Bickmore

Actuarial Review of the Funding Requirements for the Excess General Liability Program

Outstanding Liabilities as of December 31, 2015 and June 30, 2016
Forecast for Program Year 2016-17

Presented to
ACCEL

April 11, 2016

Bickmore

Monday, April 11, 2016

Authority for California Cities Excess Liability
c/o Alliant Insurance Services
Attn: Mike Simmons, Pool Administrator
100 Pine Street, 11th Floor
San Francisco, California 94111

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

Dear Mr. Simmons:

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 general 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 $17,874,000 as of June 30, 2016. We understand the Authority has chosen to record its liability with recognition of investment income at 2% per year. Discounted for anticipated investment income, we estimate the program's liability for outstanding loss and ALAE will be $16,483,000 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 85% confidence level, the Authority's required funding as of June 30, 2016 is projected to be $23,983,000.

ACCEL's outstanding liability is comprised of two separately funded pools. The first pool covers the layer from $500,000 to $1,000,000 per occurrence (the $500K pool) and is funded by those members with $500,000 self-insured retentions. Prior to July 1, 1990, four members pooled losses within this layer. The second pool is for the layer above $1,000,000 per occurrence (the $1,000K pool) and is funded by all members.

The tables below shows our estimates of the program's claims liabilities as of December 31, 2015 and June 30, 2016, on both undiscounted and discounted bases for various confidence levels:

Outstanding Liability as of December 31, 2015
at Various Confidence Level
$500K and $1,000K Pools Combined

Confidence Level	Undiscounted	Discounted
Expected	$17,216,000	$16,063,000
70%	20,229,000	18,873,000
75%	21,572,000	20,126,000
80%	23,121,000	21,572,000
85%	25,049,000	23,372,000
90%	27,597,000	25,748,000
95%	31,815,000	29,683,000

Outstanding Liability as of June 30, 2016
at Various Confidence Level
$500K and $1,000K pools combined

Confidence Level	Undiscounted	Discounted
Expected	$17,874,000	$16,483,000
70%	21,002,000	19,367,000
75%	22,396,000	20,653,000
80%	24,004,000	22,136,000
85%	26,006,000	23,983,000
90%	28,651,000	26,422,000
95%	33,031,000	30,460,000

Our funding guidelines for the program's outstanding liabilities do not include any provision for reinsurance premiums, claims administration fees, and other administrative costs associated with the ACCEL program.

According to the accounting regulations of the Governmental Accounting Standards Board, unallocated loss adjustment expenses (ULAE) associated with the 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.). Our undiscounted expected estimate of unpaid ULAE is $578,000 as of June 30, 2016. This estimate is 3.5% of IBNR and half of case reserves as of June 30, 2016.

We present funding recommendations for claims incurred during program year 2016-17 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% per year.

Funding Guidelines for Discounted Claims Incurred in 2016-2017

Layer	Expected	75%	80%	85%	90%
$1M-2M	$0.183	$0.236	$0.255	$0.279	$0.310
$1M-3M	0.291	0.375	0.406	0.443	0.493
$1M-4M	0.343	0.442	0.478	0.522	0.581
$1M-5M	0.367	0.473	0.512	0.559	0.622
$5M-10M	0.120	0.155	0.167	0.183	0.203
$6M-10M	0.093	0.120	0.130	0.142	0.158
$7M-10M	0.069	0.089	0.096	0.105	0.117
$8M-10M	0.044	0.057	0.061	0.067	0.075
$9M-10M	0.022	0.028	0.031	0.034	0.037
$10M-15M	0.102	0.131	0.142	0.155	0.173

The following table details the calculation of our funding guidelines in dollars at various confidence levels for the program's 2016-17 claims by different layers:

Funding Amount Guidelines for Discounted Claims Incurred in 2016-2017

Layer	Expected	75%	80%	85%	90%
$1M-2M	$2,179,000	$2,810,000	$3,036,000	$3,322,000	$3,691,000
$1M-3M	3,465,000	4,465,000	4,834,000	5,274,000	5,870,000
$1M-4M	4,084,000	5,262,000	5,691,000	6,215,000	6,917,000
$1M-5M	4,369,000	5,631,000	6,096,000	6,655,000	7,405,000
$5M-10M	1,429,000	1,845,000	1,988,000	2,179,000	2,417,000
$6M-10M	1,107,000	1,429,000	1,548,000	1,691,000	1,881,000
$7M-10M	821,000	1,060,000	1,143,000	1,250,000	1,393,000
$8M-10M	524,000	679,000	726,000	798,000	893,000
$9M-10M	262,000	333,000	369,000	405,000	441,000
$10M-15M	1,214,000	1,560,000	1,691,000	1,845,000	2,060,000

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 excess liability programs at the 80% to 90% confidence level.

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.

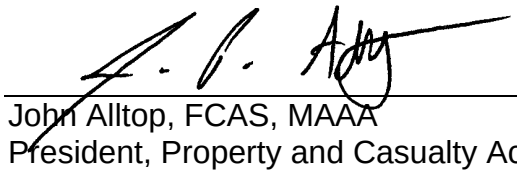
All actuarial estimates of general liability claims costs are subject to uncertainty because of the complexity of the process that determines the costs. This is especially true of excess general liability claims costs. For this reason, sound management practices suggest that actual funding should be in excess of expected claim activity. We generally recommend funding at the 80% to 90% confidence levels for excess general liability programs, after recognition of investment income.

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 prepare this review for ACCEL. Please feel free to call John Alltop at (916) 244-1160 or Derek Burkhalter at (916) 244-1167 with any questions you may have.

Sincerely,

Bickmore



John Alltop, FCAS, MAAA
President, Property and Casualty Actuarial Services, Bickmore
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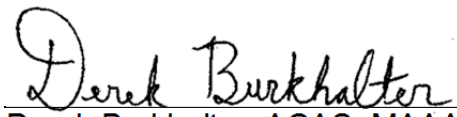

Derek Burkhalter, ACAS, MAAA
Manager, Property and Casualty Actuarial Services, Bickmore
Associate, Casualty Actuarial Society
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TABLE OF CONTENTS

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 general liability coverage and to purchase commercial excess insurance on a group basis for California cities. The program currently includes twelve members.

The Authority provides coverage above each member's self-insured retention (SIR), subject to aggregate limit. Previously, nine members had $500,000 SIRs and two members had $1,000,000 SIRs.

ACCEL provided an optional coverage of $500,000 excess of $500,000 per occurrence through 1989-90. This coverage is no longer available.

Prior to July 1, 1990, the Authority pooled losses incurred by its members up to $10,000,000. 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 and 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. ACCEL was fully insured with these limits through June 30, 2003.

On July 1, 2003, the Authority 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. ACCEL covered the layer $2,000,000 excess of $1,000,000 for the 2004-05 program year and $4,000,000 excess of $1,000,000 for the 2006-07 through 2013-14 program years.

The purpose of this study is to provide a guide to ACCEL in evaluating the adequacy of its established funding for its outstanding claims liabilities and in determining its contribution level for the 2016-17 fiscal year.

II. CONCLUSIONS AND RECOMMENDATIONS

A. LIABILITY FOR OUTSTANDING CLAIMS AS OF DECEMBER 31, 2015 and June 30, 2016

At the undiscounted expected level, we estimate the program's liability for outstanding loss and allocated loss adjustment expenses (ALAE) to be approximately $17,874,000 as of June 30, 2016. We understand the Authority has chosen to record its liability with recognition of investment income at 2% per year. Discounted for anticipated investment income, we estimate the program's liability for outstanding loss and ALAE will be $16,483,000 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 85% confidence level, the Authority's required funding as of June 30, 2016 is projected to be $23,983,000.

ACCEL's outstanding liability is comprised of two separately funded pools. The first pool is for the layer from $500,000 to $1,000,000 per occurrence (the $500K pool) and is funded by those members with $500,000 self-insured retentions. Prior to July 1, 1990, four members pooled losses this layer. The second pool is for the layer above $1,000,000 per occurrence (the $1,000K pool) and is funded by all members. 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, 2015 and June 30, 2016:

Outstanding Liability at the Expected Level
as of December 31, 2015 - $500K pool

Program Year	Undiscounted	Discounted
1986-1987	$0	$0
1987-1988	0	0
1988-1989	0	0
1989-1990	0	0
All Years	$0	$0

Outstanding Liability at the Expected Level as of December 31, 2015 - $1,000K pool

Program Year	Undiscounted	Discounted
1986-1987	$0	$0
1987-1988	0	0
1988-1989	0	0
1989-1990	0	0
1990-1991	0	0
1991-1992	1,809	1,708
1992-1993	6,442	6,059
1993-1994	832	788
1994-1995	1,808	1,716
1995-1996	859	814
1996-1997	2,030	1,923
1997-1998	4,537	4,301
2003-2004	38,915	36,814
2004-2005	1,314,378	1,237,487
2005-2006	45,247	42,645
2006-2007	63,902	60,387
2007-2008	425,867	402,018
2008-2009	98,065	92,720
2009-2010	585,000	555,165
2010-2011	1,150,000	1,095,950
2011-2012	2,104,726	2,004,752
2012-2013	1,963,997	1,857,941
2013-2014	2,942,000	2,752,241
2014-2015	4,177,000	3,842,840
2015-2016	2,288,500	2,064,227
All Years	$17,215,914	$16,062,496

Note that the $1,000K pool has no outstanding liability associated with the 1998-99 through 2002-03 program years. Due to favorable market conditions, ACCEL purchased complete reinsurance for its members during that time.

Outstanding Liability at the Expected Level as of June 30, 2016 - $500K pool

Program Year	Undiscounted	Discounted
1986-1987	$0	$0
1987-1988	0	0
1988-1989	0	0
1989-1990	0	0
All Years	$0	$0

Outstanding Liability at the Expected Level as of June 30, 2016 - $1,000K pool

Program Year	Undiscounted	Discounted
1986-1987	$0	$0
1987-1988	0	0
1988-1989	0	0
1989-1990	0	0
1990-1991	0	0
1991-1992	1,809	1,693
1992-1993	6,442	6,088
1993-1994	832	790
1994-1995	1,808	1,716
1995-1996	859	813
1996-1997	1,015	962
1997-1998	3,026	2,869
2003-2004	32,572	30,748
2004-2005	1,155,338	1,084,863
2005-2006	41,808	39,551
2006-2007	59,684	56,342
2007-2008	371,356	350,560
2008-2009	83,355	78,937
2009-2010	514,215	489,018
2010-2011	939,550	897,270
2011-2012	1,692,200	1,607,590
2012-2013	1,716,533	1,616,974
2013-2014	2,674,278	2,484,404
2014-2015	4,018,274	3,660,648
2015-2016	4,558,692	4,070,912
All Years	$17,873,647	$16,482,748

The tables below shows our estimates of the program's claims liabilities as of December 31, 2015 and June 30, 2016, on both undiscounted and discounted bases for various confidence levels:

Outstanding Liability as of December 31, 2015
at Various Confidence Level
$500K and $1,000K Pools Combined

Confidence Level	Undiscounted	Discounted
Expected	$17,216,000	$16,063,000
70%	20,229,000	18,873,000
75%	21,572,000	20,126,000
80%	23,121,000	21,572,000
85%	25,049,000	23,372,000
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Outstanding Liability as of June 30, 2016
at Various Confidence Level
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Confidence Level	Undiscounted	Discounted
Expected	$17,874,000	$16,483,000
70%	21,002,000	19,367,000
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80%	24,004,000	22,136,000
85%	26,006,000	23,983,000
90%	28,651,000	26,422,000
95%	33,031,000	30,460,000

Our funding guidelines for the program's outstanding liabilities do not include any provision for reinsurance premiums, claims administration fees, and other administrative costs associated with the ACCEL program.

According to the accounting regulations of the Governmental Accounting Standards Board, unallocated loss adjustment expenses (ULAE) associated with the 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.). Our undiscounted expected estimate of unpaid ULAE is $578,000 as of June 30, 2016. This estimate is 3.5% of IBNR and half of outstanding reserves as of June 30, 2016.

The following table details the changes in the estimates of the Authority's ultimate losses by program year from those of the prior review:

Comparison with Prior Review
$500K and $1,000 Pools Combined
Undiscounted Estimated Ultimate Losses

Program Year	Current	Prior 12/31/14	Change in Estimates Since 12/31/14 Report
1987-1988	$0	$0	$0
1987-1988	1,224,542	1,224,542	0
1988-1989	0	0	0
1989-1990	0	0	0
1990-1991	0	0	0
1991-1992	2,503,000	2,503,000	0
1992-1993	10,545,000	10,548,000	(3,000)
1993-1994	878,000	878,000	0
1994-1995	1,441,000	1,442,000	(1,000)
1995-1996	913,000	914,000	(1,000)
1996-1997	2,391,000	2,393,000	(2,000)
1997-1998	2,088,000	2,090,000	(2,000)
2003-2004	3,565,000	3,568,000	(3,000)
2004-2005	8,968,000	3,675,000	5,293,000
2005-2006	4,503,000	4,511,000	(8,000)
2006-2007	685,000	707,000	(22,000)
2007-2008	2,777,000	2,787,000	(10,000)
2008-2009	3,286,000	2,593,000	693,000
2009-2010	585,000	812,000	(227,000)
2010-2011	1,150,000	1,575,000	(425,000)
2011-2012	2,107,000	2,814,000	(707,000)
2012-2013	3,414,000	3,633,000	(219,000)
2013-2014	2,942,000	3,916,000	(974,000)
2014-2015	4,177,000	4,292,000	(115,000)
All Years	60,142,542	56,875,542	3,267,000

As shown, overall we have increased our estimates of the program's ultimate losses by $3,267,000 from those displayed in our prior actuarial report dated April 2015. The increase is mainly due to adverse loss development in the 2004-05 program year.

B. FUNDING RATES FOR 2016-17 CLAIMS

Our funding guidelines are displayed as rates per $100 of payroll and dollars for various layers. The funding guidelines include anticipated investment income at 2% per year.

Funding Rate Guidelines for Discounted Claims Incurred in 2016-2017

Layer	Expected	75%	80%	85%	90%
$1M-2M	$0.183	$0.236	$0.255	$0.279	$0.310
$1M-3M	0.291	0.375	0.406	0.443	0.493
$1M-4M	0.343	0.442	0.478	0.522	0.581
$1M-5M	0.367	0.473	0.512	0.559	0.622
$5M-10M	0.120	0.155	0.167	0.183	0.203
$6M-10M	0.093	0.120	0.130	0.142	0.158
$7M-10M	0.069	0.089	0.096	0.105	0.117
$8M-10M	0.044	0.057	0.061	0.067	0.075
$9M-10M	0.022	0.028	0.031	0.034	0.037
$10M-15M	0.102	0.131	0.142	0.155	0.173

Funding Amount Guidelines for Discounted Claims Incurred in 2016-2017

Layer	Expected	75%	80%	85%	90%
$1M-2M	$2,179,000	$2,810,000	$3,036,000	$3,322,000	$3,691,000
$1M-3M	3,465,000	4,465,000	4,834,000	5,274,000	5,870,000
$1M-4M	4,084,000	5,262,000	5,691,000	6,215,000	6,917,000
$1M-5M	4,369,000	5,631,000	6,096,000	6,655,000	7,405,000
$5M-10M	1,429,000	1,845,000	1,988,000	2,179,000	2,417,000
$6M-10M	1,107,000	1,429,000	1,548,000	1,691,000	1,881,000
$7M-10M	821,000	1,060,000	1,143,000	1,250,000	1,393,000
$8M-10M	524,000	679,000	726,000	798,000	893,000
$9M-10M	262,000	333,000	369,000	405,000	441,000
$10M-15M	1,214,000	1,560,000	1,691,000	1,845,000	2,060,000

The following table displays a comparison of the Authority's projected funding rates from current and prior studies by various layers.

Comparison with Prior Review
Undiscounted Expected Funding Rates

Layer	This Review 2016-17	Last Review 2015-16	Percent Change
$1M-2M	$0.203	$0.197	3.0%
$1M-3M	$0.323	$0.313	3.2%
$1M-5M	$0.407	$0.395	3.0%
$5M-10M	$0.133	$0.129	3.1%

As you can see, our projected funding rates for the 2016-17 program year have increased for all layers.

C. FUNDING GUIDELINES

We generally recommend funding of excess general liability programs to the 85% confidence level, with a recommended range of the 80% to 90% confidence levels. We generally consider funding to the 75% confidence level to be marginally acceptable, and to the 95% confidence level to be conservative. However, these should only be considered general guidelines, as we also strongly believe that the confidence level to which any future year is funded should be evaluated in light of the relative certainty of the underlying assumptions, the other budgetary constraints of those contributing to the program, and the relative risk it is believed appropriate to assume at a particular point in time. This means formulating both short-term and long-term funding goals, which may be the same in some years and different in others.

In general, we recommend considerable conservatism in refunding excess contributions, especially in light of the hardship imposed upon the members when assessments are necessary. It is always possible to refund excess contributions later, but contributions that appear to be excess that are refunded too soon may prove to be very difficult to re-collect later. For years for which assessments have not yet been levied, we recommend a staggered schedule of returns that begins when a year reaches a certain level of maturity. For example, the Authority might develop a guideline returning excess contributions on a year five to six years old that is funded above the 90% confidence level, on a year seven to nine years old that is funded above the 85% confidence level, and on a year ten or more years old that is funded above the 80% confidence level. Refunds are made at the discretion of the Board.

We understand the program's outstanding loss and loss adjustment expense liabilities are funded at the 85% discounted confidence level. This target applies to the outstanding liabilities in total, not on an individual program year basis. Funding in excess of the 90% discounted confidence level is available for dividends at the Board's discretion.

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, 2015 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, 2015.

- We were provided with payrolls by City for the 1986-87 through 2014-15 program years. The estimated payroll for 2015-16 and 2016-17 was calculated using a 1.5% trend per year.

- 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 general 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 general 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 general 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 general 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% in the long run.

- We estimate that the costs associated with general liability claims in the $0 to $100,000 per occurrence layer are increasing 0% annually after changes in exposure.

- We estimate that the costs associated with general liability claims in the $100,000 to $1,000,000 per occurrence layer are increasing at 5% 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 from the 2001-02 through 2013-14 program years. 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
- Exposure Development Based on Incurred Losses
- Exposure Development 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
- Expected Loss Development

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.

Authority for California Cities Excess Liability

Projected 2016-17 Funding Guidelines

Layer	Estimated 2016-17 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	$11,905,760	$2,416,869	90.2%	$2,178,754	$2,619,267	$2,809,759	$3,035,969	$3,321,707	$3,690,786	$4,309,885
$1M-3M	11,905,760	3,845,560	90.2%	3,464,576	4,155,110	4,464,660	4,833,739	5,274,252	5,869,540	6,857,718
$1M-4M	11,905,760	4,524,189	90.2%	4,083,676	4,905,173	5,262,346	5,690,953	6,214,807	6,917,247	8,072,105
$1M-5M	11,905,760	4,845,644	90.2%	4,369,414	5,238,534	5,631,424	6,095,749	6,655,320	7,405,383	8,643,582
$5M-10M	11,905,760	1,583,466	90.2%	1,428,691	1,714,429	1,845,393	1,988,262	2,178,754	2,416,869	2,821,665
$6M-10M	11,905,760	1,226,293	90.2%	1,107,236	1,333,445	1,428,691	1,547,749	1,690,618	1,881,110	2,190,660
$7M-10M	11,905,760	904,838	90.2%	821,497	988,178	1,059,613	1,142,953	1,250,105	1,392,974	1,619,183
$8M-10M	11,905,760	583,382	90.2%	523,853	631,005	678,628	726,251	797,686	892,932	1,035,801
$9M-10M	11,905,760	285,738	90.2%	261,927	309,550	333,361	369,079	404,796	440,513	523,853
$10M-15M	11,905,760	1,345,351	90.2%	1,214,388	1,452,503	1,559,655	1,690,618	1,845,393	2,059,696	2,404,964

(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 2016-17 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	$0.203	90.2%	$0.183	$0.220	$0.236	$0.255	$0.279	$0.310	$0.362
$1M-3M	0.323	90.2%	0.291	0.349	0.375	0.406	0.443	0.493	0.576
$1M-4M	0.380	90.2%	0.343	0.412	0.442	0.478	0.522	0.581	0.678
$1M-5M	0.407	90.2%	0.367	0.440	0.473	0.512	0.559	0.622	0.726
$5M-10M	0.133	90.2%	0.120	0.144	0.155	0.167	0.183	0.203	0.237
$6M-10M	0.103	90.2%	0.093	0.112	0.120	0.130	0.142	0.158	0.184
$7M-10M	0.076	90.2%	0.069	0.083	0.089	0.096	0.105	0.117	0.136
$8M-10M	0.049	90.2%	0.044	0.053	0.057	0.061	0.067	0.075	0.087
$9M-10M	0.024	90.2%	0.022	0.026	0.028	0.031	0.034	0.037	0.044
$10M-15M	0.113	90.2%	0.102	0.122	0.131	0.142	0.155	0.173	0.202

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:	$0.884
(C)	Selected Base Loss Rate ($100K - $1M Layer):	$0.884

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Funding Guidelines for Outstanding Losses
as of December 31, 2015 and June 30, 2016

		December 31, 2015	June 30, 2016
(A)	Estimated Ultimate Losses Incurred as of:	$62,431,000	$64,720,000
(B)	Estimated Paid Losses as of:	45,215,000	46,846,000
(C)	Estimated Liability for Claims Outstanding as of:	$17,216,000	$17,874,000
(D)	Outstanding Liability Discount Factor:	93.3%	92.2%
(E)	Discounted Outstanding Liability for Claims as of:	$16,063,000	$16,483,000
(F)	Risk Margin at 85% Confidence Level:	7,309,000	7,500,000
(G)	Required Funding at the 85% confidence Level:	$23,372,000	$23,983,000

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	2.0% Discounted Reserve	Discounted Factor
1987-1988	29.0	1.000	0.0%	0.0%	0.0%	100.0%
1988-1989	28.0	1.000	0.0%	0.0%	0.0%	100.0%
1989-1990	27.0	1.000	0.0%	0.0%	0.0%	100.0%
1990-1991	26.0	1.000	0.0%	0.0%	0.0%	100.0%
1991-1992	25.0	1.000	0.0%	0.0%	0.0%	100.0%
1992-1993	24.0	1.000	0.0%	0.0%	0.0%	83.4%
1993-1994	23.0	1.000	0.0%	0.1%	0.1%	83.4%
1994-1995	22.0	1.001	0.0%	0.1%	0.1%	90.1%
1995-1996	21.0	1.001	0.1%	0.2%	0.2%	95.2%
1996-1997	20.0	1.002	0.1%	0.3%	0.3%	93.6%
1997-1998	19.0	1.003	0.2%	0.5%	0.5%	94.5%
1998-1999	18.0	1.005	0.2%	0.7%	0.7%	94.9%
1999-2000	17.0	1.007	0.3%	1.0%	0.9%	94.9%
2000-2001	16.0	1.010	0.5%	1.5%	1.4%	94.7%
2001-2002	15.0	1.015	0.6%	2.1%	2.0%	94.8%
2002-2003	14.0	1.021	0.9%	2.9%	2.8%	94.8%
2003-2004	13.0	1.030	0.9%	3.8%	3.6%	94.4%
2004-2005	12.0	1.040	0.9%	4.8%	4.5%	93.9%
2005-2006	11.0	1.050	2.8%	7.6%	7.2%	94.6%
2006-2007	10.0	1.082	2.7%	10.2%	9.7%	94.4%
2007-2008	9.0	1.114	4.3%	14.5%	13.7%	94.4%
2008-2009	8.0	1.170	7.0%	21.6%	20.4%	94.7%
2009-2010	7.0	1.275	12.5%	34.1%	32.4%	95.1%
2010-2011	6.0	1.517	22.0%	56.1%	53.5%	95.5%
2011-2012	5.0	2.276	18.8%	74.9%	71.1%	95.0%
2012-2013	4.0	3.983	16.7%	91.6%	86.3%	94.2%
2013-2014	3.0	11.949	7.5%	99.2%	92.1%	92.9%
2014-2015	2.0	119.490	0.8%	100.0%	91.1%	91.1%
2015-2016	1.0	2,389.800	0.0%	100.0%	89.3%	89.3%

Discount Factor for Future Funding: 0.902

Accident Year	Accident Year Paid Loss Development Factor	Full Value Reserve	2.0% Discounted Reserve	12/31/15 Outstanding Loss	Discounted Factor	12/31/15 Discounted Outstanding Loss	6/30/16 Outstanding Loss	Discounted Factor	6/30/16 Discounted Outstanding Loss
1986-1987	1.000	0.00%	0.00%	0	100.0%	0	0	100.0%	0
1987-1988	1.000	0.00%	0.00%	0	91.7%	0	0	83.4%	0
1988-1989	1.000	0.00%	0.00%	0	83.4%	0	0	83.4%	0
1989-1990	1.000	0.00%	0.00%	0	86.8%	0	0	90.1%	0
1986-1987	1.000	0.00%	0.00%	0	100.0%	0	0	100.0%	0
1987-1988	1.000	0.00%	0.00%	0	91.7%	0	0	83.4%	0
1988-1989	1.000	0.02%	0.02%	0	83.4%	0	0	83.4%	0
1989-1990	1.000	0.04%	0.04%	0	86.8%	0	0	90.1%	0
1990-1991	1.001	0.06%	0.06%	0	92.7%	0	0	95.2%	0
1991-1992	1.001	0.10%	0.10%	1,809	94.4%	1,708	1,809	93.6%	1,693
1992-1993	1.002	0.20%	0.20%	6,442	94.1%	6,059	6,442	94.5%	6,088
1993-1994	1.003	0.30%	0.29%	832	94.7%	788	832	94.9%	790
1994-1995	1.005	0.50%	0.49%	1,808	94.9%	1,716	1,808	94.9%	1,716
1995-1996	1.007	0.70%	0.68%	859	94.8%	814	859	94.7%	813
1996-1997	1.010	0.99%	0.97%	2,030	94.8%	1,923	1,015	94.8%	962
1997-1998	1.015	1.48%	1.44%	4,537	94.8%	4,301	3,026	94.8%	2,869
2003-2004	1.021	2.06%	2.00%	38,915	94.6%	36,814	32,572	94.4%	30,748
2004-2005	1.030	2.91%	2.84%	1,314,378	94.2%	1,237,487	1,155,338	93.9%	1,084,863
2005-2006	1.040	3.85%	3.74%	45,247	94.3%	42,645	41,808	94.6%	39,551
2006-2007	1.050	4.76%	4.61%	63,902	94.5%	60,387	59,684	94.4%	56,342
2007-2008	1.082	7.58%	7.36%	425,867	94.4%	402,018	371,356	94.4%	350,560
2008-2009	1.114	10.23%	9.94%	98,065	94.6%	92,720	83,355	94.7%	78,937
2009-2010	1.170	14.53%	14.10%	585,000	94.9%	555,165	514,215	95.1%	489,018
2010-2011	1.517	34.08%	33.35%	1,150,000	95.3%	1,095,950	939,550	95.5%	897,270
2011-2012	2.276	56.06%	54.94%	2,104,726	95.3%	2,004,752	1,692,200	95.0%	1,607,590
2012-2013	3.983	74.89%	73.11%	1,963,997	94.6%	1,857,941	1,716,533	94.2%	1,616,974
2013-2014	11.949	91.63%	89.08%	2,942,000	93.6%	2,752,241	2,674,278	92.9%	2,484,404
2014-2015	119.490	99.16%	95.70%	4,177,000	92.0%	3,842,840	4,018,274	91.1%	3,660,648
2015-2016	2,389.800	99.96%	95.58%	2,288,500	90.2%	2,064,227	4,558,692	89.3%	4,070,912
			Total	17,215,914		16,062,496	17,873,647		16,482,748
		Discount Factor for Outstanding:		93.3%			92.2%		

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Confidence Level Factors

Probability	Projected Funding Factor	Outstanding Liability Factor
95	1.978	1.848
90	1.695	1.603
85	1.523	1.455
80	1.394	1.343
75	1.289	1.253
70	1.200	1.175
65	1.121	1.107
60	1.049	1.045
55	0.983	0.987
50	0.920	0.933
45	0.861	0.881
40	0.801	0.829
35	0.743	0.778
30	0.684	0.727
25	0.622	0.672

Exhibit 5

Authority for California Cities Excess Liability
ACCEL Pooled Layer

Large Losses

Member (A)	Date of Loss (B)	Fiscal Year (C)	Status (D)	Paid Losses (E)	Reported Incurred Losses (F)
Santa Monica	8/9/05	2005-06	Closed	4,619,311	4,619,311
Anaheim	11/7/05	2005-06	Closed	1,940,625	1,940,625
Santa Monica	9/5/07	2007-08	Closed	1,583,936	1,583,936
Bakersfield	11/24/07	2007-08	Open	208,548	1,250,000
Ontario	3/20/08	2007-08	Closed	0	1,000,031
Burbank	4/26/08	2007-08	Open	3,959,325	6,164,692
Burbank	4/26/08	2007-08	Open	112,576	1,800,000
Bakersfield	7/10/08	2008-09	Closed	2,104,604	2,104,604
Anaheim	10/28/08	2008-09	Closed	1,832,712	1,832,712
Burbank	4/10/09	2008-09	Open	1,989,491	1,999,149
Burbank	5/1/09	2008-09	Open	4,522,660	4,690,490
Modesto	12/30/10	2010-11	Open	486,732	1,383,717
Santa Cruz	3/25/11	2010-11	Closed	1,203,470	1,203,470
Anaheim	7/21/12	2012-13	Open	537,706	1,000,000
Visalia	10/26/12	2012-13	Open	225,943	1,000,000
Santa Monica	11/20/12	2012-13	Open	42,929	1,180,535
Santa Monica	9/24/13	2013-14	Open	11,312	1,075,000
Ontario	11/9/13	2013-14	Open	973,478	1,000,149
Santa Monica	5/26/14	2013-14	Open	999,078	1,110,000
Burbank	11/18/14	2014-15	Open	76	1,050,000
Santa Cruz	4/26/15	2014-15	Open	7,682	1,000,051

Authority for California Cities Excess Liability
ACCEL Layer

Outstanding Liability at December 31, 2015

Accident Year	Ultimate Losses (A)	12/31/15 Reported Loss (B)	12/31/15 IBNR (C)	12/31/15 Paid Loss (D)	12/31/15 Case Reserves (E)	12/31/15 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
1986-1987	0	0	0	0	0	0
1987-1988	724,542	724,542	0	724,542	0	0
1988-1989	0	0	0	0	0	0
1989-1990	0	0	0	0	0	0
1990-1991	0	0	0	0	0	0
1991-1992	2,503,000	2,501,191	1,809	2,501,191	0	1,809
1992-1993	10,545,000	10,538,558	6,442	10,538,558	0	6,442
1993-1994	878,000	877,168	832	877,168	0	832
1994-1995	1,441,000	1,439,192	1,808	1,439,192	0	1,808
1995-1996	913,000	912,141	859	912,141	0	859
1996-1997	2,391,000	2,388,970	2,030	2,388,970	0	2,030
1997-1998	2,088,000	2,083,463	4,537	2,083,463	0	4,537
2003-2004	3,565,000	3,526,085	38,915	3,526,085	0	38,915
2004-2005	8,968,000	8,903,622	64,378	7,653,622	1,250,000	1,314,378
2005-2006	4,503,000	4,457,753	45,247	4,457,753	0	45,247
2006-2007	685,000	621,098	63,902	621,098	0	63,902
2007-2008	2,777,000	2,706,133	70,867	2,351,133	355,000	425,867
2008-2009	3,286,000	3,187,935	98,065	3,187,935	0	98,065
2009-2010	585,000	0	585,000	0	0	585,000
2010-2011	1,150,000	0	1,150,000	0	0	1,150,000
2011-2012	2,107,000	2,274	2,104,726	2,274	0	2,104,726
2012-2013	3,414,000	1,450,003	1,963,997	1,450,003	0	1,963,997
2013-2014	2,942,000	0	2,942,000	0	0	2,942,000
2014-2015	4,177,000	0	4,177,000	0	0	4,177,000
2015-2016	2,288,500	0	2,288,500	0	0	2,288,500
Totals	$61,931,042	$46,320,128	$15,610,914	$44,715,128	$1,605,000	$17,215,914
Grand Totals	$62,431,042	$46,820,128	$15,610,914	$45,215,128	$1,605,000	$17,215,914

Notes:

(A) From Appendix A, Page 3, Column (E).
(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, 2016

Accident Year	Ultimate Losses (A)	6/30/2016 Reported Loss (B)	6/30/2016 IBNR (C)	6/30/2016 Paid Loss (D)	6/30/2016 Case Reserves (E)	6/30/2016 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
1986-1987	0	0	0	0	0	0
1987-1988	724,542	724,542	0	724,542	0	0
1988-1989	0	0	0	0	0	0
1989-1990	0	0	0	0	0	0
1990-1991	0	0	0	0	0	0
1991-1992	2,503,000	2,503,000	0	2,501,191	1,809	1,809
1992-1993	10,545,000	10,545,000	0	10,538,558	6,442	6,442
1993-1994	878,000	878,000	0	877,168	832	832
1994-1995	1,441,000	1,441,000	0	1,439,192	1,808	1,808
1995-1996	913,000	913,000	0	912,141	859	859
1996-1997	2,391,000	2,391,000	0	2,389,985	1,015	1,015
1997-1998	2,088,000	2,088,000	0	2,084,974	3,026	3,026
2003-2004	3,565,000	3,536,631	28,369	3,532,428	4,203	32,572
2004-2005	8,968,000	8,908,901	59,099	7,812,662	1,096,239	1,155,338
2005-2006	4,503,000	4,461,192	41,808	4,461,192	0	41,808
2006-2007	685,000	625,316	59,684	625,316	0	59,684
2007-2008	2,777,000	2,716,550	60,450	2,405,644	310,906	371,356
2008-2009	3,286,000	3,203,920	82,080	3,202,645	1,275	83,355
2009-2010	585,000	70,785	514,215	70,785	0	514,215
2010-2011	1,150,000	317,400	832,600	210,450	106,950	939,550
2011-2012	2,107,000	583,178	1,523,822	414,800	168,378	1,692,200
2012-2013	3,414,000	2,031,346	1,382,654	1,697,467	333,879	1,716,533
2013-2014	2,942,000	547,212	2,394,788	267,722	279,490	2,674,278
2014-2015	4,177,000	505,417	3,671,583	158,726	346,691	4,018,274
2015-2016	4,577,000	82,386	4,494,614	18,308	64,078	4,558,692
Totals	$64,219,542	$49,073,776	$15,145,766	$46,345,895	$2,727,881	$17,873,647
Grand Totals	$64,719,542	$49,573,776	$15,145,766	$46,845,895	$2,727,881	$17,873,647

Notes:
(A) From Appendix A, Page 3, Column (E).
(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)
1986-1987	0	0		0	0
1987-1988	500,000	500,000		500,000	500,000
1988-1989	0	0		0	0
1989-1990	0	0		0	0
Totals	$500,000	$500,000		$500,000	$500,000
1986-1987	0	0		0	0
1987-1988	724,542	724,542		724,542	724,542
1988-1989	0	0		0	0
1989-1990	0	0		0	0
1990-1991	0	0		0	0
1991-1992	2,501,191	2,503,692		2,503,000	2,503,000
1992-1993	10,538,558	10,549,097		10,548,000	10,545,000
1993-1994	877,168	878,045		878,000	878,000
1994-1995	1,439,192	1,440,631		1,442,000	1,441,000
1995-1996	912,141	913,053		914,000	913,000
1996-1997	2,388,970	2,393,748		2,393,000	2,391,000
1997-1998	2,083,463	2,089,713		2,090,000	2,088,000
2003-2004	3,564,872	3,631,868	3,537,000	3,568,000	3,565,000
2004-2005	9,010,465	7,959,767	8,926,000	3,675,000	8,968,000
2005-2006	4,515,704	4,680,641	4,491,000	4,511,000	4,503,000
2006-2007	630,414	672,028	663,000	707,000	685,000
2007-2008	2,760,256	2,619,162	2,766,000	2,787,000	2,777,000
2008-2009	3,283,573	3,729,884	3,286,000	2,593,000	3,286,000
2009-2010	0	0	132,000	812,000	585,000
2010-2011	0	0	300,000	1,575,000	1,150,000
2011-2012	2,795	5,176	693,000	2,814,000	2,107,000
2012-2013	2,673,806	5,775,362	3,195,000	3,633,000	3,414,000
2013-2014	0	0	2,942,000	3,916,000	2,942,000
2014-2015	0	0	4,177,000	4,292,000	4,177,000
2015-2016	0	0	4,577,000		4,577,000
Totals	$47,907,110	$50,566,409	$39,685,000	$56,375,542	$64,219,542
Grand Totals	$48,407,110	$51,066,409		$56,875,542	$64,719,542

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).

Authority for California Cities Excess Liability
ACCEL Layer

Reported Loss Development

Accident Year	Reported Losses as of 12/31/15 (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
1986-1987	0	1.000	0
1987-1988	724,542	1.000	724,542
1988-1989	0	1.000	0
1989-1990	0	1.000	0
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	1.011	3,564,872
2004-2005	8,903,622	1.012	9,010,465
2005-2006	4,457,753	1.013	4,515,704
2006-2007	621,098	1.015	630,414
2007-2008	2,706,133	1.020	2,760,256
2008-2009	3,187,935	1.030	3,283,573
2009-2010	0	1.040	0
2010-2011	0	1.092	0
2011-2012	2,274	1.229	2,795
2012-2013	1,450,003	1.844	2,673,806
2013-2014	0	3.688	0
2014-2015	0	25.816	0
2015-2016	0	516.320	0
Totals	$46,320,128		$47,907,110
Grand Totals	$46,820,128		$48,407,110

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 12/31/15 (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
1986-1987	0	1.000	0
1987-1988	724,542	1.000	724,542
1988-1989	0	1.000	0
1989-1990	0	1.000	0
1990-1991	0	1.001	0
1991-1992	2,501,191	1.001	2,503,692
1992-1993	10,538,558	1.001	10,549,097
1993-1994	877,168	1.001	878,045
1994-1995	1,439,192	1.001	1,440,631
1995-1996	912,141	1.001	913,053
1996-1997	2,388,970	1.002	2,393,748
1997-1998	2,083,463	1.003	2,089,713
2003-2004	3,526,085	1.030	3,631,868
2004-2005	7,653,622	1.040	7,959,767
2005-2006	4,457,753	1.050	4,680,641
2006-2007	621,098	1.082	672,028
2007-2008	2,351,133	1.114	2,619,162
2008-2009	3,187,935	1.170	3,729,884
2009-2010	0	1.275	0
2010-2011	0	1.517	0
2011-2012	2,274	2.276	5,176
2012-2013	1,450,003	3.983	5,775,362
2013-2014	0	11.949	0
2014-2015	0	119.490	0
2015-2016	0	2,389.800	0
Totals	$44,715,128		$50,566,409
Grand Totals	$45,215,128		$51,066,409

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 2013-14 $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 12/31/15 (I)	Program Year Reported Losses at 12/31/15 (J)	Program Year Estimated Ultimate Losses (K)
2003-2004	$0.884	0.601	0.531	0.230	0.122	$8,308,977	$1,015,000	1.1%	$11,044	$3,526,085	$3,537,000
2004-2005	0.884	0.625	0.552	0.365	0.202	9,374,402	1,889,000	1.2%	22,399	8,903,622	8,926,000
2005-2006	0.884	0.650	0.574	0.460	0.264	9,850,045	2,602,000	1.3%	33,392	4,457,753	4,491,000
2006-2007	0.884	0.676	0.597	0.460	0.275	10,305,894	2,831,000	1.5%	41,837	621,098	663,000
2007-2008	0.884	0.703	0.621	0.460	0.286	10,609,082	3,031,000	2.0%	59,431	2,706,133	2,766,000
2008-2009	0.884	0.731	0.646	0.460	0.297	11,307,152	3,360,000	2.9%	97,864	3,187,935	3,286,000
2009-2010	0.884	0.760	0.672	0.460	0.309	11,075,957	3,423,000	3.8%	131,654	0	132,000
2010-2011	0.884	0.790	0.699	0.460	0.321	11,097,108	3,566,000	8.4%	300,432	0	300,000
2011-2012	0.884	0.822	0.727	0.460	0.334	11,095,468	3,708,000	18.6%	690,913	2,274	693,000
2012-2013	0.884	0.855	0.756	0.460	0.348	10,966,401	3,812,000	45.8%	1,744,755	1,450,003	3,195,000
2013-2014	0.884	0.889	0.786	0.460	0.362	11,164,240	4,036,000	72.9%	2,941,640	0	2,942,000
2014-2015	0.884	0.925	0.817	0.460	0.376	11,556,443	4,345,000	96.1%	4,176,694	0	4,177,000
2015-2016	0.884	0.962	0.850	0.460	0.391	11,729,800	4,586,000	99.8%	4,577,118	0	4,577,000

Authority for California Cities Excess Liability
ACCEL Layer

Expected Loss Rates

Accident Year	Exposure	Ultimate Loss	On-Level Losses	Loss Rate	Loss Rate Trend	Trended Loss Rate
1986-1987	1,008,086	0	0	0.000	2.279	0.000
1987-1988	998,109	500,000	500,000	0.501	2.191	1.098
1988-1989	1,146,083	0	0	0.000	2.107	0.000
1989-1990	1,208,157	0	0	0.000	2.026	0.000
Totals	$4,360,436	$500,000	$500,000	0.115		0.275
1986-1987	3,105,940	0	0	0.000	3.655	0.000
1987-1988	3,670,691	724,542	724,542	0.197	3.514	0.692
1988-1989	4,030,134	0	0	0.000	3.379	0.000
1989-1990	4,399,059	0	0	0.000	3.249	0.000
1990-1991	4,875,491	0	0	0.000	3.124	0.000
1991-1992	5,277,443	2,503,000	2,503,000	0.474	3.004	1.424
1992-1993	5,310,299	10,545,000	10,545,000	1.986	2.888	5.736
1993-1994	5,635,666	878,000	878,000	0.156	2.777	0.433
1994-1995	6,004,411	1,441,000	1,441,000	0.240	2.670	0.641
1995-1996	6,102,690	913,000	913,000	0.150	2.567	0.385
1996-1997	6,502,472	2,391,000	2,391,000	0.368	2.468	0.908
1997-1998	6,972,985	2,088,000	2,088,000	0.299	2.373	0.710
2003-2004	9,103,267	3,565,000	3,565,000	0.392	1.667	0.653
2004-2005	9,374,402	8,968,000	8,968,000	0.957	1.603	1.534
2005-2006	9,850,045	4,503,000	4,503,000	0.457	1.541	0.704
2006-2007	10,305,894	685,000	685,000	0.066	1.482	0.098
2007-2008	10,609,082	2,777,000	2,777,000	0.262	1.425	0.373
2008-2009	11,307,152	3,286,000	3,286,000	0.291	1.370	0.399
2009-2010	11,075,957	585,000	585,000	0.053	1.317	0.070
2010-2011	11,097,108	1,150,000	1,150,000	0.104	1.266	0.132
2011-2012	11,095,468	2,107,000	2,107,000	0.190	1.217	0.231
2012-2013	10,966,401	3,414,000	3,414,000	0.311	1.170	0.364
2013-2014	11,164,240	2,942,000	2,942,000	0.264	1.125	0.297
2014-2015	11,556,443	4,177,000	4,177,000	0.361	1.082	0.391
2015-2016	11,729,800	4,577,000	4,577,000	0.390	1.040	0.406
Totals	$201,122,540	$64,219,542	$64,219,542	0.319		0.663
86/87-97/98	61,887,280	21,483,542	21,483,542	0.347		0.911
				Selected Trend:	1.040	

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 2015-2016 Level (F)
2005-2006	6,432,000	12,608,058	1.480	0.755
2006-2007	5,500,000	12,872,062	1.423	0.608
2007-2008	10,273,000	12,932,471	1.369	1.087
2008-2009	6,306,000	13,444,204	1.316	0.617
2009-2010	4,996,000	12,848,110	1.265	0.492
2010-2011	4,548,000	12,561,926	1.217	0.441
2011-2012	6,489,000	12,249,397	1.170	0.620
2012-2013	9,157,000	11,810,814	1.125	0.872
2013-2014	11,232,000	11,733,616	1.082	1.036
2014-2015	11,337,000	11,845,354	1.040	0.995
			Average 2005-06 - 2014-15:	0.752
			Average 2008-09 - 2014-15:	0.725
			Average 2012-13 - 2014-15:	0.968
			Prior 2014-2015 Rate :	0.825
			Selected 2015-2016 Rate :	0.850
			Trend Factor to 2016-2017 :	1.040
			Selected 2016-2017 Rate :	$0.884

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)
2005-2006	$6,432,264	$5,160,131	$6,433,309	$5,205,875	$6,431,994	$6,432,000
2006-2007	5,499,771	4,571,450	5,500,940	4,621,733	5,500,000	5,500,000
2007-2008	10,273,254	6,120,132	10,277,186	6,441,756	10,272,996	10,273,000
2008-2009	6,305,648	6,455,633	6,304,843	6,439,441	6,305,992	6,306,000
2009-2010	4,894,666	5,097,152	4,896,331	5,079,648	4,995,994	4,996,000
2010-2011	4,363,314	3,543,829	4,732,240	4,994,441	5,634,729	4,548,000
2011-2012	6,243,454	6,399,457	6,734,219	7,611,824	7,006,230	6,489,000
2012-2013	9,688,919	8,748,831	9,450,973	8,863,879	8,447,804	9,157,000
2013-2014	13,393,677	19,706,118	11,442,648	11,022,262	12,099,048	11,232,000
2014-2015	21,019,406	56,244,422	12,195,010	10,479,533	10,922,350	11,337,000
Totals						$76,270,000

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 12/31/15 (B)	Reported Loss Development Factor (C)	Ultimate $100K - $1M Losses (D)	$100K - $1M Reported Losses of 12/31/15 (E)	Reported Loss Development Factor (F)	Ultimate $100K - $1M Losses (G)
2005-2006	$6,349,718	1.013	$6,432,264	$6,349,718	1.013	$6,432,264
2006-2007	5,418,494	1.015	5,499,771	5,418,494	1.015	5,499,771
2007-2008	10,071,818	1.020	10,273,254	10,071,818	1.020	10,273,254
2008-2009	6,121,988	1.030	6,305,648	6,121,988	1.030	6,305,648
2009-2010	4,706,410	1.040	4,894,666	4,706,410	1.040	4,894,666
2010-2011	3,995,709	1.092	4,363,314	3,995,709	1.092	4,363,314
2011-2012	5,080,109	1.229	6,243,454	5,080,109	1.229	6,243,454
2012-2013	6,709,778	1.444	9,688,919	6,709,778	1.444	9,688,919
2013-2014	7,135,683	1.877	13,393,677	7,135,683	1.877	13,393,677
2014-2015	4,665,795	4.505	21,019,406	4,665,795	4.505	21,019,406
Totals	$60,255,502		$88,114,373	$60,255,502		$88,114,373

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 12/31/15 (B)	Paid Loss Development Factor (C)	Ultimate $100K - $1M Losses (D)	$100K - $1M Paid Losses of 12/31/15 (E)	Paid Loss Development Factor (F)	Ultimate $100K - $1M Losses (G)
2005-2006	$4,980,821	1.036	$5,160,131	$4,980,821	1.036	$5,160,131
2006-2007	4,324,929	1.057	4,571,450	4,324,929	1.057	4,571,450
2007-2008	5,651,091	1.083	6,120,132	5,651,091	1.083	6,120,132
2008-2009	5,733,244	1.126	6,455,633	5,733,244	1.126	6,455,633
2009-2010	4,230,002	1.205	5,097,152	4,230,002	1.205	5,097,152
2010-2011	2,556,875	1.386	3,543,829	2,556,875	1.386	3,543,829
2011-2012	3,298,689	1.940	6,399,457	3,298,689	1.940	6,399,457
2012-2013	3,006,471	2.910	8,748,831	3,006,471	2.910	8,748,831
2013-2014	3,385,931	5.820	19,706,118	3,385,931	5.820	19,706,118
2014-2015	966,399	58.200	56,244,422	966,399	58.200	56,244,422
Totals	$38,134,452		$122,047,155	$38,134,452		$122,047,155

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 12/31/15 (B)	Loss Development Factor (C)	Percentage of Losses Yet to Be Reported (D)	Program Rate (E)	Incurred but not Reported (IBNR) (F)	Ultimate Program Losses (G)
2005-2006	12,608,058	$6,349,718	1.013	0.013	$0.510	$83,591	$6,433,309
2006-2007	12,872,062	5,418,494	1.015	0.015	0.427	82,446	5,500,940
2007-2008	12,932,471	10,071,818	1.020	0.020	0.794	205,368	10,277,186
2008-2009	13,444,204	6,121,988	1.030	0.029	0.469	182,855	6,304,843
2009-2010	12,848,110	4,706,410	1.040	0.038	0.389	189,921	4,896,331
2010-2011	12,561,926	3,995,709	1.092	0.084	0.698	736,531	4,732,240
2011-2012	12,249,397	5,080,109	1.229	0.186	0.726	1,654,110	6,734,219
2012-2013	11,810,814	6,709,778	1.444	0.307	0.756	2,741,195	9,450,973
2013-2014	11,733,616	7,135,683	1.877	0.467	0.786	4,306,965	11,442,648
2014-2015	11,845,354	4,665,795	4.505	0.778	0.817	7,529,215	12,195,010
Totals	$124,906,012	$60,255,502				$17,712,197	$77,967,699

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) 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.

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 12/31/15 (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)
2004-2005	0		1.028	0.027	$0.552	$0	
2005-2006	12,608,058	4,980,821	1.036	0.035	0.510	225,054	5,205,875
2006-2007	12,872,062	4,324,929	1.057	0.054	0.427	296,804	4,621,733
2007-2008	12,932,471	5,651,091	1.083	0.077	0.794	790,665	6,441,756
2008-2009	13,444,204	5,733,244	1.126	0.112	0.469	706,197	6,439,441
2009-2010	12,848,110	4,230,002	1.205	0.170	0.389	849,646	5,079,648
2010-2011	12,561,926	2,556,875	1.386	0.278	0.698	2,437,566	4,994,441
2011-2012	12,249,397	3,298,689	1.940	0.485	0.726	4,313,135	7,611,824
2012-2013	11,810,814	3,006,471	2.910	0.656	0.756	5,857,408	8,863,879
2013-2014	11,733,616	3,385,931	5.820	0.828	0.786	7,636,331	11,022,262
2014-2015	11,845,354	966,399	58.200	0.983	0.817	9,513,134	10,479,533
Totals	$124,906,012	$38,134,452				$32,625,940	$70,760,392

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) 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.

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)	100K - $1M Loss Rate (F)	Factor to SIR (G)	Program Loss Rate (H)
2004-2005	0		1.539			$0.552	1.000	$0.552
2005-2006	12,608,058	6,432,000	1.480	9,519,360	0.755	0.510	1.000	0.510
2006-2007	12,872,062	5,500,000	1.423	7,826,500	0.608	0.427	1.000	0.427
2007-2008	12,932,471	10,273,000	1.369	14,063,737	1.087	0.794	1.000	0.794
2008-2009	13,444,204	6,306,000	1.316	8,298,696	0.617	0.469	1.000	0.469
2009-2010	12,848,110	4,996,000	1.265	6,319,940	0.492	0.389	1.000	0.389
2010-2011	12,561,926	4,363,000	1.217	5,309,771	0.423	0.698	1.000	0.698
2011-2012	12,249,397	6,243,000	1.170	7,304,310	0.596	0.726	1.000	0.726
2012-2013	11,810,814	9,219,000	1.125	10,371,375	0.878	0.756	1.000	0.756
2013-2014	11,733,616	11,306,000	1.082	12,233,092	1.043	0.786	1.000	0.786
2014-2015	11,845,354	11,306,000	1.040	11,758,240	0.993	0.817	1.000	0.817
Total/Avg	$124,906,012	$75,944,000		$93,005,021	$0.745			
09/10-13/14	61,203,863	36,127,000		41,538,488	$0.679			
10/11-14/15	60,201,107	42,437,000		46,976,788	$0.780			
				Selected $100K - $1M Rate:	$0.850			
				Prior:	$0.825			

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 2009-2010 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 An

Frequency and Severity Method

Accident Year	Ultimate Program Severity (A)	Ultimate Claims (B)	Ultimate Program Losses (C)
2005-2006	$238,222	27	$6,431,994
2006-2007	220,000	25	5,500,000
2007-2008	270,342	38	10,272,996
2008-2009	225,214	28	6,305,992
2009-2010	146,941	34	4,995,994
2010-2011	194,301	29	5,634,729
2011-2012	200,178	35	7,006,230
2012-2013	206,044	41	8,447,804
2013-2014	212,264	57	12,099,048
2014-2015	218,447	50	10,922,350
Total		364	$77,617,137

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)
2005-2006	$6,432,000	27	$238,222	1.340	$319,217	$238,222	1.000	$238,222
2006-2007	5,500,000	25	220,000	1.301	286,220	220,000	1.000	220,000
2007-2008	10,273,000	38	270,342	1.264	341,712	270,342	1.000	270,342
2008-2009	6,306,000	28	225,214	1.227	276,338	225,214	1.000	225,214
2009-2010	4,996,000	34	146,941	1.192	175,154	146,941	1.000	146,941
2010-2011	4,548,000	29	156,828	1.158	181,607	194,301	1.000	194,301
2011-2012	6,489,000	35	185,400	1.124	208,390	200,178	1.000	200,178
2012-2013	9,157,000	41	223,341	1.092	243,888	206,044	1.000	206,044
2013-2014	11,232,000	57	197,053	1.060	208,876	212,264	1.000	212,264
2014-2015	11,337,000	50	226,740	1.030	233,542	218,447	1.000	218,447

Average $100K - $1M Severity:	$247,494
Average 08/09-13/14 $100K - $1M Severity:	$215,709
Average 09/10-14/15 $100K - $1M Severity:	$208,576
Selected $100K - $1M Severity:	$225,000
Prior:	$260,000

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)
2005-2006	27	28	27	1,260.806	0.021	1.105	0.023
2006-2007	25	26	25	1,287.206	0.019	1.094	0.021
2007-2008	38	34	38	1,293.247	0.029	1.083	0.031
2008-2009	28	29	28	1,344.420	0.021	1.072	0.023
2009-2010	34	38	34	1,284.811	0.026	1.062	0.028
2010-2011	29	32	29	1,256.193	0.023	1.051	0.024
2011-2012	35	39	35	1,224.940	0.029	1.041	0.030
2012-2013	41	48	41	1,181.081	0.035	1.030	0.036
2013-2014	57	82	57	1,173.362	0.049	1.020	0.050
2014-2015	62	0	50	1,184.535	0.042	1.010	0.042
Total	376	356	364	12,490.601			0.031

(H) Selected 2015-2016 Frequency: 0.038

	Program Year:	2015-2016	2016-2017
(I)	Trend Factor:	1.000	1.010
(J)	Selected Frequency:	0.038	0.038
(K)	Composite Exposure:	1,172.980	1,190.576
(L)	Ultimate Claims:	45	45

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 .038 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 12/31/2015 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2005-2006	27	1.017	27	0.024
2006-2007	24	1.022	25	0.021
2007-2008	37	1.032	38	0.032
2008-2009	27	1.042	28	0.022
2009-2010	32	1.052	34	0.028
2010-2011	27	1.063	29	0.024
2011-2012	33	1.074	35	0.030
2012-2013	36	1.128	41	0.036
2013-2014	46	1.241	57	0.050
2014-2015	25	2.482	62	0.053
Total	314		376	0.032

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 12/31/2015 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2005-2006	26	1.061	28	0.025
2006-2007	24	1.082	26	0.022
2007-2008	31	1.109	34	0.028
2008-2009	25	1.164	29	0.023
2009-2010	31	1.222	38	0.031
2010-2011	24	1.344	32	0.027
2011-2012	23	1.680	39	0.033
2012-2013	19	2.520	48	0.042
2013-2014	13	6.300	82	0.071
2014-2015	0	31.500	0	
Total	216		356	0.030

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
1994-1995				
1995-1996				
1996-1997				
1997-1998				
1998-1999				
1999-2000				
2000-2001				
2001-2002				
2002-2003				
2003-2004				
2004-2005				
2005-2006	12,608,058	6,432,000	0.510	0.755
2006-2007	12,872,062	5,500,000	0.427	0.608
2007-2008	12,932,471	10,273,000	0.794	1.087
2008-2009	13,444,204	6,306,000	0.469	0.617
2009-2010	12,848,110	4,996,000	0.389	0.492
2010-2011	12,561,926	4,628,000	0.368	0.448
2011-2012	12,249,397	6,630,000	0.541	0.633
2012-2013	11,810,814	9,692,000	0.821	0.923
2013-2014	11,733,616	11,719,000	0.999	1.080
2014-2015	11,845,354	11,681,000	0.986	1.026

Exponential Trends

Years	R-square	Fitted Trend
05/06-12/13	0.038	1.024
10/11-14/15	0.893	1.295
08/09-14/15	0.784	1.192
06/07-14/15	0.386	1.096
	Prior Trend:	1.040
	Selected Trend:	1.040

Authority for California Cities Excess Liability

Historical Payroll by Member

Member	1987-88 Payroll (00)	1988-89 Payroll (00)	1989-90 Payroll (00)	1990-91 Payroll (00)	1991-92 Payroll (00)	1992-93 Payroll (00)	1993-94 Payroll (00)	1994-95 Payroll (00)	1995-96 Payroll (00)	1996-97 Payroll (00)	1997-98 Payroll (00)
Anaheim	863,430	945,634	887,693	997,604	1,032,792	1,017,556	1,106,327	1,138,132	1,159,649	1,186,315	1,183,599
Bakersfield	363,542	385,888	427,532	456,470	479,556	490,078	463,172	544,562	558,232	592,428	626,800
Burbank	403,276	435,541	517,034	546,240	570,952	606,092	612,781	633,112	651,359	628,837	665,202
Gardena	126,061	150,116	155,950	167,690	183,626	0	0	0	0	0	0
Modesto	296,655	340,582	340,582	403,120	486,797	492,189	479,750	496,562	535,022	533,981	596,710
Monterey	0	0	150,186	167,555	177,538	176,550	181,500	206,054	212,611	225,039	235,554
Mountain View	0	0	0	0	0	310,326	292,142	307,338	325,808	341,322	360,295
Ontario	280,023	325,401	368,037	425,392	459,269	440,000	517,000	518,010	524,206	574,396	582,744
Palo Alto	385,839	409,895	441,571	469,616	500,629	526,146	552,171	606,885	575,477	607,900	677,305
Santa Barbara	300,236	342,392	355,513	393,889	438,230	421,442	464,065	494,001	496,728	525,742	562,649
Santa Cruz	0	0	0	0	0	0	0	0	0	164,906	327,837
Santa Monica	530,434	556,978	610,936	682,891	758,378	657,800	770,000	856,975	863,634	912,836	943,294
Visalia	121,195	137,709	144,025	165,025	189,676	172,119	196,757	202,780	199,965	208,770	210,996
Total	3,670,691	4,030,134	4,399,059	4,875,491	5,277,443	5,310,299	5,635,666	6,004,411	6,102,690	6,502,472	6,972,985

Member	1998-99 Payroll (00)	1999-00 Payroll (00)	2000-01 Payroll (00)	2001-02 Payroll (00)	2002-03 Payroll (00)	2003-04 Payroll (00)	2004-05 Payroll (00)	2005-06 Payroll (00)	2006-07 Payroll (00)	2007-08 Payroll (00)	2008-09 Payroll (00)
Anaheim	1,221,632	1,347,535	1,393,423	1,497,038	1,571,861	1,686,921	1,702,110	1,874,760	1,933,055	1,936,850	2,133,195
Bakersfield	656,309	672,981	679,346	710,898	746,845	769,039	775,782	828,105	889,657	928,430	916,017
Burbank	0	0	0	0	0	0	963,640	961,084	1,080,588	1,021,641	1,190,705
Gardena	0	0	0	0	0	0	0	0	0	0	0
Modesto	599,204	621,472	656,651	711,909	761,554	745,169	757,072	777,859	808,720	836,950	811,447
Monterey	246,524	262,721	284,379	307,684	320,894	313,632	313,439	315,127	303,985	340,838	362,102
Mountain View	409,155	408,020	434,816	470,177	517,208	479,749	474,925	505,565	558,760	579,550	628,761
Ontario	589,308	605,886	637,469	683,592	692,474	710,686	732,721	783,778	808,309	827,467	855,991
Palo Alto	722,355	727,013	771,366	875,829	907,965	976,695	964,635	910,388	920,271	964,648	980,859
Santa Barbara	587,051	644,650	658,205	688,383	715,412	731,380	739,835	827,558	767,235	826,778	882,947
Santa Cruz	330,666	368,019	383,500	421,614	414,665	404,596	405,476	415,167	494,206	483,045	537,520
Santa Monica	997,024	1,028,662	1,156,953	1,234,923	1,274,089	1,221,506	1,263,241	1,350,510	1,445,204	1,539,768	1,662,386
Visalia	218,084	237,134	256,559	257,861	290,675	269,603	281,525	300,145	295,903	323,116	345,222
Total	6,577,313	6,924,094	7,312,668	7,859,909	8,213,644	8,308,977	9,374,402	9,850,045	10,305,894	10,609,082	11,307,152

Member	2009-10 Payroll (00)	2010-11 Payroll (00)	2011-12 Payroll (00)	2012-13 Payroll (00)	2013-14 Payroll (00)	2014-15 Payroll (00)	Projected 2015-16 Payroll (00)	Projected 2016-17 Payroll (00)
Anaheim	2,081,250	2,049,763	1,963,200	1,975,427	2,031,900	2,106,346	2,137,940	2,170,010
Bakersfield	882,235	882,175	913,612	974,793	981,145	1,007,547	1,022,660	1,038,000
Burbank	1,104,309	1,219,034	1,095,927	1,080,687	1,058,814	1,050,336	1,066,090	1,082,080
Gardena	0	0	0	0	0	0	0	0
Modesto	796,393	741,932	730,670	723,669	721,682	711,912	722,590	733,430
Monterey	375,986	371,980	362,541	361,402	362,125	367,532	373,050	378,650
Mountain View	632,482	629,984	618,793	624,667	633,130	660,314	670,220	680,270
Ontario	836,504	821,292	837,165	724,834	734,451	774,343	785,960	797,750
Palo Alto	1,000,933	992,673	1,041,460	919,927	996,990	1,064,558	1,080,530	1,096,740
Santa Barbara	844,604	828,178	824,422	865,528	881,841	905,611	919,200	932,990
Santa Cruz	506,288	506,381	511,940	521,594	544,821	579,725	588,420	597,250
Santa Monica	1,668,433	1,714,221	1,851,043	1,830,595	1,850,554	1,902,819	1,931,360	1,960,330
Visalia	346,541	339,496	344,696	363,276	366,787	425,402	431,780	438,260
Total	11,075,957	11,097,108	11,095,468	10,966,401	11,164,240	11,556,443	11,729,800	11,905,760

Note: Data provided by ACCEL.

Authority for California Cities Excess Liability

ULAE as of June 30, 2016

(A)	Selected ULAE Factor	3.5%
(B)	Provision for Unpaid ULAE :	
	IBNR at 6/30/16	$15,146,000
	Half of Case Reserves at 6/30/16	1,364,000
	Computation Base	$16,510,000
	Provision for Unpaid ULAE at 6/30/16	$578,000