - -	\$5,100,000 122,400 122,400 4,977,600
Totals Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability Total Outstanding ULAE Outstanding Liability plus ULAE	\$124,999,388 - 106,292,915 18,706,473 2,338,309 21,044,782	\$127,359,388 2,439,729 108,732,644 18,626,744 2,328,343 20,955,087	\$132,459,388 5,578,793 114,311,437 18,147,951 2,268,494 20,416,445

Notes appear on the next page.

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 2020-2021, \$905,792 is expected to be paid between 1/1/23 and 6/30/23, \$4,734,620 will have been paid by 6/30/23, and the reserve for remaining payments on these claims should be \$3,990,380.
- · Ultimate Losses for each accident year are from Reserve Exhibit 3, Page 1.
- Paid in Calendar Period is a proportion of the Outstanding Liability from the previous calendar period. These proportions are derived from the paid loss development pattern selected in Appendix B. For example, \$1,528,316 = \$3,990,380 x 38.3%.
- Paid to Date is Paid in Calendar Period plus Paid to Date from previous calendar period. For example, \$6,262,936 = \$1,528,316 + \$4,734,620.
- Outstanding Liability is Ultimate Loss minus Paid to Date. For example, \$3,990,380 = \$8,725,000 \$4,734,620.

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.

Short- and Long-Term Liabilities

Liabiliti	es as of 12/31/22:			Expected		Discounted	
	Current (Short Term)	Loss and ALAE:		\$5,006,242		\$4,956,918	
		ULAE:		0		0	
	Short-	Term Loss and LAE:		\$5,006,242		\$4,956,918	
	Non-Current (Long Term)	Loss and ALAE:		\$13,700,231		\$12,912,618	
		ULAE:		2,338,309		2,233,692	
	Long-	Ferm Loss and LAE:		\$16,038,540		\$15,146,310	
	Total Liability	Loss and ALAE:		\$18,706,473		\$17,869,536	
		ULAE:		2,338,309		2,233,692	
		Total Loss and LAE:		\$21,044,782		\$20,103,228	
Liabiliti	es as of 6/30/23:						
	Current (Short Term)	Loss and ALAE:		\$5,456,393		\$5,402,634	
		ULAE:		0		0	
	Short-	Ferm Loss and LAE:		\$5,456,393		\$5,402,634	
	Non-Current (Long Term)	Loss and ALAE:		\$13,170,351		\$12,419,544	
		ULAE:		2,328,343		2,227,772	
	Long-	Term Loss and LAE:		\$15,498,694		\$14,647,316	
	Total Liability	Loss and ALAE:		\$18,626,744		\$17,822,178	
		ULAE:		2,328,343		2,227,772	
		Total Loss and LAE:		\$20,955,087		\$20,049,950	
				Discounted v	with a Margin for Co	ontingencies	
		-	70%	75%	80%	85%	90%
	C 10/01/00		<u>Confidence</u>	<u>Confidence</u>	<u>Confidence</u>	<u>Confidence</u>	<u>Confidence</u>
Liabiliti	es as of 12/31/22:	Loop and ALAE:	¢5 407 222	¢5 705 040	¢5 002 014	¢6 224 041	¢6 700 079
			\$5,497,222 0	φ5,725,240 Ω	φ5,992,914 Ω	φ0,334,941 Ω	φ0,790,978 Λ
	Short-	Ferm Loss and LAE:	\$5,497,222	\$5,725,240	\$5,992,914	\$6.334.941	\$6,790,978
			<i>vo</i> ,,	<i>40,120,210</i>	¢0,00 <u>2</u> ,0	¢0,00 .,0	<i>Q</i> 0,100,010
	Non-Current (Long Term)	Loss and ALAE:	\$14,320,093	\$14,914,074	\$15,611,355	\$16,502,326	\$17,690,286
		ULAE:	2,477,165	2,579,914	2,700,534	2,854,658	3,060,158
	Long-	Ferm Loss and LAE:	\$16,797,258	\$17,493,988	\$18,311,889	\$19,356,984	\$20,750,444
	Total Liability	Loss and ALAE:	\$19,817,315	\$20,639,314	\$21,604,269	\$22,837,267	\$24,481,264
		ULAE:	2,477,165	2,579,914	2,700,534	2,854,658	3,060,158
		Total Loss and LAE:	\$22,294,480	\$23,219,228	\$24,304,803	\$25,691,925	\$27,541,422
Liabiliti	es as of 6/30/23:						
	Current (Short Term)	Loss and ALAE:	\$5,991,521	\$6,240,042	\$6,531,785	\$6,904,566	\$7,401,609
		ULAE:	0	0	0	0	0
	Short-	I erm Loss and LAE:	\$5,991,521	\$6,240,042	\$6,531,785	\$6,904,566	\$7,401,609
	Non-Current (Long Term)	Loss and ALAE:	\$13,773,274	\$14,344,574	\$15,015,228	\$15,872,177	\$17,014,775
		ULAE:	2,470,600	2,573,076	2,693,377	2,847,093	3,052,048
	Long-	Term Loss and LAE:	\$16,243,874	\$16,917,650	\$17,708,605	\$18,719,270	\$20,066,823
	Total Liability	Loss and ALAF	\$19,764 795	\$20,584 616	\$21,547 013	\$22,776 743	\$24,416 384
	<u>/</u>	ULAE:	2.470.600	2.573.076	2.693.377	2.847.093	3.052.048

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

Total Loss and LAE: \$22,235,395

126

\$23,157,692

\$24,240,390

0

\$27,468,432

\$25,623,836

0.955

0.957

PLAN JPA - Liability

Discount Factors to be Applied to Overall Reserves

Accident Year	Full Value of Reserve at 12/31/22 (A)	Discount Factor (B)	Discounted Reserve at 12/31/22 (C)	Full Value of Reserve at 6/30/23 (D)	Discount Factor (E)	Discounted Reserve at 6/30/23 (F)
1986-2002	\$0	1.000	\$0	\$0	1.000	\$0
2002-2003	0	1.000	0	0	1.000	0
2003-2004	0	1.000	0	0	1.000	0
2004-2005	0	1.000	0	0	1.000	0
2005-2006	0	1.000	0	0	1.000	0
2006-2007	0	1.000	0	0	1.000	0
2007-2008	0	1.000	0	0	1.000	0
2008-2009	0	1.000	0	0	1.000	0
2009-2010	0	0.995	0	0	1.000	0
2010-2011	0	0.986	0	0	0.990	0
2011-2012	78,977	0.978	77,222	56,548	0.982	55,550
2012-2013	617,534	0.969	598,097	549,605	0.973	534,870
2013-2014	104,875	0.963	101,005	89,721	0.964	86,478
2014-2015	136,049	0.966	131,424	111,696	0.962	107,490
2015-2016	332,655	0.970	322,733	282,757	0.970	274,182
2016-2017	1,392,661	0.970	1,351,012	1,253,395	0.971	1,216,635
2017-2018	204,527	0.968	197,932	177,223	0.970	171,821
2018-2019	1,023,769	0.965	987,639	852,800	0.966	823,801
2019-2020	2,581,254	0.963	2,485,025	2,057,259	0.963	1,982,007
2020-2021	4,896,172	0.959	4,693,440	3,990,380	0.962	3,838,823
2021-2022	4,978,000	0.948	4,721,387	4,579,760	0.955	4,374,441
2022-2023	2,360,000	0.933	2,202,620	4,625,600	0.942	4,356,080
Totals	\$18,706,473		\$17,869,536	\$18,626,744		\$17,822,178

(G) Discount Factor at 12/31/22 for Overall Reserve:

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

Notes:

- (A) From Reserve Appendix F, Outstanding Liability at 12/31/22.
- (B) Based on Reserve Appendix H, Page 2, Column (E).
- (C) (A) x (B).
- (D) From Reserve Appendix F, Outstanding Liability at 6/30/23.
- (E) Based on Reserve Appendix H, 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 0.955, the discounted liability for outstanding claims is 95.5% of the full value.

Confidence Level Table

Probability	Projected Losses	Outstanding Losses
95%	1.882	1.531
90%	1.618	1.370
85%	1.460	1.278
80%	1.342	1.209
75%	1.247	1.155
70%	1.167	1.109
65%	1.096	1.069
60%	1.032	1.032
55%	0.974	0.998
50%	0.919	0.966
45%	0.867	0.936
40%	0.816	0.906
35%	0.765	0.876
30%	0.715	0.846
25%	0.663	0.814

To read table:	For the above retention, there is a 90% chance
	that final loss settlements will be less than
	1.618 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.

Program History

Policy	Policy		Self-Insured	Retention
Year	Year	Policy	Per	
Start Date	End Date	Year	Occurrence	Aggregate
7/4/4000	0.000.00000	1000 0000	* = 000 000	()
//1/1986	6/30/2002	1986-2002	\$5,000,000	(none)
7/1/2002	6/30/2003	2002-2003	5,000,000	(none)
7/1/2003	6/30/2004	2003-2004	5,000,000	(none)
7/1/2004	6/30/2005	2004-2005	5,000,000	(none)
7/1/2005	6/30/2006	2005-2006	5,000,000	(none)
7/1/2006	6/30/2007	2006-2007	5,000,000	(none)
7/1/2007	6/30/2008	2007-2008	5,000,000	(none)
7/1/2008	6/30/2009	2008-2009	5,000,000	(none)
7/1/2009	6/30/2010	2009-2010	5,000,000	(none)
7/1/2010	6/30/2011	2010-2011	5,000,000	(none)
7/1/2011	6/30/2012	2011-2012	5,000,000	(none)
7/1/2012	6/30/2013	2012-2013	5,000,000	(none)
7/1/2013	6/30/2014	2013-2014	5,000,000	(none)
7/1/2014	6/30/2015	2014-2015	5,000,000	(none)
7/1/2015	6/30/2016	2015-2016	2,500,000	(none)
7/1/2016	6/30/2017	2016-2017	2,500,000	(none)
7/1/2017	6/30/2018	2017-2018	2,500,000	(none)
7/1/2018	6/30/2019	2018-2019	2,500,000	(none)
7/1/2019	6/30/2020	2019-2020	2,500,000	(none)
7/1/2020	6/30/2021	2020-2021	2,500,000	(none)
7/1/2021	6/30/2022	2021-2022	1,000,000	(none)
7/1/2022	6/30/2023	2022-2023	1,000,000	(none)
7/1/2023	6/30/2024	2023-2024	1,000,000	(none)

Third Party		
Claims	Begin	End
Administrator	Date	Date
Sedgwick		Current

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

Estimated Total Assets as of 6/30/23

(A)	Estimated Total Assets as of 6/30/22:	\$47,425,677
(B)	Total Income to Fund during 2022-2023	
	Premiums:	\$19,831,000
	Interest:	0
	Total Income:	\$19,831,000
(C)	Total Payments from Fund during 2022-2023	
	Loss Payments:	\$5,102,000
	Excess Insurance:	12,386,000
	Other:	2,343,000
	Total Payments:	\$19,831,000
(D)	Estimated Total Assets as of 6/30/23:	\$47,425,677

Notes:

- (A) Provided by the Authority.(B) Provided by the Authority.(C) Provided by the Authority.

(D) (A) + (B) - (C).

Incurred Losses as of 12/31/22

										Incurred
		Additions	Subtractions			Incurred	Incurred	Incurred	Incurred	Capped at
Accident	Unlimited	to	from	Adjusted	Incurred	Over	Capped at	\$1,000,000	Capped at	SIR &
Year	Incurred	Losses	Losses	Incurred	Over SIR	\$1,000,000	\$1,000,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1986-2002	\$34,482,929	\$146,726	\$0	\$34,629,654	\$0	\$8,644,200	\$25,985,454	\$8,644,200	\$34,629,654	\$34,629,654
2002-2003	8,832,841	(20,359)	0	8,812,482	0	3,375,194	5,437,289	3,375,194	8,812,482	8,812,482
2003-2004	2,569,681	4,800	0	2,574,481	0	0	2,574,481	0	2,574,481	2,574,481
2004-2005	1,876,140	(1,653)	0	1,874,487	0	0	1,874,487	0	1,874,487	1,874,487
2005-2006	4,775,006	(18,984)	0	4,756,022	0	1,518,182	3,237,840	1,518,182	4,756,022	4,756,022
2006-2007	1,662,124	0	0	1,662,124	0	0	1,662,124	0	1,662,124	1,662,124
2007-2008	6,755,660	0	0	6,755,660	0	1,835,775	4,919,885	1,835,775	6,755,660	6,755,660
2008-2009	3,528,864	(56,184)	0	3,472,680	0	95,835	3,376,845	95,835	3,472,680	3,472,680
2009-2010	2,441,417	(88,465)	0	2,352,952	0	0	2,352,952	0	2,352,952	2,352,952
2010-2011	2,046,846	0	0	2,046,846	0	0	2,046,846	0	2,046,846	2,046,846
2011-2012	3,878,185	0	0	3,878,185	0	0	3,878,185	0	3,878,185	3,878,185
2012-2013	4,063,438	0	0	4,063,438	0	0	4,063,438	0	4,063,438	4,063,438
2013-2014	6,969,125	0	0	6,969,125	0	3,900,000	3,069,125	3,900,000	6,969,125	6,969,125
2014-2015	5,429,951	0	0	5,429,951	0	524,140	4,905,812	524,140	5,429,951	5,429,951
2015-2016	4,957,912	0	0	4,957,912	0	1,400,000	3,557,912	1,400,000	4,957,912	4,957,912
2016-2017	8,211,756	0	0	8,211,756	0	2,448,007	5,763,749	2,448,007	8,211,756	8,211,756
2017-2018	870,473	0	0	870,473	0	0	870,473	0	870,473	870,473
2018-2019	1,291,645	0	0	1,291,645	0	0	1,291,645	0	1,291,645	1,291,645
2019-2020	701,961	0	0	701,961	0	0	701,961	0	701,961	701,961
2020-2021	5,611,045	0	0	5,611,045	0	1,376,800	4,234,245	1,376,800	5,611,045	5,611,045
2021-2022	514,442	0	0	514,442	0	0	514,442	0	514,442	514,442
2022-2023	0	0	0	0	0	0	0	0	0	0
Total	\$111,471,443	-\$34,120	\$0	\$111,437,323	\$0	\$25,118,133	\$86,319,190	\$25,118,133	\$111,437,323	\$111,437,323

Notes:

(A) Years are 7/1 to 6/30.(B) Provided by the Authority.

(C) Adjustments to Accounting

(D)

(E) (B) + (C) - (D).
(F) Sum of incurred losses in excess of SIR.

(G) Sum of incurred losses in excess of \$1,000,000.

(H) (E) - (G).
(I) (G) - (F).
(J) (E) - (F).

(K) Minimum of (J) and the aggregate stop loss. See Reserve Appendix J.

Paid Losses as of 12/31/22

										Paid
		Additions	Subtractions			Paid	Paid	Paid	Paid	Capped at
Accident	Unlimited	to	from	Adjusted	Paid	Over	Capped at	\$1,000,000	Capped at	SIR &
Year	Paid	Losses	Losses	Paid	Over SIR	\$1,000,000	\$1,000,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1986-2002	\$34,482,929	\$146,726	\$0	\$34,629,654	\$0	\$8,644,200	\$25,985,454	\$8,644,200	\$34,629,654	\$34,629,654
2002-2003	8,832,841	(20,359)	0	8,812,482	0	3,375,194	5,437,289	3,375,194	8,812,482	8,812,482
2003-2004	2,569,681	4,800	0	2,574,481	0	0	2,574,481	0	2,574,481	2,574,481
2004-2005	1,876,140	(1,653)	0	1,874,487	0	0	1,874,487	0	1,874,487	1,874,487
2005-2006	4,775,006	(18,984)	0	4,756,022	0	1,518,182	3,237,840	1,518,182	4,756,022	4,756,022
2006-2007	1,662,124	0	0	1,662,124	0	0	1,662,124	0	1,662,124	1,662,124
2007-2008	6,755,660	0	0	6,755,660	0	1,835,775	4,919,885	1,835,775	6,755,660	6,755,660
2008-2009	3,528,864	(56,184)	0	3,472,680	0	95,835	3,376,845	95,835	3,472,680	3,472,680
2009-2010	2,441,417	(88,465)	0	2,352,952	0	0	2,352,952	0	2,352,952	2,352,952
2010-2011	2,046,846	0	0	2,046,846	0	0	2,046,846	0	2,046,846	2,046,846
2011-2012	3,823,023	0	0	3,823,023	0	0	3,823,023	0	3,823,023	3,823,023
2012-2013	3,487,466	0	0	3,487,466	0	0	3,487,466	0	3,487,466	3,487,466
2013-2014	6,969,125	0	0	6,969,125	0	3,900,000	3,069,125	3,900,000	6,969,125	6,969,125
2014-2015	5,429,951	0	0	5,429,951	0	524,140	4,905,812	524,140	5,429,951	5,429,951
2015-2016	4,824,345	0	0	4,824,345	0	1,400,000	3,424,345	1,400,000	4,824,345	4,824,345
2016-2017	6,958,339	0	0	6,958,339	0	1.923.377	5.034.962	1.923.377	6.958.339	6.958.339
2017-2018	870,473	0	0	870,473	0	0	870,473	0	870,473	870,473
2018-2019	1,055,231	0	0	1,055,231	0	0	1,055,231	0	1,055,231	1,055,231
2019-2020	108,746	0	0	108.746	0	0	108,746	0	108,746	108.746
2020-2021	3.828.828	0	0	3.828.828	0	1.306.053	2.522.774	1.306.053	3.828.828	3.828.828
2021-2022	0	0	0	0	0	0	_,=_,=_,= 0	0	0,00	0,00
2022-2023	0	0	0	0	0	0	0	0	0	0
Total	\$106 327 035	-\$34 120	\$0	\$106 292 915	\$0	\$24 522 756	\$81 770 159	\$24 522 756	\$106 292 915	\$106 292 915

Notes:

(A) Years are 7/1 to 6/30.(B) Provided by the Authority.

(C) Adjustments to Accounting

(D)

(E) (B) + (C) - (D).

(F) Sum of paid losses in excess of SIR.

(G) Sum of paid losses in excess of \$1,000,000.

- (H) (E) (G).
 (I) (G) (F).
 (J) (E) (F).
- (K) Minimum of (J) and the aggregate stop loss. See Reserve Appendix J.

Case Reserves as of 12/31/22

Accident Year (A)	Unlimited Reserves (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Reserves (E)	Reserves Over SIR (F)	Reserves Over \$1,000,000 (G)	Reserves Capped at \$1,000,000 (H)	Reserves \$1,000,000 to SIR Layer (I)	Reserves Capped at SIR (J)	Reserves Capped at SIR & Aggregate (K)
1986-2002	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2002-2003	0	0	0	0	0	0	0	0	0	0
2003-2004	0	0	0	0	0	0	0	0	0	0
2004-2005	0	0	0	0	0	0	0	0	0	0
2005-2006	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0
2009-2010	0	0	0	0	0	0	0	0	0	0
2010-2011	0	0	0	0	0	0	0	0	0	0
2011-2012	55,162	0	0	55,162	0	0	55,162	0	55,162	55,162
2012-2013	575,972	0	0	575,972	0	0	575,972	0	575,972	575,972
2013-2014	0	0	0	0	0	0	0	0	0	0
2014-2015	0	0	0	0	0	0	0	0	0	0
2015-2016	133,567	0	0	133,567	0	0	133,567	0	133,567	133,567
2016-2017	1,253,417	0	0	1,253,417	0	524,630	728,787	524,630	1,253,417	1,253,417
2017-2018	0	0	0	0	0	0	0	0	0	0
2018-2019	236,415	0	0	236,415	0	0	236,415	0	236,415	236,415
2019-2020	593,215	0	0	593,215	0	0	593,215	0	593,215	593,215
2020-2021	1,782,218	0	0	1,782,218	0	70,747	1,711,471	70,747	1,782,218	1,782,218
2021-2022	514,442	0	0	514,442	0	0	514,442	0	514,442	514,442
2022-2023	0	0	0	0	0	0	0	0	0	0
Total	\$5,144,407	\$0	\$0	\$5,144,407	\$0	\$595,377	\$4,549,030	\$595,377	\$5,144,407	\$5,144,407

Notes:

(A) Years are 7/1 to 6/30.

(B) Reserve Appendix L, Page 1, Column (B) - Reserve Appendix L, Page 2, Column (B).

(C) Reserve Appendix L, Page 1, Column (C) - Reserve Appendix L, Page 2, Column (C).

(D) Reserve Appendix L, Page 1, Column (D) - Reserve 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 \$1,000,000.

(H) (E) - (G). (I) (G) - (F).

- (J) (E) (F).

⁽K) Minimum of (J) and the aggregate stop loss. See Reserve Appendix J.

		Additions to	Subtractions from	Adjusted		Additions to	Subtractions from	Adjusted		Adjusted
Accident	Reported	Reported	Reported	Reported	Closed	Closed	Closed	Closed	Open	Ópen
Year	Claims	Claims	Claims	Claims	Claims	Claims	Claims	Claims	Claims	Claims
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1986-2002	192	0	0	192	192	0	0	192	0	0
2002-2003	28	0	0	28	28	0	0	28	0	0
2003-2004	20	0	0	20	20	0	0	20	0	0
2004-2005	9	0	0	9	9	0	0	9	0	0
2005-2006	16	0	0	16	16	0	0	16	0	0
2006-2007	14	0	0	14	14	0	0	14	0	0
2007-2008	24	0	0	24	24	0	0	24	0	0
2008-2009	17	0	0	17	17	0	0	17	0	0
2009-2010	20	0	0	20	20	0	0	20	0	0
2010-2011	13	0	0	13	13	0	0	13	0	0
2011-2012	20	0	0	20	19	0	0	19	1	1
2012-2013	21	0	0	21	20	0	0	20	1	1
2013-2014	15	0	0	15	15	0	0	15	0	0
2014-2015	18	0	0	18	18	0	0	18	0	0
2015-2016	20	0	0	20	19	0	0	19	1	1
2016-2017	20	0	0	20	17	0	0	17	3	3
2017-2018	7	0	0	7	7	0	0	7	0	0
2018-2019	10	0	0	10	7	0	0	7	3	3
2019-2020	12	0	0	12	2	0	0	2	10	10
2020-2021	20	0	0	20	7	0	0	7	13	13
2021-2022	11	0	0	11	0	0	0	0	11	11
2022-2023	0	0	0	0	0	0	0	0	0	0
Total	527	0	0	527	484	0	0	484	43	43

Claim Counts as of 12/31/22

Notes:

(A) Years are 7/1 to 6/30.(B) Provided by the Authority.

- (B) Fronde by the Autority.
 (C)
 (D)
 (E) (B) + (C) (D).
 (F) Provided by the Authority.

(G)

(H)

(I) (F) + (G) - (H).(J) (B) - (F).(K) (E) - (I).

Exposure Measures

Accident Year	Total Payroll (\$00) (A)	Inflation Trend Factor (B)	Trended Payroll (\$00) (C)
1986-2002			
2002-2003	3,441,025	1.638	5,636,399
2003-2004	3,596,411	1.598	5,747,065
2004-2005	4,209,065	1.559	6,561,932
2005-2006	4,298,659	1.521	6,538,260
2006-2007	4,504,261	1.484	6,684,323
2007-2008	4,769,732	1.448	6,906,572
2008-2009	4,929,016	1.413	6,964,700
2009-2010	4,760,313	1.379	6,564,472
2010-2011	4,393,012	1.345	5,908,601
2011-2012	3,754,382	1.312	4,925,749
2012-2013	3,668,540	1.280	4,695,731
2013-2014	3,643,764	1.249	4,551,061
2014-2015	3,788,358	1.219	4,618,008
2015-2016	3,697,212	1.189	4,395,985
2016-2017	3,936,364	1.160	4,566,182
2017-2018	4,135,396	1.132	4,681,268
2018-2019	4,265,647	1.104	4,709,274
2019-2020	4,202,976	1.077	4,526,605
2020-2021	4,343,082	1.051	4,564,579
2021-2022	4,640,638	1.025	4,756,654
2022-2023	4,748,717	1.000	4,748,717
2023-2024	4,891,178	1.000	4,891,178

- Notes:
- Provided by the Authority. Based on industry factors. (A)
- (B) (C) (A) x (B).

PLAN JPA SPECIAL BOARD OF DIRECTORS MEETING

March 23, 2023

Agenda Item 7.B.

LIABILITY PROGRAM

SUBJECT: State of the Market - Liability

BACKGROUND AND HISTORY:

Annually, representatives from Alliant Insurance Services, Inc. (Alliant) provide an update on the status of the current excess market and a strategy for the upcoming renewal of PLAN's reinsurance and excess policies.

Seth Cole, Senior Vice President, Alliant, will provide the Board of Directors with a marketing report for the 2023/24 program year. Mr. Cole will be present at the meeting to discuss this strategy as well as answer questions.

<u>RECOMMENDATION</u>:

None.

REFERENCE MATERIALS ATTACHED:

None
PLAN JPA SPECIAL BOARD OF DIRECTORS MEETING

March 23, 2023

Agenda Item 7.C.

LIABILITY PROGRAM

SUBJECT: PLAN JPA 2023/24 Projections - Liability

BACKGROUND AND HISTORY:

The primary pooled layer funding has a slight decrease, while the reinsurance & excess layer is projected to increase by 20%. Staff has taken a conservative approach in estimating costs for the 2023/24 year. Broken down as follows:

Layers	2022-23	Carrier	2023-24	Variance
\$1M	\$5,102,000		\$4,888,000	-4.2%
\$9M	7,082,013		8,329,559	17.6%
\$5M	1,957,106	Safety National	2,348,527	20.0%
\$5M	1,450,950	Everest	1,741,140	20.0%
\$5M	860,416	Hallmark	1,032,499	20.0%
\$5M	826,000	AXIS	991,200	20.0%
\$30M	\$17,278,485	-	\$19,330,925	11.9%
	Layers \$1M \$9M \$5M \$5M \$5M \$5M \$5M	Layers 2022-23 \$1M \$5,102,000 \$9M 7,082,013 \$5M 1,957,106 \$5M 1,450,950 \$5M 860,416 \$5M 826,000 \$30M \$17,278,485	Layers 2022-23 Carrier \$1M \$5,102,000 \$9M 7,082,013 \$5M 1,957,106 Safety National \$5M 1,450,950 Everest \$5M 860,416 Hallmark \$5M 826,000 AXIS \$30M \$17,278,485 \$17,278,485	Layers 2022-23 Carrier 2023-24 \$1M \$5,102,000 \$4,888,000 \$9M 7,082,013 8,329,559 \$5M 1,957,106 Safety National 2,348,527 \$5M 1,450,950 Everest 1,741,140 \$5M 860,416 Hallmark 1,032,499 \$5M 826,000 AXIS 991,200 \$30M \$17,278,485 \$19,330,925

Overall, staff estimates an 11.9% increase for PLAN's pooled layer, reinsurance, and excess coverage. The administration cost is not included for this discussion.

<u>RECOMMENDATION</u>:

None.

REFERENCE MATERIALS ATTACHED:

None

PLAN JPA SPECIAL BOARD OF DIRECTORS MEETING

March 23, 2023

Agenda Item 8.A.

PROPERTY AND GROUP PURCHASE PROGRAMS

SUBJECT: Actuarial Update for the Property Program

BACKGROUND AND HISTORY:

The preliminary actuarial report provides the funding information for the 2023/24 year. The actuary was able to compile the report using December 31, 2022, loss run and estimated insured property values on February 22, 2023.

Property Program

PLAN JPA's current Property program structure is:



In the 2022/23 Program Year, the Property Program has been funded at the 70% Confidence Level (CL). As directed by the Board at the December 8, 2022, Strategic Planning Session and Board Meeting, to build equity in the Property Program and fund at the 85% CL by the 2025/26 Program Year, staff is presenting the 2023/24 Preliminary Budget at the 75% CL. This will be discussed in further detail during Agenda Item 9.A.

The following is a comparison of the funding for the PLAN JPA Primary Pool Layer:

March 25, 2025

Agenda Item 8.A. Page 2

Property	Discount					
Program	Factor	Expected		 70%		75%
2023/24	2.0%	\$	1,373,000	\$ 1,635,000	\$	1,766,000
2022/23	2.0%	\$	1,128,000	\$ 1,350,000	\$	1,464,000
	Change		245,000	 285,000		302,000
	% Change		21.7%	21.1%		20.6%

In 2023/24, PLAN's Property Program pooled layer is experiencing an increase of \$416,000, or 30.8%, over 2022/23 Actuals. Part of the 30.8% increase, is attributable to moving from 70% CL funding to 75%, or \$1,350,000 to \$1,766,000. The other is due to valuation increases in Total Insured Values (TIV) of 8.1% over prior year's insured values. However, TIV information is still being collected by Alliant. In addition, the actuarial report may need to be modified if the coverage structure of PLAN's participation in Alliant Property Insurance Program (APIP) changes. The current Property Program is \$500K per occurrence with no pool aggregate deductible.

Ms. Becky Richard, ACAS, MAAA, Senior Actuarial Manager from Bickmore Actuarial, will be in attendance to review the Draft Actuarial Study for the Property Program.

<u>RECOMMENDATION</u>:

None.

<u>REFERENCE MATERIALS ATTACHED</u>:

• Draft Property Program Actuarial Report as of March 13, 2023



Actuarial Review of the Self-Insured Property Program

Forecast for Program Year 2023-24

Presented to **PLAN JPA**

March 13, 2023 - DRAFT



Monday, March 13, 2023

Pooled Liability Assurance Network Joint Powers Authority Attn: Eric Dahlen 1750 Creekside Oaks Drive, Suite 200 Sacramento, CA 95833

Re: Actuarial Review of the Self-Insured Property Program

Dear Mr. Dahlen:

As you requested, we have completed our review of the Authority's self-insured property program (the PLAN JPA). Assuming a pool retention of \$500,000 and a member deductible of \$5,000, we estimate the ultimate cost of claims and expenses for claims incurred during the 2023-24 program year to be \$1,373,000 including allocated loss adjustment expenses (ALAE) and a discount for anticipated investment income. ALAE is basically the direct cost associated with the defense of individual claims. The discount for investment income is calculated based on the likely payout pattern of your claims, assuming a 2.0% return on investments per year. For budgeting purposes, the expected cost of 2023-24 claims translates to a rate of \$0.039 per \$100 TIV.

The table below shows funding recommendations for the 2023-24 fiscal year.

PLAN JPA Self-Insured Property Program Loss and ALAE Funding Guidelines for 2023-24 Pool Retention of \$500,000, Member Deductible of \$5,000

		Marginally	Reco			
	Expected	Acceptable 70% CL	Low 75% CL	Target 80% CL	High 85% CL	Conservative 90% CL
Loss and ALAE	\$1,399,000					
Investment Income Offset	(26,000)					
Discounted Loss and ALAE	\$1,373,000	\$1,635,000	\$1,766,000	\$1,921,000	\$2,116,000	\$2,375,000
Excess Insurance	7,637,000	7,637,000	7,637,000	7,637,000	7,637,000	7,637,000
Total Funding	\$9,010,000	\$9,272,000	\$9,403,000	\$9,558,000	\$9,753,000	\$10,012,000
Rate per \$100 of 2023-24 TIV	\$0.254	\$0.262	\$0.265	\$0.270	\$0.275	\$0.283

We generally recommend that risk pools fund for <u>future costs</u> between the <u>75% and 85%</u> <u>confidence levels</u>.

The report that follows outlines the scope of our study, its background, and our conclusions, recommendations and assumptions. Judgments regarding the appropriateness of our conclusions and recommendations should be made only after studying the report in its entirety – including the graphs, attachments, exhibits and appendices. Our report has been developed for the PLAN JPA's internal use. It is not intended for general circulation.

We appreciate the opportunity to be of service to PLAN JPA in preparing this report. Please feel free to call Becky Richard at (916) 244-1183, Mike Harrington at (916) 244-1162 or David Kim at (916) 244-1166 with any questions you may have about this report.

Sincerely,

Bickmore Actuarial

DRAFT

Becky Richard, ACAS, MAAA Senior Actuarial Manager, Bickmore Actuarial Associate, Casualty Actuarial Society Member, American Academy of Actuaries

DRAFT

Mike Harrington, FCAS, MAAA President and Principal, Bickmore Actuarial Fellow, Casualty Actuarial Society Member, American Academy of Actuaries

DRAFT

David Kim Senior Actuarial Analyst, Bickmore Actuarial

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I. BACKGROUND

PLAN JPA began its self-insured property and liability program in 1986.

For many years the property program had very low pool retentions with most property exposure being insured by external insurance carriers.

Effective July 1, 2017, the property pool retention became \$225K per occurrence, subject to a \$1M annual aggregate. Once the annual aggregate was met, the pool retention decreased to a \$10K maintenance deductible per occurrence.

Effective July 1, 2021, the property pool retention increased to \$500K per occurrence, with no annual aggregate.

PLAN JPA purchases excess insurance up to \$1 billion per occurrence.

PLAN Members have a \$5,000 deductible per occurrence.

The purpose of this review is to provide a guide to PLAN JPA to determine reasonable funding levels for its self-insurance program according to the funding policy PLAN JPA has adopted to comply with Governmental Accounting Standards Board Statements #10 and #30. The specific objectives of the study are to estimate PLAN JPA's ultimate loss cost for 2023-24 and provide funding guidelines to meet these future costs.

II. CONCLUSIONS AND RECOMMENDATIONS

A. COSTS OF 2023-24 CLAIMS

The following chart shows our funding recommendations for the PLAN JPA property program for the 2023-24 fiscal year assuming a \$500K pool retention and member deductibles of \$5,000.

PLAN JPA Self-Insured Property Program Loss and ALAE Funding Guidelines for 2023-24 Pool Retention of \$500,000, Member Deductible of \$5,000

		Marginally	Reco			
	Expected	Acceptable 70% CL	Low 75% CL	Target 80% CL	High 85% CL	Conservative 90% CL
Loss and ALAE	\$1,399,000					
Investment Income Offset	(26,000)					
Discounted Loss and ALAE	\$1,373,000	\$1,635,000	\$1,766,000	\$1,921,000	\$2,116,000	\$2,375,000
Excess Insurance	7,637,000	7,637,000	7,637,000	7,637,000	7,637,000	7,637,000
Total Funding	\$9,010,000	\$9,272,000	\$9,403,000	\$9,558,000	\$9,753,000	\$10,012,000
Rate per \$100 of 2023-24 TIV	\$0.254	\$0.262	\$0.265	\$0.270	\$0.275	\$0.283

The funding recommendations above are for losses and allocated loss adjustment expense only. They do not include any provision for claims administration, excess insurance, loss control, overhead, and other expenses associated with the program.

B. PROGRAM FUNDING: GOALS AND OBJECTIVES

As self-insurance programs have proliferated among public entities, it has become apparent that there is a large measure of inconsistency in the way in which these programs recognize and account for their claims costs. This is the result of the fact that there have been several different sources of guidance available, none of which has been completely relevant to public entity self-insurance programs.

According to the Governmental Accounting Standards Board (GASB), the most relevant source of guidance on the subject is Financial Accounting Standards Board Statement #60. A liability for unpaid claim costs, including all loss adjustment expenses, should be accrued at the time the self-insured events occur. This liability should include an allowance for incurred but not reported claims. It may be discounted for investment income at an appropriate rate of return, provided the discounting is disclosed. The regulations detailing the way in which this must be done are outlined in GASB's Statement #10.

GASB #10 does not address funding requirements. It does, however, allow a range of funded amounts to be recognized for accounting purposes, specifically GASB #10 allows recognition of a funding margin for unexpectedly adverse loss experience.

The amount of such a margin should be a question of long-term funding policy. We recommend that the margin be determined by thinking in terms of the probability that a given level of funding will prove to be adequate. If you elect to fund at a low confidence level, the chances are much greater that future events will prove that additional contributions should have been made for current claims.

We generally recommend that risk pools <u>maintain assets for historical liabilities</u> at no less than the <u>90% confidence level</u>, after recognition of investment income. The resulting risk margin is reasonably high that resulting funding should be sufficient to meet claim liabilities, yet the risk margin is not so large that they will cause most self-insured entities to experience undue financial hardship.

We generally recommend that risk pools fund for <u>future costs</u> between the <u>75%</u> <u>and 85% confidence levels</u>. The confidence level to which any future year is funded should be evaluated in light of the relative certainty of the assumptions underlying the actuarial analysis, PLAN JPA's other budgetary constraints, and the relative level of risk it is believed appropriate to assume. This means formulating both short- and long-term funding goals, which may be the same in some years, but different in others.

C. HISTORICAL TRENDS

PLAN JPA's \$500K loss rate (dollars of loss per \$100 of TIV) has remained relativity stable over the past eight years, with the exception of 2019-20. The projected 2022-23 loss rate of \$0.046 is based on the most recent eight years.



□Loss Rate

The program's cost per claim (limited to \$500,000) has generally increased since 2013-14. The projected 2022-23 severity of \$13,200 is based on this increasing trend.





Severity

PLAN JPA's claims frequency per \$1 million of TIV has generally decreased over the past ten years. The projected 2022-23 frequency of 0.035 is based on the decreasing trend.



PLAN JPA Property Program Number of Claims per \$1 Million of TIV

Frequency

D. COMPARISON WITH OUR PREVIOUS RESULTS

The prior report for the Authority was dated May 31, 2022. In the table below we display actual versus expected development of incurred losses and ALAE by accident year between the December 31, 2021 evaluation date of the prior report and the December 31, 2022 evaluation date of the current report.

Accident Year	Expected Incurred Development	Actual Incurred Development	Actual Minus Expected
Prior	\$0	\$0	\$0
2015-16	1,000	0	(1,000)
2016-17	3,000	0	(3,000)
2017-18	3,000	0	(3,000)
2018-19	16,000	(11,000)	(27,000)
2019-20	90,000	(18,000)	(108,000)
2020-21	85,000	39,000	(46,000)
2021-22	490,000	961,000	471,000
Total	\$688,000	\$971,000	\$283,000

Actual Versus Expected Incurred Loss and ALAE Development

As shown, actual incurred development was more than anticipated since the prior report. Based on the assumptions from the prior report, it was expected that incurred losses through accident year 2021-22 would increase by \$688,000 between the two evaluation dates. However, actual development was approximately \$971,000; or about \$283,000 more than expected.

In the table below we display actual versus expected development of paid losses and ALAE by accident year between the December 31, 2021 evaluation date of the prior report and the December 31, 2022 evaluation date of the current report.

Accident Year	Expected Paid Development	Actual Paid Development	Actual Minus Expected
Prior	\$0	\$0	\$0
2015-16	15,000	0	(15,000)
2016-17	160,000	0	(160,000)
2017-18	2,000	0	(2,000)
2018-19	24,000	25,000	1,000
2019-20	164,000	123,000	(41,000)
2020-21	233,000	61,000	(172,000)
2021-22	634,000	307,000	(327,000)
Total	\$1,232,000	\$516,000	(\$716,000)

Actual Versus Expected Paid Loss and ALAE Development

As shown, actual paid development was less than anticipated since the prior report. Based on the assumptions from the prior report, it was expected that paid losses through accident year 2021-22 would increase by \$1,232,000 between the two evaluation dates. However, actual development was approximately \$516,000; or about \$716,000 less than expected.

In the table below we display the change in our estimates of the program's ultimate losses and ALAE by accident year since our prior report.

Accident			
Year	Prior Report	Current Report	Change
.	^	* •	* •
Prior	\$0	\$0	\$0
2011-12	878,000	878,000	\$0
2012-13	1,212,000	1,212,000	0
2013-14	769,000	769,000	0
2014-15	768,000	768,000	0
2015-16	731,000	730,000	(1,000)
2016-17	1,191,000	1,188,000	(3,000)
2017-18	626,000	620,000	(6,000)
2018-19	1,067,000	1,039,000	(28,000)
2019-20	2,580,000	2,450,000	(130,000)
2020-21	960,000	884,000	(76,000)
2021-22	1,165,000	1,654,000	489,000
Total	\$11,947,000	\$12,192,000	\$245,000

Change in Loss and ALAE Ultimate Losses

As shown, overall we have increased our estimated ultimate losses by \$245,000 since our prior report. The changes in our estimates of ultimate losses take into account both the incurred and paid development listed on the previous two pages.

At the time of the prior report, our funding estimate for the 2022-23 year was \$1,128,000 at the discounted, expected level. That amount included allocated loss adjustment expenses (ALAE), and a discount for anticipated investment income, but <u>excluded</u> unallocated loss adjustment expenses (ULAE). Our current estimate for the 2023-24 year is \$1,373,000 at the discounted, expected level, an increase in the program's expected loss costs, as shown in the table below:

Comparison of Funding for Loss and ALAE

	Prior Report 2022-23 Deductible = \$500,000	Current Report 2023-24 Deductible = \$500,000	Change
(A) Ultimate Loss and ALAE:	\$1,151,000	\$1,399,000	\$248,000
(B) Offset for Investment Income:	(23,000)	(26,000)	(3,000)
(C) Total Recommended Funding:	1,128,000	\$1,373,000	\$245,000
(D) Funding per \$100 of TIV:	\$0.0345	\$0.0390	\$0.0045

As you can see, our funding recommendations at the discounted, expected level have increased between 2022-22 and 2023-24, as shown in our prior and current reports respectively.

Our estimates of ultimate loss and ALAE have increased by \$248,000 primarily due to an increase in our projected rate and increased exposures in TIV. Investment income is expected to be higher. The net change due to the above factors is an overall increase of \$245,000 in our annual funding estimate for loss and ALAE.

We provide the following comparison of property premiums, which include ultimate loss and ALAE and excess insurance costs at the 75% confidence level on a discounted basis (2.0%).

Member	2022-23 \$500K Actual Funding	2023-24 \$500K Proposed Funding	Dollar Change	Percent Change
American Canyon	\$172,404	\$255,670	\$83,266	48.3%
Atherton	132,487	179,656	47,169	35.6%
Benicia	521,317	728,936	207,619	39.8%
Burlingame	435,428	601,627	166,199	38.2%
Campbell	220,130	293,215	73,085	33.2%
Colma	63,650	78,916	15,267	24.0%
Cupertino	273,555	363,395	89,840	32.8%
Dublin	537,380	827,665	290,285	54.0%
East Palo Alto	73,291	84,281	10,990	15.0%
Foster City	354,149	485,066	130,917	37.0%
Half Moon Bay	73,066	94,946	21,881	29.9%
Hillsborough	182,738	247,557	64,819	35.5%
Los Altos Hills	42,230	50,685	8,455	20.0%
Los Gatos	145,790	206,272	60,482	41.5%
Millbrae	296,406	417,330	120,924	40.8%
Milpitas	535,695	703,186	167,491	31.3%
Morgan Hill	351,921	473,458	121,538	34.5%
Newark	365,409	503,810	138,401	37.9%
Pacifica	513,722	709,551	195,829	38.1%
Portola Valley	37,161	44,668	7,507	20.2%
Ross, Town of	20,922	17,477	-3,445	-16.5%
San Bruno	236,946	304,352	67,405	28.4%
San Carlos	161,745	217,194	55,450	34.3%
Saratoga	111,045	144,533	33,488	30.2%
South SF	844,548	1,163,010	318,462	37.7%
Suisun City	108,378	134,145	25,767	23.8%
Tiburon	38,605	41,416	2,811	7.3%
Woodside	28,006	30,662	2,656	9.5%
Total	\$6,878,124	\$9,402,682	2,524,558	36.7%

E. DATA ISSUES

Overall, the data utilized in preparing this report appears to be accurate as of the date of the current evaluation. We received loss data evaluated as of December 31, 2022.

III. ASSUMPTIONS AND LIMITATIONS

Any quantitative analysis is developed within a very specific framework of assumptions about conditions in the outside world, and actuarial analysis is no exception. We believe that it is important to review the assumptions we have made in developing the estimates presented in this report. By doing so, we hope you will gain additional perspective on the nature of the uncertainties involved in maintaining a self-insurance program. Our assumptions, and some observations about them, are as follows:

- Our analysis is based on loss experience, exposure data, and other general and specific information provided to us by PLAN JPA. We have accepted all of this information without audit.
- We have also made use of loss statistics that have been developed from the information gathered and compiled from other California public entities with self-insured excess property program.
- We were not able to obtain sufficient historical data to produce PLAN JPA property specific loss development factors. As a result, we have had to rely, in part, on statistics and historic loss development patterns derived from the loss history of the other California public entities with self-insured excess property program. This increases the uncertainty associated with the conclusions of this report, in that any individual entities' experience can be significantly different from that of other California public entities with self-insured excess property programs.
- We have made use of cost relationships for claims of various sizes derived from the most recent actuarial reviews of other California public entities.
- We have assumed that there is a continuing relationship between past and future loss costs.
- It is not possible to predict future claim costs precisely. Most of the cost of property claims arise from a small number of incidents involving serious injury. A relatively small number of such claims could generate enough loss dollars to significantly reduce, or even deplete, the self-insurance fund.
- We cannot predict and have not attempted to predict the impact of future law changes and court rulings on claims costs. This is one major reason why we believe our funding recommendations are reasonable now, but should not be extrapolated into the future.

- We have assumed that the costs associated with property claims are increasing at 1.2% per year. We have assumed that the average claim size increases at 6.5% per year and that the average number of claims per \$1 million decreases at 5.0% per year.
- We have assumed that TIV increases 5% annually due to inflation.
- We have assumed that assets held for investment will generate an annual return of 2%.
- Our funding recommendations do not include provision for catastrophic events not in the PLAN JPA's history, such as earthquakes, flooding, mass civil disorder, or mass occupational disease.
- Our estimates assume that all excess insurance is valid and collectible. Further, our funding recommendations do not include a provision for losses greater than PLAN JPA's excess coverage.

IV. 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, etc.)

Case Reserve - The amount left to be paid on a 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 TIV.

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 anticipated investment income from assets held prior to actual claim payout.

Expected Losses - The best estimate of the full, ultimate value of loss costs.

Incurred but not Reported (IBNR) Losses - Losses for which the accident has occurred but the claim has not yet been reported. This is the ultimate value of losses, less any amount that has been set up as reported losses by the claims adjuster. It includes both amounts for claims incurred but not yet received by the administrator and loss development on already reported claims.

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 Section IV).

Loss Rate - Ultimate losses per \$100 TIV.

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 deductible 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.

Deductible - The level at which an excess insurance policy is triggered to begin payments on a claim.

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 adjusters' salaries, taxes, etc.)

Funding Options for Program Year 2023-2024 (Pool Layer: \$5,000 - \$500,000) One-Year Funding Plan

				Dollar Amount	TIV Rate	
(A)	Estimated Ultimate Losses Incurred in Accident Year 2023-2024: (From Not Included)			\$1,399,000	\$0.039	
(B)	Estimated Claims Administration Fees Incurred in Accident Year 2023-2024: (From Exhibit 3, Page 1, item (L))			0	0.000	
(C)	Total Claims Costs Incurred in Accident Year 2023-2024: ((A) + (B))			\$1,399,000	\$0.039	
(D)	Loss Discount Factor (Based on a Discount Rate of (Appendix F, , (G))	2.0%.):		0.981		
(E)	Discounted Total Claims Costs Incurred in Accident Year 2023-2024: ((C) x (D))			\$1,373,000	\$0.039	
		Marginally Acceptable		Recommended		Conservative
-		70%	75%	80%	85%	90%
(F)	Confidence Level Factor: (From Appendix G)	1.191	1.286	1.399	1.541	1.730
(G)	Margin for Adverse Experience: ((E) x [(F) - 1])	262,000	393,000	548,000	743,000	1,002,000
(H)	Recommended Funding in 2023-2024					
	for Claims Costs: ((E) + (G))	\$1,635,000	\$1,766,000	\$1,921,000	\$2,116,000	\$2,375,000
(I)	Budgeted Program Costs: (Provided by the Pool)	7,637,000	7,637,000	7,637,000	7,637,000	7,637,000
(J)	Recommended Funding in 2023-2024 for Claims Costs, Other Expenses,					
	and Non Claims Related Expenses: ((H) + (I))	\$9,272,000	\$9,403,000	\$9,558,000	\$9,753,000	\$10,012,000
(I)	Rate per \$100 of TIV: ((H) / \$35,427,906)	\$0.262	\$0.265	\$0.270	\$0.275	\$0.283

TIV rates are per hundred dollars of 2023-2024 TIV of \$3,542,790,600.

\$1,630,000

PLAN JPA - Property

Estimated Ultimate Program Losses

			Exposure	Exposure		
	Reported	Paid	Method	Method		Selected
	Loss	Loss	Based on	Based on	Frequency-	Estimate of
Accident	Development	Development	Reported	Paid	Severity	Ultimate
Year	Method	Method	Losses	Losses	Method	Losses
	(A)	(B)	(C)	(D)	(E)	(F)
2011-2012	877,854	879,610	877,854	879,830	976,800	877,854
2012-2013	1,211,570	1,215,205	1,211,570	1,215,584	1,353,811	1,211,570
2013-2014	768,874	772,718	768,874	773,124	862,740	768,874
2014-2015	768,041	774,953	768,041	775,718	865,214	768,041
2015-2016	729,739	695,507	729,739	696,814	786,240	730,000
2016-2017	1,187,751	699,088	1,187,488	706,462	1,034,860	1,188,000
2017-2018	622,982	638,479	625,750	653,910	1,083,915	619,883
2018-2019	1,039,428	1,079,564	1,041,291	1,086,258	1,259,814	1,039,000
2019-2020	2,468,938	2,483,498	2,438,647	2,392,572	1,312,020	2,450,000
2020-2021	906,476	750,241	928,531	815,190	973,357	884,000
2021-2022	1,753,054	459,887	1,695,744	759,040	1,516,032	1,654,000
Totals						\$12,191,222
		Projected Losses fo	or the Year 2022-20	023 (G)		\$1,503,000

	(0)
Projected Losses for the Year 2023-2024	(H)

Notes:

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

(H) From Exhibit 3, Page 1, Line (K).

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.

Estimated Ultimate Limited Losses Capped at \$225,000 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)
2011-2012	877,854	877,854	877,854	877,854	877,800	877,854
2012-2013	1,211,570	1,211,570	1,211,570	1,211,570	1,211,569	1,211,570
2013-2014	768,874	768,874	768,874	768,874	768,960	768,874
2014-2015	768,041	768,041	768,041	768,041	767,970	768,041
2015-2016	694,403	651,245	694,403	651,245	694,460	694,403
2016-2017	910,380	685,380	910,380	685,380	910,370	910,380
2017-2018	619,883	619,883	619,883	619,883	949,620	619,883
2018-2019	1,029,137	1,032,223	1,029,137	1,032,285	1,098,390	1,029,137
2019-2020	1,761,372	1,694,947	1,761,372	1,689,354	1,138,416	1,762,000
2020-2021	709,504	614,754	711,589	626,710	841,225	711,000
2021-2022	1,479,608	404,022	1,459,835	583,608	1,304,016	1,470,000
Totals						\$10,823,142
		Projected Losses fo	or the Year 2022-20	023 (G)		\$1,287,000
		Projected Losses for	or the Year 2023-20	024 (H)		\$1,389,000

Projected Losses for the Year 2023-2024 (H)

Notes:

- (A) From Appendix A, Column (D).
- (B) From Appendix B, 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).
- (G) From Exhibit 3, Page 1, Line (K) / Line (G).
- (H) From Exhibit 3, Page 1, Line (K) / Line (G).

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.

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Selection of Projected Limited Loss Rate and Projection of Program Losses and ULAE

Accident Year	Ultimate Limited Losses (A)	Trend Factor (B)	Trended Limited Losses (C)	Trended TIV (\$00) (D)	Trended Limited Loss Rate (E)
2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019	877,854 1,211,570 768,874 768,041 694,403 910,380 619,883 1 029 137	1.141 1.127 1.114 1.100 1.087 1.074 1.062 1.049	1,001,631 1,365,439 856,526 844,845 754,816 977,748 658,316 1 079 565	26,704,247 27,876,628 30,357,358 30,465,070 27,144,230 27,028,339 27,287,225 27,621,785	0.038 0.049 0.028 0.028 0.028 0.036 0.024 0.039
2019-2020 2020-2021 2021-2022	1,762,000 711,000 1,470,000	1.037 1.024 1.012	1,827,194 728,064 1,487,640	28,688,860 28,792,638 29,127,022	0.064 0.025 0.051
Totals 16/17-20/21 17/18-21/22	\$10,823,142 5,032,400 5,592,020		\$11,581,784 5,270,887 5,780,779	311,093,402 139,418,847 141,517,530	\$0.037 0.038 0.041
			(F) Selecte Pr	ed Limited Rate: ior \$250K Rate:	\$0.039 \$0.035
Program Year: (G) Factor to S (H) Trend Fact (I) Program Ra (J) Trended TIV (K) Projected F (L) Projected U (M) Projected I	IR: or: te: ((\$00): Program Losses: JLAE: Loss and ULAE:	2022-2023 1.168 1.000 \$0.046 32,680,317 1,503,000 0 \$1,503,000	2023-2024 1.174 1.012 \$0.046 35,427,906 1,630,000 0 \$1,630,000		
Member Ded 0 5,000 10,000 15,000 25,000	Ded Fact 1.00 0.86 0.75 0.68 0.58	2022-2023 Funding 1,503,000 1,290,000 1,134,000 1,025,000 875,000	2023-2024 Funding 1,630,000 1,399,000 1,229,000 1,112,000 949,000		

Selection of Projected Limited Loss Rate and Projection of Program Losses and ULAE

Notes:

- (A) From Exhibit 2, page 2, Column (F).
 For purposes of projecting future losses, losses are capped at \$225,000 per occurrence.
- (B) From Appendix E, Column (B).
- (C) (A) x (B).
- (D) From Appendix I, Column (C).
- (E) (C) / (D).
- (F) Selected based on (E).
- (G) Based on a Burr distribution, a mathematical model of claim sizes.
- (H) From Appendix E.
- (I) (F) x (G) x (H).
- (J) From Appendix I, Column (C).
- (K) (I) x (J).
- (L) Based on an estimated claim closing pattern and the Pool's historical claims administration expenses.
- (M) (K) + (L).

This exhibit shows the calculation of future loss costs based on the past loss rates. The projections will be accurate only to the extent that what has happened in the past is representative of what will happen in the future.

Reported	Loss	Devel	opment
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Accident Year (A)	Limited Reported Losses as of 12/31/22 (B)	Reported Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Reported Losses of 12/31/22 (E)	Reported Loss Development Factor (F)	Ultimate Program Losses (G)
2011-2012	877,854	1.000	877,854	877,854	1.000	877,854
2012-2013	1,211,570	1.000	1,211,570	1,211,570	1.000	1,211,570
2013-2014	768,874	1.000	768,874	768,874	1.000	768,874
2014-2015	768,041	1.000	768,041	768,041	1.000	768,041
2015-2016	694,403	1.000	694,403	729,739	1.000	729,739
2016-2017	910,380	1.000	910,380	1,185,380	1.002	1,187,751
2017-2018	619,883	1.000	619,883	619,883	1.005	622,982
2018-2019	1,029,137	1.000	1,029,137	1,029,137	1.010	1,039,428
2019-2020	1,761,372	1.000	1,761,372	2,406,372	1.026	2,468,938
2020-2021	705,974	1.005	709,504	855,974	1.059	906,476
2021-2022	1,384,105	1.069	1,479,608	1,494,505	1.173	1,753,054
Totals	\$10,731,593		\$10,830,626	\$11,947,329		\$12,334,707

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Pool. These losses exclude amounts over \$225,000 per occurrence.
- (C) From Appendix A, Page 2. Interpolated to apply to data as of 12/31/22.
- (D) (B) x (C). These estimated losses exclude amounts over \$225,000 per occurrence.
- (E) Losses capped at the Pool's SIR. Amounts are provided by the Pool.
- (F) Derived from factors on Appendix A, Page 3. Interpolated to apply to data as of 12/31/22.
- (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.

Paid Loss Development

	Limited			Program		
	Paid	Paid Loss	Ultimate	Paid	Paid Loss	Ultimate
Accident	Losses as	Development	Limited	Losses	Development	Program
Year	of 12/31/22	Factor	Losses	of 12/31/22	Factor	Losses
(A)	(B)	(C)	(D)	(E)	(F)	(G)
2011-2012	877,854	1.000	877,854	877,854	1.002	879,610
2012-2013	1,211,570	1.000	1,211,570	1,211,570	1.003	1,215,205
2013-2014	768,874	1.000	768,874	768,874	1.005	772,718
2014-2015	768,041	1.000	768,041	768,041	1.009	774,953
2015-2016	651,245	1.000	651,245	686,581	1.013	695,507
2016-2017	685,380	1.000	685,380	685,380	1.020	699,088
2017-2018	619,883	1.000	619,883	619,883	1.030	638,479
2018-2019	1,029,136	1.003	1,032,223	1,029,136	1.049	1,079,564
2019-2020	1,678,165	1.010	1,694,947	2,293,165	1.083	2,483,498
2020-2021	599,760	1.025	614,754	661,005	1.135	750,241
2021-2022	308,649	1.309	404,022	308,649	1.490	459,887
Totals	\$9,198,557		\$9,328,793	\$9,910,138		\$10,448,750

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Pool. These losses exclude amounts over \$225,000 per occurrence.
- (C) From Appendix B, Page 2. Interpolated to apply to data as of 12/31/22.
- (D) (B) x (C). These estimated losses exclude amounts over \$225,000 per occurrence.
- (E) Losses capped at the Pool's SIR. Amounts are provided by the Pool.
- (F) Derived from factors on Appendix B, Page 3. Interpolated to apply to data as of 12/31/22.
- (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.

Exposure and Development Method Based on Reported Losses

				Percentage		Incurred	
	Trended	Reported	Loss	of Losses		but not	Ultimate
Accident	TIV	Losses as	Development	Yet to Be	Program	Reported	Program
Year	(\$00)	of 12/31/22	Factor	Reported	Rate	(IBNR)	Losses
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
2011-2012	26,704,247	877,854	1.000	0.000	0.037	0	877,854
2012-2013	27,876,628	1,211,570	1.000	0.000	0.048	0	1,211,570
2013-2014	30,357,358	768,874	1.000	0.000	0.028	0	768,874
2014-2015	30,465,070	768,041	1.000	0.000	0.028	0	768,041
2015-2016	27,144,230	729,739	1.000	0.000	0.029	0	729,739
2016-2017	27,028,339	1,185,380	1.002	0.002	0.039	2,108	1,187,488
2017-2018	27,287,225	619,883	1.005	0.005	0.043	5,867	625,750
2018-2019	27,621,785	1,029,137	1.010	0.010	0.044	12,154	1,041,291
2019-2020	28,688,860	2,406,372	1.026	0.025	0.045	32,275	2,438,647
2020-2021	28,792,638	855,974	1.059	0.056	0.045	72,557	928,531
2021-2022	29,127,022	1,494,505	1.173	0.147	0.047	201,239	1,695,744
Totals	311,093,402	\$11,947,329				\$326,200	\$12,273,529

Notes:

- (A) From Appendix I, Column (C).
- (B) Provided by the Pool. These losses exclude amounts incurred above the Pool's SIR for each year.
 (2) From Amound (A) Column (F)
- (C) From Appendix A, Column (F).
- (D) 1 1/(C).
- (E) From Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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.

Exposure and Development Method Based on Paid Losses

				Percentage			
	Trended	Paid	Loss	of Losses		Incurred	Ultimate
Accident	TIV	Losses as	Development	Yet to Be	Program	but not	Program
Year	(\$00)	of 12/31/22	Factor	Paid	Rate	Paid	Losses
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
2011-2012	26,704,247	877,854	1.002	0.002	0.037	1,976	879,830
2012-2013	27,876,628	1,211,570	1.003	0.003	0.048	4,014	1,215,584
2013-2014	30,357,358	768,874	1.005	0.005	0.028	4,250	773,124
2014-2015	30,465,070	768,041	1.009	0.009	0.028	7,677	775,718
2015-2016	27,144,230	686,581	1.013	0.013	0.029	10,233	696,814
2016-2017	27,028,339	685,380	1.020	0.020	0.039	21,082	706,462
2017-2018	27,287,225	619,883	1.030	0.029	0.043	34,027	653,910
2018-2019	27,621,785	1,029,136	1.049	0.047	0.044	57,122	1,086,258
2019-2020	28,688,860	2,293,165	1.083	0.077	0.045	99,407	2,392,572
2020-2021	28,792,638	661,005	1.135	0.119	0.045	154,185	815,190
2021-2022	29,127,022	308,649	1.490	0.329	0.047	450,391	759,040
Totals	311,093,402	\$9,910,138				\$844,364	\$10,754,502

Notes:

- (A) From Appendix I, Column (C).
- (B) Provided by the Pool. These losses exclude amounts paid above the Pool's SIR for each year.

(C) From Appendix B, Column (F).

- (D) 1 1/(C).
- (E) From Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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.

Exposure and Development Method

Accident	Trended TIV	Ultimate Limited	Trend	Trended Limited	Trended Limited	Limited	Factor to	Program
Year	(\$00)	Losses	Factor	Losses	Loss Rate	Loss Rate	SIR	Loss Rate
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
2011-2012	26,704,247	877,854	1.141	1,001,631	0.038	0.033	1.113	0.037
2012-2013	27,876,628	1,211,570	1.127	1,365,439	0.049	0.043	1.117	0.048
2013-2014	30,357,358	768,874	1.114	856,526	0.028	0.025	1.122	0.028
2014-2015	30,465,070	768,041	1.100	844,845	0.028	0.025	1.127	0.028
2015-2016	27,144,230	694,403	1.087	754,816	0.028	0.026	1.132	0.029
2016-2017	27,028,339	910,380	1.074	977,748	0.036	0.034	1.137	0.039
2017-2018	27,287,225	619,883	1.062	658,316	0.024	0.038	1.141	0.043
2018-2019	27,621,785	1,029,137	1.049	1,079,565	0.039	0.038	1.147	0.044
2019-2020	28,688,860	1,762,000	1.037	1,827,194	0.064	0.039	1.152	0.045
2020-2021	28,792,638	710,000	1.024	727,040	0.025	0.039	1.157	0.045
2021-2022	29,127,022	1,480,000	1.012	1,497,760	0.051	0.040	1.163	0.047
Total/Avg	311,093,402	\$10,832,142		\$11,590,880	\$0.037			
16/17-20/21	139,418,847	5,031,400		5,269,863	0.038			
17/18-21/22	141,517,530	5,601,020		5,789,875	0.041			
			Selecte	ed Limited Rate:	\$0.040			
				Prior:	\$0.035			

Notes:

- (A) From Appendix I, Column (C).
- (B) Selected average of results from Appendices A and B.
- (C) From Appendix E, Column (B).
- (D) (B) x (C).
- (E) (D) / (A).
- (F) Selected Limited Rate / (C). For 2016-2017 and prior (B) / (A).
- (G) Based on a Burr 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.

Frequency and Severity Method

Accident Year	Ultimate Program Severity	Adjusted Ultimate Claims	Ultimate Program Losses
	(A)	(B)	(C)
2011-2012	5 920	165	976 800
2011-2012	0,920	105	1 252 011
2012-2013	0,023	107	1,353,011
2013-2014	4,793	180	862,740
2014-2015	5,374	161	865,214
2015-2016	6,048	130	786,240
2016-2017	8,770	118	1,034,860
2017-2018	10,323	105	1,083,915
2018-2019	11,051	114	1,259,814
2019-2020	11,820	111	1,312,020
2020-2021	12,641	77	973,357
2021-2022	13,536	112	1,516,032
Total		1,430	\$12,024,803

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.

Frequency and Severity Method

	Ultimate	Adjusted	Ultimate		Trended			
Accident	Limited	Ultimate	Limited	Trend	Limited	Limited	Factor to	Program
Year	Losses	Claims	Severity	Factor	Severity	Severity	SIR	Severity
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
2011-2012	877,854	165	5,320	2.002	10,651	5,320	1.113	5,920
2012-2013	1,211,570	157	7,717	1.879	14,500	7,717	1.117	8,623
2013-2014	768,874	180	4,272	1.764	7,536	4,272	1.122	4,793
2014-2015	768,041	161	4,770	1.656	7,899	4,770	1.127	5,374
2015-2016	694,403	130	5,342	1.555	8,307	5,342	1.132	6,048
2016-2017	910,380	118	7,715	1.460	11,264	7,715	1.137	8,770
2017-2018	619,883	105	5,904	1.371	8,094	9,044	1.141	10,323
2018-2019	1,029,137	114	9,028	1.287	11,619	9,635	1.147	11,051
2019-2020	1,762,000	111	15,874	1.209	19,192	10,256	1.152	11,820
2020-2021	711,000	77	9,234	1.135	10,481	10,925	1.157	12,641
2021-2022	1,470,000	112	13,125	1.065	13,978	11,643	1.163	13,536
		~		d Soverity:	¢11 220			

	Average	Limited	Severity:	\$11,229
Average 16	6/17-20/21	Limited	Severity:	12,130
Average 17	7/18-21/22	Limited	Severity:	12,673
	Selected	Limited	Severity:	\$12,400

Prior:	\$8,100

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, Column (J).
- (E) (C) x (D).
- (F) Selected Limited Severity / (D).
- (G) Based on a Burr 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.

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Frequency and Severity Method Projection of Ultimate Claims

Accident Year	Reported Claim Development (A)	Closed Claim Development (B)	Selected Ultimate Claims (C)	Trended TIV (\$000,000) (D)	Claim Frequency (E)	Trend Factor (F)	Trended Claim Frequency (G)
2011-2012	165	165	165	2,670.4	0.062	0.569	0.035
2012-2013	157	157	157	2,787.7	0.056	0.599	0.034
2013-2014	180	180	180	3,035.7	0.059	0.631	0.037
2014-2015	161	161	161	3,046.5	0.053	0.663	0.035
2015-2016	130	129	130	2,714.4	0.048	0.698	0.034
2016-2017	118	118	118	2,702.8	0.044	0.734	0.032
2017-2018	105	106	105	2,728.7	0.038	0.773	0.029
2018-2019	114	114	114	2,762.2	0.041	0.814	0.033
2019-2020	111	104	111	2,868.9	0.039	0.857	0.033
2020-2021	77	66	77	2,879.3	0.027	0.902	0.024
2021-2022	112	70	112	2,912.7	0.038	0.950	0.036
Total	1,430	1,370	1,430	31,109.3			0.033
16/17-20/21	525	508	525	13,941.9			0.030
					(H) Selec	0.035	
						Prior:	0.040
	Program Year	:		2022-2023	2023-2024		
(I)	Trend Factor:			1.000	0.950		
(J) Selected Frequency:				0.035	0.033		

(K) Est. TIV (\$000,000):(L) Ultimate Claims:

Notes:

- (A) From Appendix D, Page 4, (C).
- (B) From Appendix D, Page 5, (C).
- (C) Selected from (A) and (B).
- (D) From Appendix I, Column (C) / 10,000.

(E) (C) / (D).

(F) From Appendix E, Column (H).

(G) (E) x (F).

3,268.0

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- (H) The selected frequency of .035 is based on (G).
- (I) From Appendix E, Column (H).

3,542.8

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(J) (H) x (I).

(K) From Appendix I, Column (C) / 10,000.

(L) (J) x (K).

This exhibit summarizes the estimated numbers of claims and shows the estimated frequencies per \$1,000,000 of trended payroll.
Frequency and Severity Method Reported Claim Count Development

	Claims Reported	Reported Claim		Trended
Accident	as of	Development	Ultimate	Claim
Year	12/31/2022	Factor	Claims	Frequency
	(A)	(B)	(C)	(D)
2011-2012	165	1.000	165	0.035
2012-2013	157	1.000	157	0.034
2013-2014	180	1.000	180	0.037
2014-2015	161	1.000	161	0.035
2015-2016	130	1.000	130	0.033
2016-2017	118	1.000	118	0.032
2017-2018	105	1.000	105	0.030
2018-2019	114	1.000	114	0.034
2019-2020	111	1.000	111	0.033
2020-2021	76	1.012	77	0.024
2021-2022	100	1.115	112	0.037
Total	1,417		1,430	0.033

Notes:

(A) Provided by the Pool.

(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 Pool. 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.

Frequency and Severity Method Closed Claim Count Development

Accident	Claims Closed	Closed Claim Development	Ultimate	Trended
Voor	45 UI	Easter	Claima	Frequency
real	12/31/2022	Factor	Clairis	Frequency
	(A)	(B)	(C)	(D)
2011-2012	165	1.001	165	0.035
2012-2013	157	1.001	157	0.034
2013-2014	180	1.001	180	0.037
2014-2015	161	1.001	161	0.035
2015-2016	129	1.002	129	0.033
2016-2017	117	1.006	118	0.032
2017-2018	105	1.009	106	0.030
2018-2019	113	1.012	114	0.034
2019-2020	101	1.025	104	0.031
2020-2021	62	1.067	66	0.021
2021-2022	52	1.351	70	0.023
Total	1,342		1,370	0.031

Notes:

(A) Provided by the Pool.

(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 Pool. 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.

Loss Trend Factors

		Factor to								
	Benefit	2022-2023	2023-2024	2024-2025	2025-2026	2022-2023	2023-2024	2024-2025	2025-2026	2022-2023
Accident	Level	Loss Rate	Loss Rate	Loss Rate	Loss Rate	Frequency	Frequency	Frequency	Frequency	Severity
Year	Factor	Level								
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
2001-2002	1.000	1.286	1.301	1.316	1.332	0.341	0.324	0.308	0.293	3.756
2002-2003	1.000	1.270	1.285	1.300	1.316	0.359	0.341	0.324	0.308	3.526
2003-2004	1.000	1.255	1.270	1.285	1.300	0.378	0.359	0.341	0.324	3.311
2004-2005	1.000	1.240	1.255	1.270	1.285	0.397	0.378	0.359	0.341	3.109
2005-2006	1.000	1.226	1.240	1.255	1.270	0.418	0.398	0.378	0.359	2.920
2006-2007	1.000	1.211	1.226	1.240	1.255	0.441	0.419	0.398	0.378	2.742
2007-2008	1.000	1.197	1.211	1.225	1.240	0.464	0.441	0.419	0.398	2.575
2008-2009	1.000	1.182	1.196	1.210	1.225	0.488	0.464	0.441	0.419	2.417
2009-2010	1.000	1.168	1.182	1.196	1.210	0.514	0.488	0.464	0.441	2.270
2010-2011	1.000	1.154	1.168	1.182	1.196	0.541	0.514	0.488	0.464	2.132
2011-2012	1.000	1.141	1.154	1.168	1.182	0.569	0.540	0.514	0.488	2.002
2012-2013	1.000	1.127	1.141	1.154	1.168	0.599	0.569	0.541	0.514	1.879
2013-2014	1.000	1.114	1.127	1.140	1.154	0.631	0.599	0.569	0.541	1.764
2014-2015	1.000	1.100	1.113	1.126	1.140	0.663	0.630	0.599	0.569	1.656
2015-2016	1.000	1.087	1.100	1.113	1.126	0.698	0.663	0.631	0.599	1.555
2016-2017	1.000	1.074	1.087	1.100	1.113	0.734	0.698	0.663	0.630	1.460
2017-2018	1.000	1.062	1.074	1.087	1.100	0.773	0.734	0.698	0.663	1.371
2018-2019	1.000	1.049	1.062	1.074	1.087	0.814	0.773	0.735	0.698	1.287
2019-2020	1.000	1.037	1.049	1.061	1.074	0.857	0.814	0.774	0.735	1.209
2020-2021	1.000	1.024	1.036	1.048	1.061	0.902	0.857	0.815	0.774	1.135
2021-2022	1.000	1.012	1.023	1.036	1.048	0.950	0.903	0.858	0.815	1.065
2022-2023	1.000	1.000	1.012	1.024	1.036	1.000	0.950	0.903	0.858	1.000
2023-2024	1.000		1.000	1.012	1.024		1.000	0.951	0.903	
2024-2025	1.000			1.000	1.012			1.000	0.950	
2025-2026	1.000				1.000				1.000	

Notes:

(A) No benefit level adjustment applied.

(B) - (E) (A) adjusted for a 1.2% annual loss rate trend.

(F) - (I) (A) adjusted for a -5.0% annual frequency trend.

(J) (A) adjusted for a 6.5% annual severity trend.

This exhibit shows the calculation of the ways in which we expect claims costs to have changed over the past twenty years due to changes in inflation.

Calculation of Discount Factors

Payment	Payment	Return on	Discounted	Undiscounted	Discount
Year	Pattern	Investment	Reserves	Reserves	Factor
(A)	(B)	(C)	(D)	(E)	(F)
22	0.0%	2.0%	0.000	0.000	1.000
21	0.0%	2.0%	0.000	0.000	1.000
20	0.0%	2.0%	0.000	0.000	1.000
19	0.0%	2.0%	0.000	0.000	1.000
18	0.0%	2.0%	0.000	0.000	1.000
17	0.0%	2.0%	0.000	0.000	1.000
16	0.1%	2.0%	0.001	0.001	0.990
15	0.0%	2.0%	0.001	0.001	0.971
14	0.1%	2.0%	0.002	0.002	0.971
13	0.1%	2.0%	0.003	0.003	0.965
12	0.1%	2.0%	0.004	0.004	0.957
11	0.2%	2.0%	0.006	0.006	0.955
10	0.3%	2.0%	0.009	0.009	0.954
9	0.5%	2.0%	0.013	0.014	0.955
8	0.7%	2.0%	0.020	0.021	0.954
7	0.9%	2.0%	0.029	0.030	0.953
6	1.1%	2.0%	0.039	0.041	0.949
5	2.5%	2.0%	0.063	0.066	0.953
4	3.7%	2.0%	0.098	0.103	0.954
3	5.1%	2.0%	0.147	0.154	0.954
2	36.5%	2.0%	0.505	0.519	0.974
1	48.1%	2.0%	0.972	1.000	0.972
	(for Euturo Eunding	2022 2022	0.091

(G) Discount Factor for Future Funding: 2022-2023 0.981 2023-2024 0.981

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, 50.5% = [14.7% / 1.020] + [36.5% / (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).
- (G) (F) at year 1, with interest accumulated for six months. We assume that the required funding is deposited at the middle of the first year.

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 0.98, on a discounted basis, 0.98 must be budgeted for every 1 that will actually be paid on claims that will be incurred in the next fiscal year.

Confidence Level Table

Probability	Projected Losses	Outstanding Losses
95%	2.047	1.679
90%	1.730	1.480
85%	1.541	1.360
80%	1.399	1.270
75%	1.286	1.198
70%	1.191	1.136
65%	1.106	1.082
60%	1.032	1.032
55%	0.963	0.987
50%	0.898	0.943
45%	0.836	0.902
40%	0.777	0.862
35%	0.718	0.822
30%	0.660	0.782
25%	0.600	0.739

To read table:	For the above retention, there is a 90% chance
	that final loss settlements will be less than
	1.730 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.

Incurred Losses as of 12/31/22

										Incurred
Accident Year	Unlimited Incurred	Additions to Losses	Subtractions from Losses	Adjusted Incurred	Incurred Over SIR	Incurred Over \$225,000	Incurred Capped at \$225,000	Incurred \$225,000 to SIR Layer	Incurred Capped at SIR	Capped at SIR & Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)
2011-2012	877,854	0	0	877,854	0	0	877,854	0	877,854	877,854
2012-2013	1,211,570	0	0	1,211,570	0	0	1,211,570	0	1,211,570	1,211,570
2013-2014	768,874	0	0	768,874	0	0	768,874	0	768,874	768,874
2014-2015	768,041	0	0	768,041	0	0	768,041	0	768,041	768,041
2015-2016	729,739	0	0	729,739	0	35,337	694,403	35,337	729,739	729,739
2016-2017	1,585,380	0	0	1,585,380	400,000	675,000	910,380	275,000	1,185,380	1,185,380
2017-2018	619,883	0	0	619,883	0	0	619,883	0	619,883	619,883
2018-2019	1,029,137	0	0	1,029,137	0	0	1,029,137	0	1,029,137	1,029,137
2019-2020	3,926,372	0	0	3,926,372	1,520,000	2,165,000	1,761,372	645,000	2,406,372	2,406,372
2020-2021	855,974	0	0	855,974	0	150,000	705,974	150,000	855,974	855,974
2021-2022	1,494,505	0	0	1,494,505	0	110,400	1,384,105	110,400	1,494,505	1,494,505
2022-2023	256,650	0	0	256,650	0	0	256,650	0	256,650	256,650
Total	\$14,123,979	\$0	\$0	\$14,123,979	\$1,920,000	\$3,135,737	\$10,988,243	\$1,215,737	\$12,203,979	\$12,203,979

Notes:

(A) Years are 7/1 to 6/30.

(B) Provided by the Pool.

- (C)
- (D)

(E) (B) + (C) - (D).

- (F) Sum of incurred losses in excess of SIR.
- (G) Sum of incurred losses in excess of \$225,000.
- (H) (E) (G).
- (I) (G) (F). (J) (E) (F).
- (K) Minimum of (J) and the aggregate stop loss. See Not Included.

Paid Losses as of 12/31/22

										Paid
		Additions	Subtractions			Paid	Paid	Paid	Paid	Capped at
Accident	Unlimited	to	from	Adjusted	Paid	Over	Capped at	\$225,000	Capped at	SIR &
Year	Paid	Losses	Losses	Paid	Over SIR	\$225,000	\$225,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
2011-2012	877,854	0	0 0	877,854	0	0	877,854	0	877,854	877,854
2012-2013	1,211,570	0	0 0	1,211,570	0	0	1,211,570	0	1,211,570	1,211,570
2013-2014	768,874	0	0 0	768,874	0	0	768,874	0	768,874	768,874
2014-2015	768,041	0	0	768,041	0	0	768,041	0	768,041	768,041
2015-2016	686,581	0	0	686,581	0	35,337	651,245	35,337	686,581	686,581
2016-2017	685,380	0	0	685,380	0	0	685,380	0	685,380	685,380
2017-2018	619,883	0	0	619,883	0	0	619,883	0	619,883	619,883
2018-2019	1,029,136	0	0 0	1,029,136	0	0	1,029,136	0	1,029,136	1,029,136
2019-2020	2,588,165	0	0 0	2,588,165	295,000	910,000	1,678,165	615,000	2,293,165	2,293,165
2020-2021	661,005	0	0 0	661,005	0	61,245	599,760	61,245	661,005	661,005
2021-2022	308,649	0	0	308,649	0	0	308,649	0	308,649	308,649
2022-2023	112,471	C	0 0	112,471	0	0	112,471	0	112,471	112,471
Total	\$10,317,609	\$0	\$0	\$10,317,609	\$295,000	\$1,006,582	\$9,311,027	\$711,582	\$10,022,609	\$10,022,609

Notes:

(A) Years are 7/1 to 6/30.

(B) Provided by the Pool.

(C)

(D)

- (E) (B) + (C) (D).
- (F) Sum of paid losses in excess of SIR.
- (G) Sum of paid losses in excess of \$225,000.
- (H) (E) (G).
- (I) (G) (F). (J) (E) (F).
- (K) Minimum of (J) and the aggregate stop loss. See Not Included.

Case Reserves as of 12/31/22

Accident Year (A)	Unlimited Reserves (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Reserves (E)	Reserves Over SIR (F)	Reserves Over \$225,000 (G)	Reserves Capped at \$225,000 (H)	Reserves \$225,000 to SIR Layer (I)	Reserves Capped at SIR (J)	Reserves Capped at SIR & Aggregate (K)
2011-2012	0	0	0	0	0	0	0	0	0	0
2012-2013	0	0	0	0	0	0	0	0	0	0
2013-2014	0	0	0	0	0	0	0	0	0	0
2014-2015	0	0	0	0	0	0	0	0	0	0
2015-2016	43,158	0	0	43,158	0	0	43,158	0	43,158	43,158
2016-2017	900,000	0	0	900,000	400,000	675,000	225,000	275,000	500,000	500,000
2017-2018	0	0	0	0	0	0	0	0	0	0
2018-2019	1	0	0	1	0	0	1	0	1	1
2019-2020	1,338,207	0	0	1,338,207	1,225,000	1,255,000	83,207	30,000	113,207	113,207
2020-2021	194,969	0	0	194,969	0	88,755	106,214	88,755	194,969	194,969
2021-2022	1,185,857	0	0	1,185,857	0	110,400	1,075,457	110,400	1,185,857	1,185,857
2022-2023	144,179	0	0	144,179	0	0	144,179	0	144,179	144,179
Total	\$3,806,370	\$0	\$0	\$3,806,370	\$1,625,000	\$2,129,155	\$1,677,216	\$504,155	\$2,181,370	\$2,181,370
Total	\$3,806,370	\$0	\$0	\$3,806,370	\$1,625,000	\$2,129,155	\$1,677,216	\$504,155	\$2,181,370	\$2,1

Notes:

(A)	Years	are	7/1	to	6/30
v v	rours	arc	.,.	10	0/00.

(B) Appendix H, Page 1, Column (B) - Appendix H, Page 2, Column (B).

(C) Appendix H, Page 1, Column (C) - Appendix H, Page 2, Column (C).

- (D) Appendix H, Page 1, Column (D) Appendix H, 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 \$225,000.
- (H) (E) (G).
- (I) (G) (F).
- (J) (E) (F).
- (K) Minimum of (J) and the aggregate stop loss. See Not Included.

Claim Counts as of 12/31/22

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)
2011-2012	165	0	0	165	165	0	0	165	0	0
2012-2013	157	0	0	157	157	0	0	157	0	0
2013-2014	180	0	0	180	180	0	0	180	0	0
2014-2015	161	0	0	161	161	0	0	161	0	0
2015-2016	130	0	0	130	129	0	0	129	1	1
2016-2017	118	0	0	118	117	0	0	117	1	1
2017-2018	105	0	0	105	105	0	0	105	0	0
2018-2019	114	0	0	114	113	0	0	113	1	1
2019-2020	111	0	0	111	101	0	0	101	10	10
2020-2021	76	0	0	76	62	0	0	62	14	14
2021-2022	100	0	0	100	52	0	0	52	48	48
2022-2023	36	0	0	36	4	0	0	4	32	32
Total	1,453	0	0	1,453	1,346	0	0	1,346	107	107

Notes:

(A) Years are 7/1 to 6/30.

(B) Provided by the Pool.

(C)

(C) (D) (E) (B) + (C) - (D). (F) Provided by the Pool. (G)

(H)

(I) (F) + (G) - (H). (J) (B) - (F). (K) (E) - (I).

Exposure Measures

Accident Year	Total TIV (\$00) (A)	Inflation Trend Factor (B)	Trended TIV (\$00) (C)
2010-2011	22,712,182	1.345	30,547,885
2011-2012	20,353,847	1.312	26,704,247
2012-2013	21,778,616	1.280	27,876,628
2013-2014	24,305,331	1.249	30,357,358
2014-2015	24,991,854	1.219	30,465,070
2015-2016	22,829,462	1.189	27,144,230
2016-2017	23,300,292	1.160	27,028,339
2017-2018	24,105,322	1.132	27,287,225
2018-2019	25,019,733	1.104	27,621,785
2019-2020	26,637,753	1.077	28,688,860
2020-2021	27,395,469	1.051	28,792,638
2021-2022	28,416,607	1.025	29,127,022
2022-2023	32,680,317	1.000	32,680,317
2023-2024	35,427,906	1.000	35,427,906

Notes:

- Provided by the Pool. Based on 2.5%.
- (A) (B) (C)
- (A) x (B).

PLAN JPA SPECIAL BOARD OF DIRECTORS MEETING

March 23, 2023

Agenda Item 8.B.

PROPERTY AND GROUP PURCHASE PROGRAMS

SUBJECT: State of the Market – Property and Group Purchase Programs

BACKGROUND AND HISTORY:

Annually, representatives from Alliant Insurance Services, Inc. (Alliant) provide an update on the status of the current excess market and a strategy for the upcoming renewal of PLAN's excess Property policies.

Seth Cole, Senior Vice President with Alliant, will provide the Board of Directors with a marketing report for the 2023/24 program year. Mr. Cole will be present at the meeting to discuss this strategy as well as answer questions.

RECOMMENDATION:

None.

<u>REFERENCE MATERIALS ATTACHED</u>:

None

PLAN JPA SPECIAL BOARD OF DIRECTORS MEETING

March 23, 2023

Agenda Item 8.C.

PROPERTY AND GROUP PURCHASE PROGRAMS

SUBJECT: PLAN JPA 2023/24 Projections – Property and Group Purchase Programs

BACKGROUND AND HISTORY:

The primary pooled layer SIR for the Property Program is projected to remain at \$500K per occurrence. Additionally, the excess coverage cost is expected to increase. Staff has taken a conservative approach in estimating cost for the 2023/24 program year. Below is a breakdown:

Property	Layers	2022-23	Carrier	2023-24	Variance
PLAN - prior 70%, now 75%	\$500K	\$1,350,000		\$1,766,000	30.8%
Excess Property & Flood	Above \$500K	5,003,137	APIP	6,485,091	29.6%
Excess Cyber Coverage		382,887	Ironshore	471,609	23.2%
	-	\$6,736,024	=	\$8,722,699	29.5%

Overall, staff estimates a 29.5% increase for PLAN's pooled layer, excess Property, and excess Cyber coverage.

<u>RECOMMENDATION</u>:

None.

<u>REFERENCE MATERIALS ATTACHED</u>:

None

PLAN JPA SPECIAL BOARD OF DIRECTORS MEETING

March 23, 2023

Agenda Item 9.A.

FINANCIAL MATTERS

SUBJECT: Review of the PLAN JPA 2023/24 Preliminary Operating Budget

BACKGROUND AND HISTORY:

Enclosed is Preliminary Operating Budget (Budget) for PLAN JPA for the 2023/24 Fiscal Year. The funding model is similar to what the Board of Directors has approved in the past. Funding rates were compiled by PLAN's actuary. Pages two and three detail the Budget as follows:

- For the Liability Program, member contributions are presented at the 60% confidence level (CL) with a 2% discount. PLAN's Self-Insured Retention (SIR) is up to \$1 million above each member's SIR, currently \$25K, \$50K, \$100K, and \$250K. PLAN JPA joined California Affiliated Risk Management Authority (CARMA) JPA in 2021/22 at the \$9 million excess of \$1 million layer. Above CARMA's pooled layer, PLAN purchases Reinsurance and Excess above \$10 million; these coverage layers are conservatively estimated at 20% over prior year.
- For the Property Program, member contributions are presented at the *increased 75% confidence level* with a 2% discount factor. The proposed coverage includes losses pooled from each member's SIR, currently \$5K, with a maximum of \$500K per occurrence with zero aggregate deductible, as well as excess coverage purchased up to \$1 billion through Alliant Property Insurance Program (APIP). In addition, valuation increases continue into the 2023/24 program year, a direct result of factors such as the supply chain crisis, higher costs for construction materials like lumber and steel, general inflation, and real estate pricing escalation in California. This equates to a 30.8% increase in the risk sharing layer, a 29.6% increase for excess property, and 23.2% increase for excess cyber.
 - As mentioned in Agenda Item 8.A., the PLAN Board of Directors has determined to strengthen their confidence in the funding ability of the Property Program by increasing the confidence level from 70% to 85% in 5-point increments over the next three (3) program years, in addition to providing immediate equity relief. This plan requires the passing of a resolution outlining the program fund transfer. The details have been presented to the Finance Committee and will proceed to the Executive Committee prior to being presented to the Board of Directors for approval.

The major components of the Budget are outlined below:

1. <u>Overall Rates for Coverage</u>

With an increase in estimated payroll of 2.7% and 8.1% increase in Total Insured Values, combined with 17.6% CARMA, Reinsurance/Excess 20% estimations, and Property Program member contributions of 40.3% over prior year, the budgeted contributions are projected to increase from \$26.6 million to \$31.5 million for 2023/24. This is an increase of 18%, or \$4.9 million over the prior year. Below is a summary by program.

March 25, 2025

Agenda Item 9.A. Page 2

Liability Program

The Liability program is projecting an 11% increase in contribution over the 2022/23 Approved Budget. No members are capped at the 60% change in 2023/24, compared to three members capped at 50% in 2022/23. The underlying assumption used in compiling the preliminary budget include:

- *Payroll* overall, is estimated to increase by 2.7% from prior year. The 2023/24 estimated payroll is based upon the actual payroll collected on a quarterly basis, annualized, with a conservative 3% trend increase.
- *Primary Funding Layer* decrease of \$214 thousand, or 4.2% from the prior year due to favorable claims development. Total Ultimate Loss decreased by \$2.2 million.
- *Insurance cost* The insurance cost is projected to increase by 18.6% over the prior year.
 - a. CARMA is projected to increase by 17.6%.
 - b. Reinsurance and Excess are projected to increase by 20%.
- *Administrative Expenses* budgeted an increase 3.6% in administration expenses. See note 5 below which outlines the estimated changes.

Experience Modification (ex-mod) Factors:

PLAN's actuary developed the ex-mod factors by using the loss experience and payroll from 2017/18 through 2021/22. The losses were limited to \$250,000 per occurrence, with a loss weighting (Credibility), limited to a minimum of 10% and maximum of 90%. Ex-mod change, from year over year, has been capped at plus, minus 30%.

Allocation of Administrative Cost:

Administrative costs are first split 80/20 between Liability and Property Programs, then split again into fixed and variable portions. The fixed costs (33%) are allocated among the members evenly. The remaining variable costs (67%) are allocated based upon the following: a) one-third of the costs are allocated based upon reported claims greater than \$1 and b) two-thirds of the costs are allocated based upon paid losses in the period of 2017/18 to 2021/22. The allocation of administrative costs is same as it has been in the past years.

Property Program

The Property program is projected to increase 40.3%, or \$2.8 million, over the 2022/23 Approved Budget. As previously mentioned, \$784 thousand is due to repayment Year 1 of 3. Additional details in the proposed budget includes:

- Increased funding in 2023/24 program year at the **75% CL**, or \$416 thousand more than the previously funded year at 70% CL;
- Total Insured Values (TIV) increasing by 8.1%; these are preliminary numbers as Alliant is still gathering the data;
- Excess premium includes a 29.6% increase, or \$1.5 million. The proposed rate increase takes into the account the same property coverage as 2022/23 of \$500K per occurrence, with no aggregate deductible;

Agenda Item 9.A. Page 3

- Excess Cyber liability is projected to increase 23.2%; and
- Draft Actuarial Report, dated on March 13, 2023, was used to compile the proposed contributions for the 2023/24 Budget.

2. <u>Claims Expense</u>

The overall claims expenses for program year 2023/24 is budgeted at the expected CL and remained flat over 2022/23, at \$6.1 million. The Liability Program is projected to decrease by 4.2% due to favorable claims development, and the Property Program is projected to increase 21.7% due to both increases in TIV and property valuations.

3. <u>Insurance Expense</u>

Total insurance expense is projected to increase by 21.6 % over the prior year budget. Liability insurance expense is projected to increase 18.6% as the liability market continues to harden, while the Property Program is also projected to increase 29% as the property market is continuing an upward trend. Excess Cyber Coverage is projected to increase by 23.2% due to high dollar payouts in the cyber market, while employment liability is estimated to increase 10% over prior year actuals. These are conservative estimates and will be revised once more information is received from Alliant.

4. <u>Risk Management Grants</u>

Risk Management Grants were subject to a one-year moratorium in 2022/23. The reactivation of Risk Management Grants for 2023/24, which will be funded out of equity, is budgeted at \$500,000.

5. <u>Administration Expenses</u>

Administrative expenses are projected to increase by 3.6%, or \$83,810, over the prior year. The 2023/24 proposed budget includes the following line-item variances from the prior year:

- Program Administration: contractual 3% increase from prior year;
- Financial Audit: flat, no contractual increase;
- Actuarial Studies: 11.2 % increase, or \$5,298, for potential additional studies;
- Claims Admin & Audit: contractual 3.1% increase for claims administration, management of APD claims of \$30K, and claims audit cost of \$8K budgeted for 2023/24;
- Legal Counsel: increase of 5.0% or \$2,716, from prior year budget for legal services of claims activity and coverage opinions;
- Risk Control Services: contractual 3% increase over prior year;
- Other Insurance: projected 6% increase, or \$3,458, for Deadly Weapon Response, E&O and Crime coverages;

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- Meetings & Conferences: in anticipation of in-person meetings for the 2023/24 program year, proposing an increase of \$7 thousand due to rising costs of meetings/conferences in Bay Area cities.
- Allowance for Contingencies: continue with \$10 thousand for 2023/24, similar to prior years.

<u>RECOMMENDATION</u>:

None.

<u>REFERENCE MATERIALS ATTACHED</u>:

• 2023/24 PLAN Preliminary Operating Budget

PLAN JPA

2023/2024 Preliminary Operating Budget Summary of Contributions by Program

								Prior	Ye	ear Comparis	son	Payroll Comparison					Ex-mod Comparison				
							2023/24	2022/23					Estimated		Estimated						
		Liability	Property		EPL		Total	Total		Increase/	Percent		Payroll		Payroll	%					
Member		Program	Program	L	iability	Co	ontributions	Contribution	s	(Decrease)	Change		2023/24		2022/23	Change	2023/24	2022/23	Change		
		Page 2	Page 3																		
Amorican Canvon	¢	512 470	\$ 250,680	¢	55 124	e	827 274	¢ 664.68	7	¢ 162.587	24%	¢	8 /31 800	¢	8 503 800	10/	60%	58%	3%		
Atherican Canyon	φ	270,818	φ 239,000 172.086	Ψ	38 0/1	φ	490 845	φ 004,00 173.81	י כ	φ 102,307 17.033	2470	ψ	6 742 700	φ	7 486 700	10%	121%	140%	1.4%		
Ronicia		1 096 477	727 140		50,941		490,045	473,01	2 0	200, 220	4 /0 27%		24 540 400		22 054 000	-1070	12170	14070	-14/0		
Burlingamo		1,000,477	612 764		-		1,023,017	1,432,70	9 0	211 560	21%		24,340,400		23,954,000	2 /0	14070	107%	220%		
Campbell		1,013,050	310 / 69		-		1 385 419	1,317,00	0	285 089	24%		26,213,300		23 557 700	-570	92%	73%	25%		
Colma		1/5 302	80 201				234 503	1,100,55	n	49.003	20%		6 113 600		4 065 300	50%	100%	100%	20%		
Cupertino		1 181 070	380 112				1 562 091	1 263 10	1	208 000	20%		26 692 400		25 593 400	1%	57%	100%	30%		
Dublin		1,101,979	700,112				2 348 044	1,200,19	י ה	748 038	24 % 47%		11 560 400		10 171 800	470 14%	142%	100%	30%		
East Palo Alto		690.014	97 635				787 649	806.85	a	(10,000	-2%		12 825 000		14 354 600	_11%	94%	132%	-29%		
East 1 alo Alto		769 114	490,088				1 259 202	1 017 42	5	2/1 777	24%		23 744 600		24 874 900	-5%	51%	40%	-23%		
Half Moon Bay		200 603	430,000		-		300 334	3/3 32	0	56 005	16%		5 100 000		4 748 600	-070	105%	40%	20%		
Hillsborough		389.044	254 564				643 608	563.88	7	79 721	10%		11 918 200		12 861 200	-7%	00%	83%	8%		
		215 244	57 327		_		272 571	251.05	, 1	21 520	9%		3 296 500		2 817 400	17%	84%	121%	-31%		
Los Gatos		738 183	223,967		_		962 150	766 70	0	195 450	25%		22 514 800		20 772 900	8%	40%	39%	3%		
Millbrae		604 013	410 975		_		1 014 988	846.44	1	168 547	20%		9 527 200		8 016 500	19%	160%	165%	-3%		
Milnitae		2 044 749	7/1 278				2 786 027	2 360 85	' 1	100,047	18%		61 670 900		62 317 100	-1%	80%	83%	-3%		
Morgan Hill		1 184 534	/95 163				1 679 698	1 562 00	י ג	117 605	8%		34 313 500		30 223 300	1/1%	83%	93%	-11%		
Newark		1,104,004	505 435		_		1 597 652	1,002,00	4	167 518	12%		25 484 300		22 383 200	14%	80%	103%	-22%		
Pacifica		1 224 324	723 769		_		1 948 093	1,400,10	5	357 228	22%		20,404,000		21,633,500	-6%	153%	136%	13%		
Portola Valley		131 659	50 601		_		182 260	1,000,00	3 3	23 037	14%		2 324 800		2 093 500	-070	81%	81%	0%		
Ross		91 705	26 272		_		117 977	114 58	a	3 388	3%		2,024,000		2,000,000	-12%	71%	70%	1%		
San Bruno		1 297 213	329 148		_		1 626 361	1 596 78	5	29 576	2%		32 417 400		32 064 600	1%	125%	132%	-5%		
San Carlos		825 824	224 039		_		1 049 864	962.45	1	87 413	9%		10 945 800		10 624 400	3%	205%	259%	-21%		
Saratona		748 062	153 440		_		901 502	756 50	7	144 995	19%		8 193 100		8 436 600	-3%	141%	153%	-8%		
South San Francisco		1 414 773	1 168 722		_		2 583 495	2 263 82	a	319 666	14%		49 221 500		48 319 000	2%	43%	58%	-26%		
Suisun City		734 596	147 190		_		881 786	693 21	6	188 570	27%		10 109 000		9 635 800	5%	123%	97%	20%		
Tiburon		266 335	51 918		_		318 253	278.09	8	40 155	14%		4 088 100		4 579 200	-11%	128%	103%	21%		
Woodside		159,582	37,191		16,470		213,243	207,36	2	5,881	3%		2,380,300		2,350,600	1%	100%	129%	-22%		
Total	\$	21.766.706	\$ 9.648.883	\$	110.536	\$	31,526,125	\$ 26,609,07	0	\$ 4.917.055	18%	\$	489,117,800	\$	476,167,000	2.7%					
	Ŧ	,,	,,	Ŧ	,- 30	È	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		~	,,		-	,,	Ŧ	-,,-						
Prior Year Actuals		19,630,455	6,878,124	5	\$100,487		26,609,070														
\$ Incr./ (Decr.)	\$	2,136,251	\$ 2,770,759	\$	10,049	\$	4,917,055														
% Change		11%	40%		10%		18%														

Notes:

Payroll comparison was obtained from the actuarial study. The payroll numbers are estimates that were used at the time of funding.

The ex-mod comparisons were obtained from actuarial reports.

EPL coverage is through Employment Risk Management Authority (ERMA).

PLAN JPA

2023/2024 Preliminary Operating Budget

Liability Program Contribution Schedule

Pool Funding @ 60% Confidence Level, 2.0% Discount Factor

													Budget Con	nparison
		Funding for	Reins	urance/Excess In	surance				Members		Allocation	2023/24	2022/23	Percent
	Member	Losses	CARMA	Rein/Excess	Total	Administration	Deposit from PY	Unallocated	capped	Uncapped	of	60% CL	60% CL	Increase /
Members	SIR	SIR-\$1M	\$9M x \$1M	\$20M x \$10M	Insurance	Expense	60%	Contributions	at 60%	Members	Contributions	Liability Budget	Liability Budget	(Decrease)
	Note 1	Note 2			Note 3	Note 4		Note 5	Note 6	Note 7	Note 8	Note 9	Note 10	
American Canyon	\$25,000	\$ 69,916	\$ 214,831	\$ 157,672	\$ 372,504	\$ 70,050	\$707,472	\$ 512,470	-	\$ 512,470	\$ 512,470	\$ 512,470	442,170	15.9%
Atherton	\$25,000	112,808	66,638	48,908	115,545	51,465	489,478	279,818	-	279,818	279,818	279,818	305,924	-8.5%
Benicia	\$25,000	501,055	264,407	194,058	458,466	126,957	1,458,355	1,086,477	-	1,086,477	1,086,477	1,086,477	911,472	19.2%
Burlingame	\$250,000	214,117	300,384	220,463	520,848	280,892	1,410,611	1,015,856	-	1,015,856	1,015,856	1,015,856	881,632	15.2%
Campbell	\$100,000	237,342	424,871	311,828	736,699	100,909	1,408,320	1,074,950	-	1,074,950	1,074,950	1,074,950	880,200	22.1%
Colma	\$50,000	74,155	13,590	9,974	23,563	47,584	194,960	145,302	-	145,302	145,302	145,302	121,850	19.2%
Cupertino	\$250,000	93,582	591,286	433,966	1,025,253	63,144	1,583,418	1,181,979	-	1,181,979	1,181,979	1,181,979	989,636	19.4%
Dublin	\$50,000	198,621	723,431	530,952	1,254,383	95,970	1,700,201	1,548,974	-	1,548,974	1,548,974	1,548,974	1,062,626	45.8%
East Palo Alto	\$100,000	118,607	287,291	210,854	498,145	73,262	1,173,708	690,014	-	690,014	690,014	690,014	733,568	-5.9%
Foster City	\$100,000	119,205	327,890	240,651	568,541	81,368	1,061,242	769,114	-	769,114	769,114	769,114	663,276	16.0%
Half Moon Bay	\$50,000	65,124	112,167	82,323	194,490	40,079	432,421	299,693	-	299,693	299,693	299,693	270,263	10.9%
Hillsborough	\$50,000	129,735	109,290	80,212	189,502	69,807	609,838	389,044	-	389,044	389,044	389,044	381,149	2.1%
Los Altos Hills	\$25,000	38,492	83,322	61,153	144,475	32,277	334,113	215,244	-	215,244	215,244	215,244	208,820	3.1%
Los Gatos	\$50,000	109,117	327,950	240,695	568,645	60,421	993,455	738,183	-	738,183	738,183	738,183	620,909	18.9%
Millbrae	\$100,000	151,007	223,302	163,890	387,192	65,814	880,056	604,013	-	604,013	604,013	604,013	550,035	9.8%
Milpitas	\$100,000	486,781	801,862	588,516	1,390,378	167,590	2,920,249	2,044,749	-	2,044,749	2,044,749	2,044,749	1,825,156	12.0%
Morgan Hill	\$100,000	281,904	460,759	338,168	798,927	103,704	1,936,276	1,184,534	-	1,184,534	1,184,534	1,184,534	1,210,173	-2.1%
Newark	\$100,000	200,501	468,476	343,832	812,308	79,408	1,703,560	1,092,217	-	1,092,217	1,092,217	1,092,217	1,064,725	2.6%
Pacifica	\$50,000	379,127	372,299	273,244	645,543	199,654	1,723,429	1,224,324	-	1,224,324	1,224,324	1,224,324	1,077,143	13.7%
Portola valley	\$25,000	26,070	42,544	31,224	/3,/68	31,821	195,299	131,659	-	131,659	131,659	131,659	122,062	7.9%
Ross	\$25,000	22,603	22,824	16,751	39,575	29,527	149,867	91,705	-	91,705	91,705	91,705	93,667	-2.1%
San Bruno	\$100,000	400,129	423,115	310,540	733,655	163,429	2,175,742	1,297,213	-	1,297,213	1,297,213	1,297,213	1,359,839	-4.6%
San Carlos	\$100,000	221,338	295,960	217,210	513,170	91,310	1,281,129	825,824	-	825,824	825,824	825,824	800,706	3.1%
Saratoga	\$25,000	207 850	504,195	223,239	527,452	00,302	1,032,739	1 40,002	-	1 40,002	1 414 772	1 40,002	1 410 291	15.9%
South San Francisco	\$100,000	207,009	039,712	409,000	1,109,220	97,094	2,270,000	1,414,773	-	1,414,773	1,414,773	1,414,773	1,419,201	-0.3%
Tiburon	\$25,000	62 624	200,027	210,300	490,992	49 674	202 100	734,390	-	754,590	734,390	7 34,390	220 402	20.0%
Woodsido	\$30,000	32 085	51 600	37 044	80.643	40,074	263 013	200,333	-	200,333	200,333	200,333	239,493	-2.0%
Woouside	\$25,000	52,905	51,033	57,544	03,043	50,954	205,015	159,502	-	159,502	139,302	139,302	104,505	-2.370
Total		\$ 4,888,000	\$ 8,329,559	\$ 6,113,366	\$ 14,442,925	\$ 2,435,780		\$ 21,766,706	-	\$21,766,706	\$ 21,766,706	\$ 21,766,706	\$ 19,630,455	11%
Prior Year Actuals		5,102,000	7,082,013	5,094,472	12,176,485	2,351,970						19,630,455		
\$ Incr./ (Decr.)		\$ (214,000)	\$ 1,247,546	\$ 1,018,894	\$ 2,266,440	\$ 83,810	-					\$ 2,136,251		
% Change		-4.2%	17.6%	20.0%	18.6%	3.6%)					11%		

NOTES:

Note 1: Member Selected Self-Insured Retention

Note 2: Adjusted funding needed for SIR to \$1,000,000 at the 60% confidence level from draft Actuarial Study dated March 13, 2023.

Note 3: CARMA preliminary budget. In excess of CARMA, trended 20% over prior year. Allocation based upon draft actuarial study dated March 13, 2023

Note 4: Administrative Expense allocation: 33% allocated to the member equally. Of the remaining 67%,

one-third is allocated using reported claims and two-thirds using paid losses; these numbers were provided in the draft actuarial study.

Note 5: Unallocated contributions: (Note 2 + Note 3 + Note 4)

Note 6: Capping members who have more than 60% change in contributions from the prior year.

Note 7: Members with contributions below the 60% cap.

Note 8: Allocation of remaining contributions among uncapped members.

Note 9: Total 2023/24 Liability Contributions by members

Note 10: 2022/23 Liability Contributions by members.

Funding for the Pool Layer @ 2.0%												
	\$1M SIR	\$1M SIR										
	22/23	<u>23/24</u>										
Expected Undisc.	5,318,000	5,100,000										
Expected Disc.	4,972,000	4,764,000										
60% CL Disc.	5,102,000	4,888,000										
70% CL Disc.	5,828,000	5,593,000										
80% CL Disc.	6,787,000	6,517,000										
90% CL Disc.	8,309,000	7,999,000										

PLAN JPA

2023/2024 Preliminary Operating Budget Property Program Contributions Schedule

Pool Funding @ 75% Confidence Level, 2.0% Discount Factor

		Insured Values													Budget Con	nparison				
		2022/23		2023/24		Pool		Excess		Flood	I	Excess	R	esolute	Re	epayment		2023/24	2022/23	Percent
		Insured		Insured		Funding		Prop. Premium	Ρ	remium		Cyber	(Guard	Ye	ear 1 of 3		Program	Program	Increase /
Member	SIR	Values		Values	S	IR-\$500K		\$500k-\$1B			С	Coverage						Deposit	 Deposit	(Decrease)
		Note 1		Note 2		Note 3		Note 4		Note 5		Note 6		Note 7		Note 8		Note 9	 Note 10	
American Canyon	\$5,000	\$ 82,739,502	\$	96,332,759	\$	48,020	\$	174,616	\$	1,826	\$	8,647	\$	4,500	\$	22,070	\$	259,680	\$ 172,404	50.6%
Atherton	5,000	63,202,126		67,691,702		33,743		122,701		-		7,115		4,500		4,027		172,086	132,487	29.9%
Benicia	5,000	256,510,580		274,652,385		136,908		497,845		4,567		23,257		5,650		68,912		737,140	521,317	41.4%
Burlingame	5,000	211,536,210		226,684,224		112,997		410,897		2,491		24,776		5,650		55,953		612,764	435,428	40.7%
Campbell	5,000	101,992,873		110,479,076		55,071		200,259		-		24,657		5,650		24,833		310,469	220,130	41.0%
Colma	5,000	27,846,112		29,734,484		14,822		53,898		1,827		6,545		4,500		7,609		89,201	63,650	40.1%
Cupertino	5,000	128,166,947		136,921,873		68,252		248,190		1,827		25,209		5,650		30,984		380,112	273,555	39.0%
Dublin	5,000	272,090,670		311,852,016		155,451		565,275		1,827		11,485		4,500		60,532		799,070	537,380	48.7%
East Palo Alto	5,000	29,721,112		31,755,720		15,829		57,562		-		12,632		4,500		7,112		97,635	73,291	33.2%
Foster City	5,000	171,249,333		182,765,587		91,104		331,288		-		22,535		5,650		39,511		490,088	354,149	38.4%
Half Moon Bay	5,000	33,330,839		35,774,409		17,833		64,846		-		5,626		4,500		6,836		99,641	73,066	36.4%
Hillsborough	5,000	87,276,218		93,275,856		46,496		169,075		-		11,809		4,500		22,683		254,564	182,738	39.3%
Los Altos Hills	5,000	18,027,866		19,097,521		9,520		34,617		-		3,990		4,500		4,701		57,327	42,230	35.7%
Los Gatos	5,000	64,373,829		77,720,158		38,742		140,879		-		21,420		5,650		17,277		223,967	145,790	53.6%
Millbrae	5,000	147,061,725		157,243,761		78,382		285,026		2,730		9,641		4,500		30,696		410,975	296,406	38.7%
Milpitas	5,000	248,267,527		264,950,001		132,072		480,259		5,095		56,933		6,800		60,120		741,278	535,695	38.4%
Morgan Hill	5,000	167,166,110		178,392,070		88,924		323,360		1,827		32,121		5,650		43,281		495,163	351,921	40.7%
Newark	5,000	178,077,670		189,828,178		94,625		344,090		-		24,113		5,650		36,957		505,435	365,409	38.3%
Pacifica	5,000	249,217,975		267,348,423		133,267		484,606		13,700		19,476		5,650		67,070		723,769	513,722	40.9%
Portola Valley	5,000	15,669,809		16,830,091		8,389		30,507		-		3,108		4,500		4,097		50,601	37,161	36.2%
Ross	5,000	6,166,661		6,584,981		3,282		11,936		1,827		3,077		4,500		1,649		26,272	20,922	25.6%
San Bruno	5,000	107,446,679		114,675,265		57,163		207,865		-		30,401		5,650		28,069		329,148	236,946	38.9%
San Carlos	5,000	76,367,403		81,835,578		40,793		148,338		1,827		10,927		4,500		17,654		224,039	161,745	38.5%
Saratoga	5,000	50,823,366		54,457,911		27,146		98,713		1,827		8,431		4,500		12,823		153,440	111,045	38.2%
South San Francisco	5,000	410,486,058		438,204,737		218,435		794,307		13,700		45,642		6,800		89,838		1,168,722	844,548	38.4%
Suisun City	5,000	47,697,428		50,543,816		25,195		91,618		4,567		10,168		4,500		11,141		147,190	108,378	35.8%
Tiburon	5,000	14,609,067		15,605,016		7,779		28,286		1,827		4,708		4,500		4,818		51,918	38,605	34.5%
Woodside	5,000	10,804,161		11,552,992		5,759		20,941		-		3,159		4,500		2,831		37,191	28,006	32.8%
Total		\$ 3,277,925,856	\$	3,542,790,590	\$	1,766,000	\$	6,421,798	\$	63,292	\$	471,609	\$	142,100	\$	784,084	\$	9,648,883	\$ 6,878,124	40.3%
Prior Year Actuals				3,277,925,856		1,350,000		4,946,701		56,436		382,887		142,100				6,878,124		
\$ Incr./ (Decr.)			\$	264,864,734	\$	416,000	\$	1,475,097	\$	6,856	\$	88,722	\$	-	•		\$	2,770,759		
% Change				8.1%		30.8%		29.8%		12.1%		23.2%		0.0%			_	40.3%		
			_														-			

Notes:

Note 1: 2022/23 Total Insured property values obtained from Alliant.

Note 2: 2023/24 Total Insured property values as submitted by members, updated as of 2/22/23

Note 3: Rate for PLAN pool (from actuarial draft report dated March 13, 2023) allocated using Note 2.

Note 4: Premium, trended 30%, for Alliant Property Insurance Program (APIP) allocated using Note 2.

Note 5: Flood cost are based upon 2022/23 expiring premiums, trended with a 12% increase. Note 6: Excess Cyber coverage: minimum \$1K per member and remaining allocated based upon payroll.

Note 7: Continuation of Resolute Guard Services, no increase over prior year.

Note 8: Year 1 of 3 Repayment

Note 9: Total 2023/24 Property Contributions by member (Total Notes 3 through 8). Note 10: 2022/23 Property Contributions.

Funding for the Pooled Layer

		<u>22/23</u>	<u>23/24</u>
Expected	Undiscounted	1,151,000	1,399,000
Expected	Discounted	1,128,000	1,373,000
70% confidence Level	Discounted	1,350,000	1,635,000
75% confidence Level	Discounted	1,464,000	1,766,000
80% confidence Level	Discounted	1,598,000	1,921,000
85% confidence Level	Discounted	1,768,000	2,116,000

PLAN JPA 2023/2024 Preliminary Operating Budget

					2023/24				
		202	2/23		Draft	Prior Year			
	4	Approved		Projected	Operating		Increase/	Percent	
		Budget		Actuals	Budget	(Decrease)	Incr./(Decr.)	1
Revenues:									
Contributions	\$	26,609,066	\$	26,609,070	\$ 31,526,125	\$	4,917,059	18.5%	
Funding from Equity					500,000		500,000	0.0%	С
Investment Income		221,725		108,570	116,406		(105,319)	-47.5%	
Less: Investment Fees		(36,000)		(36,139)	(38,000)		(2,000)	5.6%	_
Total Revenues		26,794,791		26,681,501	32,104,530		5,309,739	19.8%	
Expenses									
Claims Expense		6,100,000		4,456,638	6,137,000		37,000	0.6%	а
Insurance Expense									
Insurance - Liability		12,176,485		12,176,485	14,442,925		2,266,440	18.6%	
Insurance - Property		4,946,701		4,959,376	6,421,798		1,475,097	29.8%	
Flood Insurance		56,436		43,761	63,292		6,856	12.1%	
Excess Cyber Coverage		382,887		382,887	471,609		88,722	23.2%	
Resolute Guard		142,100		86,300	142,100		-	0.0%	
Employment Liability Coverage		100,487		100,487	110,536		10,049	10.0%	_
		17,805,096		17,749,297	21,652,260		3,847,164	21.6%	b
Risk Management Grants									
Risk Management Fund					500,000		500,000	0.0%	С
Administration									
Program Administration		997,482		997,482	1,027,406		29,924	3.0%	
Financial Audit		22,900		22,900	22,900		-	0.0%	
Actuarial Studies		47,150		42,840	52,448		5,298	11.2%	
Claims Admin & Audit		784,704		766,714	809,165		24,461	3.1%	
Legal Counsel		54,661		42,502	57,377		2,716	5.0%	
Risk Control Services		298,440		298,440	307,393		8,953	3.0%	
Sewer Summit		18,000		13,000	20,000		2,000	11.1%	
Other Insurance		57,633		56,020	61,091		3,458	6.0%	
CAJPA Accreditation		12,000		-	12,000		-	0.0%	
Bank Fees		6,000		5,723	6,000		-	0.0%	
Meetings & Conferences:									
Meetings		40,000		15,227	45,000		5,000	12.5%	
Training & Workshops		3,000		-	5,000		2,000	66.7%	
Allowance for Contingencies		10,000		-	10,000		-	0.0%	_
Total Administration Expenses:		2,351,970		2,260,848	2,435,780		83,810	3.6%	d
Total Expenses		26,257,066		24,466,783	30,725,041		4,467,975	17.0%	
Budgeted Net Income (Loss)		537,725		2,214,718	1,379,490		841,765	156.5%	-

Notes:

a Claims expenses are recorded at expected. The breakout of expenses by programs are:

	2022/23	2023/24	Difference	<u>% Difference</u>
Liability	\$4,972,000	\$4,764,000	(\$208,000)	-4.2%
Property	1,128,000	1,373,000	245,000	21.7%
Total	\$6,100,000	\$6,137,000	\$37,000	0.6%

b Insurance expenses are budgeted to increase by 21.6% in comparison to 22/23 budget. Liability insurance expense are budgeted to increase 18.6% due to a continued hardening insurance market. Property rates are budgeted to increase 29.8% as the property market is continuing an upward trend. Cyber excess coverage is budgeted to increase 23.2% & employment liability coverage is budgeted to increase 10% for those members who are participating in ERMA.

c Reactivation of Risk Management Grant, funded from equity. A corresponding revenue has been recorded for budgeting

d Administration expenses are expected to increase by 3.6% in comparison to 22/23 budget. While majority of the expenses are related to contractual increase, actuarial studies have increased due to potential additional studies \$5K. In addition to claims admin and audit contractual increases, management of APD claims are budgeted at \$30K. Due to rising costs and in anticipation of in-person meetings for 23/24, meeting expenses have been increased by \$5K.