



Tuesday, April 7, 2015

Authority for California Cities Excess Liability  
c/o Alliant Insurance Services  
Attn: Mike Simmons, Pool Administrator  
100 Pine Street, 11<sup>th</sup> 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 \$17,796,000 as of June 30, 2015. We understand the Authority has chosen to record its liability with recognition of investment income at 3% per year. Discounted for anticipated investment income, we estimate the program's liability for outstanding loss and ALAE will be \$15,811,000 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, 2015 is projected to be \$23,005,000.

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, 2014 and June 30, 2015, on both undiscounted and discounted bases for various confidence levels:

**Outstanding Liability as of December 31, 2014  
at Various Confidence Level  
\$500K and \$1,000K Pools Combined**

Confidence Level	Undiscounted	Discounted
Expected	\$17,218,000	\$15,549,000
70%	20,232,000	18,270,000
75%	21,575,000	19,482,000
80%	23,124,000	20,882,000
85%	25,053,000	22,624,000
90%	27,601,000	24,924,000
95%	31,820,000	28,734,000

**Outstanding Liability as of June 30, 2015  
at Various Confidence Level  
\$500K and \$1,000K pools combined**

Confidence Level	Undiscounted	Discounted
Expected	\$17,796,000	\$15,811,000
70%	20,910,000	18,577,000
75%	22,298,000	19,810,000
80%	23,899,000	21,233,000
85%	25,893,000	23,005,000
90%	28,526,000	25,344,000
95%	32,886,000	29,217,000

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 \$573,000 as of June 30, 2015. This estimate is 3.5% of IBNR and half of case reserves as of June 30, 2015.

We present funding recommendations for claims incurred during program year 2015-16 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 3% per year.

**Funding Guidelines for Discounted Claims Incurred in 2015-2016**

Layer	Expected	75%	80%	85%	90%
\$1M-2M	\$0.169	\$0.219	\$0.237	\$0.259	\$0.289
\$1M-3M	0.269	0.348	0.377	0.413	0.460
\$1M-4M	0.317	0.411	0.444	0.486	0.542
\$1M-5M	0.339	0.439	0.475	0.520	0.579
\$5M-10M	0.111	0.144	0.156	0.170	0.190
\$6M-10M	0.086	0.111	0.121	0.132	0.147
\$7M-10M	0.063	0.082	0.088	0.097	0.108
\$8M-10M	0.041	0.053	0.057	0.063	0.070
\$9M-10M	0.020	0.026	0.028	0.031	0.034
\$10M-15M	0.094	0.122	0.132	0.144	0.161

The following table details the calculation of our funding guidelines in dollars at various confidence levels for the program’s 2015-16 claims by different layers:

**Funding Amount Guidelines for Discounted Claims Incurred in 2015-2016**

Layer	Expected	75%	80%	85%	90%
\$1M-2M	\$1,944,000	\$2,519,000	\$2,726,000	\$2,979,000	\$3,324,000
\$1M-3M	3,094,000	4,003,000	4,336,000	4,750,000	5,291,000
\$1M-4M	3,646,000	4,727,000	5,107,000	5,590,000	6,234,000
\$1M-5M	3,899,000	5,049,000	5,463,000	5,981,000	6,659,000
\$5M-10M	1,277,000	1,656,000	1,794,000	1,955,000	2,185,000
\$6M-10M	989,000	1,277,000	1,392,000	1,518,000	1,691,000
\$7M-10M	725,000	943,000	1,012,000	1,116,000	1,242,000
\$8M-10M	472,000	610,000	656,000	725,000	805,000
\$9M-10M	230,000	299,000	322,000	357,000	391,000
\$10M-15M	1,081,000	1,403,000	1,518,000	1,656,000	1,852,000

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.

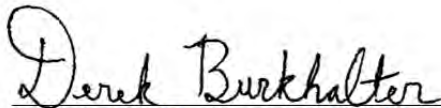
Sincerely,

Bickmore



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John Alltop, FCAS, MAAA  
President, Property and Casualty Actuarial Services, Bickmore  
Fellow, Casualty Actuarial Society  
Member, American Academy of Actuaries



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Derek Burkhalter, ACAS, MAAA  
Manager, Property and Casualty Actuarial Services, Bickmore  
Associate, Casualty Actuarial Society  
Member, American Academy of Actuaries

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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 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 2015-16 fiscal year.

## II. CONCLUSIONS AND RECOMMENDATIONS

### A. LIABILITY FOR OUTSTANDING CLAIMS AS OF DECEMBER 31, 2014 and June 30, 2015

At the undiscounted expected level, we estimate the program's liability for outstanding loss and allocated loss adjustment expenses (ALAE) to be approximately \$17,796,000 as of June 30, 2015. We understand the Authority has chosen to record its liability with recognition of investment income at 3% per year. Discounted for anticipated investment income, we estimate the program's liability for outstanding loss and ALAE will be \$15,811,000 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, 2015 is projected to be \$23,005,000.

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, 2014 and June 30, 2015:

#### **Outstanding Liability at the Expected Level as of December 31, 2014 - \$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, 2014 - \$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	1,750
1992-1993	9,442	9,036
1993-1994	832	785
1994-1995	2,808	2,630
1995-1996	1,859	1,731
1996-1997	4,030	3,734
1997-1998	6,537	6,040
2003-2004	41,915	38,478
2004-2005	1,285,836	1,181,040
2005-2006	53,247	49,094
2006-2007	85,902	79,030
2007-2008	435,867	401,869
2008-2009	394,685	365,676
2009-2010	812,000	756,784
2010-2011	1,575,000	1,466,325
2011-2012	2,811,726	2,591,006
2012-2013	3,633,000	3,291,498
2013-2014	3,916,000	3,459,786
2014-2015	2,146,000	1,842,341
All Years	\$17,218,495	\$15,548,633

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, 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 June 30, 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	1,746
1992-1993	9,442	8,960
1993-1994	832	781
1994-1995	2,808	2,623
1995-1996	930	863
1996-1997	2,688	2,486
1997-1998	5,236	4,833
2003-2004	35,837	32,719
2004-2005	1,162,396	1,074,054
2005-2006	49,733	45,754
2006-2007	74,907	68,914
2007-2008	370,487	342,330
2008-2009	346,928	322,296
2009-2010	663,404	620,283
2010-2011	1,266,300	1,173,860
2011-2012	2,457,449	2,251,023
2012-2013	3,302,397	2,958,948
2013-2014	3,767,192	3,281,224
2014-2015	4,274,832	3,616,508
All Years	\$17,795,606	\$15,810,205

The tables below shows our estimates of the program's claims liabilities as of December 31, 2014 and June 30, 2015, on both undiscounted and discounted bases for various confidence levels:

**Outstanding Liability as of December 31, 2014  
at Various Confidence Level  
\$500K and \$1,000K Pools Combined**

Confidence Level	Undiscounted	Discounted
Expected	\$17,218,000	\$15,549,000
70%	20,232,000	18,270,000
75%	21,575,000	19,482,000
80%	23,124,000	20,882,000
85%	25,053,000	22,624,000
90%	27,601,000	24,924,000
95%	31,820,000	28,734,000

**Outstanding Liability as of June 30, 2015  
at Various Confidence Level  
\$500K and \$1,000K Pools Combined**

Confidence Level	Undiscounted	Discounted
Expected	\$17,796,000	\$15,811,000
70%	20,910,000	18,577,000
75%	22,298,000	19,810,000
80%	23,899,000	21,233,000
85%	25,893,000	23,005,000
90%	28,526,000	25,344,000
95%	32,886,000	29,217,000

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 \$573,000 as of June 30, 2015. This estimate is 3.5% of IBNR and half of outstanding reserves as of June 30, 2015.

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 12/31/13	Change in Estimates Since 12/31/13 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	2,505,000	(2,000)
1992-1993	10,548,000	10,556,000	(8,000)
1993-1994	878,000	880,000	(2,000)
1994-1995	1,442,000	1,447,000	(5,000)
1995-1996	914,000	915,000	(1,000)
1996-1997	2,393,000	2,363,000	30,000
1997-1998	2,090,000	2,091,000	(1,000)
2003-2004	3,568,000	3,572,000	(4,000)
2004-2005	3,675,000	3,682,000	(7,000)
2005-2006	4,511,000	4,531,000	(20,000)
2006-2007	707,000	736,000	(29,000)
2007-2008	2,787,000	2,814,000	(27,000)
2008-2009	2,593,000	2,857,000	(264,000)
2009-2010	812,000	1,073,000	(261,000)
2010-2011	1,575,000	2,030,000	(455,000)
2011-2012	2,814,000	3,363,000	(549,000)
2012-2013	3,633,000	4,461,000	(828,000)
2013-2014	3,916,000	4,601,000	(685,000)
All Years	52,083,542	55,201,542	(3,118,000)

As shown, overall we have decreased our estimates of the program's ultimate losses by \$3,118,000 from those displayed in our prior actuarial report dated April 2014. The decrease is mainly due to favorable loss development in all program years.

## **B. FUNDING RATES FOR 2015-16 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 3% per year.

### **Funding Rate Guidelines for Discounted Claims Incurred in 2015-2016**

Layer	Expected	75%	80%	85%	90%
\$1M-2M	\$0.169	\$0.219	\$0.237	\$0.259	\$0.289
\$1M-3M	0.269	0.348	0.377	0.413	0.460
\$1M-4M	0.317	0.411	0.444	0.486	0.542
\$1M-5M	0.339	0.439	0.475	0.520	0.579
\$5M-10M	0.111	0.144	0.156	0.170	0.190
\$6M-10M	0.086	0.111	0.121	0.132	0.147
\$7M-10M	0.063	0.082	0.088	0.097	0.108
\$8M-10M	0.041	0.053	0.057	0.063	0.070
\$9M-10M	0.020	0.026	0.028	0.031	0.034
\$10M-15M	0.094	0.122	0.132	0.144	0.161

### **Funding Amount Guidelines for Discounted Claims Incurred in 2015-2016**

Layer	Expected	75%	80%	85%	90%
\$1M-2M	\$1,944,000	\$2,519,000	\$2,726,000	\$2,979,000	\$3,324,000
\$1M-3M	3,094,000	4,003,000	4,336,000	4,750,000	5,291,000
\$1M-4M	3,646,000	4,727,000	5,107,000	5,590,000	6,234,000
\$1M-5M	3,899,000	5,049,000	5,463,000	5,981,000	6,659,000
\$5M-10M	1,277,000	1,656,000	1,794,000	1,955,000	2,185,000
\$6M-10M	989,000	1,277,000	1,392,000	1,518,000	1,691,000
\$7M-10M	725,000	943,000	1,012,000	1,116,000	1,242,000
\$8M-10M	472,000	610,000	656,000	725,000	805,000
\$9M-10M	230,000	299,000	322,000	357,000	391,000
\$10M-15M	1,081,000	1,403,000	1,518,000	1,656,000	1,852,000

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 2015-16	Last Review 2014-15	Percent Change
\$1M-2M	\$0.197	\$0.215	-8.4%
\$1M-3M	\$0.313	\$0.342	-8.5%
\$1M-5M	\$0.395	\$0.431	-8.4%
\$5M-10M	\$0.129	\$0.140	-7.9%

As you can see, our projected funding rates for the 2015-16 program year have decreased 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, 2014 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, 2014.
- We were provided with payrolls by City for the 1986-87 through 2013-14 program years. The estimated payroll for 2014-15 and 2015-16 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 3% 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 2015-16 Funding Guidelines

Layer	Estimated 2015-16 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	\$11,501,680	\$2,265,831	85.9%	\$1,943,784	\$2,334,841	\$2,518,868	\$2,725,898	\$2,978,935	\$3,323,986	\$3,887,568
\$1M-3M	11,501,680	3,600,026	85.9%	3,093,952	3,726,544	4,002,585	4,336,133	4,750,194	5,290,773	6,176,402
\$1M-4M	11,501,680	4,244,120	85.9%	3,646,033	4,393,642	4,727,190	5,106,746	5,589,816	6,233,911	7,280,563
\$1M-5M	11,501,680	4,543,164	85.9%	3,899,070	4,692,685	5,049,238	5,463,298	5,980,874	6,659,473	7,786,637
\$5M-10M	11,501,680	1,483,717	85.9%	1,276,686	1,541,225	1,656,242	1,794,262	1,955,286	2,185,319	2,553,373
\$6M-10M	11,501,680	1,150,168	85.9%	989,144	1,196,175	1,276,686	1,391,703	1,518,222	1,690,747	1,978,289
\$7M-10M	11,501,680	839,623	85.9%	724,606	874,128	943,138	1,012,148	1,115,663	1,242,181	1,449,212
\$8M-10M	11,501,680	552,081	85.9%	471,569	563,582	609,589	655,596	724,606	805,118	943,138
\$9M-10M	11,501,680	264,539	85.9%	230,034	276,040	299,044	322,047	356,552	391,057	460,067
\$10M-15M	11,501,680	1,253,683	85.9%	1,081,158	1,299,690	1,403,205	1,518,222	1,656,242	1,851,770	2,162,316

- (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 2015-16 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	\$0.197	85.9%	\$0.169	\$0.203	\$0.219	\$0.237	\$0.259	\$0.289	\$0.338
\$1M-3M	0.313	85.9%	0.269	0.324	0.348	0.377	0.413	0.460	0.537
\$1M-4M	0.369	85.9%	0.317	0.382	0.411	0.444	0.486	0.542	0.633
\$1M-5M	0.395	85.9%	0.339	0.408	0.439	0.475	0.520	0.579	0.677
\$5M-10M	0.129	85.9%	0.111	0.134	0.144	0.156	0.170	0.190	0.222
\$6M-10M	0.100	85.9%	0.086	0.104	0.111	0.121	0.132	0.147	0.172
\$7M-10M	0.073	85.9%	0.063	0.076	0.082	0.088	0.097	0.108	0.126
\$8M-10M	0.048	85.9%	0.041	0.049	0.053	0.057	0.063	0.070	0.082
\$9M-10M	0.023	85.9%	0.020	0.024	0.026	0.028	0.031	0.034	0.040
\$10M-15M	0.109	85.9%	0.094	0.113	0.122	0.132	0.144	0.161	0.188

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:	\$0.858
(C) Selected Base Loss Rate (\$100K - \$1M Layer):	\$0.858

Authority for California Cities Excess Liability  
ACCEL Pooled Layer

Funding Guidelines for Outstanding Losses  
as of December 31, 2014 and June 30, 2015

	<u>December 31, 2014</u>	<u>June 30, 2015</u>
(A) Estimated Ultimate Losses Incurred as of:	\$54,730,000	\$56,876,000
(B) Estimated Paid Losses as of:	37,511,000	39,080,000
(C) Estimated Liability for Claims Outstanding as of:	\$17,219,000	\$17,796,000
(D) Outstanding Liability Discount Factor:	90.3%	88.8%
(E) Discounted Outstanding Liability for Claims as of:	\$15,549,000	\$15,811,000
(F) Risk Margin at 85% Confidence Level:	7,075,000	7,194,000
(G) Required Funding at the 85% confidence Level:	\$22,624,000	\$23,005,000

## 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

Accident Year	Age	Paid Loss Development Factor	Payment Pattern	Full Value Reserve	3.0% Discounted Reserve	Discounted Factor
1988-1989	27.0	1.000	0.0%	0.0%	0.0%	100.0%
1989-1990	26.0	1.000	0.0%	0.0%	0.0%	100.0%
1990-1991	25.0	1.000	0.0%	0.0%	0.0%	100.0%
1991-1992	24.0	1.000	0.0%	0.0%	0.0%	100.0%
1992-1993	23.0	1.000	0.0%	0.1%	0.1%	97.4%
1993-1994	22.0	1.001	0.0%	0.1%	0.1%	100.2%
1994-1995	21.0	1.001	0.1%	0.2%	0.2%	100.2%
1995-1996	20.0	1.002	0.1%	0.3%	0.3%	97.0%
1996-1997	19.0	1.003	0.2%	0.5%	0.5%	96.5%
1997-1998	18.0	1.005	0.2%	0.7%	0.7%	94.9%
1998-1999	17.0	1.007	0.3%	1.0%	0.9%	93.9%
1999-2000	16.0	1.010	0.4%	1.4%	1.3%	93.4%
2000-2001	15.0	1.014	0.6%	2.0%	1.8%	92.8%
2001-2002	14.0	1.020	0.8%	2.7%	2.5%	92.5%
2002-2003	13.0	1.028	1.1%	3.8%	3.6%	92.3%
2003-2004	12.0	1.040	0.9%	4.8%	4.4%	91.3%
2004-2005	11.0	1.050	2.8%	7.6%	7.0%	92.4%
2005-2006	10.0	1.082	2.7%	10.2%	9.4%	92.0%
2006-2007	9.0	1.114	4.3%	14.5%	13.4%	92.0%
2007-2008	8.0	1.170	7.0%	21.6%	19.9%	92.4%
2008-2009	7.0	1.275	12.5%	34.1%	31.7%	92.9%
2009-2010	6.0	1.517	22.0%	56.1%	52.4%	93.5%
2010-2011	5.0	2.276	18.8%	74.9%	69.4%	92.7%
2011-2012	4.0	3.983	16.7%	91.6%	83.9%	91.6%
2012-2013	3.0	11.949	7.5%	99.2%	88.9%	89.6%
2013-2014	2.0	119.490	0.8%	100.0%	87.1%	87.1%
2014-2015	1.0	2,389.800	0.0%	100.0%	84.6%	84.6%

Discount Factor for Future Funding: 0.859

Accident Year	Accident Year Paid Loss Development Factor	Full Value Reserve	3.0% Discounted Reserve	12/31/14 Outstanding Loss	Discounted Factor	12/31/14 Discounted Outstanding Loss	6/30/15 Outstanding Loss	Discounted Factor	6/30/15 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	98.7%	0	0	97.4%	0
1988-1989	1.000	0.00%	0.00%	0	98.8%	0	0	100.2%	0
1989-1990	1.000	0.00%	0.00%	0	100.2%	0	0	100.2%	0
1986-1987	1.000	0.00%	0.00%	0	100.0%	0	0	100.0%	0
1987-1988	1.000	0.04%	0.04%	0	98.7%	0	0	97.4%	0
1988-1989	1.001	0.07%	0.07%	0	98.8%	0	0	100.2%	0
1989-1990	1.001	0.12%	0.11%	0	100.2%	0	0	100.2%	0
1990-1991	1.002	0.20%	0.19%	0	98.6%	0	0	97.0%	0
1991-1992	1.003	0.30%	0.28%	1,809	96.8%	1,750	1,809	96.5%	1,746
1992-1993	1.005	0.50%	0.47%	9,442	95.7%	9,036	9,442	94.9%	8,960
1993-1994	1.007	0.70%	0.65%	832	94.4%	785	832	93.9%	781
1994-1995	1.010	0.99%	0.92%	2,808	93.7%	2,630	2,808	93.4%	2,623
1995-1996	1.014	1.38%	1.28%	1,859	93.1%	1,731	930	92.8%	863
1996-1997	1.020	1.96%	1.81%	4,030	92.7%	3,734	2,688	92.5%	2,486
1997-1998	1.028	2.72%	2.51%	6,537	92.4%	6,040	5,236	92.3%	4,833
2003-2004	1.040	3.85%	3.54%	41,915	91.8%	38,478	35,837	91.3%	32,719
2004-2005	1.050	4.76%	4.34%	1,285,836	91.9%	1,181,040	1,162,396	92.4%	1,074,054
2005-2006	1.082	7.58%	6.99%	53,247	92.2%	49,094	49,733	92.0%	45,754
2006-2007	1.114	10.23%	9.40%	85,902	92.0%	79,030	74,907	92.0%	68,914
2007-2008	1.170	14.53%	13.36%	435,867	92.2%	401,869	370,487	92.4%	342,330
2008-2009	1.275	21.57%	19.91%	394,685	92.7%	365,676	346,928	92.9%	322,296
2009-2010	1.517	34.08%	31.66%	812,000	93.2%	756,784	663,404	93.5%	620,283
2010-2011	2.276	56.06%	52.39%	1,575,000	93.1%	1,466,325	1,266,300	92.7%	1,173,860
2011-2012	3.983	74.89%	69.42%	2,811,726	92.2%	2,591,006	2,457,449	91.6%	2,251,023
2012-2013	11.949	91.63%	83.89%	3,633,000	90.6%	3,291,498	3,302,397	89.6%	2,958,948
2013-2014	119.490	99.16%	88.86%	3,916,000	88.4%	3,459,786	3,767,192	87.1%	3,281,224
2014-2015	2,389.800	99.96%	87.06%	2,146,000	85.9%	1,842,341	4,274,832	84.6%	3,616,508
Total				17,218,495		15,548,633	17,795,606		15,810,205
Discount Factor for Outstanding:				90.3%			88.8%		

Authority for California Cities Excess Liability  
ACCEL Pooled Layer

## Confidence Level Factors

Probability	Projected Funding Factor	Outstanding Liability Factor
95	1.998	1.848
90	1.709	1.603
85	1.534	1.455
80	1.402	1.343
75	1.295	1.253
70	1.204	1.175
65	1.124	1.107
60	1.050	1.045
55	0.983	0.987
50	0.918	0.933
45	0.857	0.881
40	0.797	0.829
35	0.737	0.778
30	0.677	0.727
25	0.614	0.672

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	5/18/05	2004-05	Closed	1,333,904	1,333,904
Anaheim	6/14/05	2004-05	Closed	3,329,184	3,329,184
Santa Monica	8/6/05	2005-06	Closed	4,619,311	4,619,311
Anaheim	11/7/05	2005-06	Closed	1,940,625	1,940,625
Santa Monica	8/14/07	2007-08	Closed	1,583,936	1,583,936
Bakersfield	11/24/07	2007-08	Open	5,000	1,005,000
Ontario	3/20/08	2007-08	Closed	1,000,031	1,000,031
Burbank	4/26/08	2007-08	Open	2,938,462	3,468,222
Mountain View	6/1/08	2007-08	Open	22,634	1,022,634
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	1,987,473	1,999,149
Burbank	5/1/09	2008-09	Open	4,466,660	4,665,000
Santa Cruz	3/25/11	2010-11	Closed	1,203,470	1,203,470

Authority for California Cities Excess Liability  
ACCEL Layer

Outstanding Liability at December 31, 2014

Accident Year	Ultimate Losses (A)	12/31/14 Reported Loss (B)	12/31/14 IBNR (C)	12/31/14 Paid Loss (D)	12/31/14 Case Reserves (E)	12/31/14 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	10,548,000	10,538,558	9,442	10,538,558	0	9,442
1993-1994	878,000	877,168	832	877,168	0	832
1994-1995	1,442,000	1,439,192	2,808	1,439,192	0	2,808
1995-1996	914,000	912,141	1,859	912,141	0	1,859
1996-1997	2,393,000	2,388,970	4,030	2,388,970	0	4,030
1997-1998	2,090,000	2,083,463	6,537	2,083,463	0	6,537
2003-2004	3,568,000	3,526,085	41,915	3,526,085	0	41,915
2004-2005	3,675,000	3,639,164	35,836	2,389,164	1,250,000	1,285,836
2005-2006	4,511,000	4,457,753	53,247	4,457,753	0	53,247
2006-2007	707,000	621,098	85,902	621,098	0	85,902
2007-2008	2,787,000	2,706,133	80,867	2,351,133	355,000	435,867
2008-2009	2,593,000	2,198,315	394,685	2,198,315	0	394,685
2009-2010	812,000	0	812,000	0	0	812,000
2010-2011	1,575,000	0	1,575,000	0	0	1,575,000
2011-2012	2,814,000	2,274	2,811,726	2,274	0	2,811,726
2012-2013	3,633,000	0	3,633,000	0	0	3,633,000
2013-2014	3,916,000	0	3,916,000	0	0	3,916,000
2014-2015	2,146,000	0	2,146,000	0	0	2,146,000
Totals	\$54,229,542	\$38,616,047	\$15,613,495	\$37,011,047	\$1,605,000	\$17,218,495
Grand Totals	\$54,729,542	\$39,116,047	\$15,613,495	\$37,511,047	\$1,605,000	\$17,218,495

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, 2015

Accident Year	Ultimate Losses (A)	6/30/2015 Reported Loss (B)	6/30/2015 IBNR (C)	6/30/2015 Paid Loss (D)	6/30/2015 Case Reserves (E)	6/30/2015 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	10,548,000	10,548,000	0	10,538,558	9,442	9,442
1993-1994	878,000	878,000	0	877,168	832	832
1994-1995	1,442,000	1,442,000	0	1,439,192	2,808	2,808
1995-1996	914,000	914,000	0	913,071	930	930
1996-1997	2,393,000	2,393,000	0	2,390,312	2,688	2,688
1997-1998	2,090,000	2,090,000	0	2,084,764	5,236	5,236
2003-2004	3,568,000	3,536,480	31,520	3,532,163	4,317	35,837
2004-2005	3,675,000	3,641,888	33,112	2,512,604	1,129,283	1,162,396
2005-2006	4,511,000	4,461,267	49,733	4,461,267	0	49,733
2006-2007	707,000	633,726	73,274	632,093	1,632	74,907
2007-2008	2,787,000	2,719,314	67,686	2,416,513	302,801	370,487
2008-2009	2,593,000	2,246,072	346,928	2,246,072	0	346,928
2009-2010	812,000	224,112	587,888	148,596	75,516	663,404
2010-2011	1,575,000	434,700	1,140,300	308,700	126,000	1,266,300
2011-2012	2,814,000	834,545	1,979,455	356,551	477,993	2,457,449
2012-2013	3,633,000	675,738	2,957,262	330,603	345,135	3,302,397
2013-2014	3,916,000	473,836	3,442,164	148,808	325,028	3,767,192
2014-2015	4,292,000	77,256	4,214,744	17,168	60,088	4,274,832
Totals	\$56,375,542	\$41,451,475	\$14,924,067	\$38,579,936	\$2,871,539	\$17,795,606
Grand Totals	\$56,875,542	\$41,951,475	\$14,924,067	\$39,079,936	\$2,871,539	\$17,795,606

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		2,505,000	2,503,000
1992-1993	10,538,558	10,549,097		10,556,000	10,548,000
1993-1994	877,168	878,045		880,000	878,000
1994-1995	1,439,192	1,440,631		1,447,000	1,442,000
1995-1996	912,141	913,965		915,000	914,000
1996-1997	2,388,970	2,396,137		2,363,000	2,393,000
1997-1998	2,083,463	2,093,880		2,091,000	2,090,000
2003-2004	3,568,398	3,667,128	3,538,000	3,572,000	3,568,000
2004-2005	3,686,473	2,508,622	3,664,000	3,682,000	3,675,000
2005-2006	4,524,619	4,823,289	4,497,000	4,531,000	4,511,000
2006-2007	633,520	691,903	677,000	736,000	707,000
2007-2008	2,787,317	2,750,826	2,795,000	2,814,000	2,787,000
2008-2009	2,286,248	2,802,852	2,329,000	2,857,000	2,593,000
2009-2010	0	0	291,000	1,073,000	812,000
2010-2011	0	0	664,000	2,030,000	1,575,000
2011-2012	4,193	9,057	1,715,000	3,363,000	2,814,000
2012-2013	0	0	2,805,000	4,461,000	3,633,000
2013-2014	0	0	3,916,000	4,601,000	3,916,000
2014-2015	0	0	4,292,000		4,292,000
Totals	\$38,955,993	\$38,753,666	\$31,183,000	\$55,201,542	\$56,375,542
Grand Totals	\$39,455,993	\$39,253,666		\$55,701,542	\$56,875,542

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 12/31/14 (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	1.012	3,568,398
2004-2005	3,639,164	1.013	3,686,473
2005-2006	4,457,753	1.015	4,524,619
2006-2007	621,098	1.020	633,520
2007-2008	2,706,133	1.030	2,787,317
2008-2009	2,198,315	1.040	2,286,248
2009-2010	0	1.092	0
2010-2011	0	1.229	0
2011-2012	2,274	1.844	4,193
2012-2013	0	3.688	0
2013-2014	0	25.816	0
2014-2015	0	516.320	0
Totals	\$38,616,047		\$38,955,993
Grand Totals	\$39,116,047		\$39,455,993

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 12/31/14 (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
<b>Totals</b>	<b>\$500,000</b>		<b>\$500,000</b>
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	1.002	913,965
1996-1997	2,388,970	1.003	2,396,137
1997-1998	2,083,463	1.005	2,093,880
2003-2004	3,526,085	1.040	3,667,128
2004-2005	2,389,164	1.050	2,508,622
2005-2006	4,457,753	1.082	4,823,289
2006-2007	621,098	1.114	691,903
2007-2008	2,351,133	1.170	2,750,826
2008-2009	2,198,315	1.275	2,802,852
2009-2010	0	1.517	0
2010-2011	0	2.276	0
2011-2012	2,274	3.983	9,057
2012-2013	0	11.949	0
2013-2014	0	119.490	0
2014-2015	0	2,389.800	0
<b>Totals</b>	<b>\$37,011,047</b>		<b>\$38,753,666</b>
<b>Grand Totals</b>	<b>\$37,511,047</b>		<b>\$39,253,666</b>

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 12/31/12 (I)	Program Year Reported Losses at 12/31/12 (J)	Program Year Estimated Ultimate Losses (K)
2003-2004	\$0.858	0.625	0.536	0.230	0.123	\$8,308,977	\$1,024,000	1.2%	\$12,142	\$3,526,085	\$3,538,000
2004-2005	0.858	0.650	0.557	0.365	0.203	9,374,402	1,907,000	1.3%	24,473	3,639,164	3,664,000
2005-2006	0.858	0.676	0.580	0.460	0.267	9,850,045	2,626,000	1.5%	38,808	4,457,753	4,497,000
2006-2007	0.858	0.703	0.603	0.460	0.277	10,305,894	2,858,000	2.0%	56,039	621,098	677,000
2007-2008	0.858	0.731	0.627	0.460	0.288	10,609,082	3,060,000	2.9%	89,126	2,706,133	2,795,000
2008-2009	0.858	0.760	0.652	0.460	0.300	11,307,152	3,391,000	3.8%	130,423	2,198,315	2,329,000
2009-2010	0.858	0.790	0.678	0.460	0.312	11,069,646	3,453,000	8.4%	290,912	0	291,000
2010-2011	0.858	0.822	0.705	0.460	0.324	10,987,347	3,564,000	18.6%	664,081	0	664,000
2011-2012	0.858	0.855	0.733	0.460	0.337	11,094,868	3,743,000	45.8%	1,713,174	2,274	1,715,000
2012-2013	0.858	0.889	0.763	0.460	0.351	10,969,687	3,849,000	72.9%	2,805,345	0	2,805,000
2013-2014	0.858	0.925	0.793	0.460	0.365	11,164,240	4,074,000	96.1%	3,916,191	0	3,916,000
2014-2015	0.858	0.962	0.825	0.460	0.380	11,331,710	4,300,000	99.8%	4,291,672	0	4,292,000

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	3.514	0.000
1987-1988	3,670,691	724,542	724,542	0.197	3.379	0.666
1988-1989	4,030,134	0	0	0.000	3.249	0.000
1989-1990	4,399,059	0	0	0.000	3.124	0.000
1990-1991	4,875,491	0	0	0.000	3.004	0.000
1991-1992	5,277,443	2,503,000	2,503,000	0.474	2.888	1.369
1992-1993	5,310,299	10,548,000	10,548,000	1.986	2.777	5.515
1993-1994	5,635,666	878,000	878,000	0.156	2.670	0.417
1994-1995	6,004,411	1,442,000	1,442,000	0.240	2.567	0.616
1995-1996	6,102,690	914,000	914,000	0.150	2.468	0.370
1996-1997	6,502,472	2,393,000	2,393,000	0.368	2.373	0.873
1997-1998	6,972,985	2,090,000	2,090,000	0.300	2.282	0.685
2003-2004	9,103,267	3,568,000	3,568,000	0.392	1.603	0.628
2004-2005	9,374,402	3,675,000	3,675,000	0.392	1.541	0.604
2005-2006	9,850,045	4,511,000	4,511,000	0.458	1.482	0.679
2006-2007	10,305,894	707,000	707,000	0.069	1.425	0.098
2007-2008	10,609,082	2,787,000	2,787,000	0.263	1.370	0.360
2008-2009	11,307,152	2,593,000	2,593,000	0.229	1.317	0.302
2009-2010	11,069,646	812,000	812,000	0.073	1.266	0.092
2010-2011	10,987,347	1,575,000	1,575,000	0.143	1.217	0.174
2011-2012	11,094,868	2,814,000	2,814,000	0.254	1.170	0.297
2012-2013	10,969,687	3,633,000	3,633,000	0.331	1.125	0.372
2013-2014	11,164,240	3,916,000	3,916,000	0.351	1.082	0.380
2014-2015	11,331,710	4,292,000	4,292,000	0.379	1.040	0.394
Totals	\$189,054,621	\$56,375,542	\$56,375,542	0.298		0.620
86/87-97/98	61,887,280	21,492,542	21,492,542	0.347		0.876

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 2014-2015 Level (F)
1993-1994				
1994-1995				
1995-1996				
1996-1997				
1997-1998				
1998-1999				
1999-2000				
2000-2001				
2001-2002				
2002-2003				
2003-2004				
2004-2005	6,080,000	10,092,300	1.480	0.892
2005-2006	6,808,000	12,302,706	1.423	0.787
2006-2007	5,525,000	12,562,885	1.369	0.602
2007-2008	10,221,000	12,614,198	1.316	1.066
2008-2009	6,859,000	13,116,296	1.265	0.662
2009-2010	6,361,000	12,530,839	1.217	0.618
2010-2011	6,319,000	12,130,031	1.170	0.609
2011-2012	8,244,000	11,949,173	1.125	0.776
2012-2013	9,608,000	11,529,141	1.082	0.902
2013-2014	9,630,000	11,443,346	1.040	0.875
Average 2004-05 - 2013-14:				0.779
Average 2007-08 - 2013-14:				0.787
Average 2011-12 - 2013-14:				0.851
Prior 2013-2014 Rate :				0.900
Selected 2014-2015 Rate :				0.825
Trend Factor to 2015-2016 :				1.040
Selected 2015-2016 Rate :				\$0.858

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)
2004-2005	\$6,080,191	\$3,550,336	\$6,081,145	\$3,639,610	\$6,080,000	\$6,080,000
2005-2006	6,807,936	6,455,273	6,809,377	6,474,548	6,807,990	6,808,000
2006-2007	5,524,975	5,373,062	5,527,195	5,386,907	5,525,000	5,525,000
2007-2008	10,221,345	7,959,684	10,219,944	8,213,351	10,221,012	10,221,000
2008-2009	6,556,737	7,160,691	6,565,228	7,108,652	6,858,998	6,859,000
2009-2010	6,268,194	4,127,437	6,453,760	5,339,812	7,409,325	6,361,000
2010-2011	6,091,330	3,120,994	6,546,941	5,756,321	7,633,461	6,319,000
2011-2012	6,947,305	9,436,210	7,500,087	8,988,420	8,095,230	8,244,000
2012-2013	11,373,651	10,360,875	10,162,175	9,054,369	9,811,320	9,608,000
2013-2014	13,557,045	15,732,217	10,069,351	9,190,619	10,097,080	9,630,000
Totals						\$75,655,000

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 12/31/14 (B)	Reported Loss Development Factor (C)	Ultimate \$100K - \$1M Losses (D)	\$100K - \$1M Reported Losses of 12/31/14 (E)	Reported Loss Development Factor (F)	Ultimate \$100K - \$1M Losses (G)
2004-2005	\$6,002,163	1.013	\$6,080,191	\$6,002,163	1.013	\$6,080,191
2005-2006	6,707,326	1.015	6,807,936	6,707,326	1.015	6,807,936
2006-2007	5,416,642	1.020	5,524,975	5,416,642	1.020	5,524,975
2007-2008	9,923,636	1.030	10,221,345	9,923,636	1.030	10,221,345
2008-2009	6,304,555	1.040	6,556,737	6,304,555	1.040	6,556,737
2009-2010	5,740,104	1.092	6,268,194	5,740,104	1.092	6,268,194
2010-2011	4,956,330	1.229	6,091,330	4,956,330	1.229	6,091,330
2011-2012	4,811,153	1.444	6,947,305	4,811,153	1.444	6,947,305
2012-2013	6,059,484	1.877	11,373,651	6,059,484	1.877	11,373,651
2013-2014	3,009,333	4.505	13,557,045	3,009,333	4.505	13,557,045
Totals	\$58,930,726		\$79,428,709	\$58,930,726		\$79,428,709

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 12/31/14 (B)	Paid Loss Development Factor (C)	Ultimate \$100K - \$1M Losses (D)	\$100K - \$1M Paid Losses of 12/31/14 (E)	Paid Loss Development Factor (F)	Ultimate \$100K - \$1M Losses (G)
2004-2005	\$3,426,965	1.036	\$3,550,336	\$3,426,965	1.036	\$3,550,336
2005-2006	6,107,165	1.057	6,455,273	6,107,165	1.057	6,455,273
2006-2007	4,961,276	1.083	5,373,062	4,961,276	1.083	5,373,062
2007-2008	7,068,991	1.126	7,959,684	7,068,991	1.126	7,959,684
2008-2009	5,942,482	1.205	7,160,691	5,942,482	1.205	7,160,691
2009-2010	2,977,949	1.386	4,127,437	2,977,949	1.386	4,127,437
2010-2011	1,608,760	1.940	3,120,994	1,608,760	1.940	3,120,994
2011-2012	3,242,684	2.910	9,436,210	3,242,684	2.910	9,436,210
2012-2013	1,780,219	5.820	10,360,875	1,780,219	5.820	10,360,875
2013-2014	270,313	58.200	15,732,217	270,313	58.200	15,732,217
Totals	\$37,386,804		\$73,276,779	\$37,386,804		\$73,276,779

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 12/31/14 (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)
2004-2005	10,092,300	\$6,002,163	1.013	0.013	\$0.602	\$78,982	\$6,081,145
2005-2006	12,302,706	6,707,326	1.015	0.015	0.553	102,051	6,809,377
2006-2007	12,562,885	5,416,642	1.020	0.020	0.440	110,553	5,527,195
2007-2008	12,614,198	9,923,636	1.030	0.029	0.810	296,308	10,219,944
2008-2009	13,116,296	6,304,555	1.040	0.038	0.523	260,673	6,565,228
2009-2010	12,530,839	5,740,104	1.092	0.084	0.678	713,656	6,453,760
2010-2011	12,130,031	4,956,330	1.229	0.186	0.705	1,590,611	6,546,941
2011-2012	11,949,173	4,811,153	1.444	0.307	0.733	2,688,934	7,500,087
2012-2013	11,529,141	6,059,484	1.877	0.467	0.762	4,102,691	10,162,175
2013-2014	11,443,346	3,009,333	4.505	0.778	0.793	7,060,018	10,069,351
Totals	\$120,270,915	\$58,930,726				\$17,004,477	\$75,935,203

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 12/31/14 (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)
2003-2004	0		1.028	0.027	\$0.536	\$0	
2004-2005	10,092,300	3,426,965	1.036	0.035	0.602	212,645	3,639,610
2005-2006	12,302,706	6,107,165	1.057	0.054	0.553	367,383	6,474,548
2006-2007	12,562,885	4,961,276	1.083	0.077	0.440	425,631	5,386,907
2007-2008	12,614,198	7,068,991	1.126	0.112	0.810	1,144,360	8,213,351
2008-2009	13,116,296	5,942,482	1.205	0.170	0.523	1,166,170	7,108,652
2009-2010	12,530,839	2,977,949	1.386	0.278	0.678	2,361,863	5,339,812
2010-2011	12,130,031	1,608,760	1.940	0.485	0.705	4,147,561	5,756,321
2011-2012	11,949,173	3,242,684	2.910	0.656	0.733	5,745,736	8,988,420
2012-2013	11,529,141	1,780,219	5.820	0.828	0.762	7,274,150	9,054,369
2013-2014	11,443,346	270,313	58.200	0.983	0.793	8,920,306	9,190,619
Totals	\$120,270,915	\$37,386,804				\$31,765,805	\$69,152,609

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)
2003-2004	0		1.539			\$0.536	1.000	\$0.536
2004-2005	10,092,300	6,080,000	1.480	8,998,400	0.892	0.602	1.000	0.602
2005-2006	12,302,706	6,808,000	1.423	9,687,784	0.787	0.553	1.000	0.553
2006-2007	12,562,885	5,525,000	1.369	7,563,725	0.602	0.440	1.000	0.440
2007-2008	12,614,198	10,221,000	1.316	13,450,836	1.066	0.810	1.000	0.810
2008-2009	13,116,296	6,859,000	1.265	8,676,635	0.662	0.523	1.000	0.523
2009-2010	12,530,839	6,268,000	1.217	7,628,156	0.609	0.678	1.000	0.678
2010-2011	12,130,031	6,091,000	1.170	7,126,470	0.588	0.705	1.000	0.705
2011-2012	11,949,173	8,192,000	1.125	9,216,000	0.771	0.733	1.000	0.733
2012-2013	11,529,141	10,867,000	1.082	11,758,094	1.020	0.762	1.000	0.762
2013-2014	11,443,346	13,557,000	1.040	14,099,280	1.232	0.793	1.000	0.793
Total/Avg	\$120,270,915	\$80,468,000		\$98,205,380	\$0.817			
08/09-12/13	61,255,480	38,277,000		44,405,355	\$0.725			
09/10-13/14	59,582,530	44,975,000		49,828,000	\$0.836			
				Selected \$100K - \$1M Rate:	\$0.825			
				Prior:	\$0.850			

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 2008-2009 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)
2004-2005	\$320,000	19	\$6,080,000
2005-2006	226,933	30	6,807,990
2006-2007	221,000	25	5,525,000
2007-2008	268,974	38	10,221,012
2008-2009	221,258	31	6,858,998
2009-2010	224,525	33	7,409,325
2010-2011	231,317	33	7,633,461
2011-2012	238,095	34	8,095,230
2012-2013	245,283	40	9,811,320
2013-2014	252,427	40	10,097,080
Total		323	\$78,539,416

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	Ultimate Claims (B)	Ultimate	Trend Factor (D)	Trended		Factor to SIR (G)	Program Severity (H)
	\$100K - \$1M Losses (A)		\$100K - \$1M Severity (C)		\$100K - \$1M Severity (E)	\$100K - \$1M Severity (F)		
2004-2005	\$6,080,000	19	\$320,000	1.340	\$428,800	\$320,000	1.000	\$320,000
2005-2006	6,808,000	30	226,933	1.301	295,240	226,933	1.000	226,933
2006-2007	5,525,000	25	221,000	1.264	279,344	221,000	1.000	221,000
2007-2008	10,221,000	38	268,974	1.227	330,031	268,974	1.000	268,974
2008-2009	6,859,000	31	221,258	1.192	263,740	221,258	1.000	221,258
2009-2010	6,361,000	33	192,758	1.158	223,214	224,525	1.000	224,525
2010-2011	6,319,000	33	191,485	1.124	215,229	231,317	1.000	231,317
2011-2012	8,244,000	34	242,471	1.092	264,778	238,095	1.000	238,095
2012-2013	9,608,000	40	240,200	1.060	254,612	245,283	1.000	245,283
2013-2014	9,630,000	40	240,750	1.030	247,973	252,427	1.000	252,427

Average \$100K - \$1M Severity: \$280,296  
Average 07/08-12/13 \$100K - \$1M Severity: \$258,601  
Average 08/09-13/14 \$100K - \$1M Severity: \$244,924

Selected \$100K - \$1M Severity: \$260,000  
Prior: \$285,000

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)
2004-2005	19	19	19	1,009.230	0.019	1.105	0.021
2005-2006	30	28	30	1,230.271	0.024	1.094	0.026
2006-2007	25	27	25	1,256.289	0.020	1.083	0.022
2007-2008	38	36	38	1,261.420	0.030	1.072	0.032
2008-2009	31	29	31	1,311.630	0.024	1.062	0.025
2009-2010	33	34	33	1,253.084	0.026	1.051	0.027
2010-2011	33	37	33	1,213.003	0.027	1.041	0.028
2011-2012	34	48	34	1,194.917	0.028	1.030	0.029
2012-2013	40	50	40	1,152.914	0.035	1.020	0.036
2013-2014	60	95	40	1,144.335	0.035	1.010	0.035
Total	343	403	323	12,027.092			0.028

(H) Selected 2014-2015 Frequency: 0.032

Program Year:	2014-2015	2015-2016
(I) Trend Factor:	1.000	1.010
(J) Selected Frequency:	0.032	0.032
(K) Composite Exposure:	1,133.171	1,150.168
(L) Ultimate Claims:	36	37

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 .032 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 12/31/2014 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2004-2005	19	1.017	19	0.021
2005-2006	29	1.022	30	0.027
2006-2007	24	1.032	25	0.022
2007-2008	36	1.042	38	0.032
2008-2009	29	1.052	31	0.025
2009-2010	31	1.063	33	0.028
2010-2011	31	1.074	33	0.028
2011-2012	30	1.128	34	0.029
2012-2013	32	1.241	40	0.035
2013-2014	24	2.482	60	0.053
Total	285		343	0.030

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 12/31/2014 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2004-2005	18	1.061	19	0.021
2005-2006	26	1.082	28	0.025
2006-2007	24	1.109	27	0.023
2007-2008	31	1.164	36	0.031
2008-2009	24	1.222	29	0.023
2009-2010	25	1.344	34	0.029
2010-2011	22	1.680	37	0.032
2011-2012	19	2.520	48	0.041
2012-2013	8	6.300	50	0.044
2013-2014	3	31.500	95	0.084
Total	200		403	0.035

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
1993-1994				
1994-1995				
1995-1996				
1996-1997				
1997-1998				
1998-1999				
1999-2000				
2000-2001				
2001-2002				
2002-2003				
2003-2004				
2004-2005	10,092,300	6,080,000	0.602	0.892
2005-2006	12,302,706	6,808,000	0.553	0.788
2006-2007	12,562,885	5,525,000	0.440	0.602
2007-2008	12,614,198	10,221,000	0.810	1.066
2008-2009	13,116,296	6,859,000	0.523	0.662
2009-2010	12,530,839	6,425,000	0.513	0.624
2010-2011	12,130,031	6,426,000	0.530	0.620
2011-2012	11,949,173	8,630,000	0.722	0.812
2012-2013	11,529,141	9,892,000	0.858	0.928
2013-2014	11,443,346	10,015,000	0.875	0.910

Exponential Trends

Years	R-square	Fitted Trend
11/12-13/14	0.827	1.101
09/10-13/14	0.914	1.168
07/08-13/14	0.241	1.057
05/06-13/14	0.406	1.062
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)	Projected 2013-14 Payroll (00)	Projected 2014-15 Payroll (00)	Projected 2015-16 Payroll (00)				
Anaheim	2,081,250	2,049,763	1,963,200	1,975,427	2,031,900	2,062,380	2,093,320				
Bakersfield	882,235	882,175	913,612	974,793	981,145	995,860	1,010,800				
Burbank	1,104,309	1,109,272	1,095,927	1,080,687	1,058,814	1,074,700	1,090,820				
Gardena	0	0	0	0	0	0	0				
Modesto	796,393	741,932	730,070	723,669	721,682	732,510	743,500				
Monterey	375,986	371,980	362,541	361,402	362,125	367,560	373,070				
Mountain View	632,482	629,984	618,793	624,667	633,130	642,630	652,270				
Ontario	836,504	821,292	837,165	724,834	734,451	745,470	756,650				
Palo Alto	1,000,933	992,673	1,041,460	919,927	996,990	1,011,940	1,027,120				
Santa Barbara	844,604	828,178	824,422	865,528	881,841	895,070	908,500				
Santa Cruz	506,288	506,381	511,940	521,531	544,821	552,990	561,280				
Santa Monica	1,668,433	1,714,221	1,851,043	1,833,945	1,850,554	1,878,310	1,906,480				
Visalia	340,230	339,496	344,696	363,276	366,787	372,290	377,870				
Total	11,069,646	10,987,347	11,094,868	10,969,687	11,164,240	11,331,710	11,501,680				

Note: Data provided by ACCEL.

## Authority for California Cities Excess Liability

## ULAE as of June 30, 2015

(A) Selected ULAE Factor	3.5%
(B) Provision for Unpaid ULAE :	
IBNR at 6/30/15	\$14,924,000
Half of Case Reserves at 6/30/15	1,436,000
Computation Base	\$16,360,000
Provision for Unpaid ULAE at 6/30/15	\$573,000