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Actuarial

Actuarial Review of the Self-Insured Excess Liability Program

Outstanding Liabilities as of June 30, 2024

Funding Guidelines for Program Year 2024-25

Presented to

**Authority for California Cities Excess
Liability**

March 11, 2024



Monday, March 11, 2024

Authority for California Cities Excess Liability
c/o Alliant Insurance Services
Attn: Conor Boughey, Pool Administrator
560 Mission Street, 6th Floor
San Francisco, California 94105

Re: Actuarial Review of the Funding Requirements for the Excess Liability Program

Dear Mr. Boughey:

As you requested, we have completed our actuarial review of the funding requirements for the Authority for California Cities Excess Liability's (ACCEL, the Authority) excess liability program. Our conclusions are documented in the text and exhibits that follow.

At the undiscounted expected level, we estimate the program's liability for outstanding loss and allocated loss adjustment expenses (ALAE) to be approximately \$83,683,000 as of June 30, 2024. We understand the Authority has chosen to record its liability with recognition of investment income at 2.75% per year. Discounted for anticipated investment income, we estimate the program's liability for outstanding loss and ALAE will be \$76,699,000 as of that date. Further, we recommend the Authority fund a risk margin for potential adverse experience. Including a margin for adverse experience at the 90% confidence level, the required assets for outstanding loss and ALAE as of June 30, 2024 is projected to be \$118,966,000.

The unallocated loss adjustment expenses (ULAE) associated with open claims should be recognized as part of the program's claims liability. 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.). At the undiscounted expected level, our undiscounted expected estimate of unpaid ULAE is \$2,199,000 as of June 30, 2024. Discounted for anticipated investment income, we estimate the program's liability for unpaid ULAE will be \$2,015,000 as of that date. Including a margin for adverse experience at the 90% confidence level, the required assets for outstanding ULAE as of June 30, 2024 is projected to be \$3,126,000.

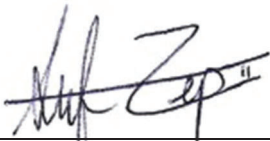
The analysis which made it possible for us to draw our conclusions is based on the data provided by the Authority's program manager Alliant Insurance Services (Alliant). We have accepted all of this information without audit.

The first section of the attached report outlines the scope of our study, its background, and our conclusions, recommendations, detailed funding recommendations, assumptions, and approach to the project. The entire report has been developed for the internal use of the ACCEL, its auditors, and the representatives of its members. It is not intended for general circulation.

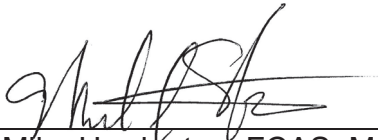
We appreciate the opportunity to be of service to ACCEL in preparing this report. Please feel free to call Stefan Zepernick at (279) 895-1461 or Mike Harrington at (916) 244-1162 with any questions you may have concerning this report.

Sincerely,

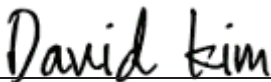
Bickmore Actuarial



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I. BACKGROUND AND PURPOSE OF STUDY

The Authority for California Cities Excess Liability (ACCEL, the Authority) began operations on April 1, 1986. Its purpose is to provide excess liability coverage and to purchase commercial excess insurance on a group basis for California cities. The Authority provides coverage above each member's self-insured retention (SIR), subject to an upper pool limit.

The program currently includes thirteen members: Anaheim, Bakersfield, Burbank, Modesto, Monterey, Mountain View, Ontario, Palo Alto, Salinas, Santa Barbara, Santa Cruz, Santa Monica, and Visalia.

Prior to July 1, 1990, the Authority pooled losses incurred by its members up to \$10,000,000 through two separate pools.

- The first pool was optional and covered the layer from \$500,000 to \$1,000,000 per occurrence (the \$500K pool) and operated during program years 1986-87 to 1989-90. This pool was funded by those members with \$500,000 self-insured retentions during that period. This coverage is no longer available. All claims for this pool have been closed and there are no unpaid losses remaining.
- The second pool was for the layer above \$1,000,000 per occurrence (the \$1M pool) and is funded by all members.

Effective July 1, 1990, ACCEL created a reinsurance pool within the \$9,000,000 excess of \$1,000,000 layer by purchasing \$5,000,000 excess of \$5,000,000 coverage. On July 1, 1997, ACCEL further reduced its exposure and purchased coverage of \$17,000,000 excess of \$3,000,000 coverage.

Due to favorable market conditions, ACCEL purchased coverage of \$19,000,000 excess of \$1,000,000 effective July 1, 1998. Six members with an SIR of \$500,000 purchased additional coverage of \$500,000 excess of \$500,000. On July 1, 2000, nine members purchased insurance of \$19,500,000 excess of \$500,000 and two members had coverage of \$19,000,000 excess of \$1,000,000. The ACCEL layer was fully insured with these limits through June 30, 2003.

Effective July 1, 2003, ACCEL purchased reinsurance covering \$20,000,000 excess of \$2,000,000 and pooled losses in the layer \$1,000,000 excess of \$1,000,000. All members had an SIR of \$1,000,000. Effective July 1, 2004, ACCEL pooled losses in the layer \$2,000,000 excess of \$1,000,000. ACCEL pooled losses in the layer \$4,000,000 excess of \$1,000,000 for the period between 2005-06 and 2015-16 years. For the 2016-17 year, ACCEL pooled losses in the layer \$2,000,000 excess of \$1,000,000.

For 2020-21 program year, ACCEL created a corridor deductible of \$2,000,000 on top of their retention whereby the pool retains the first \$2,000,000 of any amounts that would normally be ceded to their reinsurers. For the 2021-22 program year, ACCEL pools losses in the layer \$9,000,000 excess of \$1,000,000.

II. CONCLUSIONS AND RECOMMENDATIONS

A. LIABILITY FOR OUTSTANDING CLAIMS

At the undiscounted expected level, we estimate the program's liability for outstanding loss and allocated loss adjustment expenses (ALAE) to be approximately \$83,683,000 as of June 30, 2024. We understand the Authority has chosen to record its liability with recognition of investment income at 2.75% per year. Discounted for anticipated investment income, we estimate the program's liability for outstanding loss and ALAE will be \$76,699,000 as of that date. Further, we recommend the Authority fund a risk margin for potential adverse experience. Including a margin for adverse experience at the 90% confidence level, the required assets for outstanding loss and ALAE as of June 30, 2024 is projected to be \$118,966,000.

The unallocated loss adjustment expenses (ULAE) associated with open claims should be recognized as part of the program's claims liability. 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.). At the undiscounted expected level, our undiscounted expected estimate of unpaid ULAE is \$2,199,000 as of June 30, 2024. Discounted for anticipated investment income, we estimate the program's liability for unpaid ULAE will be \$2,015,000 as of that date. Including a margin for adverse experience at the 90% confidence level, the required assets for outstanding ULAE as of June 30, 2024 is projected to be \$3,126,000.

The tables below show our estimates of the program’s claims liabilities as of December 31, 2023 and June 30, 2024, on both undiscounted and discounted bases for various confidence levels:

**Outstanding Liability as of December 31, 2023
For Unpaid Loss and LAE**

Confidence Level	Loss and ALAE Undiscounted	Loss and ALAE Discounted	ULAE Undiscounted	ULAE Discounted
Expected	\$85,207,000	\$78,896,000	\$2,175,000	\$2,014,000
70%	98,965,000	91,635,000	2,526,000	2,339,000
75%	104,947,000	97,173,000	2,679,000	2,481,000
80%	111,925,000	103,635,000	2,857,000	2,646,000
85%	120,698,000	111,758,000	3,081,000	2,853,000
90%	132,163,000	122,373,000	3,374,000	3,124,000
95%	151,104,000	139,912,000	3,857,000	3,572,000
98%	194,532,000	180,123,000	4,966,000	4,598,000

**Outstanding Liability as of June 30, 2024
For Unpaid Loss and LAE**

Confidence Level	Loss and ALAE Undiscounted	Loss and ALAE Discounted	ULAE Undiscounted	ULAE Discounted
Expected	\$83,683,000	\$76,699,000	\$2,199,000	\$2,015,000
70%	97,195,000	89,083,000	2,554,000	2,340,000
75%	103,070,000	94,467,000	2,708,000	2,482,000
80%	109,923,000	100,749,000	2,889,000	2,647,000
85%	118,539,000	108,646,000	3,115,000	2,854,000
90%	129,799,000	118,966,000	3,411,000	3,125,000
95%	148,402,000	136,016,000	3,900,000	3,573,000
98%	191,052,000	175,107,000	5,020,000	4,600,000

Discounted amounts in the tables above assume a 2.75% discount rate. Results at various alternative discount rates are shown in the supporting exhibits.

The outstanding liabilities presented in this section, including ALAE and ULAE, comply with the requirements promulgated by GASB #10. GASB #10 does not address an actual asset requirement for the program, but only speaks to the liability to be recorded on ACCEL’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 risk margin for contingencies.

We generally recommend that risk pools maintain assets for historical liabilities at no less than the 90% confidence level. However, we understand that each entity is unique, and that proper funding levels can vary based on issues such as the organization’s risk tolerance and financial circumstances. All of these items need to be considered when determining a surplus target, which may significantly exceed the 90% confidence level. A detailed assessment of an appropriate surplus target is beyond the scope of this study.

Our estimates of the program's expected claims liabilities, on both undiscounted and discounted bases, by program year are displayed in the following tables as of December 31, 2023 and June 30, 2024:

**Outstanding Liability at the Expected Level
as of December 31, 2023**

Program Year	Loss and ALAE Undiscounted	Loss and ALAE Discounted
Prior	\$0	\$0
2012-2013	0	0
2013-2014	0	0
2014-2015	889,000	800,100
2015-2016	371,318	339,942
2016-2017	2,363,337	2,184,905
2017-2018	9,109,264	8,467,061
2018-2019	5,175,707	4,841,874
2019-2020	9,789,310	9,192,162
2020-2021	14,894,323	13,948,533
2021-2022	17,688,229	16,414,676
2022-2023	17,052,000	15,670,788
2023-2024	7,875,000	7,036,313
All Years	\$85,207,487	\$78,896,354

**Outstanding Liability at the Expected Level
as of June 30, 2024**

Program Year	Undiscounted	Discounted
Prior	\$0	\$0
2012-2013	0	0
2013-2014	0	0
2014-2015	736,092	668,372
2015-2016	301,510	278,294
2016-2017	1,992,293	1,844,863
2017-2018	7,433,159	6,935,138
2018-2019	4,197,498	3,937,253
2019-2020	7,997,866	7,517,994
2020-2021	12,943,166	12,075,974
2021-2022	16,007,847	14,775,243
2022-2023	16,386,972	14,830,210
2023-2024	15,687,000	13,835,934
All Years	\$83,683,405	\$76,699,275

B. FUNDING RATES FOR FUTURE CLAIMS

We present funding guidelines for claims incurred during program year 2024-25 at several confidence levels in the table below. Our recommendations are displayed as rates per \$100 of payroll for various layers. The recommended funding includes anticipated investment income at 2.75% per year.

Funding Guidelines for Discounted Claims Incurred in 2024-25

Layer	Expected	75%	80%	85%	90%
\$1M-2M	\$0.410	\$0.520	\$0.560	\$0.608	\$0.672
\$1M-3M	0.671	0.852	0.916	0.995	1.100
\$1M-4M	0.815	1.034	1.113	1.209	1.337
\$1M-5M	0.941	1.194	1.285	1.396	1.543
\$1M-\$10M	1.330	1.688	1.816	1.973	2.181
\$5M-\$10M	0.389	0.494	0.531	0.577	0.638
\$1M-\$15M	1.565	1.986	2.136	2.321	2.567
\$10M-\$15M	0.234	0.297	0.319	0.347	0.384

The following table details the calculation of our funding guidelines in dollars at various confidence levels for the program's 2024-25 claims by different layers:

Funding Amount Guidelines for Discounted Claims Incurred in 2024-25

Layer	Expected	75%	80%	85%	90%
\$1M-2M	\$6,935,000	\$8,796,000	\$9,473,000	\$10,285,000	\$11,367,000
\$1M-3M	11,350,000	14,412,000	15,495,000	16,831,000	18,607,000
\$1M-4M	13,786,000	17,491,000	18,827,000	20,451,000	22,616,000
\$1M-5M	15,917,000	20,197,000	21,736,000	23,614,000	26,101,000
\$1M-\$10M	22,498,000	28,553,000	30,718,000	33,374,000	36,893,000
\$5M-\$10M	6,580,000	8,356,000	8,982,000	9,760,000	10,792,000
\$1M-\$15M	26,473,000	33,594,000	36,131,000	39,261,000	43,422,000
\$10M-\$15M	3,958,000	5,024,000	5,396,000	5,870,000	6,496,000

We have assumed that payrolls for 2024-25 will be approximately \$1,691,547,000 based upon information provided by ACCEL.

The estimated program costs shown above do not include any provision for reinsurance premiums, claims administration fees, and other administrative costs associated with the ACCEL program. As with the program's outstanding claims, the Authority should fund a margin for adverse experience in addition to the expected cost of claims. We would recommend funding annual costs for excess liability programs in the 80% to 90% confidence level range.

C. COMPARISON WITH PRIOR RESULTS

The following tables detail the changes in our estimates of the Authority's ultimate losses by program year from those of the prior report based upon losses valued as of 12/31/22:

Comparison with Prior Undiscounted Estimated Ultimate Losses (Prior Based upon Losses Valued at December 31, 2022)			
Program Year	Prior Report 12/31/22	Current Report	Change
Prior	\$57,077,000	\$57,077,000	\$0
2009-2010	0	0	0
2010-2011	375,000	375,000	0
2011-2012	2,000	2,000	0
2012-2013	4,207,000	4,207,000	0
2013-2014	12,963,000	12,963,000	0
2014-2015	7,409,000	6,569,000	(840,000)
2015-2016	3,943,000	3,304,000	(639,000)
2016-2017	14,032,000	13,781,000	(251,000)
2017-2018	18,070,000	15,944,000	(2,126,000)
2018-2019	15,548,000	15,901,000	353,000
2019-2020	13,691,000	12,610,000	(1,081,000)
2020-2021	9,928,000	15,789,000	5,861,000
2021-2022	24,178,000	19,760,000	(4,418,000)
2022-2023	17,928,000	17,052,000	(876,000)
All Years	\$199,351,000	\$195,334,000	(\$4,017,000)

As shown, overall we have decreased our estimates of the program's ultimate losses by \$4,017,000 from those displayed in our prior actuarial report dated March 18, 2023. The increase is mainly due to favorable loss development in the 2017-18, 2019-20 and 2021-22 program years.

At the time of the prior report (based upon losses valued at 12/31/22), we estimated the liability for outstanding claims as of June 30, 2023 to be \$78,245,000 at the discounted, expected level. Our current estimate as of June 30, 2024, is \$76,699,000, a decrease in our assessment of the Authority's outstanding liabilities, as shown below:

**Comparison with Prior
Outstanding Claim Liabilities for Loss and ALAE
(Prior Based upon Losses Valued at December 31, 2022)**

	Prior Report at June 30, 2023	Current Report at June 30, 2024	Change
Case Reserves:	\$42,726,000	\$41,707,000	(\$1,019,000)
IBNR Reserves:	40,861,000	41,977,000	1,116,000
Total Reserves:	\$83,587,000	\$83,684,000	\$97,000
Offset for Investment Income: (Prior at 2.0%, Current at 2.75%)	(5,342,000)	(6,985,000)	(1,643,000)
Total Outstanding Claim Liabilities:	\$78,245,000	\$76,699,000	(\$1,546,000)

As shown, our estimate of outstanding claims liabilities at the discounted, expected level has increased between June 30, 2023 and June 30, 2024 as reflected in our prior and current reports respectively.

Estimated case reserves have decreased by \$1,019,000 since the prior evaluation while our estimate of IBNR reserves have increased by \$1,116,000. The overall result is an increase of \$97,000 in total claim reserves. The offset for investment income is greater with higher investment rate assumption. The net change due to the above factors is an overall decrease of \$1,546,000 in our estimate of outstanding claim liabilities for loss and ALAE.

The following tables detail the changes in our estimates of the Authority's ultimate losses by program year from those of the prior report based upon losses valued as of 6/30/23:

Comparison with Prior Undiscounted Estimated Ultimate Losses (Prior Based upon Losses Valued at June 30, 2023)			
Program Year	Prior Report 6/30/23	Current Report	Change
Prior	\$57,077,000	\$57,077,000	\$0
2009-2010	0	0	0
2010-2011	375,000	375,000	0
2011-2012	2,000	2,000	0
2012-2013	4,207,000	4,207,000	0
2013-2014	12,963,000	12,963,000	0
2014-2015	6,620,000	6,569,000	(51,000)
2015-2016	3,397,000	3,304,000	(93,000)
2016-2017	13,793,000	13,781,000	(12,000)
2017-2018	16,746,000	15,944,000	(802,000)
2018-2019	13,715,000	15,901,000	2,186,000
2019-2020	11,150,000	12,610,000	1,460,000
2020-2021	12,933,000	15,789,000	2,856,000
2021-2022	21,742,000	19,760,000	(1,982,000)
2022-2023	18,558,000	17,052,000	(1,506,000)
All Years	\$193,278,000	\$195,334,000	\$2,056,000

As shown, overall we have increased our estimates of the program's ultimate losses by \$2,056,000 from those displayed in our prior actuarial report dated June 1, 2023. The increase is mainly due to adverse loss development in the four of last five program years.

At the time of the prior report (based upon losses valued at 6/30/23), we estimated the liability for outstanding claims as of June 30, 2023 to be \$78,957,000 at the discounted, expected level. Our current estimate as of June 30, 2024, is \$76,699,000, a decrease in our assessment of the Authority's outstanding liabilities, as shown below:

**Comparison with Prior
Outstanding Claim Liabilities for Loss and ALAE
(Prior Based upon Losses Valued at June 30, 2023)**

	Prior Report at June 30, 2023	Current Report at June 30, 2024	Change
Case Reserves:	\$47,948,000	\$41,707,000	(\$6,241,000)
IBNR Reserves:	36,407,000	41,977,000	5,570,000
Total Reserves:	\$84,355,000	\$83,684,000	(\$671,000)
Offset for Investment Income: (Prior at 2.0%, Current at 2.75%)	(5,398,000)	(6,985,000)	(1,587,000)
Total Outstanding Claim Liabilities:	\$78,957,000	\$76,699,000	(\$2,258,000)

As shown, our estimate of outstanding claims liabilities at the discounted, expected level has decreased between June 30, 2023 and June 30, 2024 as reflected in our prior and current reports respectively.

Estimated case reserves have decreased by \$6,241,000 while our estimate of IBNR reserves increased by \$5,570,000. The overall result is an decrease of \$671,000 in total claim reserves. The offset for investment income is greater with higher investment rate assumption. The net change due to the above factors is an overall decrease of \$2,258,000 in our estimate of outstanding claim liabilities for loss and ALAE.

The following tables display a comparison of the Authority’s projected funding rates from current and prior reports valued at 12/31/22 by various layers and confidence levels. The assumed investment rate has increased from 2.0% in the prior report to 2.75% in the current report.

**Comparison with Prior
Undiscounted Expected Funding Rates**

Layer	Prior Report 2023-24	Current Report 2024-25	Percent Change
\$1M-2M	\$0.453	\$0.459	1.3%
\$1M-3M	0.738	0.750	1.6%
\$1M-4M	0.893	0.912	2.1%
\$1M-5M	1.025	1.053	2.7%
\$1M-10M	1.447	1.488	2.8%
\$5M-10M	0.422	0.435	3.1%
\$1M-\$15M	1.695	1.750	3.2%
\$10M-\$15M	0.248	0.262	5.6%

**Comparison with Prior
Discounted Expected Funding Rates**

Layer	Prior Report 2023-24	Current Report 2024-25	Percent Change
\$1M-2M	\$0.417	\$0.410	-1.7%
\$1M-3M	0.680	0.671	-1.3%
\$1M-4M	0.823	0.815	-1.0%
\$1M-5M	0.944	0.941	-0.3%
\$1M-10M	1.333	1.330	-0.2%
\$5M-10M	0.389	0.389	0.0%
\$1M-\$15M	1.561	1.565	0.3%
\$10M-\$15M	0.228	0.234	2.6%

**Comparison with Prior
Discounted 75% Confidence Level Funding Rates**

Layer	Prior Report 2023-24	Current Report 2024-25	Percent Change
\$1M-2M	\$0.524	\$0.520	-0.8%
\$1M-3M	0.855	0.852	-0.4%
\$1M-4M	1.035	1.034	-0.1%
\$1M-5M	1.187	1.194	0.6%
\$1M-10M	1.676	1.688	0.7%
\$5M-10M	0.489	0.494	1.0%
\$1M-\$15M	1.963	1.986	1.2%
\$10M-\$15M	0.287	0.297	3.5%

**Comparison with Prior
Discounted 90% Confidence Level Funding Rates**

Layer	Prior Report 2023-24	Current Report 2024-25	Percent Change
\$1M-2M	\$0.672	\$0.672	0.0%
\$1M-3M	1.097	1.100	0.3%
\$1M-4M	1.327	1.337	0.8%
\$1M-5M	1.522	1.543	1.4%
\$1M-10M	2.150	2.181	1.4%
\$5M-10M	0.627	0.638	1.8%
\$1M-\$15M	2.517	2.567	2.0%
\$10M-\$15M	0.368	0.384	4.3%

**Comparison with Prior
Discounted Pool Funding Rates**

Layer	Prior Report 2023-24	Current Report 2024-25	Percent Change
\$1M-5M*	\$1.522	\$1.543	1.4%
\$5M-10M*	0.489	0.494	1.0%
Pool Funding Rate	\$2.011	\$2.037	1.3%

* \$1M-\$5M layer is funded at 90% CL. \$5M-\$10M layer is funded at 75% CL.

As you can see, our projected funding rates for the 2024-25 program year have increased for all layers.

These increases, though substantial, are driven by the experience of the Authority over the past year. This is very similar to the increases other excess pools in the industry are receiving.

D. 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 an excess pooling 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 you have provided to us. We have accepted all of this information without audit and relied on its accuracy in preparing our estimates for this report. As always, the accuracy and relevance of our conclusions and recommendations are highly dependent on the accuracy and relevance of the underlying data.
- In ACCEL's case, we were provided a list of claims with incurred losses greater than \$25,000 as of December 31, 2023 from individual member cities. This file included ground up losses and allocated loss adjustment expenses reported separately for each claimant. We were also provided with pool loss runs as of December 31, 2023.
- We were provided with payrolls by City for the 1986-87 through 2024-25 program years.
- We have assumed that the future development of incurred and paid losses can be reasonably predicted on the basis of the development of such losses in the recent past. We have also assumed that the historical development patterns for a large group of California public entities with a self-insured excess liability program in the aggregate form a reasonable basis of comparison to the patterns from the Authority's data.
- We have assumed that there is a continuing relationship between past and future loss costs and between loss costs and payroll. These assumptions can be tenuous in a changing legal and social environment such as we face today.
- It is not possible to predict future claims costs precisely. Most of the cost of liability claims arises from a small number of incidents involving serious injury. Thus, changes in the circumstances surrounding these claims can have large effects on total costs. Therefore, the actual costs of the covered liability claims could differ significantly from our estimates.
- We cannot predict and have not attempted to predict the impact of future law changes and court rulings on liability claims costs. This is one major reason

why we believe our funding recommendations are reasonable now, but should not be extrapolated into the future.

- At your instruction, we have assumed that funds held for investment will generate an annual return of 2.75% in the long run. It should be noted that actual future investment returns may vary significantly from this assumption, depending upon the prevailing investment market conditions.
- We estimate that the costs associated with liability claims in the \$100,000 to \$1,000,000 per occurrence layer are increasing at 4% per year after changes in exposure.
- The claims costs we have estimated include indemnity payments and allocated loss adjustment expenses. We have not provided estimates for claims adjustment expenses not allocated to particular cases, reinsurance premiums, and Authority administrative expenses.
- We have assumed that all reinsurance coverage purchased by the Authority will prove to be valid and fully collectible.
- Our funding recommendations do not include provision for catastrophic events not in the program's history, such as earthquakes, flooding, fire or mass civil disorder.

E. OVERALL ANALYTICAL APPROACH

The approach we have taken in developing this analysis is firmly grounded in the Authority's loss and exposure data. Our approach to the problem of estimating the program's ultimate pooled loss costs is a multi-step process. We estimated the cost of the \$100,000 to \$1 million layer. We then constructed a mathematical equation for the distribution of the Authority's losses by size by trending and developing the Authority's individual claims.

Next, using the loss distribution, the \$100,000 – \$1,000,000 ultimate loss rate, and our selected loss development patterns, we then estimated the ultimate losses of the excess layers for which the Authority is responsible.

The following actuarial techniques were applied to ACCEL's loss data to estimate the ultimate cost of claims in the \$100,000 - \$1,000,000 layer:

- ◆ Incurred Loss Development
- ◆ Paid Loss Development
- ◆ Bornhuetter-Ferguson Based on Incurred Losses
- ◆ Bornhuetter-Ferguson Based on Paid Losses
- ◆ Frequency Times Severity

Actuarial judgment was used to select among the ultimate losses indicated by the above methods.

The following actuarial techniques were applied to ACCEL's loss data to estimate the ultimate losses in the program's actual pooled layers:

- ◆ Incurred Loss Development
- ◆ Paid Loss Development
- ◆ Bornhuetter-Ferguson

Again, actuarial judgment was used to select among the ultimate losses indicated by the above methods, with heavy emphasis applied to the two methods based on incurred losses.

ULAE is calculated as 3.5% of the sum of all IBNR reserves and half of case reserves.

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Outstanding Liabilities as of December 31, 2023

Loss and Allocated Loss Adjustment Expenses (ALAE)

		Undiscounted	2.00% Discounted 0.945	2.25% Discounted 0.939	2.50% Discounted 0.933	2.75% Discounted 0.926	3.00% Discounted 0.921
Discount Factor							
Confidence Level	CL Factor						
Expected	1.000	85,207,000	80,497,000	80,012,000	79,518,000	78,941,000	78,473,000
70%	1.161	98,965,000	93,495,000	92,931,000	92,357,000	91,687,000	91,143,000
75%	1.232	104,947,000	99,146,000	98,549,000	97,940,000	97,229,000	96,653,000
80%	1.314	111,925,000	105,738,000	105,101,000	104,452,000	103,694,000	103,079,000
85%	1.417	120,698,000	114,026,000	113,339,000	112,639,000	111,822,000	111,159,000
90%	1.551	132,163,000	124,857,000	124,105,000	123,339,000	122,443,000	121,718,000
95%	1.773	151,104,000	142,751,000	141,891,000	141,015,000	139,991,000	139,162,000
98%	2.283	194,532,000	183,779,000	182,672,000	181,544,000	180,226,000	179,157,000

Unallocated Loss Adjustment Expenses (ULAE)

		Undiscounted	2.00% Discounted 0.945	2.25% Discounted 0.939	2.50% Discounted 0.933	2.75% Discounted 0.926	3.00% Discounted 0.921
Discount Factor							
Confidence Level	CL Factor						
Expected	1.000	2,175,000	2,055,000	2,042,000	2,030,000	2,015,000	2,003,000
70%	1.161	2,526,000	2,386,000	2,372,000	2,357,000	2,340,000	2,326,000
75%	1.232	2,679,000	2,531,000	2,516,000	2,500,000	2,482,000	2,467,000
80%	1.314	2,857,000	2,699,000	2,683,000	2,666,000	2,647,000	2,631,000
85%	1.417	3,081,000	2,911,000	2,893,000	2,875,000	2,854,000	2,837,000
90%	1.551	3,374,000	3,187,000	3,168,000	3,149,000	3,126,000	3,107,000
95%	1.773	3,857,000	3,644,000	3,622,000	3,599,000	3,573,000	3,552,000
98%	2.283	4,966,000	4,691,000	4,663,000	4,634,000	4,601,000	4,574,000

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Outstanding Liabilities as of June 30, 2024

Loss and Allocated Loss Adjustment Expenses (ALAE)

		Undiscounted	2.00% Discounted 0.938	2.25% Discounted 0.931	2.50% Discounted 0.924	2.75% Discounted 0.917	3.00% Discounted 0.910
Discount Factor							
Confidence Level	CL Factor						
Expected	1.000	83,683,000	78,482,000	77,884,000	77,325,000	76,699,000	76,169,000
70%	1.161	97,195,000	91,154,000	90,459,000	89,810,000	89,083,000	88,468,000
75%	1.232	103,070,000	96,664,000	95,927,000	95,238,000	94,468,000	93,816,000
80%	1.314	109,923,000	103,091,000	102,305,000	101,571,000	100,749,000	100,053,000
85%	1.417	118,539,000	111,171,000	110,324,000	109,532,000	108,646,000	107,896,000
90%	1.551	129,799,000	121,731,000	120,804,000	119,937,000	118,966,000	118,145,000
95%	1.773	148,402,000	139,178,000	138,117,000	137,126,000	136,017,000	135,077,000
98%	2.283	191,052,000	179,177,000	177,812,000	176,535,000	175,107,000	173,898,000

Unallocated Loss Adjustment Expenses (ULAE)

		Undiscounted	2.00% Discounted 0.938	2.25% Discounted 0.931	2.50% Discounted 0.924	2.75% Discounted 0.917	3.00% Discounted 0.910
Discount Factor							
Confidence Level	CL Factor						
Expected	1.000	2,199,000	2,062,000	2,047,000	2,032,000	2,015,000	2,002,000
70%	1.161	2,554,000	2,395,000	2,377,000	2,360,000	2,341,000	2,325,000
75%	1.232	2,708,000	2,540,000	2,520,000	2,502,000	2,482,000	2,465,000
80%	1.314	2,889,000	2,709,000	2,689,000	2,669,000	2,648,000	2,630,000
85%	1.417	3,115,000	2,921,000	2,899,000	2,878,000	2,855,000	2,835,000
90%	1.551	3,411,000	3,199,000	3,175,000	3,152,000	3,126,000	3,105,000
95%	1.773	3,900,000	3,658,000	3,630,000	3,604,000	3,575,000	3,550,000
98%	2.283	5,020,000	4,708,000	4,672,000	4,639,000	4,601,000	4,569,000

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Discounted Funding Rates and Amounts for 2024-25
Discount Rate = 2.00%

Funding Rates per \$100 of Payroll						
CL Factor	Expected	Confidence Level				
		70%	75%	80%	85%	90%
	1.000	1.187	1.269	1.365	1.483	1.640
Loss Layer						
\$1M-2M	0.410	0.487	0.520	0.560	0.608	0.672
\$1M-3M	0.671	0.797	0.852	0.916	0.995	1.100
\$1M-4M	0.815	0.968	1.034	1.113	1.209	1.337
\$1M-5M	0.941	1.117	1.194	1.285	1.396	1.543
\$1M-10M	1.330	1.579	1.688	1.816	1.973	2.181
\$5M-\$10M	0.389	0.462	0.494	0.531	0.577	0.638
\$1M-15M	1.565	1.858	1.986	2.136	2.321	2.567

Indicated Funding Amounts*						
CL Factor	Expected	Confidence Level				
		70%	75%	80%	85%	90%
	1.000	1.187	1.269	1.365	1.483	1.640
Loss Layer						
\$1M-2M	6,935,343	8,237,834	8,796,044	9,472,663	10,284,606	11,367,196
\$1M-3M	11,350,280	13,481,630	14,411,980	15,494,571	16,830,893	18,607,017
\$1M-4M	13,786,108	16,374,175	17,490,596	18,826,918	20,450,803	22,615,983
\$1M-5M	15,917,457	18,894,580	20,197,071	21,736,379	23,613,996	26,100,570
\$1M-10M	22,497,575	26,709,527	28,553,313	30,718,494	33,374,222	36,892,640
\$5M-\$10M	6,580,118	7,814,947	8,356,242	8,982,115	9,760,226	10,792,070
\$1M-15M	26,472,711	31,428,943	33,594,123	36,131,444	39,260,806	43,422,011

* Assumes 2024-25 Payroll of \$1,691,547,000

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Discounted Funding Rates and Amounts for 2024-25
Discount Rate = 2.25%

Funding Rates per \$100 of Payroll						
CL Factor	Expected	Confidence Level				
		70%	75%	80%	85%	90%
CL Factor	1.000	1.187	1.269	1.365	1.483	1.640
Loss Layer						
\$1M-2M	0.419	0.497	0.532	0.572	0.621	0.687
\$1M-3M	0.684	0.812	0.868	0.934	1.015	1.122
\$1M-4M	0.832	0.988	1.056	1.136	1.234	1.364
\$1M-5M	0.960	1.140	1.218	1.310	1.424	1.574
\$1M-10M	1.357	1.611	1.722	1.852	2.013	2.225
\$5M-\$10M	0.397	0.471	0.504	0.542	0.589	0.651
\$1M-15M	1.596	1.895	2.025	2.179	2.367	2.617
Indicated Funding Amounts*						
CL Factor	Expected	70%	75%	80%	85%	90%
CL Factor	1.000	1.187	1.269	1.365	1.483	1.640
Loss Layer						
\$1M-2M	7,087,582	8,406,989	8,999,030	9,675,649	10,504,507	11,620,928
\$1M-3M	11,570,181	13,735,362	14,682,628	15,799,049	17,169,202	18,979,157
\$1M-4M	14,073,671	16,712,484	17,862,736	19,215,974	20,873,690	23,072,701
\$1M-5M	16,238,851	19,283,636	20,603,042	22,159,266	24,087,629	26,624,950
\$1M-10M	22,954,293	27,250,822	29,128,439	31,327,450	34,050,841	37,636,921
\$5M-\$10M	6,715,442	7,967,186	8,525,397	9,168,185	9,963,212	11,011,971
\$1M-15M	26,997,090	32,054,816	34,253,827	36,858,809	40,038,917	44,267,785

* Assumes 2024-25 Payroll of \$1,691,547,000

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Discounted Funding Rates and Amounts for 2024-25
Discount Rate = 2.50%

Funding Rates per \$100 of Payroll						
CL Factor	Expected	Confidence Level				
		70%	75%	80%	85%	90%
CL Factor	1.000	1.187	1.269	1.365	1.483	1.640
Loss Layer						
\$1M-2M	0.415	0.493	0.527	0.566	0.616	0.681
\$1M-3M	0.677	0.804	0.859	0.924	1.004	1.110
\$1M-4M	0.824	0.978	1.046	1.125	1.222	1.351
\$1M-5M	0.951	1.129	1.207	1.298	1.411	1.560
\$1M-10M	1.344	1.596	1.706	1.835	1.993	2.204
\$5M-\$10M	0.393	0.467	0.499	0.536	0.583	0.645
\$1M-15M	1.580	1.876	2.005	2.157	2.343	2.591
Indicated Funding Amounts*						
CL Factor	Expected	70%	75%	80%	85%	90%
CL Factor	1.000	1.187	1.269	1.365	1.483	1.640
Loss Layer						
\$1M-2M	7,019,920	8,339,327	8,914,453	9,574,156	10,419,930	11,519,435
\$1M-3M	11,451,773	13,600,038	14,530,389	15,629,894	16,983,132	18,776,172
\$1M-4M	13,938,347	16,543,330	17,693,582	19,029,904	20,670,704	22,852,800
\$1M-5M	16,086,612	19,097,566	20,416,972	21,956,280	23,867,728	26,388,133
\$1M-10M	22,734,392	26,997,090	28,857,792	31,039,887	33,712,532	37,281,696
\$5M-\$10M	6,647,780	7,899,524	8,440,820	9,066,692	9,861,719	10,910,478
\$1M-15M	26,726,443	31,733,422	33,915,517	36,486,669	39,632,946	43,827,983

* Assumes 2024-25 Payroll of \$1,691,547,000

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Discounted Funding Rates and Amounts for 2024-25
Discount Rate = 2.75%

Funding Rates per \$100 of Payroll

CL Factor	Expected	Confidence Level				
		70%	75%	80%	85%	90%
CL Factor	1.000	1.187	1.269	1.365	1.483	1.640
Loss Layer						
\$1M-2M	0.410	0.487	0.520	0.560	0.608	0.672
\$1M-3M	0.671	0.797	0.852	0.916	0.995	1.100
\$1M-4M	0.815	0.968	1.034	1.113	1.209	1.337
\$1M-5M	0.941	1.117	1.194	1.285	1.396	1.543
\$1M-10M	1.330	1.579	1.688	1.816	1.973	2.181
\$5M-\$10M	0.389	0.462	0.494	0.531	0.577	0.638
\$1M-15M	1.565	1.858	1.986	2.136	2.321	2.567

Indicated Funding Amounts*

CL Factor	Expected	Confidence Level				
		70%	75%	80%	85%	90%
CL Factor	1.000	1.187	1.269	1.365	1.483	1.640
Loss Layer						
\$1M-2M	6,935,343	8,237,834	8,796,044	9,472,663	10,284,606	11,367,196
\$1M-3M	11,350,280	13,481,630	14,411,980	15,494,571	16,830,893	18,607,017
\$1M-4M	13,786,108	16,374,175	17,490,596	18,826,918	20,450,803	22,615,983
\$1M-5M	15,917,457	18,894,580	20,197,071	21,736,379	23,613,996	26,100,570
\$1M-10M	22,497,575	26,709,527	28,553,313	30,718,494	33,374,222	36,892,640
\$5M-\$10M	6,580,118	7,814,947	8,356,242	8,982,115	9,760,226	10,792,070
\$1M-15M	26,472,711	31,428,943	33,594,123	36,131,444	39,260,806	43,422,011

* Assumes 2024-25 Payroll of \$1,691,547,000

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Discounted Funding Rates and Amounts for 2024-25
Discount Rate = 3.00%

Funding Rates per \$100 of Payroll						
CL Factor	Expected	Confidence Level				
		70%	75%	80%	85%	90%
CL Factor	1.000	1.187	1.269	1.365	1.483	1.640
Loss Layer						
\$1M-2M	0.407	0.483	0.517	0.556	0.604	0.667
\$1M-3M	0.664	0.788	0.843	0.906	0.985	1.089
\$1M-4M	0.808	0.959	1.025	1.103	1.198	1.325
\$1M-5M	0.933	1.108	1.184	1.274	1.384	1.530
\$1M-10M	1.318	1.565	1.673	1.799	1.955	2.162
\$5M-\$10M	0.385	0.457	0.489	0.526	0.571	0.631
\$1M-15M	1.550	1.840	1.967	2.116	2.299	2.542
Indicated Funding Amounts*						
CL Factor	Expected	70%	75%	80%	85%	90%
CL Factor	1.000	1.187	1.269	1.365	1.483	1.640
Loss Layer						
\$1M-2M	6,884,596	8,170,172	8,745,298	9,405,001	10,216,944	11,282,618
\$1M-3M	11,231,872	13,329,390	14,259,741	15,325,416	16,661,738	18,420,947
\$1M-4M	13,667,700	16,221,936	17,338,357	18,657,763	20,264,733	22,412,998
\$1M-5M	15,782,134	18,742,341	20,027,916	21,550,309	23,411,010	25,880,669
\$1M-10M	22,294,589	26,472,711	28,299,581	30,430,931	33,069,744	36,571,246
\$5M-\$10M	6,512,456	7,730,370	8,271,665	8,897,537	9,658,733	10,673,662
\$1M-15M	26,218,979	31,124,465	33,272,729	35,793,135	38,888,666	42,999,125

* Assumes 2024-25 Payroll of \$1,691,547,000

Authority for California Cities Excess Liability

Projected 2024-25 Funding Guidelines

Layer	Estimated 2024-25 Payroll (A)	Expected Ultimate Losses (B)	Discount Factor (C)	Discounted Expected Ultimate Losses (D)	70% Confidence Level (E)	75% Confidence Level (E)	80% Confidence Level (E)	85% Confidence Level (E)	90% Confidence Level (E)	95% Confidence Level (E)
\$1M-2M	\$16,915,470	\$7,764,201	89.4%	\$6,935,343	\$8,237,834	\$8,796,044	\$9,472,663	\$10,284,606	\$11,367,196	\$13,160,236
\$1M-3M	16,915,470	12,686,603	89.4%	11,350,280	13,481,630	14,411,980	15,494,571	16,830,893	18,607,017	21,550,309
\$1M-4M	16,915,470	15,426,909	89.4%	13,786,108	16,374,175	17,490,596	18,826,918	20,450,803	22,615,983	26,168,232
\$1M-5M	16,915,470	17,811,990	89.4%	15,917,457	18,894,580	20,197,071	21,736,379	23,613,996	26,100,570	30,227,945
\$1M-\$10M	16,915,470	25,170,219	89.4%	22,497,575	26,709,527	28,553,313	30,718,494	33,374,222	36,892,640	42,711,562
\$5M-\$10M	16,915,470	7,358,229	89.4%	6,580,118	7,814,947	8,356,242	8,982,115	9,760,226	10,792,070	12,500,532
\$1M-15M	16,915,470	29,602,073	89.4%	26,472,711	31,428,943	33,594,123	36,131,444	39,260,806	43,422,011	50,255,861
\$10M-15M	16,915,470	4,431,853	89.4%	3,958,220	4,702,501	5,023,895	5,396,035	5,869,668	6,495,540	7,510,469

- (A) Provided by ACCEL.
- (B) (A) times funding rates from Exhibit 1, Page 2, (A).
- (C) From Exhibit 3.
- (D) (A) times funding rates from Exhibit 1, Page 2, (C).
- (E) (A) times funding rates from Exhibit 1, Page 2, (D).

Authority for California Cities Excess Liability

Projected 2024-25 Funding Guidelines
Loss Rates per \$100 of Payroll

Layer	Expected Loss Rate Per \$100 of Payroll (A)	Discount Factor (B)	Discounted Expected Loss Rate Per \$100 of Payroll (C)	70% Confidence Level (D)	75% Confidence Level (D)	80% Confidence Level (D)	85% Confidence Level (D)	90% Confidence Level (D)	95% Confidence Level (D)
\$1M-2M	\$0.459	89.4%	\$0.410	\$0.487	\$0.520	\$0.560	\$0.608	\$0.672	\$0.778
\$1M-3M	0.750	89.4%	0.671	0.797	0.852	0.916	0.995	1.100	1.274
\$1M-4M	0.912	89.4%	0.815	0.968	1.034	1.113	1.209	1.337	1.547
\$1M-5M	1.053	89.4%	0.941	1.117	1.194	1.285	1.396	1.543	1.787
\$1M-\$10M	1.488	89.4%	1.330	1.579	1.688	1.816	1.973	2.181	2.525
\$5M-\$10M	0.435	89.4%	0.389	0.462	0.494	0.531	0.577	0.638	0.739
\$1M-15M	1.750	89.4%	1.565	1.858	1.986	2.136	2.321	2.567	2.971
\$10M-15M	0.262	89.4%	0.234	0.278	0.297	0.319	0.347	0.384	0.444

Notes:

- (A) From Exhibit 1, Page 3 and members' loss distribution.
- (B) From Exhibit 3.
- (C) (A) * (B)
- (D) (C) times Confidence Level Factor from Exhibit 4.

Authority for California Cities Excess Liability
ACCEL Pooled Layer

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

(A) Estimated based on \$1M Ultimate Less \$100K Ultimate	N/A
(B) Estimated based on \$100K - \$1M Analysis:	\$1.617
(C) Selected Base Loss Rate (\$100K - \$1M Layer):	\$1.617

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Funding Guidelines for Outstanding Losses
as of December 31, 2023 and June 30, 2024

	<u>December 31, 2023</u>	<u>June 30, 2024</u>
(A) Estimated Ultimate Losses Incurred as of:	\$203,709,000	\$211,584,000
(B) Estimated Paid Losses as of:	118,502,000	127,901,000
(C) Estimated Liability for Claims Outstanding as of:	\$85,207,000	\$83,683,000
(D) Outstanding Liability Discount Factor:	92.6%	91.7%
(E) Discounted Outstanding Liability for Claims as of:	\$78,896,000	\$76,699,000
(F) Risk Margin at 90% Confidence Level:	43,477,000	42,267,000
(G) Required Funding at the 90% confidence Level:	\$122,373,000	\$118,966,000

Notes:

- (A) From Appendix A, Page 1, Column (A).
- (B) Provided by ACCEL
- (C) (A) - (B)
- (D) From Exhibit 3
- (E) (C) * (D)
- (F) (E) * Confidence Level Factor from Exhibit 4
- (G) (E) + (F)

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Discount Factors

Age	Accident Year Paid Loss Development Factor	Payment Pattern	Full Value Reserve	2.75% Discounted Reserve	Discount Factor
1990-1991	34.0	1.000	0.0%	0.0%	100.0%
1991-1992	33.0	1.000	0.0%	0.0%	100.0%
1992-1993	32.0	1.000	0.0%	0.0%	100.0%
1993-1994	31.0	1.000	0.0%	0.0%	100.0%
1994-1995	30.0	1.000	0.0%	0.0%	100.0%
1995-1996	29.0	1.000	0.0%	0.0%	100.0%
1996-1997	28.0	1.000	0.0%	0.0%	100.0%
1997-1998	27.0	1.000	0.0%	0.0%	92.6%
1998-1999	26.0	1.000	0.0%	0.0%	83.4%
1999-2000	25.0	1.000	0.0%	0.1%	83.4%
2000-2001	24.0	1.001	0.0%	0.1%	90.1%
2001-2002	23.0	1.001	0.0%	0.1%	90.1%
2002-2003	22.0	1.001	0.1%	0.2%	95.2%
2003-2004	21.0	1.002	0.1%	0.3%	93.6%
2004-2005	20.0	1.003	0.1%	0.4%	92.9%
2005-2006	19.0	1.004	0.2%	0.6%	93.9%
2006-2007	18.0	1.006	0.3%	0.9%	94.2%
2007-2008	17.0	1.009	0.4%	1.3%	93.5%
2008-2009	16.0	1.013	0.5%	1.8%	92.8%
2009-2010	15.0	1.018	0.2%	2.0%	91.3%
2010-2011	14.0	1.020	0.0%	2.0%	88.7%
2011-2012	13.0	1.020	0.0%	2.0%	86.2%
2012-2013	12.0	1.020	1.0%	2.9%	88.6%
2013-2014	11.0	1.030	0.9%	3.8%	89.2%
2014-2015	10.0	1.040	1.9%	5.7%	90.8%
2015-2016	9.0	1.061	3.6%	9.3%	92.3%
2016-2017	8.0	1.103	4.3%	13.6%	92.6%
2017-2018	7.0	1.158	7.9%	21.5%	93.3%
2018-2019	6.0	1.274	13.1%	34.6%	93.8%
2019-2020	5.0	1.529	20.0%	54.6%	94.0%
2020-2021	4.0	2.202	19.5%	74.1%	93.3%
2021-2022	3.0	3.854	17.3%	91.4%	92.3%
2022-2023	2.0	11.562	7.8%	99.1%	90.5%
2023-2024	1.0	115.620	0.9%	100.0%	88.2%

Discount Factor for Future Funding: 0.894

Accident Year	Accident Year Paid Loss Development Factor	Full Value Reserve	2.8% Discounted Reserve	12/31/23 Outstanding Loss	Discount Factor	12/31/23 Discounted Outstanding Loss	6/30/24 Outstanding Loss	Discount Factor	6/30/24 Discounted Outstanding Loss
1986-1990	1.000	0.00%	0.00%	0	100.0%	0	0	100.0%	0
1990-1991	1.000	0.00%	0.00%	0	100.0%	0	0	100.0%	0
1991-1992	1.000	0.00%	0.00%	0	100.0%	0	0	100.0%	0
1992-1993	1.000	0.00%	0.00%	0	96.3%	0	0	92.6%	0
1986-1990	1.000	0.00%	0.00%	0	100.0%	0	0	100.0%	0
1990-1991	1.000	0.00%	0.00%	0	100.0%	0	0	100.0%	0
1991-1992	1.000	0.00%	0.01%	0	100.0%	0	0	100.0%	0
1992-1993	1.000	0.01%	0.01%	0	96.3%	0	0	92.6%	0
1993-1994	1.000	0.01%	0.01%	0	88.0%	0	0	83.4%	0
1994-1995	1.000	0.02%	0.02%	0	83.4%	0	0	83.4%	0
1995-1996	1.000	0.04%	0.04%	0	86.8%	0	0	90.1%	0
1996-1997	1.001	0.06%	0.06%	0	90.1%	0	0	90.1%	0
1997-1998	1.001	0.10%	0.10%	0	92.7%	0	0	95.2%	0
2003-2004	1.001	0.10%	0.09%	0	94.4%	0	0	93.6%	0
2004-2005	1.002	0.20%	0.19%	0	93.3%	0	0	92.9%	0
2005-2006	1.003	0.30%	0.28%	0	93.4%	0	0	93.9%	0
2006-2007	1.004	0.40%	0.37%	0	94.1%	0	0	94.2%	0
2007-2008	1.006	0.60%	0.56%	0	93.9%	0	0	93.5%	0
2008-2009	1.009	0.89%	0.83%	0	93.2%	0	0	92.8%	0
2009-2010	1.018	1.77%	1.67%	0	92.1%	0	0	91.3%	0
2010-2011	1.020	1.96%	1.82%	0	90.0%	0	0	88.7%	0
2011-2012	1.020	1.96%	1.77%	0	87.5%	0	0	86.2%	0
2012-2013	1.020	1.96%	1.73%	0	87.4%	0	0	88.6%	0
2013-2014	1.030	2.91%	2.62%	0	88.9%	0	0	89.2%	0
2014-2015	1.040	3.85%	3.47%	889,000	90.0%	800,100	736,092	90.8%	668,372
2015-2016	1.061	5.75%	5.25%	371,318	91.6%	339,942	301,510	92.3%	278,294
2016-2017	1.103	9.34%	8.65%	2,363,337	92.5%	2,184,905	1,992,293	92.6%	1,844,863
2017-2018	1.158	13.64%	12.67%	9,109,264	93.0%	8,467,061	7,433,159	93.3%	6,935,138
2018-2019	1.274	21.51%	20.09%	5,175,707	93.6%	4,841,874	4,197,498	93.8%	3,937,253
2019-2020	1.529	34.60%	32.46%	9,789,310	93.9%	9,192,162	7,997,866	94.0%	7,517,994
2020-2021	2.202	54.59%	51.31%	14,894,323	93.7%	13,948,533	12,943,166	93.3%	12,075,974
2021-2022	3.854	74.05%	69.14%	17,688,229	92.8%	16,414,676	16,007,847	92.3%	14,775,243
2022-2023	11.562	91.35%	84.35%	17,052,000	91.9%	15,670,788	16,386,972	90.5%	14,830,210
2023-2024	115.620	99.14%	89.77%	7,875,000	89.4%	7,036,313	15,687,000	88.2%	13,835,934
Total				85,207,487		78,896,354	83,683,405		76,699,275

Discount Factor for Outstanding: 92.6% 91.7%

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Confidence Level Factors

Probability	Projected Funding Factor	Outstanding Liability Factor
95	1.899	1.773
90	1.640	1.551
85	1.483	1.417
80	1.365	1.314
75	1.269	1.232
70	1.187	1.161
65	1.115	1.099
60	1.048	1.042
55	0.989	0.991
50	0.940	0.948
45	0.892	0.908
40	0.846	0.868
35	0.799	0.828
30	0.752	0.787
25	0.703	0.745

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Large Losses in the Pool Layer as of 12/31/23

Member (A)	Date of Loss (B)	Fiscal Year (C)	Status (D)	Paid Losses (E)	Case Reserves (F)	Incurred Losses (G)
Santa Monica	12/1/86	1986-1987	Closed	9,000,000	0	9,000,000
Burbank	4/1/05	2004-2005	Closed	3,732,201	0	3,732,201
Santa Monica	9/5/07	2007-2008	Closed	584,023	0	584,023
Ontario	3/20/08	2007-2008	Closed	515,035	0	515,035
Ontario	4/26/08	2007-2008	Closed	1,243,490	0	1,243,490
Anaheim	10/28/08	2008-2009	Closed	857,009	0	857,009
Burbank	5/15/09	2008-2009	Closed	989,618	0	989,618
Anaheim	7/21/12	2012-2013	Closed	1,449,645	0	1,449,645
Burbank	9/26/12	2012-2013	Closed	1,641,201	0	1,641,201
Anaheim	1/31/13	2012-2013	Closed	978,765	0	978,765
Santa Monica	9/24/13	2013-2014	Closed	1,966,510	0	1,966,510
Anaheim	10/11/13	2013-2014	Closed	3,025,672	0	3,025,672
Bakersfield	1/28/14	2013-2014	Closed	4,000,000	0	4,000,000
Santa Monica	4/10/14	2013-2014	Closed	3,970,883	0	3,970,883
Anaheim	9/17/14	2014-2015	Closed	2,930,000	0	2,930,000
Bakersfield	5/17/15	2014-2015	Closed	2,750,000	0	2,750,000
Anaheim	7/10/15	2015-2016	Closed	502,543	0	502,543
Ontario	5/8/16	2015-2016	Closed	798,632	0	798,632
Anaheim	7/2/16	2016-2017	Closed	2,000,000	0	2,000,000
Burbank	10/4/16	2016-2017	Closed	1,203,430	0	1,203,430
Ontario	10/5/16	2016-2017	Closed	2,000,000	0	2,000,000
Santa Cruz	10/16/16	2016-2017	Closed	741,710	0	741,710
Santa Monica	11/10/16	2016-2017	Closed	531,443	0	531,443
Anaheim	11/19/16	2016-2017	Closed	919,639	0	919,639
Modesto	12/10/16	2016-2017	Open	0	2,000,000	2,000,000
Santa Monica	3/22/17	2016-2017	Closed	2,000,000	0	2,000,000
Santa Monica	4/13/17	2016-2017	Closed	2,000,000	0	2,000,000
Santa Cruz	11/14/17	2017-2018	Open	0	2,000,000	2,000,000
Palo Alto	12/3/17	2017-2018	Open	0	4,000,000	4,000,000
Anaheim	3/2/18	2017-2018	Closed	1,314,125	0	1,314,125
Anaheim	3/27/18	2017-2018	Closed	1,504,712	0	1,504,712
Anaheim	7/21/18	2018-2019	Closed	1,905,350	0	1,905,350
Santa Monica	8/10/18	2018-2019	Closed	504,397	0	504,397
Bakersfield	9/16/18	2018-2019	Closed	0	4,000,000	4,000,000
Burbank	10/12/18	2018-2019	Closed	3,102,194	0	3,102,194
Santa Monica	1/9/19	1991-1992	Closed	2,000,000	0	2,000,000
Salinas	3/1/19	2018-2019	Closed	1,031,389	0	1,031,389
Anaheim	4/4/19	2018-2019	Closed	1,711,727	0	1,711,727
Santa Monica	7/14/19	2019-2020	Closed	1,329,919	0	1,329,919
Anaheim	6/24/16	2015-2016	Closed	860,854	0	860,854
Bakersfield	7/5/17	2017-2018	Closed	946,440	0	946,440
Santa Cruz	6/11/18	2017-2018	Closed	3,037,194	0	3,037,194
Anaheim	10/27/18	2018-2019	Closed	2,470,236	0	2,470,236
Anaheim	12/12/19	2019-2020	Closed	1,444,331	0	1,444,331
Santa Monica	5/31/20	2019-2020	Open	0	4,000,000	4,000,000
Modesto	9/21/15	2015-2016	Closed	557,598	0	557,598
Modesto	12/29/20	2020-2021	Open	0	4,000,000	4,000,000
Anaheim	9/28/21	2021-2022	Open	0	6,500,000	6,500,000
Modesto	10/17/14	2014-2015	Open	0	500,000	500,000
Bakersfield	11/4/17	2017-2018	Open	0	2,000,000	2,000,000
Modesto	11/6/17	2017-2018	Open	0	500,000	500,000
Ontario	7/19/19	2019-2020	Open	0	4,000,000	4,000,000
Santa Monica	5/29/21	2020-2021	Open	0	500,000	500,000
Burbank	1/3/22	2021-2022	Closed	2,071,771	0	2,071,771
Santa Monica	3/25/21	2020-2021	Closed	588,270	0	588,270
Modesto	7/14/22	2022-2023	Open	0	3,500,000	3,500,000
Santa Monica	8/2/20	2020-2021	Open	0	750,000	750,000
Anaheim	11/13/20	2020-2021	Open	0	4,000,000	4,000,000
Santa Monica	8/27/21	2021-2022	Open	0	2,950,000	2,950,000
Totals				80,053,264	45,200,000	125,253,264

Authority for California Cities Excess Liability
ACCEL Layer

Outstanding Liability at December 31, 2023

Accident Year	Ultimate Losses With Corridor (A)	12/31/23 Reported Loss (B)	12/31/23 IBNR (C)	12/31/23 Paid Loss (D)	12/31/23 Case Reserves (E)	12/31/23 Outstanding Loss (F)
1986-1987	0	0	0	0	0	0
1987-1988	500,000	500,000	0	500,000	0	0
1988-1989	0	0	0	0	0	0
1989-1990	0	0	0	0	0	0
Totals	\$500,000	\$500,000	\$0	\$500,000	\$0	\$0
1986-1990	9,724,542	9,724,542	0	9,724,542	0	0
1990-1991	0	0	0	0	0	0
1991-1992	2,501,191	2,501,191	0	2,501,191	0	0
1992-1993	10,538,558	10,538,558	0	10,538,558	0	0
1993-1994	877,168	877,168	0	877,168	0	0
1994-1995	1,439,192	1,439,192	0	1,439,192	0	0
1995-1996	912,141	912,141	0	912,141	0	0
1996-1997	2,388,970	2,388,970	0	2,388,970	0	0
1997-1998	2,083,463	2,083,463	0	2,083,463	0	0
2003-2004	3,526,085	3,526,085	0	3,526,085	0	0
2004-2005	9,967,624	9,967,624	0	9,967,624	0	0
2005-2006	4,457,753	4,457,753	0	4,457,753	0	0
2006-2007	621,098	621,098	0	621,098	0	0
2007-2008	4,851,132	4,851,132	0	4,851,132	0	0
2008-2009	3,187,935	3,187,935	0	3,187,935	0	0
2009-2010	0	0	0	0	0	0
2010-2011	375,159	375,159	0	375,159	0	0
2011-2012	2,274	2,274	0	2,274	0	0
2012-2013	4,206,743	4,206,743	0	4,206,743	0	0
2013-2014	12,963,065	12,963,065	0	12,963,065	0	0
2014-2015	6,569,000	6,430,000	139,000	5,680,000	750,000	889,000
2015-2016	3,304,000	3,078,095	225,905	2,932,682	145,413	371,318
2016-2017	13,781,000	13,417,663	363,337	11,417,663	2,000,000	2,363,337
2017-2018	15,944,000	15,334,736	609,264	6,834,736	8,500,000	9,109,264
2018-2019	15,901,000	14,975,293	925,707	10,725,293	4,250,000	5,175,707
2019-2020	12,610,000	10,820,690	1,789,310	2,820,690	8,000,000	9,789,310
2020-2021	15,789,000	10,144,677	5,644,323	894,677	9,250,000	14,894,323
2021-2022	19,760,000	11,831,771	7,928,229	2,071,771	9,760,000	17,688,229
2022-2023	17,052,000	3,500,000	13,552,000	0	3,500,000	17,052,000
2023-2024	7,875,000	0	7,875,000	0	0	7,875,000
Totals	\$203,209,093	\$164,157,020	\$39,052,073	\$118,001,606	\$46,155,414	\$85,207,487
Grand Totals	\$203,709,093	\$164,657,020	\$39,052,073	\$118,501,606	\$46,155,414	\$85,207,487

Notes:

- (A) From Appendix A, Page 3, Column (G).
- (B) Provided by ACCEL
- (C) (A) - (B)
- (D) Provided by ACCEL
- (F) (B) - (D)
- (F) (D) - (A)

Authority for California Cities Excess Liability
ACCEL Layer

Outstanding Liability at June 30, 2024

Accident Year	Ultimate Losses (A)	6/30/2024 Reported Loss (B)	6/30/2024 IBNR (C)	6/30/2024 Paid Loss (D)	6/30/2024 Case Reserves (E)	6/30/2024 Outstanding Loss (F)
1986-1987	0	0	0	0	0	0
1987-1988	500,000	500,000	0	500,000	0	0
1988-1989	0	0	0	0	0	0
1989-1990	0	0	0	0	0	0
Totals	\$500,000	\$500,000	\$0	\$500,000	\$0	\$0
1986-1990	9,724,542	9,724,542	0	9,724,542	0	0
1990-1991	0	0	0	0	0	0
1991-1992	2,501,191	2,501,191	0	2,501,191	0	0
1992-1993	10,538,558	10,538,558	0	10,538,558	0	0
1993-1994	877,168	877,168	0	877,168	0	0
1994-1995	1,439,192	1,439,192	0	1,439,192	0	0
1995-1996	912,141	912,141	0	912,141	0	0
1996-1997	2,388,970	2,388,970	0	2,388,970	0	0
1997-1998	2,083,463	2,083,463	0	2,083,463	0	0
2003-2004	3,526,085	3,526,085	0	3,526,085	0	0
2004-2005	9,967,624	9,967,624	0	9,967,624	0	0
2005-2006	4,457,753	4,457,753	0	4,457,753	0	0
2006-2007	621,098	621,098	0	621,098	0	0
2007-2008	4,851,132	4,851,132	0	4,851,132	0	0
2008-2009	3,187,935	3,187,935	0	3,187,935	0	0
2009-2010	0	0	0	0	0	0
2010-2011	375,159	375,159	0	375,159	0	0
2011-2012	2,274	2,274	0	2,274	0	0
2012-2013	4,206,743	4,206,743	0	4,206,743	0	0
2013-2014	12,963,065	12,963,065	0	12,963,065	0	0
2014-2015	6,569,000	6,446,819	122,181	5,832,908	613,911	736,092
2015-2016	3,304,000	3,116,951	187,049	3,002,490	114,461	301,510
2016-2017	13,781,000	13,475,797	305,203	11,788,707	1,687,090	1,992,293
2017-2018	15,944,000	15,437,702	506,298	8,510,841	6,926,861	7,433,159
2018-2019	15,901,000	15,125,258	775,742	11,703,502	3,421,756	4,197,498
2019-2020	12,610,000	11,140,977	1,469,023	4,612,134	6,528,843	7,997,866
2020-2021	15,789,000	11,290,475	4,498,525	2,845,834	8,444,641	12,943,166
2021-2022	19,760,000	13,163,714	6,596,286	3,752,153	9,411,561	16,007,847
2022-2023	17,052,000	5,017,824	12,034,176	665,028	4,352,796	16,386,972
2023-2024	15,750,000	267,750	15,482,250	63,000	204,750	15,687,000
Totals	\$211,084,093	\$169,107,359	\$41,976,734	\$127,400,688	\$41,706,670	\$83,683,405
Grand Totals	\$211,584,093	\$169,607,359	\$41,976,734	\$127,900,688	\$41,706,670	\$83,683,405

Notes:

- (A) From Appendix A, Page 3, Column (G).
- (B) Projected based on Appendix A, Page 4, Column (B).
- (C) (A) - (B)
- (D) Projected based on Appendix A, Page 5, Column (B).
- (F) (B) - (D)
- (F) (D) - (A)

Authority for California Cities Excess Liability
ACCEL Layer

Estimated Ultimate Losses

Accident Year	Reported Loss Development Method (A)	Paid Loss Development Method (B)	Expected Loss Method (C)	Prior Estimate of Ultimate Losses (D)	Selected Estimate of Ultimate Losses (E)	Selected Corridor Deductible Ultimate (F)	Selected Estimate of Ultimate Losses w/ Corridor (G)
1986-1987	0	0		0	0	0	0
1987-1988	500,000	500,000		500,000	500,000	0	500,000
1988-1989	0	0		0	0	0	0
1989-1990	0	0		0	0	0	0
Totals	\$500,000	\$500,000		\$500,000	\$500,000	\$0	\$500,000
1986-1990	9,724,542	9,724,542		9,724,542	9,724,542	0	9,724,542
1990-1991	0	0		0	0	0	0
1991-1992	2,501,191	2,501,191		2,501,191	2,501,191	0	2,501,191
1992-1993	10,538,558	10,538,558		10,538,558	10,538,558	0	10,538,558
1993-1994	877,168	877,168		877,168	877,168	0	877,168
1994-1995	1,439,192	1,440,631		1,439,192	1,439,192	0	1,439,192
1995-1996	912,141	913,053		912,141	912,141	0	912,141
1996-1997	2,388,970	2,391,359		2,388,970	2,388,970	0	2,388,970
1997-1998	2,083,463	2,085,546		2,083,463	2,083,463	0	2,083,463
2003-2004	3,526,085	3,529,611		3,526,085	3,526,085	0	3,526,085
2004-2005	9,967,624	10,007,494		9,967,624	9,967,624	0	9,967,624
2005-2006	4,462,211	4,484,500		4,457,753	4,457,753	0	4,457,753
2006-2007	622,340	626,688	630,000	621,098	621,098	0	621,098
2007-2008	4,870,537	4,914,197	4,870,000	4,851,132	4,851,132	0	4,851,132
2008-2009	3,216,612	3,245,261	3,234,000	3,187,935	3,187,935	0	3,187,935
2009-2010	0	0	57,000	0	0	0	0
2010-2011	380,786	382,662	462,000	375,159	375,159	0	375,159
2011-2012	2,319	2,319	124,000	2,274	2,274	0	2,274
2012-2013	4,311,912	4,332,945	4,365,000	4,206,743	4,206,743	0	4,206,743
2013-2014	13,351,957	13,481,588	13,160,000	12,963,065	12,963,065	0	12,963,065
2014-2015	6,687,200	6,026,480	6,708,000	6,620,000	6,569,000	0	6,569,000
2015-2016	3,265,859	3,234,748	3,529,000	3,397,499	3,304,000	0	3,304,000
2016-2017	14,665,506	13,221,654	14,144,000	13,793,000	13,781,000	0	13,781,000
2017-2018	17,604,277	8,707,454	16,205,000	16,746,194	15,944,000	0	15,944,000
2018-2019	18,479,512	16,398,973	16,938,000	13,715,000	15,901,000	0	15,901,000
2019-2020	15,354,560	6,211,160	14,202,000	11,149,865	12,610,000	0	12,610,000
2020-2021	20,157,474	3,448,087	16,468,000	12,932,926	13,789,000	2,000,000	15,789,000
2021-2022	47,019,459	23,953,819	21,526,000	21,742,000	19,760,000	0	19,760,000
2022-2023	97,363,000	0	22,526,000	18,557,500	17,052,000	0	17,052,000
2023-2024	0	0	22,756,000	15,750,201	15,750,000	0	15,750,000
Totals	\$315,774,455	\$156,681,688	\$181,904,000	\$209,028,278	\$209,084,093	\$2,000,000	\$211,084,093
Grand Totals	\$316,274,455	\$157,181,688		\$209,528,278	\$209,584,093	\$2,000,000	\$211,584,093

Notes:

- (A) From Appendix A, Page 4, Column (C).
- (B) From Appendix A, Page 5, Column (C).
- (C) From Appendix A, Page 6, Column (K).
- (D) From prior actuarial study.
- (E) Selected based on (A) through (D).
- (F) Based on Monte Carlo simulation.
- (G) (E) + (F)

Authority for California Cities Excess Liability
ACCEL Layer

Reported Loss Development

Accident Year	Reported Losses as of 12/31/23 (A)	Reported Loss Development Factor (B)	Estimated Ultimate Losses (C)
1986-1987	0	1.000	0
1987-1988	500,000	1.000	500,000
1988-1989	0	1.000	0
1989-1990	0	1.000	0
Totals	\$500,000		\$500,000
1986-1990	9,724,542	1.000	9,724,542
1990-1991	0	1.000	0
1991-1992	2,501,191	1.000	2,501,191
1992-1993	10,538,558	1.000	10,538,558
1993-1994	877,168	1.000	877,168
1994-1995	1,439,192	1.000	1,439,192
1995-1996	912,141	1.000	912,141
1996-1997	2,388,970	1.000	2,388,970
1997-1998	2,083,463	1.000	2,083,463
2003-2004	3,526,085	1.000	3,526,085
2004-2005	9,967,624	1.000	9,967,624
2005-2006	4,457,753	1.001	4,462,211
2006-2007	621,098	1.002	622,340
2007-2008	4,851,132	1.004	4,870,537
2008-2009	3,187,935	1.009	3,216,612
2009-2010	0	1.010	0
2010-2011	375,159	1.015	380,786
2011-2012	2,274	1.020	2,319
2012-2013	4,206,743	1.025	4,311,912
2013-2014	12,963,065	1.030	13,351,957
2014-2015	6,430,000	1.040	6,687,200
2015-2016	3,078,095	1.061	3,265,859
2016-2017	13,417,663	1.093	14,665,506
2017-2018	15,334,736	1.148	17,604,277
2018-2019	14,975,293	1.234	18,479,512
2019-2020	10,820,690	1.419	15,354,560
2020-2021	10,144,677	1.987	20,157,474
2021-2022	11,831,771	3.974	47,019,459
2022-2023	3,500,000	27.818	97,363,000
2023-2024	0	417.270	0
Totals	\$164,157,020		\$315,774,455
Grand Totals	\$164,657,020		\$316,274,455

Notes:

- (A) Provided by ACCEL
- (B) (C) from Appendix B, Page 3.
- (C) (A) x (B).

Authority for California Cities Excess Liability
ACCEL Layer

Paid Loss Development

Accident Year	Paid Losses as of 12/31/23 (A)	Paid Loss Development Factor (B)	Estimated Ultimate Losses (C)
1986-1987	0	1.000	0
1987-1988	500,000	1.000	500,000
1988-1989	0	1.000	0
1989-1990	0	1.000	0
Totals	\$500,000		\$500,000
1986-1990	9,724,542	1.000	9,724,542
1990-1991	0	1.000	0
1991-1992	2,501,191	1.000	2,501,191
1992-1993	10,538,558	1.000	10,538,558
1993-1994	877,168	1.000	877,168
1994-1995	1,439,192	1.001	1,440,631
1995-1996	912,141	1.001	913,053
1996-1997	2,388,970	1.001	2,391,359
1997-1998	2,083,463	1.001	2,085,546
2003-2004	3,526,085	1.001	3,529,611
2004-2005	9,967,624	1.004	10,007,494
2005-2006	4,457,753	1.006	4,484,500
2006-2007	621,098	1.009	626,688
2007-2008	4,851,132	1.013	4,914,197
2008-2009	3,187,935	1.018	3,245,261
2009-2010	0	1.020	0
2010-2011	375,159	1.020	382,662
2011-2012	2,274	1.020	2,319
2012-2013	4,206,743	1.030	4,332,945
2013-2014	12,963,065	1.040	13,481,588
2014-2015	5,680,000	1.061	6,026,480
2015-2016	2,932,682	1.103	3,234,748
2016-2017	11,417,663	1.158	13,221,654
2017-2018	6,834,736	1.274	8,707,454
2018-2019	10,725,293	1.529	16,398,973
2019-2020	2,820,690	2.202	6,211,160
2020-2021	894,677	3.854	3,448,087
2021-2022	2,071,771	11.562	23,953,819
2022-2023	0	115.620	0
2023-2024	0	2,312.400	0
Totals	\$118,001,606		\$156,681,688
Grand Totals	\$118,501,606		\$157,181,688

Notes:

- (A) Provided by ACCEL
- (B) (C) from Appendix B, Page 4.
- (C) (A) x (B).

Authority for California Cities Excess Liability
ACCEL Layer

Expected Loss Methods

Program Year	Program Year 2024-2025 \$100K-\$1M Base Rate (A)	Trend Factor Program Year (B)	Program Year \$100K-\$1M Base Rate (C)	Factor to Self-Insured Layer (D)	Program Year Self-Insured Expected Rate (E)	Program Year Payroll (F)	Program Year Preliminary Ultimate Losses (G)	Percent of Ultimate Losses Not Reported (H)	Estimated Program Year IBNR at 12/31/23 (I)	Program Year Reported Losses at 12/31/23 (J)	Program Year Estimated Ultimate Losses (K)
2005-2006	1.617	0.416	0.672	0.651	0.437	\$9,850,045	\$4,308,000	0.2%	\$8,599	\$621,098	\$630,000
2006-2007	1.617	0.436	0.705	0.651	0.459	10,305,894	4,733,000	0.4%	18,857	4,851,132	4,870,000
2007-2008	1.617	0.458	0.741	0.651	0.482	10,609,082	5,116,000	0.9%	45,611	3,187,935	3,234,000
2008-2009	1.617	0.481	0.778	0.651	0.506	11,307,152	5,725,000	1.0%	56,683	0	57,000
2009-2010	1.617	0.505	0.817	0.651	0.532	11,075,957	5,889,000	1.5%	87,030	375,159	462,000
2010-2011	1.617	0.530	0.858	0.651	0.558	11,097,108	6,195,000	2.0%	121,471	2,274	124,000
2011-2012	1.617	0.557	0.900	0.651	0.586	11,095,468	6,504,000	2.4%	158,634	4,206,743	4,365,000
2012-2013	1.617	0.585	0.945	0.651	0.615	10,966,401	6,750,000	2.9%	196,602	12,963,065	13,160,000
2013-2014	1.617	0.614	0.993	0.651	0.646	11,164,240	7,215,000	3.8%	277,500	6,430,000	6,708,000
2014-2015	1.617	0.645	1.042	0.651	0.679	11,556,443	7,842,000	5.7%	450,860	3,078,095	3,529,000
2015-2016	1.617	0.677	1.094	0.651	0.712	11,986,752	8,540,000	8.5%	726,642	13,417,663	14,144,000
2016-2017	1.617	0.711	1.149	0.464	0.533	12,662,643	6,752,000	12.9%	870,467	15,334,736	16,205,000
2017-2018	1.617	0.746	1.207	0.651	0.786	13,177,894	10,351,000	19.0%	1,962,831	14,975,293	16,938,000
2018-2019	1.617	0.784	1.267	0.651	0.825	13,884,423	11,452,000	29.5%	3,381,528	10,820,690	14,202,000
2019-2020	1.617	0.823	1.330	0.651	0.866	14,699,647	12,730,000	49.7%	6,323,357	10,144,677	16,468,000
2020-2021	1.617	0.864	1.397	0.651	0.909	14,245,854	12,954,000	74.8%	9,694,312	11,831,771	21,526,000
2021-2022	1.617	0.907	1.467	0.920	1.349	14,625,633	19,735,000	96.4%	19,025,567	3,500,000	22,526,000
2022-2023	1.617	0.952	1.540	0.920	1.417	16,100,399	22,811,000	99.8%	22,756,333	0	22,756,000

Authority for California Cities Excess Liability
ACCEL Layer

Expected Loss Rates

Accident Year	Program Year Payroll	Ultimate Loss	On-Level Losses	Loss Rate	Loss Rate Trend	Trended Loss Rate
1986-1987	1,008,086	0	0	0.000	2.925	0.000
1987-1988	998,109	500,000	500,000	0.501	2.786	1.396
1988-1989	1,146,083	0	0	0.000	2.653	0.000
1989-1990	1,208,157	0	0	0.000	2.527	0.000
Totals	\$4,360,436	\$500,000	\$500,000	0.115		0.349
1986-1990	4,030,134	9,724,542	9,724,542	2.413	6.389	15.417
1990-1991	4,399,059	0	0	0.000	6.085	0.000
1991-1992	4,875,491	2,501,191	2,501,191	0.513	5.795	2.973
1992-1993	5,277,443	10,538,558	10,538,558	1.997	5.519	11.021
1993-1994	5,310,299	877,168	877,168	0.165	5.256	0.867
1994-1995	5,635,666	1,439,192	1,439,192	0.255	5.006	1.277
1995-1996	6,004,411	912,141	912,141	0.152	4.768	0.725
1996-1997	6,102,690	2,388,970	2,388,970	0.391	4.541	1.776
1997-1998	6,502,472	2,083,463	2,083,463	0.320	4.325	1.384
2003-2004	6,972,985	3,526,085	3,526,085	0.506	4.119	2.084
2004-2005	9,103,267	9,967,624	9,967,624	1.095	2.655	2.907
2005-2006	9,374,402	4,457,753	4,457,753	0.476	2.529	1.204
2006-2007	9,850,045	621,098	621,098	0.063	2.409	0.152
2007-2008	10,305,894	4,851,132	4,851,132	0.471	2.294	1.080
2008-2009	10,609,082	3,187,935	3,187,935	0.300	2.185	0.656
2009-2010	11,307,152	0	0	0.000	2.081	0.000
2010-2011	11,075,957	375,159	375,159	0.034	1.982	0.067
2011-2012	11,097,108	2,274	2,274	0.000	1.888	0.000
2012-2013	11,095,468	4,206,743	4,206,743	0.379	1.798	0.681
2013-2014	10,966,401	12,963,065	12,963,065	1.182	1.712	2.024
2014-2015	11,164,240	6,569,000	6,569,000	0.588	1.630	0.958
2015-2016	11,556,443	3,304,000	3,304,000	0.286	1.552	0.444
2016-2017	11,986,752	13,781,000	13,781,000	1.150	1.478	1.700
2017-2018	12,662,643	15,944,000	15,944,000	1.259	1.408	1.773
2018-2019	13,177,894	15,901,000	15,901,000	1.207	1.341	1.619
2019-2020	13,884,423	12,610,000	12,610,000	0.908	1.277	1.160
2020-2021	14,699,647	15,789,000	15,789,000	1.074	1.216	1.306
2021-2022	14,245,854	19,760,000	19,760,000	1.387	1.158	1.606
2022-2023	14,625,633	17,052,000	17,052,000	1.166	1.103	1.286
2023-2024	16,100,399	15,750,000	15,750,000	0.978	1.050	1.027
Totals	\$293,999,355	\$211,084,093	\$211,084,093	0.718		1.972
86/87-97/98	55,110,650	33,991,310	33,991,310	0.617		3.752

Selected Trend: 1.050

Authority for California Cities Excess Liability - Liability (\$100K - \$1M Analysis)

Estimated Loss Rates for the \$100,000 - \$1,000,000 Layer

Accident Year	Estimated Ultimate \$100K - \$1M Losses (C)	Payroll (\$00's) (D)	Loss Trend Factor (E)	Loss Rate at 2023-2024 Level (F)
2014-2015	14,068,000	14,433,997	1.551	1.512
2015-2016	12,728,000	14,611,851	1.477	1.287
2016-2017	22,050,000	15,055,883	1.407	2.061
2017-2018	16,437,000	15,286,357	1.340	1.441
2018-2019	16,667,000	15,717,167	1.276	1.353
2019-2020	18,410,000	16,228,410	1.216	1.379
2020-2021	23,529,000	15,342,785	1.158	1.776
2021-2022	20,821,000	15,371,540	1.103	1.494
2022-2023	25,565,000	16,502,909	1.050	1.627
Average 2014-15 - 2020-21:				1.544
Average 2015-16 - 2021-22:				1.542
Average 2016-17 - 2022-23:				1.590
Prior 2022-2023 Rate :				1.560
Selected 2023-2024 Rate :				1.540
Trend Factor to 2024-2025 :				1.050
Selected 2024-2025 Rate :				\$1.617

Authority for California Cities Excess Liability - Liability (\$100K - \$1M Analysis)

Estimated Ultimate Losses for the \$100,000 to \$1,000,000 Layer

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)
2014-2015	13,910,568	14,225,773	13,916,090	14,214,341	14,067,984	14,068,000
2015-2016	12,472,486	12,983,293	12,482,465	12,963,985	12,728,000	12,728,000
2016-2017	21,672,322	22,428,497	21,680,738	22,387,101	22,050,006	22,050,000
2017-2018	16,109,772	16,765,110	16,114,613	16,716,111	16,436,987	16,437,000
2018-2019	16,492,705	15,763,331	16,737,670	16,597,170	16,716,294	16,667,000
2019-2020	16,306,504	18,716,737	17,097,917	19,722,230	20,789,504	18,410,000
2020-2021	24,319,583	27,627,749	23,386,131	23,672,430	22,171,825	23,529,000
2021-2022	17,111,282	24,830,255	19,043,434	22,598,191	24,709,866	20,821,000
2022-2023	25,838,630	41,962,331	25,109,629	26,020,135	30,847,580	25,565,000
Totals						\$170,275,000

Notes:

- (A) From Appendix B, Page 3, Column (D).
- (B) From Appendix B, Page 4, Column (D).
- (C) Based on results in Appendix B, Page 5.
- (D) Based on results in Appendix B, Page 6.
- (E) Based on results in Appendix B, Page 8.
- (F) Selected averages of (A), (B), (C), (D), and (E).

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

Authority for California Cities Excess Liability - Liability (\$100K - \$1M Analysis)

Reported Loss Development

Accident Year (A)	\$100K - \$1M Reported Losses as of 12/31/23 (B)	Reported Loss Development Factor (C)	Ultimate \$100K - \$1M Losses (D)	\$100K - \$1M Reported Losses of 12/31/23 (E)	Reported Loss Development Factor (F)	Ultimate \$100K - \$1M Losses (G)
2014-2015	13,704,993	1.015	13,910,568	13,704,993	1.015	13,910,568
2015-2016	12,227,927	1.020	12,472,486	12,227,927	1.020	12,472,486
2016-2017	21,041,089	1.030	21,672,322	21,041,089	1.030	21,672,322
2017-2018	15,490,165	1.040	16,109,772	15,490,165	1.040	16,109,772
2018-2019	15,103,210	1.092	16,492,705	15,103,210	1.092	16,492,705
2019-2020	13,577,439	1.201	16,306,504	13,577,439	1.201	16,306,504
2020-2021	17,610,125	1.381	24,319,583	17,610,125	1.381	24,319,583
2021-2022	10,326,664	1.657	17,111,282	10,326,664	1.657	17,111,282
2022-2023	6,780,013	3.811	25,838,630	6,780,013	3.811	25,838,630
Totals	\$125,861,625		\$164,233,852	\$125,861,625		\$164,233,852

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Authority. These losses exclude amount over the SIR.
- (C) Based upon Industry Loss Development Factors.
- (D) (B) x (C). These estimated losses exclude amount over the SIR.
- (E) Losses capped at the Authority's SIR. Amounts are provided by the Authority.
- (F) Based upon Industry Loss Development Factors.
- (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.

Authority for California Cities Excess Liability - Liability (\$100K - \$1M Analysis)

Paid Loss Development

Accident Year (A)	\$100K - \$1M Paid Losses as of 12/31/23 (B)	Paid Loss Development Factor (C)	Ultimate \$100K - \$1M Losses (D)	\$100K - \$1M Paid Losses of 12/31/23 (E)	Paid Loss Development Factor (F)	Ultimate \$100K - \$1M Losses (G)
2014-2015	13,665,488	1.041	14,225,773	13,665,488	1.041	14,225,773
2015-2016	12,111,281	1.072	12,983,293	12,111,281	1.072	12,983,293
2016-2017	20,115,244	1.115	22,428,497	20,115,244	1.115	22,428,497
2017-2018	14,316,917	1.171	16,765,110	14,316,917	1.171	16,765,110
2018-2019	12,238,611	1.288	15,763,331	12,238,611	1.288	15,763,331
2019-2020	10,762,931	1.739	18,716,737	10,762,931	1.739	18,716,737
2020-2021	11,346,098	2.435	27,627,749	11,346,098	2.435	27,627,749
2021-2022	5,098,615	4.870	24,830,255	5,098,615	4.870	24,830,255
2022-2023	2,872,165	14.610	41,962,331	2,872,165	14.610	41,962,331
Totals	\$102,527,350		\$195,303,076	\$102,527,350		\$195,303,076

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Authority. These losses exclude amount over the SIR.
- (C) Based upon Industry Loss Development Factors.
- (D) (B) x (C). These estimated losses exclude amount over the SIR.
- (E) Losses capped at the Authority's SIR. Amounts are provided by the Authority.
- (F) Based upon Industry Loss Development Factors.
- (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.

Authority for California Cities Excess Liability - Liability (\$100K - \$1M Analysis)

Exposure and Development Method
Based on Reported Losses

Accident Year	Composite Exposure (A)	Reported Losses as of 12/31/23 (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)
2014-2015	14,433,997	13,704,993	1.015	0.015	0.975	211,097	13,916,090
2015-2016	14,611,851	12,227,927	1.020	0.020	0.871	254,538	12,482,465
2016-2017	15,055,883	21,041,089	1.030	0.029	1.465	639,649	21,680,738
2017-2018	15,286,357	15,490,165	1.040	0.038	1.075	624,448	16,114,613
2018-2019	15,717,167	15,103,210	1.092	0.084	1.238	1,634,460	16,737,670
2019-2020	16,228,410	13,577,439	1.201	0.167	1.299	3,520,478	17,097,917
2020-2021	15,342,785	17,610,125	1.381	0.276	1.364	5,776,006	23,386,131
2021-2022	15,371,540	10,326,664	1.657	0.396	1.432	8,716,770	19,043,434
2022-2023	16,502,909	6,780,013	3.811	0.738	1.505	18,329,616	25,109,629
Totals	\$138,550,899	\$125,861,625				\$39,707,062	\$165,568,687

Notes:

- (A) Provided by the Authority.
- (B) Provided by the Authority. These losses exclude amounts incurred above the Authority's SIR for each year.
- (C) From Appendix B, Page 3, Column (F).
- (D) $1 - 1/(C)$.
- (E) From Appendix B, Page 7, Column (H).
- (F) $(A) \times (D) \times (E)$.
- (G) $(B) + (F)$.

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

Authority for California Cities Excess Liability - Liability (\$100K - \$1M Analysis)

Exposure and Development Method
Based on Paid Losses

Accident Year	Composite Exposure (A)	Paid Losses as of 12/31/23 (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)
2013-2014	14,290,227		1.021	0.021	0.970	291,092	
2014-2015	14,433,997	13,665,488	1.041	0.039	0.975	548,853	14,214,341
2015-2016	14,611,851	12,111,281	1.072	0.067	0.871	852,704	12,963,985
2016-2017	15,055,883	20,115,244	1.115	0.103	1.465	2,271,857	22,387,101
2017-2018	15,286,357	14,316,917	1.171	0.146	1.075	2,399,194	16,716,111
2018-2019	15,717,167	12,238,611	1.288	0.224	1.238	4,358,559	16,597,170
2019-2020	16,228,410	10,762,931	1.739	0.425	1.299	8,959,299	19,722,230
2020-2021	15,342,785	11,346,098	2.435	0.589	1.364	12,326,332	23,672,430
2021-2022	15,371,540	5,098,615	4.870	0.795	1.432	17,499,576	22,598,191
2022-2023	16,502,909	2,872,165	14.610	0.932	1.505	23,147,970	26,020,135
Totals	\$152,841,126	\$102,527,350				\$72,655,436	\$174,891,694

Notes:

- (A) Provided by the Authority.
- (B) Provided by the Authority. These losses exclude amounts paid above the Authority's SIR for each year.
- (C) From Appendix B, Page 4, Column (F).
- (D) $1 - 1/(C)$.
- (E) From Appendix B, Page 7, Column (H).
- (F) $(A) \times (D) \times (E)$.
- (G) $(B) + (F)$.

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

Authority for California Cities Excess Liability - Liability (\$100K - \$1M Analysis)

Exposure and Development Method

Accident Year	Composite Exposure (A)	Ultimate \$100K - \$1M Losses (B)	Trend Factor (C)	Trended \$100K - \$1M Losses (D)	Trended \$100K - \$1M Loss Rate (E)	Trended \$100K - \$1M Loss Rate (F)	Factor to SIR (G)	Program Loss Rate (H)
2013-2014	14,290,227		1.629			0.970	1.000	0.970
2014-2015	14,433,997	14,068,000	1.551	21,819,468	1.512	0.975	1.000	0.975
2015-2016	14,611,851	12,728,000	1.477	18,799,256	1.287	0.871	1.000	0.871
2016-2017	15,055,883	22,050,000	1.407	31,024,350	2.061	1.465	1.000	1.465
2017-2018	15,286,357	16,437,000	1.340	22,025,580	1.441	1.075	1.000	1.075
2018-2019	15,717,167	16,128,000	1.276	20,579,328	1.309	1.238	1.000	1.238
2019-2020	16,228,410	16,307,000	1.216	19,829,312	1.222	1.299	1.000	1.299
2020-2021	15,342,785	25,974,000	1.158	30,077,892	1.960	1.364	1.000	1.364
2021-2022	15,371,540	19,684,000	1.103	21,711,452	1.412	1.432	1.000	1.432
2022-2023	16,502,909	25,839,000	1.050	27,130,950	1.644	1.505	1.000	1.505
Total/Avg	\$152,841,126	\$169,215,000		\$212,997,588	\$1.537			
14/15-20/21	106,676,450	123,692,000		164,155,186	\$1.539			
15/16-21/22	107,613,993	129,308,000		164,047,170	\$1.524			
16/17-22/23	109,505,051	142,419,000		172,378,864	\$1.574			
				Selected \$100K - \$1M Rate:	\$1.580			
				Prior:	\$1.580			
					0.0%			

Notes:

- (A) Provided by the Authority.
- (B) Selected average of results from Appendices B and B.
- (C) From Appendix E, Column (B).
- (D) (B) x (C).
- (E) (D) / (A).
- (F) Selected \$100K - \$1M Rate / (C). For 2017-2018 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.

Authority for California Cities Excess Liability - Liability (\$100K - \$1M Anal

Frequency and Severity Method

Accident Year	Ultimate Program Severity (A)	Ultimate Claims (B)	Ultimate Program Losses (C)
2014-2015	293,083	48	14,067,984
2015-2016	318,200	40	12,728,000
2016-2017	334,091	66	22,050,006
2017-2018	278,593	59	16,436,987
2018-2019	309,561	54	16,716,294
2019-2020	324,836	64	20,789,504
2020-2021	341,105	65	22,171,825
2021-2022	358,114	69	24,709,866
2022-2023	376,190	82	30,847,580
Total		547	\$180,518,046

Notes:

- (A) From Appendix B, Page 9, Column (H).
- (B) From Appendix B, Page 9, 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.

Authority for California Cities Excess Liability - Liability (\$100K - \$1M Analysis)

Frequency and Severity Method

Accident Year	Ultimate \$100K - \$1M Losses (A)	Ultimate Claims (B)	Ultimate \$100K - \$1M Severity (C)	Trend Factor (D)	Trended \$100K - \$1M Severity (E)	\$100K - \$1M Severity (F)	Factor to SIR (G)	Program Severity (H)
2014-2015	14,068,000	48	293,083	1.551	454,572	293,083	1.000	293,083
2015-2016	12,728,000	40	318,200	1.477	469,981	318,200	1.000	318,200
2016-2017	22,050,000	66	334,091	1.407	470,066	334,091	1.000	334,091
2017-2018	16,437,000	59	278,593	1.340	373,315	278,593	1.000	278,593
2018-2019	16,667,000	54	308,648	1.276	393,835	309,561	1.000	309,561
2019-2020	18,410,000	64	287,656	1.216	349,790	324,836	1.000	324,836
2020-2021	23,529,000	65	361,985	1.158	419,179	341,105	1.000	341,105
2021-2022	20,821,000	69	301,754	1.103	332,835	358,114	1.000	358,114
2022-2023	25,565,000	82	311,768	1.050	327,356	376,190	1.000	376,190

Average \$100K - \$1M Severity: \$398,992
Average 14/15-20/21 \$100K - \$1M Severity: \$418,677
Average 14/15-21/22 \$100K - \$1M Severity: \$407,947

Selected \$100K - \$1M Severity: \$395,000
Prior: \$390,000

Notes:

- (A) Selected average of results from Appendices B, B, and B.
- (B) Appendix B, Page 10, 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.

Authority for California Cities Excess Liability - Liability (\$100K - \$1M Analysis)

Frequency and Severity Method
Projection of Ultimate Claims

Accident Year	Reported Claim Development (A)	Closed Claim Development (B)	Selected Ultimate Claims (C)	Composite Exposure (10,000s) (D)	Claim Frequency (E)	Trend Factor (F)	Trended Claim Frequency (G)
2014-2015	48	49	48	1,443.400	0.033	1.000	0.033
2015-2016	40	41	40	1,461.185	0.027	1.000	0.027
2016-2017	66	68	66	1,505.588	0.044	1.000	0.044
2017-2018	59	57	59	1,528.636	0.039	1.000	0.039
2018-2019	54	55	54	1,571.717	0.034	1.000	0.034
2019-2020	64	59	64	1,622.841	0.039	1.000	0.039
2020-2021	65	40	65	1,534.279	0.042	1.000	0.042
2021-2022	69	76	69	1,537.154	0.045	1.000	0.045
2022-2023	82	126	82	1,650.291	0.050	1.000	0.050
Total	547	571	547	13,855.090			0.039

(H) Selected 2023-2024 Frequency: 0.045
Prior: 0.045

Program Year:	2023-2024	2024-2025
(I) Trend Factor:	1.000	1.000
(J) Selected Frequency:	0.045	0.045
(K) Composite Exposure:	1,650.289	1,691.547
(L) Ultimate Claims:	74	76

Notes:

- (A) From Appendix B, Page 11, (C).
- (B) From Appendix B, Page 12, (C).
- (C) Selected from (A) and (B).
- (D) From Appendix N, Page 2, (G).
- (E) (C) / (D).
- (F) From Appendix E.
- (G) (E) x (F).
- (H) The selected frequency of .045 is based on (G).
- (I) From Appendix E.
- (J) (H) x (I).
- (K) From Appendix N, Page 2, (G).
- (L) (J) x (K).

This exhibit summarizes the estimated numbers of claims and shows the estimated frequencies per 10,000 units of composite exposure, Appendix E, page2, Item (G).

Authority for California Cities Excess Liability - Liability (\$100K - \$1M Analysis)

Frequency and Severity Method
Reported Claim Count Development

Accident Year	Claims Reported as of 12/31/2023 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2014-2015	47	1.022	48	0.033
2015-2016	39	1.032	40	0.027
2016-2017	63	1.042	66	0.044
2017-2018	56	1.052	59	0.039
2018-2019	51	1.063	54	0.034
2019-2020	60	1.074	64	0.039
2020-2021	58	1.128	65	0.042
2021-2022	56	1.241	69	0.045
2022-2023	33	2.482	82	0.050
Total	463		547	0.039

Notes:

- (A) Provided by the Authority.
- (B) From Appendix B, Page 15.
- (C) (A) x (B).
- (D) (C) / [Appendix B, Page 10, (D)] x [Appendix B, Page 10, (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.

Authority for California Cities Excess Liability - Liability (\$100K - \$1M Analysis)

Frequency and Severity Method
Closed Claim Count Development

Accident Year	Claims Closed as of 12/31/2023 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2014-2015	45	1.082	49	0.034
2015-2016	37	1.109	41	0.028
2016-2017	58	1.164	68	0.045
2017-2018	47	1.222	57	0.037
2018-2019	41	1.344	55	0.035
2019-2020	35	1.680	59	0.036
2020-2021	16	2.520	40	0.026
2021-2022	12	6.300	76	0.049
2022-2023	4	31.500	126	0.076
Total	295		571	0.041

Notes:

- (A) Provided by the Authority.
- (B) From Appendix B, Page 16.
- (C) (A) x (B).
- (D) (C) / [Appendix B, Page 10, (D)] x [Appendix B, Page 10, (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.

Authority for California Cities Excess Liability - Liability (\$100K - \$1M Analysis)

Loss Rate Trend

Accident Year	Payroll	Preliminary Ultimate Loss	Untrended Loss Rate	Trended Loss Rate
2014-2015	14,433,997	14,068,000	0.975	1.512
2015-2016	14,611,851	12,728,000	0.871	1.287
2016-2017	15,055,883	22,050,000	1.465	2.061
2017-2018	15,286,357	16,437,000	1.075	1.441
2018-2019	15,717,167	16,480,000	1.049	1.338
2019-2020	16,228,410	19,299,000	1.189	1.445
2020-2021	15,342,785	23,473,000	1.530	1.771
2021-2022	15,371,540	21,183,000	1.378	1.519
2022-2023	16,502,909	25,659,000	1.555	1.633

Exponential Trends

Years	R-square	Fitted Trend
14/15-20/21	0.372	1.060
17/18-22/23	0.806	1.087
18/19-22/23	0.766	1.098
14/15-22/23	0.544	1.059
	Prior Trend:	1.045
	Selected Trend:	1.050