



# **Bickmore**

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# **Actuarial**

## **Actuarial Review of the Self-Insured Workers' Compensation Program**

*Outstanding Liabilities as of June 30, 2019*

*Forecast for Program Years 2019-20 and 2020-21*

*Presented to*

**Santa Clara County Schools Insurance Group**

October 4, 2019





Friday, October 4, 2019

Ms. Corinne Kelsch  
Executive Director  
Santa Clara County Schools Insurance Group  
645 Wool Creek Drive  
San Jose, CA 95112

Re: Actuarial Review of the Self-Insured Workers' Compensation Program

Dear Ms. Kelsch:

As you requested, we have completed our review of Santa Clara County Schools Insurance Group's self-insured workers' compensation program. We estimate the program's liability for the outstanding tail claims to be \$1,276,000 as of June 30, 2019. This amount includes allocated loss adjustment expenses (ALAE), unallocated loss adjustment expenses (ULAE), and a discount for anticipated investment income. ALAE is the direct cost associated with the defense of individual claims (e.g. legal fees, investigation fees, court charges). ULAE is the cost to administer all claims to final settlement, which may be years into the future (e.g. claims adjusters' salaries, taxes). The discount for investment income is calculated based on the likely payout pattern of the Group's claims, assuming a 2.0% return on investments per year. Given estimated program assets of \$2,542,000 as of June 30, 2019, the program is currently funded above the 90% confidence level.

Although the program is currently fully insured, we have also analyzed the projected funding for the upcoming year, assuming an SIR of \$250,000 per occurrence. We estimate the ultimate cost of claims and expenses for claims incurred during the 2019-20 and 2020-21 program years to be \$13,261,000 and \$13,922,000, respectively. For budgeting purposes, the expected costs of 2019-20 and 2020-21 claims translate to rates of \$0.96 and \$0.98 per \$100 of payroll, respectively.

The \$1,276,000 estimate is the minimum liability to be booked by the Group at June 30, 2019 for its workers' compensation program, in accordance with Governmental Accounting Standards Board (GASB) Statement #10. GASB #10 requires the Group to accrue a liability on its financial statements for the ultimate cost of claims and expenses associated with all reported and unreported claims, including ALAE and ULAE. GASB #10 does not prohibit the discounting of losses to recognize investment income.

The liability estimate also includes \$414,000 of estimated non-recoverable amounts from claims that have exceeded the SIR. These claims are listed on Exhibit 1 - Tail, Pages 2 and 3. This list is based on an excess claim run provided by Keenan & Associates which filters paid losses that exceed the SIR. The estimate of the total

unrecoverable is included on Exhibit 1 - Tail, Page 4 and is based on an assumption of 25% of the outstanding reserves above the SIR.

Our conclusions regarding the Group's liability for unpaid loss and loss adjustment expenses (LAE) at June 30, 2019 are summarized in the table below.

Santa Clara County Schools Insurance Group  
Self-Insured Workers' Compensation Program  
Estimated Liability for Unpaid Loss and LAE  
at June 30, 2019

	Expected	Marginally Acceptable 70% CL	Recommended Range			Conservative 90% CL
			Low 75% CL	Target 80% CL	High 85% CL	
Loss and ALAE	\$802,000					
ULAE	157,000					
Estimated Non- Recoverable	414,000					
Investment Income Offset	<u>(97,000)</u>					
Discounted Loss and LAE	\$1,276,000	\$1,452,000	\$1,531,000	\$1,624,000	\$1,740,000	\$1,894,000
Assets	<u>2,542,000</u>					
Surplus or (Deficit)	\$1,266,000	\$1,090,000	\$1,011,000	\$918,000	\$802,000	\$648,000

GASB #10 does not address an actual asset requirement for the program, but only speaks to the liability to be recorded on the Group's financial statements.

Because actuarial estimates of claims costs are subject to some uncertainty, we recommend that an amount in addition to the discounted expected loss costs be set aside as a risk margin for contingencies. Generally, the amount should be sufficient to fund assets to the 75% to 85% confidence level for primary programs. We consider funding assets to the 70% confidence level to be marginally acceptable and funding assets to the 90% confidence level to be conservative.

The table below shows our funding recommendations for Santa Clara County Schools Insurance Group for the 2019-20 fiscal year, assuming a self-insured retention (SIR) of \$250,000.

Santa Clara County Schools Insurance Group  
 Self-Insured Workers' Compensation Program  
 Loss and LAE Funding Guidelines for 2019-20  
 Self-Insured Retention (SIR) of \$250,000

	Expected	Marginally Acceptable 70% CL	Recommended Range			Conservative 90% CL
			Low 75% CL	Target 80% CL	High 85% CL	
Loss and ALAE	\$13,565,000					
ULAE	1,017,000					
Investment Income Offset	<u>(1,321,000)</u>					
Discounted Loss and LAE	\$13,261,000	\$14,388,000	\$14,813,000	\$15,303,000	\$15,900,000	\$16,682,000
Rate per \$100 of 2019-20 Payroll	\$0.96	\$1.05	\$1.08	\$1.11	\$1.16	\$1.21

The funding recommendations shown in the table above do not include any recognition of the existing funding margin (surplus or deficit) at June 30, 2019. They are for losses and loss adjustment expenses only, and do not include a provision for loss control, overhead, excess insurance premiums, and other expenses associated with the program.

The table below shows our funding recommendations for Santa Clara County Schools Insurance Group for the 2020-21 fiscal year, assuming a self-insured retention (SIR) of \$250,000.

Santa Clara County Schools Insurance Group  
 Self-Insured Workers' Compensation Program  
 Loss and LAE Funding Guidelines for 2020-21  
 Self-Insured Retention (SIR) of \$250,000

	Expected	Marginally Acceptable 70% CL	Recommended Range			Conservative 90% CL
			Low 75% CL	Target 80% CL	High 85% CL	
Loss and ALAE	\$14,241,000					
ULAE	1,068,000					
Investment Income Offset	<u>(1,387,000)</u>					
Discounted Loss and LAE	\$13,922,000	\$15,105,000	\$15,551,000	\$16,066,000	\$16,692,000	\$17,514,000
Rate per \$100 of 2020-21 Payroll	\$0.98	\$1.07	\$1.10	\$1.13	\$1.18	\$1.24

The funding recommendations shown in the table above do not include any recognition of the existing funding margin (surplus or deficit) at June 30, 2020. They are for losses and loss adjustment expenses only, and do not include a provision for loss control, overhead, excess insurance premiums, and other expenses associated with the program.

The loss projections in this report reflect the estimated impact of benefit legislation contained in AB749, AB227, SB228, SB899, SB863, and recent WCAB court decisions based upon information provided by the WCIRB. The ultimate impact on loss costs of legislated benefit adjustments are generally difficult to forecast in advance because the changes typically take place over a period of several years following enactment. Furthermore, actuarially derived benefit level evaluations often underestimate actual future cost levels. The shortfalls result from a variety of circumstances, including: increases in utilization levels, unanticipated changes in administrative procedures, and cost shifting among benefit categories. Thus, actual cost increases could differ, perhaps substantially, from the WCIRB's estimates.

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

We appreciate the opportunity to be of service to Santa Clara County Schools Insurance Group in preparing this report. Please feel free to call Derek Burkhalter at (916) 244-1167, Dana Winkler at (503) 419-0455 or York Lee at (916) 244-1159 with any questions you may have concerning this report.

Sincerely,

Bickmore Actuarial



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



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Dana Winkler, MBA, ACAS, MAAA  
Senior Actuarial Manager, Bickmore Actuarial  
Associate, Casualty Actuarial Society  
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York Lee  
Senior Analyst, Bickmore Actuarial

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## **I. BACKGROUND**

Santa Clara County Schools Insurance Group was self-insured for its workers' compensation program from October 1, 1978 to December 31, 1995. Effective January 1, 1996, SCCSIG became fully insured with Fremont Insurance. From July 1, 2000 through June 30, 2003, the Group was fully insured with ACE. Since July 1, 2003, SCCSIG has been self-insured with a zero-dollar insured retention through PIPS. Claims administration services are provided by Keenan & Associates for the pre-1996 self-insured claims. Additional background on the program prior to January 1, 1996 is given in Appendix I - Tail.

As of June 30, 2019, the Group had assets of \$2,542,000 for the program. The June 30, 2019 fund balance is net of non-claims-related liabilities as shown on Appendix J - Tail.

The purpose of this review is to provide a guide to the Group to determine reasonable funding levels for its self-insurance program according to the funding policy the Group has adopted and to comply with Governmental Accounting Standards Board Statements #10 and #30. The specific objectives of the study are to estimate the Group's liability for outstanding claims as of June 30, 2019, project ultimate loss costs for 2019-20 and 2020-21, and provide funding guidelines to meet these liabilities and future costs.

## **II. CONCLUSIONS AND RECOMMENDATIONS**

### **A. LIABILITY FOR OUTSTANDING CLAIMS**

Graph 1 on the following page summarizes our assessment of the Group's funding position as of June 30, 2019. The dark-colored bars indicate our estimates of the program's liability for outstanding claims before recognition of the investment income that can be earned on the assets held before the claim payments come due. The horizontal line across the graph indicates the Group's available assets at June 30<sup>th</sup>.

Our best estimate of the full value of the Group's liability for outstanding claims within its self-insured retention (SIR) is \$1,373,000 as of June 30, 2019. This amount includes losses, allocated loss adjustment expenses (ALAE), and unallocated loss adjustment expenses (ULAE). ALAE is the direct cost associated with the defense of individual claims (e.g. legal fees, investigation fees, court charges). ULAE is the cost to administer claims to final settlement, which may be years in the future (e.g. claims adjusters' salaries, taxes).

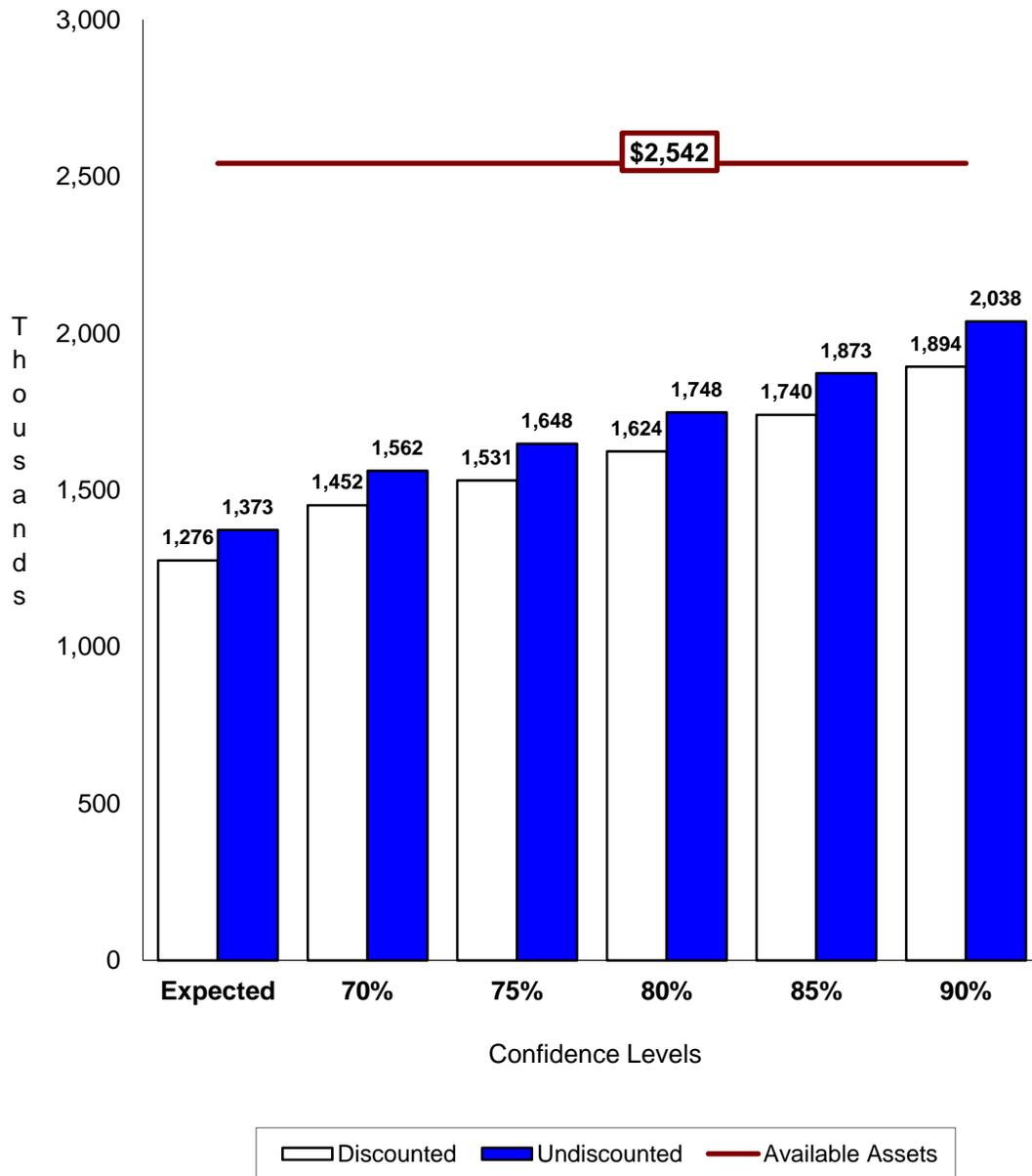
There is some measure of uncertainty associated with our best estimate because of the random nature of much of the process that determines ultimate claims costs. For this reason, we generally recommend that a program such as this include some funding margin for the possibility that actual loss costs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

The Group can earn investment income on the assets it holds until claims payments come due. Assuming a long-term average annual return on investments of 2.0%, we estimate the impact of investment income earnings to be about 7.0% if the program is funded within the range indicated in the graph, resulting in a discounted liability for outstanding claims of \$1,276,000 as of June 30, 2019.

Investment income earnings will be less than this when the program does not maintain sufficient funding, and more when there is excess funding. Thus, thinking in terms of liabilities discounted for investment income can actually mask funding deficiencies and redundancies that might otherwise be obvious. However, the discounted liabilities do represent legitimate funding targets. The light-colored bars on Graph 1 show our estimates of the Group's discounted liability for outstanding claims.

Graph 1

Santa Clara County Schools Insurance Group  
Workers' Compensation  
Available Assets vs Outstanding Liability (\$000's)  
at June 30, 2019



The table below displays a breakdown of the program's outstanding loss and LAE liabilities into case reserves and incurred but not reported (IBNR) reserves at June 30, 2019, before recognition of investment income.

Santa Clara County Schools Insurance Group  
Self-Insured Workers' Compensation Program  
Estimated Liability for Unpaid Loss and LAE at June 30, 2019

Year	Case Reserves	IBNR Reserves	Total Outstanding
1977-78	\$0	\$0	\$0
1978-79	0	0	0
1979-80	12,336	1,850	14,186
1980-81	48,342	2,901	51,243
1981-82	0	0	0
1982-83	101,079	10,108	111,187
1983-84	0	0	0
1984-85	0	0	0
1985-86	26,873	4,031	30,904
1986-87	36,607	5,491	42,098
1987-88	0	0	0
1988-89	8,427	843	9,270
1989-90	79,810	7,981	87,791
1990-91	71,304	10,696	82,000
1991-92	102,141	5,107	107,248
1992-93	0	0	0
1993-94	83,341	372	83,713
1994-95	124,126	20,305	144,431
1995-96	27,747	10,321	38,068
Loss and ALAE	\$722,133	\$80,005	\$802,138
ULAE		157,467	157,467
Non-Recoverable	414,000		414,000
Total	\$1,136,133	\$237,472	\$1,373,605

## **B. PROGRAM FUNDING: GOALS AND OBJECTIVES**

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

According to the Governmental Accounting Standards Board (GASB), the most relevant source of guidance on the subject is Financial Accounting Standards Board Statement #60. A liability for unpaid claim costs, including all loss adjustment expenses, should be accrued at the time the self-insured events occur. This liability should include an allowance for incurred but not reported claims. It may be discounted for investment income at an appropriate rate of return, provided the discounting is disclosed. The regulations detailing the way in which this must be done are outlined in GASB's statements #10 and #30. These regulations are required to be applied by the Group.

GASB #10 and #30 do not address asset requirements. They do, however, allow a range of amounts to be recognized for accounting purposes; specifically, GASB #10 and #30 allow recognition of a risk margin for unexpectedly adverse loss experience. Thus, for accounting purposes, it is possible to formulate a funding policy from a range of alternatives. The uncertainty in any estimate of the program's liability for outstanding claims should be taken into consideration in determining funding policy, but it may be offset by recognizing anticipated investment income earnings. This usually means developing a funding program based on discounted claims costs with some risk margin for unexpected adverse loss experience.

The amount of the risk margin should be a question of long-term funding policy. We recommend that the risk margin be determined by thinking in terms of the probability that a given level of assets will prove to be adequate. For example, a reasonable goal might be to maintain assets at the 85% confidence level.

A key factor to consider in determining funding policy is the degree to which stability is required in the level of contributions to the program from year to year. If you elect to maintain assets at a low confidence level, the chances are much greater that future events will prove that additional contributions should have been made for old claims. The additional contributions for old claims may be required at the same time that costs are increasing dramatically on new claims. The burden of funding for increases on past years as well as on current years, may well be prohibitive.

We generally recommend maintaining program assets at the 80% confidence level, after recognition of investment income, with a recommended range of the 75% to 85% confidence levels. We tend to think of the 70% confidence level as marginally acceptable and of the 90% confidence level as conservative. We recommend the 75% to 85% confidence level range because the probabilities are reasonably high that resulting assets will be sufficient to meet claim liabilities, yet the required risk margins are not so large that they will cause most self-insured entities to experience undue financial hardship. In addition, within this range, anticipated investment income generally offsets the required risk margin for the most part, which means that assets are likely sufficient on an undiscounted basis.

We also strongly believe, however, that the confidence level to which any future year is funded should be evaluated in light of the relative certainty of the assumptions underlying the actuarial analysis, the Group's other budgetary constraints, and the relative level of risk it is believed appropriate to assume. This means formulating both short and long-term funding goals, which may be the same in some years, but different in others.

In general, we recommend funding each year's claims costs in that year. When surpluses or deficits have developed on outstanding liabilities and funding adjustments are necessary, they should be clearly identified as such so that the habit of funding each year's claims costs that year is maintained. We also recommend that you reduce a surplus more slowly than you would accumulate funding to reduce a deficit.

It is estimated that program assets were \$2,542,000 as of June 30, 2019, resulting in the program being funded above the 90% confidence level.

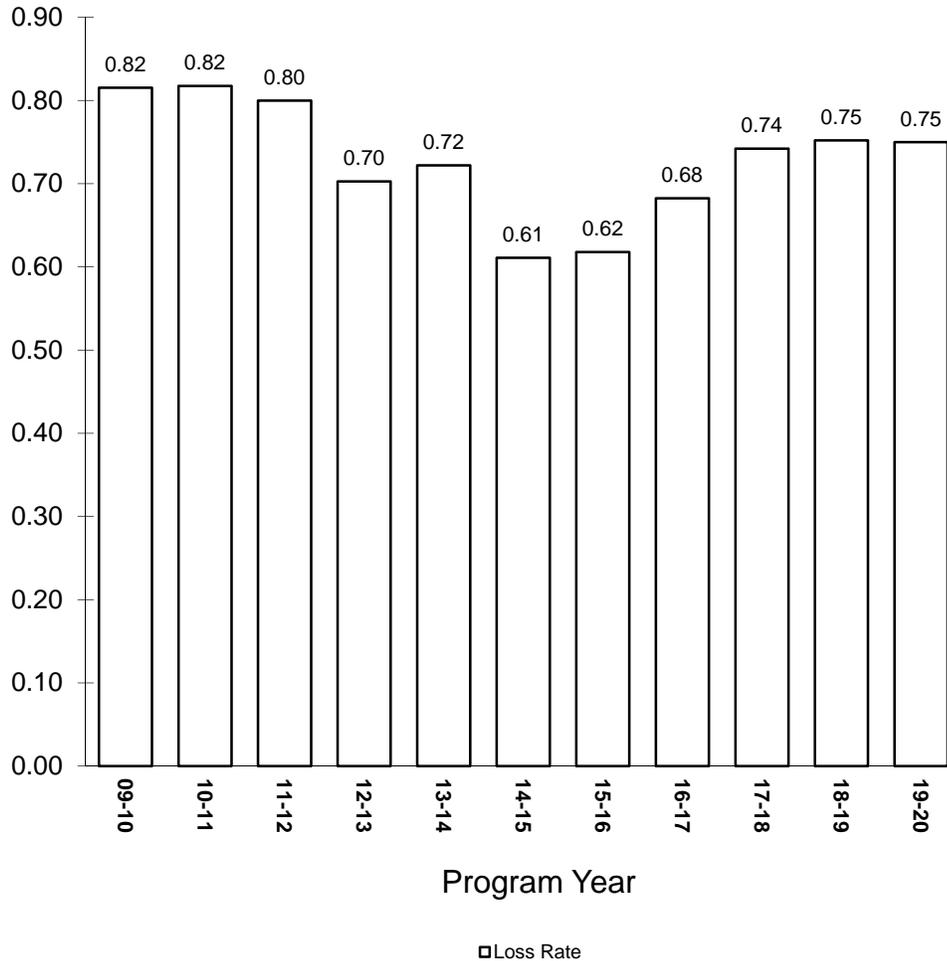
### C. HISTORICAL TRENDS IN THE SELF-INSURANCE PROGRAM

#### Loss Rate

The program's dollars of loss per \$100 of payroll (based on losses limited to \$100,000 per occurrence), or loss rate, has been relatively stable over the period shown below. Our projected 2019-20 loss rate is \$0.75 per \$100 of payroll. See Graph 2 below.

Graph 2

Santa Clara County Schools Insurance Group  
Workers' Compensation  
Dollars of Loss per  
\$100 of Payroll

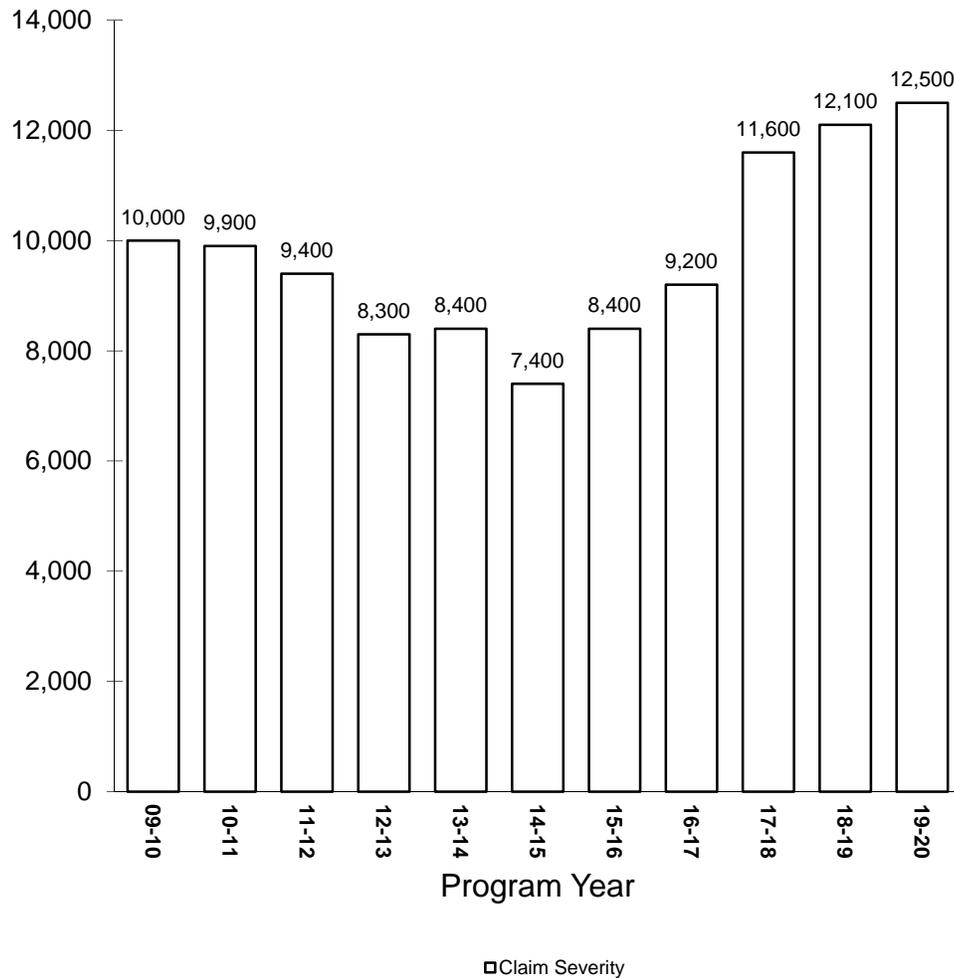


Severity

The program's average dollars of loss per claim (based on losses limited to \$100,000 per occurrence), or severity, has increased since a low of \$7,400 in 2014-15. The projected 2019-20 severity of \$12,500 per claim reflects the apparent increasing trend. See Graph 3 below.

Graph 3

Santa Clara County Schools Insurance Group  
Workers' Compensation  
Dollars of Loss per Claim

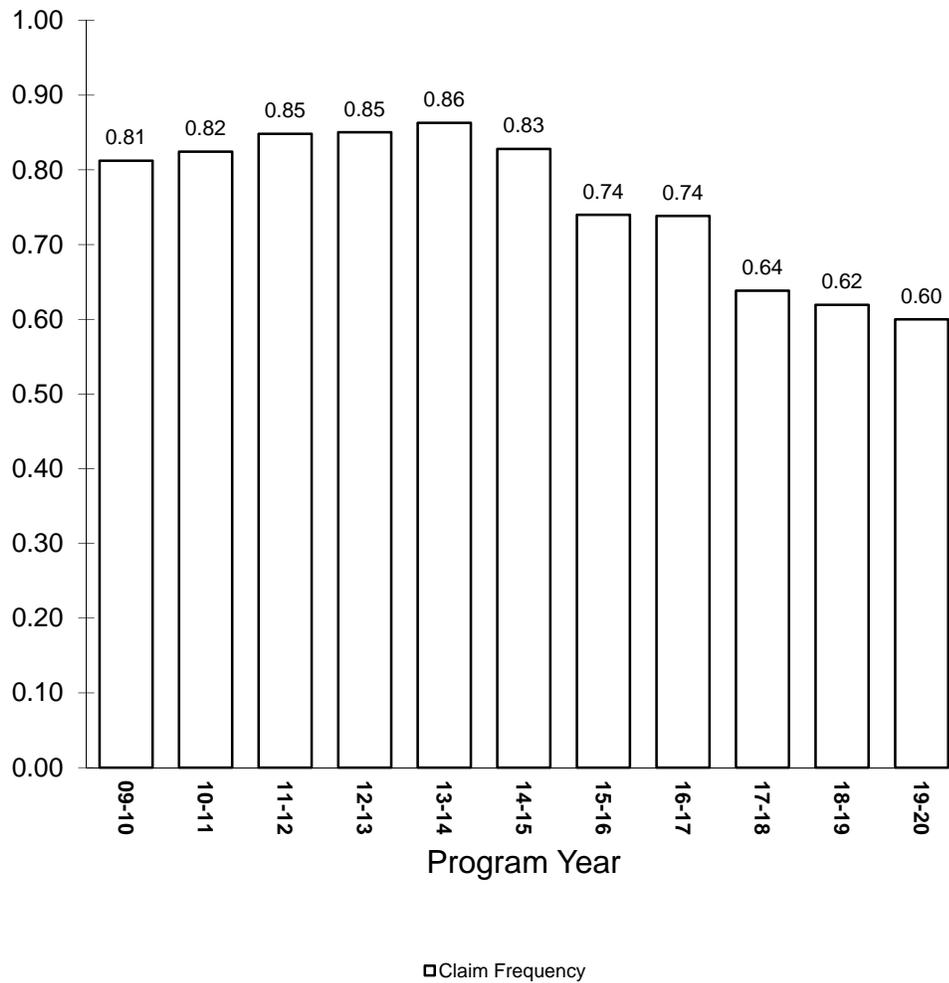


Frequency

The program's number of claims per \$1 million of payroll, or frequency, has been decreasing since 2013-14. The projected 2019-20 frequency of 0.60 claims per \$1 million of payroll reflects this observed decreasing trend. See Graph 4 below.

Graph 4

Santa Clara County Schools Insurance Group  
Workers' Compensation  
Number of Claims per  
\$1 Million of Payroll



## D. COMPARISON WITH PREVIOUS RESULTS

The prior report for Santa Clara County Schools Insurance Group was dated September 20, 2018. In the table below we display actual versus expected development of incurred losses and ALAE by accident year between the June 30, 2018 evaluation date of the prior report and the June 30, 2019 evaluation date of the current report.

### Actual Versus Expected Incurred Loss and ALAE Development

Accident Year	Expected Incurred Development	Actual Incurred Development	Actual Minus Expected
1977-78	\$0	\$0	\$0
1978-79	0	0	0
1979-80	2,000	0	(2,000)
1980-81	2,000	23,000	21,000
1981-82	0	0	0
1982-83	9,000	35,000	26,000
1983-84	0	0	0
1984-85	0	0	0
1985-86	4,000	0	(4,000)
1986-87	4,000	21,000	17,000
1987-88	5,000	(34,000)	(39,000)
1988-89	4,000	(31,000)	(35,000)
1989-90	9,000	(2,000)	(11,000)
1990-91	4,000	57,000	53,000
1991-92	8,000	(17,000)	(25,000)
1992-93	0	0	0
1993-94	12,000	(6,000)	(18,000)
1994-95	17,000	(30,000)	(47,000)
1995-96	3,000	19,000	16,000
Total	\$83,000	\$35,000	(\$48,000)

As shown, actual incurred development was less than anticipated since the prior report.

Based on the assumptions from the prior report, it was expected that incurred losses through accident year 1995-96 would increase by \$83,000 between the two evaluation dates. However, actual development was approximately \$35,000; or about \$48,000 less than expected.

In the table below we display actual versus expected development of paid losses and ALAE by accident year between the June 30, 2018 evaluation date of the prior report and the June 30, 2019 evaluation date of the current report.

### Actual Versus Expected Paid Loss and ALAE Development

Accident Year	Expected Paid Development	Actual Paid Development	Actual Minus Expected
1977-78	\$0	\$0	\$0
1978-79	0	0	0
1979-80	16,000	1,000	(15,000)
1980-81	41,000	13,000	(28,000)
1981-82	0	0	0
1982-83	51,000	26,000	(25,000)
1983-84	0	0	0
1984-85	0	0	0
1985-86	7,000	2,000	(5,000)
1986-87	5,000	11,000	6,000
1987-88	8,000	20,000	12,000
1988-89	5,000	1,000	(4,000)
1989-90	10,000	4,000	(6,000)
1990-91	3,000	15,000	12,000
1991-92	15,000	41,000	26,000
1992-93	0	0	0
1993-94	29,000	118,000	89,000
1994-95	22,000	4,000	(18,000)
1995-96	2,000	4,000	2,000
Total	\$214,000	\$260,000	\$46,000

As shown, actual paid development was greater than anticipated since the prior report.

Based on the assumptions from the prior report, it was expected that paid losses through accident year 1995-96 would increase by \$214,000 between the two evaluation dates. However, actual development was approximately \$260,000; or about \$46,000 more than expected.

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

### Change in Ultimate Loss and ALAE

Accident Year	Prior Report	Current Report	Change In Ultimate
1977-78	\$32,000	\$32,000	\$0
1978-79	1,329,000	1,329,000	0
1979-80	2,304,000	2,304,000	0
1980-81	2,353,000	2,377,000	24,000
1981-82	3,119,000	3,119,000	0
1982-83	3,663,000	3,699,000	36,000
1983-84	5,573,000	5,573,000	0
1984-85	3,487,000	3,487,000	0
1985-86	4,123,000	4,123,000	0
1986-87	6,465,000	6,488,000	23,000
1987-88	6,588,000	6,549,000	(39,000)
1988-89	6,980,000	6,946,000	(34,000)
1989-90	7,285,000	7,282,000	(3,000)
1990-91	10,108,000	10,172,000	64,000
1991-92	9,092,000	9,072,000	(20,000)
1992-93	8,981,000	8,981,000	0
1993-94	8,836,000	8,818,000	(18,000)
1994-95	7,561,000	7,516,000	(45,000)
1995-96	4,639,000	4,658,000	19,000
Total	\$102,518,000	\$102,525,000	\$7,000

As shown, overall we have increased our estimated ultimate losses by \$7,000 since our prior report. The changes in our estimates of ultimate losses reflect a certain amount of weight applied to both the incurred and paid development listed on the previous two pages.

At the time of the prior report, we estimated the liability for outstanding claims as of June 30, 2018 to be \$1,522,000 at the discounted, expected level. Our current estimate as of June 30, 2019 is \$1,276,000, a decrease in our assessment of the Group's outstanding liabilities, as shown below:

### Outstanding Claim Liabilities for Loss and LAE

	Prior Report at June 30, 2018	Current Report at June 30, 2019	Change
(A) Case Reserves:	\$947,000	\$722,000	(\$225,000)
(B) IBNR Reserves:	109,000	80,000	(29,000)
(C) Claims Administration Reserves:	204,000	157,000	(47,000)
(D) Estimated Non-Recoverable:	400,000	414,000	14,000
(E) Total Reserves:	\$1,660,000	\$1,373,000	(\$287,000)
(F) Offset for Investment Income:	(138,000)	(97,000)	41,000
(G) Total Outstanding Claim Liabilities:	\$1,522,000	\$1,276,000	(\$246,000)

As shown, our estimate of outstanding claims liabilities at the discounted, expected level has decreased between June 30, 2018 and June 30, 2019, as reflected in our prior and current reports, respectively.

Total case reserves have decreased by \$225,000, reflecting the claims run-off, while our estimate of IBNR reserves has decreased by \$29,000. Reserves for future claims administration expenses have also decreased. We estimate a slight increase in the amount of non-recoverable case reserves above the SIR than had been listed in the prior report. Total reserves are estimated to be \$287,000 less than the estimate from the prior report. Investment income is expected to be lower. The net change due to the above factors is an overall decrease of \$246,000 in our estimate of outstanding claim liabilities for loss and LAE.

At the time of the prior report, available assets were estimated to be \$2,790,000 as of June 30, 2018, which corresponded to the then-estimated discounted liability for outstanding claims above the 90% confidence level. Available assets are currently estimated to be \$2,542,000 as of June 30, 2019, which corresponds to the currently estimated liability for outstanding claims above the 90% confidence level. It can be summarized as follows:

**Funding Margin**

	Prior Report at June 30, 2018	Current Report at June 30, 2019	Change
(A) Outstanding Liability at the Discounted Expected Level:	\$1,522,000	\$1,276,000	(\$246,000)
(B) Estimated Assets At June 30:	2,790,000	2,542,000	(248,000)
(C) Surplus/(Deficit):	\$1,268,000	\$1,266,000	(\$2,000)

As you can see, our estimate of the program’s funding margin at the discounted, expected level has decreased by \$2,000 between June 30, 2018 (as previously estimated) and June 30, 2019 (as currently estimated). This is driven by a decrease in the estimated fund assets between the two points, mostly offset by a decrease in the estimated outstanding liability.

At the time of the prior report, our funding estimate for the 2018-19 year was \$13,306,000 at the discounted, expected level, assuming an SIR of \$250,000. That amount included allocated loss adjustment expenses (ALAE), unallocated loss adjustment expenses (ULAE), and a discount for anticipated investment income. Our current estimate for the 2019-20 year is \$13,261,000 at the discounted, expected level, a decrease in the program's expected loss costs, as shown in the table below:

**Comparison of Funding for Loss and LAE**

	Prior Report 2018-19 SIR = \$250,000	Current Report 2019-20 SIR = \$250,000	Change
(A) Ultimate Loss and ALAE:	\$13,588,000	\$13,565,000	(\$23,000)
(B) Ultimate Claims Administration (ULAE):	1,019,000	1,017,000	(2,000)
(C) Total Claim Costs:	\$14,607,000	\$14,582,000	(\$25,000)
(D) Offset for Investment Income:	(1,301,000)	(1,321,000)	(20,000)
(E) Total Recommended Funding:	\$13,306,000	\$13,261,000	(\$45,000)
(F) Funding per \$100 of Payroll:	\$0.99	\$0.97	(\$0.02)

As you can see, our funding recommendations at the discounted, expected level have decreased between 2018-19 and 2019-20, as shown in our prior and current reports, respectively.

Our estimates of ultimate loss and ALAE have decreased by \$23,000. In addition, claims administration costs are expected to be lower, resulting in an overall decrease in total claim costs of \$25,000. Investment income is expected to be higher. The net change due to the above factors is an overall decrease of \$45,000 in our annual funding estimate for loss and LAE. The funding rate per \$100 of payroll has decreased by \$0.02.

## **E. DATA PROVIDED FOR THE ANALYSIS**

Overall, the data utilized in preparing this report appears to be accurate.

Comments and issues regarding the data are as follows:

- We received loss data evaluated as of June 30, 2019 (See Appendix K - Tail and Appendix H - Project Funding). We also utilized the data from the Group's most recent actuarial study for our assessment of loss development.
- Data was not available for the 1996-97 through 2002-03 years. Since these years are fully insured, there is no impact on the estimated liability for outstanding claims.
- Our estimated outstanding claims administration cost for the self-insured period (which ended in 1995-96) is based on information provided by the claims administrator, namely that the average ULAE cost per claim in 2019-20 will be approximately \$975 and that about 6 claims are expected to close each year.
- The June 30, 2019 fund balance is net of non-claims-related liabilities as shown on Appendix J - Tail.
- The program has a number of claims that have exceeded the SIR. It is our understanding that paid amounts in excess of SIR may not be recoverable by the Group. These claims are listed on Exhibit 1 - Tail, Pages 2 and 3. This list is based on an excess claim run provided by Keenan & Associates which filters paid losses that exceed the SIR. The estimate of the total unrecoverable is included on Exhibit 1 - Tail, Page 4 and is based on an assumption of 25% of the outstanding reserves above the SIR.
- For the purpose of projecting 2019-20 and 2020-21 costs, we have assumed that the program's self-insured retention would be \$250,000 per occurrence.
- We have assumed that the Group's payroll for 2019-20 and 2020-21 will be \$1,374,415,000 and \$1,415,647,000, respectively, based upon information provided by the Group (See Appendix I - Project Funding).
- Our estimate of claims administration for the 2019-20 and 2020-21 projected funding estimates is based on an assumption of ULAE costs being equivalent to 7.5% of total loss and ALAE.

The data provided for the analysis appears to be reasonable for use in this actuarial valuation of liabilities and projection of loss costs.

### **III. ASSUMPTIONS AND LIMITATIONS**

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

- Our analysis is based on loss experience, exposure data, and other general and specific information provided to us by the Group. While we have not independently audited or verified this information, we have reviewed it for reasonableness and internal consistency.
- We have also made use of loss statistics that have been developed from the information gathered and compiled from a large group of public entities with similar self-insured workers' compensation programs.
- We have assumed that the future development of incurred and paid losses can be reasonably predicted on the basis of development of such losses in the recent past. We have also assumed that the historical development patterns for a large group of public entities with similar self-insured workers' compensation programs in the aggregate form a reasonable basis of comparison to the patterns from Santa Clara County Schools Insurance Group's data.
- We have made use of cost relationships for claims of various sizes derived from the most recent actuarial review of a large group of public entities with similar self-insured workers' compensation programs.
- We have assumed that there is a continuing relationship between past and future loss costs.
- It is not possible to predict future claim costs precisely. Most of the costs of workers' compensation claims arise from a small number of incidents involving serious injury. A relatively small number of such claims could generate enough loss dollars to significantly reduce, or even deplete, the self-insurance fund.
- We cannot predict and have not attempted to predict the impact of future law changes and court rulings on claims costs. This is one major reason why we believe our funding recommendations are reasonable now, but should not be extrapolated into the future.
- The changes in cost levels associated with benefit increases and administrative changes typically take place over a period of several years following their enactment, and these changes are very difficult to forecast in advance. We have based our benefit level factors on those produced by the Workers' Compensation

Insurance Rating Bureau of California (WCIRB). See Appendix E - Projected Funding for a display of the benefit level cost indices by fiscal year.

- We have assumed that the loss rate trend associated with claim costs increases at 1.4% per year. We have assumed that claim severity increases at 3.5% per year, and that claim frequency decreases at 2.0% per year.
- We have assumed that payroll and other inflation-sensitive exposure measures increase 2.5% annually due to inflation.
- At the Group's instruction, we have assumed that assets held for investment will generate an average annual return of 2.0% over the duration of payment of the loss liabilities. It should be noted that actual future investment returns may vary significantly from this assumption, depending upon the prevailing investment market conditions.
- The claims costs we have estimated include indemnity and medical payments, and all loss adjustment expenses. We have not included estimates for excess insurance premiums and other expenses associated with the program based upon information provided by the Group.
- Our funding recommendations do not include provisions for catastrophic events not in the Group's history, such as earthquakes, flooding, mass civil disorder, or mass occupational disease.
- Unless otherwise specified, our estimates assume that all excess insurance is valid and collectible. Further, our funding recommendations do not include a provision for losses greater than the Group's excess coverage.
- The Group's assets available for the program are estimated to be \$2,542,000 as of June 30, 2019 for use in this report. This is shown in further detail in Appendix J - Tail.

#### **IV. GLOSSARY OF ACTUARIAL TERMS**

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

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

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

**Case Reserve** - The amount left to be paid on a claim, as estimated by the claims administrator.

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

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

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

**Discount Factor** - A factor to adjust estimated loss costs to reflect anticipated investment income from assets held prior to actual claim payout.

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

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

**Loss Development Factor** - A factor applied to losses for a particular accident period to reflect the fact that reported and paid losses do not reflect final values until all claims are settled (see Section IV).

**Loss Rate** - Ultimate losses per \$100 of payroll.

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

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

**Paid Losses** - Losses actually paid on all reported claims.

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

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

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

**Severity** - Average claim cost.

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

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

Santa Clara County Schools Insurance Group - Workers' Compensation  
July 1, 1977 through December 31, 1995  
Funding Guidelines for Outstanding Liabilities at  
June 30, 2019

(A) Estimated Ultimate Losses Incurred through 6/30/19: (From Appendix E - Tail)	\$102,523,000
(B) Estimated Paid Losses through 6/30/19: (From Appendix E - Tail)	101,721,000
(C) Estimated Liability for Claims Outstanding at 6/30/19: (From Appendix E - Tail)	<u>\$802,000</u>
(D) Estimated Liability for Outstanding Claims Administration Fees at 6/30/19: (From Appendix D - Tail)	157,000
(E) Estimated Unrecoverable Amounts over the SIR Over the SIR as of 6/30/19: (From Exhibit 1 - Tail, Page 4, Item (C))	414,000
(F) Total Outstanding Liability for Claims at 6/30/19: ((C) + (D) + (E))	<u>\$1,373,000</u>
(G) Reserve Discount Factor (Based on a Discount Rate of 2.0%.): (Appendix G - Tail, (G))	0.930
(H) Discounted Outstanding Liability for Claims at 6/30/19: ((F) x (G))	<u>\$1,276,000</u>

Confidence Level of Adequacy:	Marginally Acceptable 70%	75%	Recommended 80%	85%	Conservative 90%
(I) Confidence Level Factor: (From Appendix H - Tail)	1.138	1.200	1.273	1.364	1.484
(J) Margin for Adverse Experience: ((H) x [(I) - 1])	176,000	255,000	348,000	464,000	618,000
(K) Total Required Assets at 6/30/19: ((H) + (J))	<u>\$1,452,000</u>	<u>\$1,531,000</u>	<u>\$1,624,000</u>	<u>\$1,740,000</u>	<u>\$1,894,000</u>
(L) Estimated Total Assets at 6/30/19: (From Appendix J - Tail)	2,542,000	2,542,000	2,542,000	2,542,000	2,542,000
(M) Indicated Funding Redundancy/ (Deficiency): ((L) - (K))	<u>\$1,090,000</u>	<u>\$1,011,000</u>	<u>\$918,000</u>	<u>\$802,000</u>	<u>\$648,000</u>

Santa Clara County Schools Insurance Group - Workers' Compensation

Claims with Reserves Over the SIR at  
June 30, 2019

DOL (A)	Claim No. (B)	SIR (C)	Paid Over SIR (D)	Incurred Over SIR (E)	Reserves Over SIR (F)
10/17/79	5010-80-0009	250,000	5,429	5,429	-
02/09/82	5018-82-0095	250,000	144,596	144,596	-
04/19/83	5013-83-0069	250,000	125,913	125,913	-
07/26/83	5011-84-0001	100,000	6,844	6,844	-
09/02/83	5006-84-0024	100,000	44,741	44,741	-
09/02/83	5014-84-0002	100,000	29,120	29,120	-
01/19/84	5001-84-0098	100,000	39,884	39,884	-
01/31/84	5001-84-0100	100,000	7,161	7,161	-
02/22/84	5006-84-0134	100,000	14,810	14,810	-
05/09/84	5001-84-0149	100,000	17,455	17,455	-
05/15/84	5020-84-0053	100,000	112,873	112,873	-
06/13/84	5007-84-0079	100,000	17,137	17,137	-
03/15/85	5008-85-0070	100,000	4,044	4,044	-
05/01/85	5005-85-0184	100,000	6,325	6,325	-
05/31/85	5002-85-0039	100,000	14,483	14,483	-
10/11/85	5015-86-0039	125,000	34,668	34,668	-
10/14/85	5018-86-0020	125,000	228,551	235,509	6,957
11/19/85	5006-86-0164	125,000	638	638	-
03/04/86	5008-86-0048	125,000	21,861	21,861	-
03/11/86	5018-86-0040	125,000	40,080	40,080	-
04/04/86	5010-86-0010	125,000	-	12,679	12,679
05/30/86	5011-86-0028	125,000	73,410	73,410	-
12/05/86	5017-87-0016	200,000	225,221	225,221	-
02/19/87	5005-87-0156	200,000	83,021	83,021	-
05/07/87	5008-87-0083	200,000	150,465	182,595	32,129
09/29/87	5002-88-0005	250,000	59,884	59,884	-
03/25/88	5005-88-0258	250,000	70,875	77,854	6,980
10/07/88	5015-89-0012	150,000	426,638	716,635	289,996
04/12/89	5001-89-0160	150,000	340,533	340,533	-
05/19/89	5016-89-0018	150,000	21,777	21,777	-
09/11/89	5004-90-0005	150,000	129,353	129,353	-
02/22/90	5010-90-0007	150,000	53,208	53,208	-
02/27/90	5001-90-0119	150,000	-	1,510	1,510
05/01/90	5028-90-0095	150,000	387,938	387,938	-
06/21/90	5001-90-0227	150,000	35	35	-
07/12/90	5005-91-0026	150,000	1,312	1,312	-
09/10/90	5006-91-0013	150,000	57,497	163,829	106,332
11/01/90	5013-91-0033	150,000	79,955	79,955	-
11/20/90	5008-91-0026	150,000	243,968	248,885	4,916
11/29/90	5001-91-0098	150,000	599,480	599,480	-
12/06/90	5013-91-0041	150,000	67,716	67,716	-
01/16/91	5006-91-0093	150,000	302,857	302,857	-
01/28/91	5005-91-0145	150,000	128,034	182,679	54,646
02/01/91	5001-91-0132	150,000	9,550	9,550	-
03/25/91	5007-91-0054	150,000	8,971	8,971	-

Santa Clara County Schools Insurance Group - Workers' Compensation

Claims with Reserves Over the SIR at  
June 30, 2019

DOL (A)	Claim No. (B)	SIR (C)	Paid Over SIR (D)	Incurred Over SIR (E)	Reserves Over SIR (F)
06/21/91	5005-91-0261	150,000	28,822	28,822	-
08/01/91	5010-92-0004	150,000	836,763	1,590,059	753,296
09/25/91	5008-92-0022	150,000	558,965	558,965	-
01/06/92	5002-92-0077	150,000	163,450	163,450	-
02/07/92	5006-92-0093	150,000	-	62,265	62,265
02/13/92	5005-92-0184	150,000	50,622	59,429	8,807
03/03/92	5001-92-0134	150,000	-	14,390	14,390
03/17/92	5003-92-0011	150,000	197,349	197,349	-
07/23/92	5020-93-0003	150,000	11,874	11,874	-
10/19/92	5013-93-0019	150,000	78,629	78,629	-
01/20/93	5005-93-0149	150,000	16,504	16,504	-
02/05/93	5017-93-0017	150,000	51,356	51,356	-
03/16/93	5005-93-0214	150,000	116,286	116,286	-
03/31/93	5015-93-0061	150,000	17,266	17,266	-
05/06/93	5015-93-0084	150,000	8,437	8,437	-
05/21/93	5018-93-0104	150,000	56,273	79,809	23,537
06/01/93	5001-93-0166	150,000	2,132	2,132	-
07/02/93	5001-94-0001	150,000	117,753	164,448	46,696
07/15/93	5005-94-0012	150,000	28,568	28,568	-
08/02/93	5001-94-0008	150,000	1,147	1,147	-
01/03/94	5001-94-0099	150,000	60,261	60,261	-
01/20/94	5005-94-0150	150,000	151,103	151,103	-
02/04/94	5002-94-0035	150,000	303,099	303,099	-
02/04/94	5007-94-0052	150,000	211,292	211,292	-
02/25/94	5028-94-0084	150,000	-	39,080	39,080
05/18/94	5006-94-0165	150,000	164,173	164,173	-
03/21/95	5014-95-0016	250,000	241,374	267,448	26,073
06/09/95	5006-95-0158	250,000	18,191	141,669	123,477
07/28/95	5004-96-0004	250,000	131,324	131,324	-
10/12/95	5021-96-0010	250,000	10,011	10,011	-
10/17/95	5005-96-0143	250,000	-	28,622	28,622
10/23/95	5006-96-0045	250,000	6,949	6,949	-
11/06/95	5027-96-0006	250,000	539,388	551,641	12,253
Total			8,617,668	10,272,310	1,654,642

Notes:

- (A) - (C) Provided by the Group.
- (D) - (E) From data provided by the Group at 6/30/19.
- (F) (E) - (D).

Santa Clara County Schools Insurance Group - Workers' Compensation

Estimated Unrecoverable Amounts Over the SIR at  
June 30, 2019

(A) Outstanding Reserves Above the SIR: (From Exhibit 1 - Tail, Page 3, Item (F))	\$1,655,000
(B) Estimated Unrecoverable Portion:	25%
(C) Estimated Additional Outstanding: ((A) x (B))	\$414,000

Santa Clara County Schools Insurance Group - Workers' Compensation  
 July 1, 1977 through December 31, 1995  
 Outstanding Liabilities at Expected Level

Accident Year	Estimated Ultimate (A)	Reported as of 6/30/19 (B)	Estimated IBNR as of 6/30/19 (C)	Estimated Percent of IBNR Reported Between 7/1/19 and 6/30/20 (D)	Estimated IBNR Reported (E)	Estimated IBNR as of 6/30/20 (F)
1977-1978	32,176	32,176	0	25.0%	0	0
1978-1979	1,328,790	1,328,790	0	25.0%	0	0
1979-1980	2,303,725	2,301,875	1,850	25.0%	0	1,850
1980-1981	2,376,578	2,373,677	2,901	25.0%	1,000	1,901
1981-1982	3,119,161	3,119,161	0	25.0%	0	0
1982-1983	3,698,821	3,688,713	10,108	25.0%	3,000	7,108
1983-1984	5,572,588	5,572,588	0	25.0%	0	0
1984-1985	3,486,817	3,486,817	0	25.0%	0	0
1985-1986	4,122,684	4,118,653	4,031	25.0%	1,000	3,031
1986-1987	6,487,763	6,482,272	5,491	25.0%	1,000	4,491
1987-1988	6,548,633	6,548,633	0	25.0%	0	0
1988-1989	6,945,617	6,944,774	843	25.0%	211	632
1989-1990	7,281,838	7,273,857	7,981	25.0%	2,000	5,981
1990-1991	10,171,843	10,161,147	10,696	25.0%	3,000	7,696
1991-1992	9,072,171	9,067,064	5,107	25.0%	1,000	4,107
1992-1993	8,981,085	8,981,085	0	25.0%	0	0
1993-1994	8,818,000	8,817,628	372	25.0%	93	279
1994-1995	7,516,413	7,496,108	20,305	25.0%	5,000	15,305
1995-1996	4,658,162	4,647,841	10,321	100.0%	10,321	0
Totals	\$102,522,864	\$102,442,859	\$80,005		\$27,625	\$52,380

## Notes:

- (A) From Exhibit 3 - Tail.
- (B) Provided by the Group. These losses exclude amounts incurred above the Group's SIR for each year.
- (C) (A) - (B).
- (D) Percentage of incurred but not reported (IBNR) expected to be reported between 7/1/19 and 6/30/20. The percentage is based on the development pattern selected in Appendix A - Tail.
- (E) ((A) - (B)) x (D).
- (F) (A) - (B) - (E).

This exhibit shows the calculation of the amount of incurred but not reported losses we expect as of 6/30/20. This amount is dependent on both the strength of the case reserves and the average frequency and severity of the losses incurred.

## Santa Clara County Schools Insurance Group - Workers' Compensation

## Estimated Ultimate Program Losses

Accident Year	Reported Loss Development Method (A)	Paid Loss Development Method (B)	Case Reserve Development Method (C)	Selected Estimate of Ultimate Losses (D)
1977-1978	32,176	32,176	32,176	32,176
1978-1979	1,328,790	1,328,790	1,328,790	1,328,790
1979-1980	2,301,875	2,289,539	2,301,875	2,303,725
1980-1981	2,373,677	2,325,335	2,373,677	2,376,578
1981-1982	3,119,161	3,119,161	3,119,161	3,119,161
1982-1983	3,688,713	3,591,222	3,688,713	3,698,821
1983-1984	5,572,588	5,583,733	5,572,588	5,572,588
1984-1985	3,486,817	3,497,277	3,486,817	3,486,817
1985-1986	4,118,653	4,108,147	4,118,653	4,122,684
1986-1987	6,482,272	6,477,893	6,482,272	6,487,763
1987-1988	6,548,633	6,587,925	6,548,633	6,548,633
1988-1989	6,944,774	6,984,901	6,944,774	6,945,617
1989-1990	7,273,857	7,251,599	7,273,857	7,281,838
1990-1991	10,161,147	10,180,652	10,161,147	10,171,843
1991-1992	9,067,064	9,054,572	9,067,065	9,072,171
1992-1993	8,981,085	9,079,877	8,981,085	8,981,085
1993-1994	8,817,628	8,847,833	8,817,628	8,818,000
1994-1995	7,503,604	7,482,562	7,505,045	7,516,413
1995-1996	4,657,137	4,698,636	4,651,615	4,658,162
Totals				\$102,522,864

## Notes:

- (A) From Appendix A - Tail, Page 1, Column (D).
- (B) From Appendix B - Tail, Page 1, Column (D).
- (C) From Appendix C - Tail, Column (D).
- (D) Selected averages of (A), (B), and (C).

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Reported Loss Development

Accident Year (A)	SIR Reported Losses as of 6/30/19 (B)	Reported Loss Development Factor (C)	Ultimate SIR Losses (D)
1977-1978	32,176	1.000	32,176
1978-1979	1,328,790	1.000	1,328,790
1979-1980	2,301,875	1.000	2,301,875
1980-1981	2,373,677	1.000	2,373,677
1981-1982	3,119,161	1.000	3,119,161
1982-1983	3,688,713	1.000	3,688,713
1983-1984	5,572,588	1.000	5,572,588
1984-1985	3,486,817	1.000	3,486,817
1985-1986	4,118,653	1.000	4,118,653
1986-1987	6,482,272	1.000	6,482,272
1987-1988	6,548,633	1.000	6,548,633
1988-1989	6,944,774	1.000	6,944,774
1989-1990	7,273,857	1.000	7,273,857
1990-1991	10,161,147	1.000	10,161,147
1991-1992	9,067,064	1.000	9,067,064
1992-1993	8,981,085	1.000	8,981,085
1993-1994	8,817,628	1.000	8,817,628
1994-1995	7,496,108	1.001	7,503,604
1995-1996	4,647,841	1.002	4,657,137
Totals	\$102,442,859		\$102,459,651

Notes:

- (A) Years are 7/1 to 6/30 except for 1995-1996: 7/1/95 through 12/31/95.
- (B) Provided by the Group. These losses exclude amounts over the SIR.
- (C) From Appendix A - Tail, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over the SIR.

Santa Clara County Schools Insurance Group - Workers' Compensation  
Reported Loss Development

SIR Losses Reported as of:

Accident Year	288 Months	300 Months	312 Months	324 Months	336 Months	348 Months	360 Months	372 Months	384 Months	396 Months
1977-1978									32,176	32,176
1978-1979								1,328,790	1,328,790	1,328,790
1979-1980							2,245,020	2,274,948	2,382,961	2,351,765
1980-1981						2,255,219	2,271,532	2,248,245	2,269,275	2,269,275
1981-1982					3,117,134	3,117,134	3,117,134	3,117,135	3,125,230	3,125,230
1982-1983				3,528,589	3,538,376	3,533,814	3,533,814	3,547,062	3,590,415	3,552,332
1983-1984			5,582,541	5,572,185	5,572,185	5,572,588	5,572,588	5,572,588	5,572,588	5,572,588
1984-1985		3,485,462	3,509,657	3,509,657	3,509,457	3,484,509	3,484,509	3,484,719	3,484,817	3,486,817
1985-1986	4,147,884	4,147,943	4,148,660	4,126,372	4,126,372	4,126,629	4,118,633	4,118,633	4,118,645	4,118,645
1986-1987	6,284,805	6,329,297	6,373,932	6,368,592	6,373,930	6,404,298	6,508,449	6,491,346	6,461,105	6,482,272
1987-1988	6,613,536	6,625,489	6,593,840	6,565,452	6,565,752	6,565,752	6,582,545	6,582,545	6,548,633	
1988-1989	6,976,018	6,973,407	6,966,068	6,972,254	6,971,378	6,975,881	6,975,981	6,944,774		
1989-1990	7,245,210	7,245,210	7,263,364	7,287,146	7,275,833	7,276,004	7,273,857			
1990-1991	10,138,062	10,136,002	10,137,164	10,104,042	10,104,042	10,161,147				
1991-1992	8,984,927	8,991,701	9,033,322	9,084,309	9,067,064					
1992-1993	9,030,477	8,993,061	8,993,061	8,980,852	8,981,085					
1993-1994	8,725,925	8,823,965	8,817,628							
1994-1995	7,526,605	7,496,108								
1995-1996	4,647,841									

Reported Loss Development Factors:

	288-300 Months	300-312 Months	312-324 Months	324-336 Months	336-348 Months	348-360 Months	360-372 Months	372-384 Months	384-396 Months	396-408 Months
1977-1978									1.000	1.000
1978-1979								1.000	1.000	1.000
1979-1980							1.013	1.047	0.987	1.017
1980-1981						1.007	0.990	1.009	1.000	1.007
1981-1982					1.000	1.000	1.000	1.003	1.000	0.998
1982-1983				1.003	0.999	1.000	1.004	1.012	0.989	1.000
1983-1984			0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1984-1985		1.007	1.000	1.000	0.993	1.000	1.000	1.000	1.001	1.000
1985-1986	1.000	1.000	0.995	1.000	1.000	0.998	1.000	1.000	1.000	1.000
1986-1987	1.007	1.007	0.999	1.001	1.005	1.016	0.997	0.995	1.003	
1987-1988	1.002	0.995	0.996	1.000	1.000	1.003	1.000	0.995		
1988-1989	1.000	0.999	1.001	1.000	1.001	1.000	0.996			
1989-1990	1.000	1.003	1.003	0.998	1.000	1.000				
1990-1991	1.000	1.000	0.997	1.000	1.006					
1991-1992	1.001	1.005	1.006	0.998						
1992-1993	0.996	0.999	1.000							
1993-1994	1.011	0.999								
1994-1995	0.996									
Average Dollar-Weighted Averages	1.001	1.001	1.000	1.000	1.000	1.002	1.000	1.006	0.998	1.002
3-yr	1.001	1.001	1.001	0.999	1.003	1.001	0.998	0.996	1.002	1.000
4-yr	1.001	1.001	1.001	0.999	1.002	1.004	0.998	0.997	1.001	1.000
Prior	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Santa Clara County Schools Insurance Group - Workers' Compensation  
Reported Loss Development

SIR Losses Reported as of:

Accident Year	408 Months	420 Months	432 Months	444 Months	456 Months	468 Months	480 Months	492 Months	504 Months
1977-1978	32,176	32,176	32,176	32,176	32,176	32,176	32,176	32,176	32,176
1978-1979	1,328,790	1,328,790	1,328,790	1,328,790	1,328,790	1,328,790	1,328,790	1,328,790	1,328,790
1979-1980	2,390,674	2,312,733	2,301,875	2,301,875	2,301,875	2,301,875	2,301,875	2,301,875	
1980-1981	2,284,685	2,308,685	2,320,576	2,344,134	2,350,732	2,373,677			
1981-1982	3,119,161	3,119,161	3,119,161	3,119,161	3,119,161				
1982-1983	3,552,332	3,552,332	3,653,713	3,688,713					
1983-1984	5,572,588	5,572,588	5,572,588						
1984-1985	3,486,817	3,486,817							
1985-1986	4,118,653								
1986-1987									
1987-1988									
1988-1989									
1989-1990									
1990-1991									
1991-1992									
1992-1993									
1993-1994									
1994-1995									
1995-1996									

Reported Loss Development Factors:

	408-420 Months	420-432 Months	432-444 Months	444-456 Months	456-468 Months	468-480 Months	480-492 Months	492-504 Months	504-Ult. Months
1977-1978	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1978-1979	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
1979-1980	0.967	0.995	1.000	1.000	1.000	1.000			
1980-1981	1.011	1.005	1.010	1.003	1.010				
1981-1982	1.000	1.000	1.000	1.000					
1982-1983	1.000	1.029	1.010						
1983-1984	1.000	1.000							
1984-1985	1.000								
1985-1986									
1986-1987									
1987-1988									
1988-1989									
1989-1990									
1990-1991									
1991-1992									
1992-1993									
1993-1994									
1994-1995									

	408-420 Months	420-432 Months	432-444 Months	444-456 Months	456-468 Months	468-480 Months	480-492 Months	492-504 Months	504-Ult. Months		
Average Dollar-Weighted Averages	0.997	1.004	1.003	1.001	1.003	1.000	1.000	1.000			
3-yr	1.000	1.008	1.006	1.001	1.004	1.000					
4-yr	1.000	1.008	1.005	1.001	1.004						
Prior	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Santa Clara County Schools Insurance Group - Workers' Compensation

Paid Loss Development

Accident Year (A)	SIR Paid Losses as of 6/30/19 (B)	Paid Loss Development Factor (C)	Ultimate SIR Losses (D)
1977-1978	32,176	1.000	32,176
1978-1979	1,328,790	1.000	1,328,790
1979-1980	2,289,539	1.000	2,289,539
1980-1981	2,325,335	1.000	2,325,335
1981-1982	3,119,161	1.000	3,119,161
1982-1983	3,587,634	1.001	3,591,222
1983-1984	5,572,588	1.002	5,583,733
1984-1985	3,486,817	1.003	3,497,277
1985-1986	4,091,780	1.004	4,108,147
1986-1987	6,445,665	1.005	6,477,893
1987-1988	6,548,633	1.006	6,587,925
1988-1989	6,936,347	1.007	6,984,901
1989-1990	7,194,047	1.008	7,251,599
1990-1991	10,089,843	1.009	10,180,652
1991-1992	8,964,923	1.010	9,054,572
1992-1993	8,981,085	1.011	9,079,877
1993-1994	8,734,287	1.013	8,847,833
1994-1995	7,371,982	1.015	7,482,562
1995-1996	4,620,094	1.017	4,698,636
Totals	\$101,720,726		\$102,521,830

Notes:

- (A) Years are 7/1 to 6/30 except for 1995-1996: 7/1/95 through 12/31/95.
- (B) Provided by the Group. These losses exclude amounts over the SIR.
- (C) From Appendix B - Tail, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over the SIR.

Santa Clara County Schools Insurance Group - Workers' Compensation

Paid Loss Development

SIR Losses Paid as of:

Accident Year	288 Months	300 Months	312 Months	324 Months	336 Months	348 Months	360 Months	372 Months	384 Months	396 Months
1977-1978									32,176	32,176
1978-1979								1,328,790	1,328,790	1,328,790
1979-1980							2,213,731	2,241,514	2,281,607	2,283,828
1980-1981						2,201,408	2,208,585	2,215,466	2,230,623	2,242,901
1981-1982					3,117,134	3,117,134	3,117,134	3,117,135	3,118,647	3,119,161
1982-1983				3,517,442	3,533,800	3,533,814	3,533,814	3,536,205	3,552,332	3,552,332
1983-1984			5,565,374	5,570,151	5,570,861	5,572,588	5,572,588	5,572,588	5,572,588	5,572,588
1984-1985		3,478,228	3,481,102	3,483,947	3,484,509	3,484,509	3,484,509	3,484,719	3,484,817	3,486,817
1985-1986	4,055,551	4,059,842	4,068,127	4,070,039	4,071,961	4,071,961	4,076,039	4,080,926	4,084,870	4,090,123
1986-1987	6,250,180	6,271,652	6,316,770	6,351,373	6,359,408	6,361,892	6,412,888	6,432,972	6,434,745	6,445,665
1987-1988	6,468,711	6,472,986	6,480,130	6,505,278	6,514,747	6,517,389	6,523,886	6,528,810	6,548,633	
1988-1989	6,878,056	6,891,824	6,902,742	6,912,972	6,930,516	6,934,429	6,935,672	6,936,347		
1989-1990	7,145,476	7,151,590	7,160,459	7,174,357	7,181,251	7,189,678	7,194,047			
1990-1991	10,067,258	10,068,577	10,070,593	10,073,389	10,075,143	10,089,843				
1991-1992	8,885,312	8,897,189	8,916,873	8,924,196	8,964,923					
1992-1993	8,921,531	8,971,221	8,980,852	8,981,085						
1993-1994	8,581,212	8,615,882	8,734,287							
1994-1995	7,367,515	7,371,982								
1995-1996	4,620,094									

Paid Loss Development Factors:

	288-300 Months	300-312 Months	312-324 Months	324-336 Months	336-348 Months	348-360 Months	360-372 Months	372-384 Months	384-396 Months	396-408 Months
1977-1978									1.000	1.000
1978-1979								1.000	1.000	1.000
1979-1980							1.013	1.018	1.001	1.000
1980-1981						1.003	1.003	1.007	1.006	1.006
1981-1982					1.000	1.000	1.000	1.000	1.000	1.000
1982-1983				1.005	1.000	1.000	1.001	1.005	1.000	1.000
1983-1984			1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
1984-1985		1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.000
1985-1986	1.001	1.002	1.000	1.000	1.001	1.001	1.001	1.001	1.000	1.000
1986-1987	1.003	1.007	1.005	1.001	1.000	1.008	1.003	1.000	1.002	
1987-1988	1.001	1.001	1.004	1.001	1.000	1.001	1.001	1.003		
1988-1989	1.002	1.002	1.001	1.003	1.001	1.000	1.000			
1989-1990	1.001	1.001	1.002	1.001	1.001	1.001				
1990-1991	1.000	1.000	1.000	1.000	1.001					
1991-1992	1.001	1.002	1.001	1.005						
1992-1993	1.006	1.001	1.000							
1993-1994	1.004	1.014								
1994-1995	1.001									

	288-300 Months	300-312 Months	312-324 Months	324-336 Months	336-348 Months	348-360 Months	360-372 Months	372-384 Months	384-396 Months	396-408 Months
Average Dollar-Weighted Averages	1.002	1.003	1.002	1.002	1.000	1.001	1.002	1.003	1.001	1.001
3-yr	1.004	1.006	1.000	1.002	1.001	1.001	1.001	1.001	1.001	1.000
4-yr	1.003	1.004	1.001	1.002	1.001	1.002	1.001	1.001	1.001	1.000
Prior	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Selected	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Cumulated	1.017	1.015	1.013	1.011	1.010	1.009	1.008	1.007	1.006	1.005

Santa Clara County Schools Insurance Group - Workers' Compensation  
Paid Loss Development

Accident Year	<u>SIR Losses Paid as of:</u>									
	408 Months	420 Months	432 Months	444 Months	456 Months	468 Months	480 Months	492 Months	504 Months	
1977-1978	32,176	32,176	32,176	32,176	32,176	32,176	32,176	32,176	32,176	32,176
1978-1979	1,328,790	1,328,790	1,328,790	1,328,790	1,328,790	1,328,790	1,328,790	1,328,790	1,328,790	1,328,790
1979-1980	2,284,522	2,285,417	2,286,368	2,287,227	2,287,834	2,288,393	2,289,539			
1980-1981	2,256,933	2,271,753	2,279,904	2,301,060	2,312,142	2,325,335				
1981-1982	3,119,161	3,119,161	3,119,161	3,119,161	3,119,161					
1982-1983	3,552,332	3,552,332	3,561,455	3,587,634						
1983-1984	5,572,588	5,572,588	5,572,588							
1984-1985	3,486,817	3,486,817								
1985-1986	4,091,780									
1986-1987										
1987-1988										
1988-1989										
1989-1990										
1990-1991										
1991-1992										
1992-1993										
1993-1994										
1994-1995										
1995-1996										

	<u>Paid Loss Development Factors:</u>									
	408-420 Months	420-432 Months	432-444 Months	444-456 Months	456-468 Months	468-480 Months	480-492 Months	492-504 Months	504-Ult. Months	
1977-1978	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
1978-1979	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
1979-1980	1.000	1.000	1.000	1.000	1.000	1.001				
1980-1981	1.007	1.004	1.009	1.005	1.006					
1981-1982	1.000	1.000	1.000	1.000						
1982-1983	1.000	1.003	1.007							
1983-1984	1.000	1.000								
1984-1985	1.000									
1985-1986										
1986-1987										
1987-1988										
1988-1989										
1989-1990										
1990-1991										
1991-1992										
1992-1993										
1993-1994										
1994-1995										

	408-420 Months	420-432 Months	432-444 Months	444-456 Months	456-468 Months	468-480 Months	480-492 Months	492-504 Months	504-Ult. Months		
Average Dollar-Weighted Averages	1.001	1.001	1.003	1.001	1.002	1.000	1.000	1.000			
3-yr	1.000	1.001	1.005	1.002	1.002	1.000					
4-yr	1.000	1.001	1.004	1.001	1.002						
Prior	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## Santa Clara County Schools Insurance Group - Workers' Compensation

## Case Reserve Development

Accident Year (A)	SIR Case Reserves as of 6/30/19 (B)	Case Reserve Development Factor (C)	Ultimate SIR Losses (D)
1977-1978	0	1.000	32,176
1978-1979	0	1.000	1,328,790
1979-1980	12,336	1.000	2,301,875
1980-1981	48,342	1.000	2,373,677
1981-1982	0	1.000	3,119,161
1982-1983	101,079	1.000	3,688,713
1983-1984	0	1.000	5,572,588
1984-1985	0	1.000	3,486,817
1985-1986	26,873	1.000	4,118,653
1986-1987	36,607	1.000	6,482,272
1987-1988	0	1.000	6,548,633
1988-1989	8,427	1.000	6,944,774
1989-1990	79,810	1.000	7,273,857
1990-1991	71,304	1.000	10,161,147
1991-1992	102,142	1.000	9,067,065
1992-1993	0	1.000	8,981,085
1993-1994	83,341	1.000	8,817,628
1994-1995	124,126	1.072	7,505,045
1995-1996	27,747	1.136	4,651,615
Totals	\$722,135		\$102,455,571

## Notes:

- (A) Years are 7/1 to 6/30 except for 1995-1996: 7/1/95 through 12/31/95.
- (B) Provided by the Group. These losses exclude amounts over the SIR.
- (C) Based on the development factors from Appendix A - Tail, Page 2 and Appendix B - Tail, Page 2.
- (D) (B) x (C)+ Appendix B - Tail ,Page 1, (B).  
These estimated losses exclude amounts over the SIR.

## Santa Clara County Schools Insurance Group - Workers' Compensation

Outstanding Liability for  
Unallocated Loss Adjustment Expenses  
as of 6/30/19

Fiscal Year (A)	Number of Claims Active During Fiscal Year (B)	Average ULAE Charge per Active Claim (C)	Inflation Trend Factor (D)	Trended ULAE Charge per Active Claim (E)	ULAE Paid During Year (F)
2019-2020	39.0	\$975	1.000	\$975	\$38,025
2020-2021	33.0	975	1.050	1,024	33,792
2021-2022	27.0	975	1.103	1,075	29,025
2022-2023	21.0	975	1.158	1,129	23,709
2023-2024	15.0	975	1.216	1,186	17,790
2024-2025	9.0	975	1.277	1,245	11,205
2025-2026	3.0	975	1.341	1,307	3,921
2026-2027	0.0	975	1.408	1,373	0
2027-2028	0.0	975	1.478	1,441	0
2028-2029	0.0	975	1.552	1,513	0
2029-2030	0.0	975	1.630	1,589	0
2030-2031	0.0	975	1.712	1,669	0
2031-2032	0.0	975	1.798	1,753	0
2032-2033	0.0	975	1.888	1,841	0
2033-2034	0.0	975	1.982	1,932	0
2034-2035	0.0	975	2.081	2,029	0
2035-2036	0.0	975	2.185	2,130	0
2036-2037	0.0	975	2.294	2,237	0

(G) Total ULAE Outstanding as of 6/30/19: \$157,467

## Notes:

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

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Payment and Reserve Forecast

<u>Accident Year</u>	<u>As of</u> <u>6/30/2019</u>	<u>Calendar Period</u>	
		<u>7/1/2019</u> <u>to</u> <u>6/30/2020</u>	<u>7/1/2020</u> <u>to</u> <u>6/30/2021</u>
Prior			
Ultimate Loss	\$3,664,691	\$3,664,691	\$3,664,691
Paid in Calendar Period	-	3,547	2,660
Paid to Date	3,650,505	3,654,052	3,656,712
Outstanding Liability	14,186	10,639	7,979
1980-1981			
Ultimate Loss	\$2,376,578	\$2,376,578	\$2,376,578
Paid in Calendar Period	-	12,811	9,608
Paid to Date	2,325,335	2,338,146	2,347,754
Outstanding Liability	51,243	38,432	28,824
1981-1982			
Ultimate Loss	\$3,119,161	\$3,119,161	\$3,119,161
Paid in Calendar Period	-		
Paid to Date	3,119,161	3,119,161	3,119,161
Outstanding Liability			
1982-1983			
Ultimate Loss	\$3,698,821	\$3,698,821	\$3,698,821
Paid in Calendar Period	-	27,797	20,847
Paid to Date	3,587,634	3,615,431	3,636,278
Outstanding Liability	111,187	83,390	62,543
1983-1984			
Ultimate Loss	\$5,572,588	\$5,572,588	\$5,572,588
Paid in Calendar Period	-		
Paid to Date	5,572,588	5,572,588	5,572,588
Outstanding Liability			
1984-1985			
Ultimate Loss	\$3,486,817	\$3,486,817	\$3,486,817
Paid in Calendar Period	-		
Paid to Date	3,486,817	3,486,817	3,486,817
Outstanding Liability			
1985-1986			
Ultimate Loss	\$4,122,684	\$4,122,684	\$4,122,684
Paid in Calendar Period	-	7,726	5,794
Paid to Date	4,091,780	4,099,506	4,105,300
Outstanding Liability	30,904	23,178	17,384
1986-1987			
Ultimate Loss	\$6,487,763	\$6,487,763	\$6,487,763
Paid in Calendar Period	-	10,525	7,893
Paid to Date	6,445,665	6,456,190	6,464,083
Outstanding Liability	42,098	31,573	23,680

Santa Clara County Schools Insurance Group - Workers' Compensation

Payment and Reserve Forecast

<u>Accident Year</u>	<u>As of</u> <u>6/30/2019</u>	<u>Calendar Period</u>	
		<u>7/1/2019</u> <u>to</u> <u>6/30/2020</u>	<u>7/1/2020</u> <u>to</u> <u>6/30/2021</u>
1987-1988			
Ultimate Loss	\$6,548,633	\$6,548,633	\$6,548,633
Paid in Calendar Period	-		
Paid to Date	6,548,633	6,548,633	6,548,633
Outstanding Liability			
1988-1989			
Ultimate Loss	\$6,945,617	\$6,945,617	\$6,945,617
Paid in Calendar Period	-	1,316	1,988
Paid to Date	6,936,347	6,937,663	6,939,651
Outstanding Liability	9,270	7,954	5,966
1989-1990			
Ultimate Loss	\$7,281,838	\$7,281,838	\$7,281,838
Paid in Calendar Period	-	10,886	19,226
Paid to Date	7,194,047	7,204,933	7,224,159
Outstanding Liability	87,791	76,905	57,679
1990-1991			
Ultimate Loss	\$10,171,843	\$10,171,843	\$10,171,843
Paid in Calendar Period	-	9,020	9,049
Paid to Date	10,089,843	10,098,863	10,107,912
Outstanding Liability	82,000	72,980	63,931
1991-1992			
Ultimate Loss	\$9,072,171	\$9,072,171	\$9,072,171
Paid in Calendar Period	-	10,618	10,629
Paid to Date	8,964,923	8,975,541	8,986,170
Outstanding Liability	107,248	96,630	86,001
1992-1993			
Ultimate Loss	\$8,981,085	\$8,981,085	\$8,981,085
Paid in Calendar Period	-		
Paid to Date	8,981,085	8,981,085	8,981,085
Outstanding Liability			
1993-1994			
Ultimate Loss	\$8,818,000	\$8,818,000	\$8,818,000
Paid in Calendar Period	-	12,724	6,389
Paid to Date	8,734,287	8,747,011	8,753,400
Outstanding Liability	83,713	70,989	64,600
1994-1995			
Ultimate Loss	\$7,516,413	\$7,516,413	\$7,516,413
Paid in Calendar Period	-	19,065	19,056
Paid to Date	7,371,982	7,391,047	7,410,103
Outstanding Liability	144,431	125,366	106,310

Santa Clara County Schools Insurance Group - Workers' Compensation

Payment and Reserve Forecast

<u>Accident Year</u>	<u>As of</u> <u>6/30/2019</u>	<u>Calendar Period</u>	
		<u>7/1/2019</u> <u>to</u> <u>6/30/2020</u>	<u>7/1/2020</u> <u>to</u> <u>6/30/2021</u>
1995-1996			
Ultimate Loss	\$4,658,162	\$4,658,162	\$4,658,162
Paid in Calendar Period	-	4,416	4,442
Paid to Date	4,620,094	4,624,510	4,628,952
Outstanding Liability	38,068	33,652	29,210
Totals			
Ultimate Loss	\$102,522,864	\$102,522,864	\$102,522,864
Paid in Calendar Period	-	130,451	117,581
Paid to Date	101,720,726	101,851,177	101,968,758
Outstanding Liability	802,138	671,687	554,106
Total Outstanding ULAE	157,467	119,442	100,225
Outstanding Liability plus ULAE	959,605	791,129	654,331

Notes appear on the next page.

Santa Clara County Schools Insurance Group - Workers' Compensation

Payment and Reserve Forecast

Notes to previous page:

- Accident Year is associated with date of loss. Calendar Period is associated with date of transaction. For example, for the losses which occurred during 1994-1995, \$19,065 is expected to be paid between 7/1/19 and 6/30/20, \$7,391,047 will have been paid by 6/30/20, and the reserve for remaining payments on these claims should be \$125,366.
- Ultimate Losses for each accident year are from Exhibit 3 - Tail.
- Paid in Calendar Period is a proportion of the Outstanding Liability from the previous calendar period. These proportions are derived from the paid loss development pattern selected in Appendix B. For example,  $\$19,056 = \$125,366 \times 15.2\%$ .
- Paid to Date is Paid in Calendar Period plus Paid to Date from previous calendar period. For example,  $\$7,410,103 = \$19,056 + \$7,391,047$ .
- Outstanding Liability is Ultimate Loss minus Paid to Date. For example,  $\$125,366 = \$7,516,413 - \$7,391,047$ .

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

## Santa Clara County Schools Insurance Group - Workers' Compensation

## Short- and Long-Term Liabilities

<u>Liabilities as of 6/30/19:</u>		<u>Expected</u>	<u>Discounted</u>
<u>Current (Short Term)</u>	Loss and ALAE:	\$130,451	\$129,166
	ULAE:	38,025	37,650
	Short-Term Loss and LAE:	<u>\$168,476</u>	<u>\$166,816</u>
<u>Non-Current (Long Term)</u>	Loss and ALAE:	\$671,687	\$616,456
	ULAE:	119,442	108,723
	Long-Term Loss and LAE:	<u>\$791,129</u>	<u>\$725,179</u>
<u>Total Liability</u>	Loss and ALAE:	\$802,138	\$745,622
	ULAE:	157,467	146,373
	Total Loss and LAE:	<u>\$959,605</u>	<u>\$891,995</u>
<u>Liabilities as of 6/30/20:</u>			
<u>Current (Short Term)</u>	Loss and ALAE:	\$117,581	\$116,423
	ULAE:	33,792	33,459
	Short-Term Loss and LAE:	<u>\$151,373</u>	<u>\$149,882</u>
<u>Non-Current (Long Term)</u>	Loss and ALAE:	\$554,106	\$510,494
	ULAE:	85,650	78,022
	Long-Term Loss and LAE:	<u>\$639,756</u>	<u>\$588,516</u>
<u>Total Liability</u>	Loss and ALAE:	\$671,687	\$626,917
	ULAE:	119,442	111,481
	Total Loss and LAE:	<u>\$791,129</u>	<u>\$738,398</u>

		<u>Discounted with a Margin for Contingencies</u>				
		<u>70%</u>	<u>75%</u>	<u>80%</u>	<u>85%</u>	<u>90%</u>
		<u>Confidence</u>	<u>Confidence</u>	<u>Confidence</u>	<u>Confidence</u>	<u>Confidence</u>
<u>Liabilities as of 6/30/19:</u>						
<u>Current (Short Term)</u>	Loss and ALAE:	\$146,991	\$154,999	\$164,428	\$176,182	\$191,682
	ULAE:	42,846	45,180	47,928	51,355	55,873
	Short-Term Loss and LAE:	<u>\$189,837</u>	<u>\$200,179</u>	<u>\$212,356</u>	<u>\$227,537</u>	<u>\$247,555</u>
<u>Non-Current (Long Term)</u>	Loss and ALAE:	\$701,527	\$739,747	\$784,749	\$840,846	\$914,821
	ULAE:	123,726	130,468	138,405	148,298	161,345
	Long-Term Loss and LAE:	<u>\$825,253</u>	<u>\$870,215</u>	<u>\$923,154</u>	<u>\$989,144</u>	<u>\$1,076,166</u>
<u>Total Liability</u>	Loss and ALAE:	\$848,518	\$894,746	\$949,177	\$1,017,028	\$1,106,503
	ULAE:	166,572	175,648	186,333	199,653	217,218
	Total Loss and LAE:	<u>\$1,015,090</u>	<u>\$1,070,394</u>	<u>\$1,135,510</u>	<u>\$1,216,681</u>	<u>\$1,323,721</u>
<u>Liabilities as of 6/30/20:</u>						
<u>Current (Short Term)</u>	Loss and ALAE:	\$132,489	\$139,708	\$148,206	\$158,801	\$172,772
	ULAE:	38,076	40,151	42,593	45,638	49,653
	Short-Term Loss and LAE:	<u>\$170,565</u>	<u>\$179,859</u>	<u>\$190,799</u>	<u>\$204,439</u>	<u>\$222,425</u>
<u>Non-Current (Long Term)</u>	Loss and ALAE:	\$580,943	\$612,592	\$649,859	\$696,314	\$757,573
	ULAE:	88,789	93,627	99,323	106,422	115,785
	Long-Term Loss and LAE:	<u>\$669,732</u>	<u>\$706,219</u>	<u>\$749,182</u>	<u>\$802,736</u>	<u>\$873,358</u>
<u>Total Liability</u>	Loss and ALAE:	\$713,432	\$752,300	\$798,065	\$855,115	\$930,345
	ULAE:	126,865	133,778	141,916	152,060	165,438
	Total Loss and LAE:	<u>\$840,297</u>	<u>\$886,078</u>	<u>\$939,981</u>	<u>\$1,007,175</u>	<u>\$1,095,783</u>

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Discount Factors to be Applied to Overall Reserves

Accident Year	Full Value of Reserve at 6/30/19 (A)	Discount Factor (B)	Discounted Reserve at 6/30/19 (C)	Full Value of Reserve at 6/30/20 (D)	Discount Factor (E)	Discounted Reserve at 6/30/20 (F)
1977-1978	0	1.000	0	0	1.000	0
1978-1979	0	1.000	0	0	1.000	0
1979-1980	14,186	1.000	14,186	10,639	1.000	10,639
1980-1981	51,243	1.000	51,243	38,432	1.000	38,432
1981-1982	0	1.000	0	0	1.000	0
1982-1983	111,187	0.990	110,091	83,390	1.000	83,390
1983-1984	0	0.980	0	0	0.990	0
1984-1985	0	0.971	0	0	0.980	0
1985-1986	30,904	0.961	29,710	23,178	0.971	22,502
1986-1987	42,098	0.952	40,077	31,573	0.961	30,353
1987-1988	0	0.943	0	0	0.952	0
1988-1989	9,270	0.934	8,654	7,954	0.943	7,498
1989-1990	87,791	0.925	81,172	76,905	0.934	71,800
1990-1991	82,000	0.916	75,087	72,980	0.925	67,477
1991-1992	107,248	0.907	97,263	96,630	0.916	88,484
1992-1993	0	0.898	0	0	0.907	0
1993-1994	83,713	0.897	75,113	70,989	0.898	63,763
1994-1995	144,431	0.894	129,152	125,366	0.897	112,487
1995-1996	38,068	0.890	33,874	33,652	0.894	30,092
0	0	-	-	0	0.890	0
Totals	\$802,138		\$745,622	\$671,687		\$626,917

(G) Discount Factor at 6/30/19 for Overall Reserve: 0.930  
(H) Discount Factor at 6/30/20 for Overall Reserve: 0.933

Notes:

- (A) From Appendix E - Tail, Outstanding Liability at 6/30/19.
- (B) Based on Appendix G - Tail, Page 2, Column (E).
- (C) (A) x (B).
- (D) From Appendix E - Tail, Outstanding Liability at 6/30/20.
- (E) Based on Appendix G - Tail, Page 2, Column (E).
- (F) (D) x (E).
- (G) Total of (C) / Total of (A).
- (H) Total of (F) / Total of (D).

This exhibit shows the expected impact of anticipated investment income on the liability for outstanding claims at the date of evaluation and the end of the current fiscal year. For example, if the discount factor in item (G) is 0.930, the discounted liability for outstanding claims is 93.0% of the full value.

Santa Clara County Schools Insurance Group - Workers' Compensation

Calculation of Discount Factors

Payment Year (A)	Payment Pattern (B)	Return on Investment (C)	Discounted Reserves (D)	Undiscounted Reserves (E)	Discount Factor (F)
22	0.0%	2.0%	0.000	0.000	1.000
21	0.0%	2.0%	0.000	0.000	1.000
20	0.0%	2.0%	0.000	0.000	1.000
19	0.0%	2.0%	0.000	0.000	1.000
18	0.0%	2.0%	0.000	0.000	1.000
17	0.0%	2.0%	0.000	0.000	1.000
16	0.0%	2.0%	0.000	0.000	1.000
15	0.1%	2.0%	0.001	0.001	0.990
14	0.1%	2.0%	0.002	0.002	0.980
13	0.1%	2.0%	0.003	0.003	0.971
12	0.1%	2.0%	0.004	0.004	0.961
11	0.1%	2.0%	0.005	0.005	0.952
10	0.1%	2.0%	0.006	0.006	0.943
9	0.1%	2.0%	0.006	0.007	0.934
8	0.1%	2.0%	0.007	0.008	0.925
7	0.1%	2.0%	0.008	0.009	0.916
6	0.1%	2.0%	0.009	0.010	0.907
5	0.1%	2.0%	0.010	0.011	0.898
4	0.2%	2.0%	0.012	0.013	0.897
3	0.2%	2.0%	0.013	0.015	0.894
2	0.2%	2.0%	0.015	0.017	0.890
1	0.2%	2.0%	0.016	0.019	0.885

Notes:

- (A) This is the year of payment relative to the accident year. For example, year 7 refers to payments made in the seventh year after the inception of the accident year. We assume that payments are made at midyear.
- (B) Percent of ultimate loss paid this year. This payment pattern is based on the paid loss development pattern selected in Appendix B - Tail, Page 2.
- (C) Assumed Investment Income Rates.
- (D) Discounted Reserves at the beginning of this year is next year's Discounted Reserves discounted one year plus this year's payments discounted six months. For example, in year 2,  $1.5\% = [1.3\% / 1.020] + [0.2\% / (1.010)]$ .
- (E) Summation of future (B) values. This is the percent of ultimate loss unpaid at the beginning of the year.
- (F) (D) / (E).

## Santa Clara County Schools Insurance Group - Workers' Compensation

## Confidence Level Table

Probability	Outstanding Losses
95%	1.684
90%	1.484
85%	1.364
80%	1.273
75%	1.200
70%	1.138
65%	1.083
60%	1.033
55%	0.987
50%	0.944
45%	0.902
40%	0.861
35%	0.821
30%	0.780
25%	0.737

To read table: For the above retention, there is a 90% chance that final loss settlements will be less than 1.484 times the average expected amount of losses.

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Program History

Policy Year Start Date	Policy Year End Date	Policy Year	Self-Insured Retention	
			Per Occurrence	Aggregate
1/1/1977	9/30/1978	1977-1978	150,000	(none)
10/1/1978	9/30/1979	1978-1979	150,000	(none)
10/1/1979	6/30/1980	1979-1980	250,000	(none)
7/1/1980	6/30/1981	1980-1981	250,000	(none)
7/1/1981	6/30/1982	1981-1982	250,000	(none)
7/1/1982	6/30/1983	1982-1983	250,000	(none)
7/1/1983	6/30/1984	1983-1984	100,000	(none)
7/1/1984	6/30/1985	1984-1985	100,000	(none)
7/1/1985	6/30/1986	1985-1986	125,000	(none)
7/1/1986	6/30/1987	1986-1987	200,000	(none)
7/1/1987	6/30/1988	1987-1988	250,000	(none)
7/1/1988	6/30/1989	1988-1989	150,000	(none)
7/1/1989	6/30/1990	1989-1990	150,000	(none)
7/1/1990	6/30/1991	1990-1991	150,000	(none)
7/1/1991	6/30/1992	1991-1992	150,000	(none)
7/1/1992	6/30/1993	1992-1993	150,000	(none)
7/1/1993	6/30/1994	1993-1994	150,000	(none)
7/1/1994	6/30/1995	1994-1995	250,000	(none)
7/1/1995	12/31/1995	1995-1996	250,000	(none)

Claims administration for the pre-1996 self-insured years are provided by Keenan and Associates.

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

## Santa Clara County Schools Insurance Group - Workers' Compensation

Estimated Total Assets as of 7/1/19

(A) <u>Total Assets as of 6/30/19:</u>	\$4,454,000
(B) <u>Non-Claims-Related Liabilities:</u>	
Account Payable:	\$197,000
Wage/Benefits Payable:	0
Insurance Premiums Payable:	419,000
Safety Credits:	984,000
Other:	312,000
Total Income:	<u>\$1,912,000</u>
(C) <u>Assets Available to Pay Claims as of 7/1/19:</u>	\$2,542,000

## Notes:

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Incurred Losses as of 6/30/19

Accident Year (A)	Unlimited Incurred (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Incurred (E)	Incurred Over SIR (F)	Incurred Over \$100,000 (G)	Incurred Capped at \$100,000 (H)	Incurred \$100,000 to SIR Layer (I)	Incurred Capped at SIR (J)	Incurred Capped at SIR & Aggregate (K)
1977-1978	\$30,971	\$1,205	\$0	\$32,176	\$0	\$0	\$32,176	\$0	\$32,176	\$32,176
1978-1979	239,963	1,088,827	0	1,328,790	0	0	1,328,790	0	1,328,790	1,328,790
1979-1980	1,304,143	1,003,161	0	2,307,304	5,429	255,556	2,051,748	250,127	2,301,875	2,301,875
1980-1981	1,719,776	653,901	0	2,373,677	0	46,219	2,327,459	46,219	2,373,677	2,373,677
1981-1982	2,650,747	613,010	0	3,263,757	144,596	300,406	2,963,351	155,810	3,119,161	3,119,161
1982-1983	3,558,973	255,653	0	3,814,626	125,913	348,611	3,466,015	222,698	3,688,713	3,688,713
1983-1984	5,862,612	0	0	5,862,612	290,024	290,024	5,572,588	0	5,572,588	5,572,588
1984-1985	3,511,668	0	0	3,511,668	24,851	24,851	3,486,817	0	3,486,817	3,486,817
1985-1986	4,537,497	0	0	4,537,497	418,845	638,313	3,899,185	219,468	4,118,653	4,118,653
1986-1987	6,973,108	0	0	6,973,108	490,836	1,392,960	5,580,148	902,124	6,482,272	6,482,272
1987-1988	6,686,372	0	0	6,686,372	137,738	924,954	5,761,417	787,216	6,548,633	6,548,633
1988-1989	8,023,719	0	0	8,023,719	1,078,944	1,467,260	6,556,458	388,316	6,944,774	6,944,774
1989-1990	7,845,901	0	0	7,845,901	572,044	1,011,636	6,834,264	439,592	7,273,857	7,273,857
1990-1991	11,855,203	0	0	11,855,203	1,694,056	2,404,643	9,450,560	710,587	10,161,147	10,161,147
1991-1992	11,712,970	0	0	11,712,970	2,645,906	3,109,663	8,603,307	463,758	9,067,064	9,067,064
1992-1993	9,363,379	0	0	9,363,379	382,294	963,283	8,400,095	580,990	8,981,085	8,981,085
1993-1994	9,940,798	0	0	9,940,798	1,123,170	1,779,420	8,161,378	656,250	8,817,628	8,817,628
1994-1995	7,905,224	0	0	7,905,224	409,116	1,108,071	6,797,154	698,954	7,496,108	7,496,108
1995-1996	5,376,389	0	0	5,376,389	728,547	1,599,760	3,776,628	871,213	4,647,841	4,647,841
0	0	0	0	0	0	0	0	0	0	0
Total	\$109,099,412	\$3,615,757	\$0	\$112,715,169	\$10,272,310	\$17,665,632	\$95,049,537	\$7,393,322	\$102,442,859	\$102,442,859

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Group.
- (C) Closed claims no longer listed in the current loss data.
- (D)
- (E) (B) + (C) - (D).
- (F) Sum of incurred losses in excess of SIR.
- (G) Sum of incurred losses in excess of \$100,000.
- (H) (E) - (G).
- (I) (G) - (F).
- (J) (E) - (F).
- (K) Minimum of (J) and the aggregate stop loss. See Appendix I - Tail.

Santa Clara County Schools Insurance Group - Workers' Compensation

Paid Losses as of 6/30/19

Accident Year (A)	Unlimited Paid (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Paid (E)	Paid Over SIR (F)	Paid Over \$100,000 (G)	Paid Capped at \$100,000 (H)	Paid \$100,000 to SIR Layer (I)	Paid Capped at SIR (J)	Paid Capped at SIR & Aggregate (K)
1977-1978	\$30,971	\$1,205	\$0	\$32,176	\$0	\$0	\$32,176	\$0	\$32,176	\$32,176
1978-1979	239,963	1,088,827	0	1,328,790	0	0	1,328,790	0	1,328,790	1,328,790
1979-1980	1,291,807	1,003,161	0	2,294,968	5,429	243,220	2,051,748	237,791	2,289,539	2,289,539
1980-1981	1,671,434	653,901	0	2,325,335	0	8,531	2,316,804	8,531	2,325,335	2,325,335
1981-1982	2,650,747	613,010	0	3,263,757	144,596	300,406	2,963,351	155,810	3,119,161	3,119,161
1982-1983	3,457,894	255,653	0	3,713,547	125,913	332,300	3,381,248	206,386	3,587,634	3,587,634
1983-1984	5,862,612	0	0	5,862,612	290,024	290,024	5,572,588	0	5,572,588	5,572,588
1984-1985	3,511,668	0	0	3,511,668	24,851	24,851	3,486,817	0	3,486,817	3,486,817
1985-1986	4,490,987	0	0	4,490,987	399,208	593,676	3,897,311	194,468	4,091,780	4,091,780
1986-1987	6,904,372	0	0	6,904,372	458,707	1,324,224	5,580,148	865,517	6,445,665	6,445,665
1987-1988	6,679,392	0	0	6,679,392	130,759	917,975	5,761,417	787,216	6,548,633	6,548,633
1988-1989	7,725,295	0	0	7,725,295	788,948	1,177,264	6,548,031	388,316	6,936,347	6,936,347
1989-1990	7,764,580	0	0	7,764,580	570,534	943,984	6,820,596	373,450	7,194,047	7,194,047
1990-1991	11,618,004	0	0	11,618,004	1,528,161	2,238,749	9,379,255	710,587	10,089,843	10,089,843
1991-1992	10,772,070	0	0	10,772,070	1,807,148	2,210,061	8,562,010	402,913	8,964,923	8,964,923
1992-1993	9,339,842	0	0	9,339,842	358,757	939,747	8,400,095	580,990	8,981,085	8,981,085
1993-1994	9,771,681	0	0	9,771,681	1,037,394	1,664,226	8,107,455	626,832	8,734,287	8,734,287
1994-1995	7,631,548	0	0	7,631,548	259,565	950,174	6,681,374	690,609	7,371,982	7,371,982
1995-1996	5,307,767	0	0	5,307,767	687,673	1,541,657	3,766,110	853,985	4,620,094	4,620,094
0	0	0	0	0	0	0	0	0	0	0
Total	\$106,722,635	\$3,615,757	\$0	\$110,338,392	\$8,617,668	\$15,701,069	\$94,637,324	\$7,083,401	\$101,720,724	\$101,720,724

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Group.
- (C) Closed claims no longer listed in the current loss data.
- (D)
- (E) (B) + (C) - (D).
- (F) Sum of paid losses in excess of SIR.
- (G) Sum of paid losses in excess of \$100,000.
- (H) (E) - (G).
- (I) (G) - (F).
- (J) (E) - (F).
- (K) Minimum of (J) and the aggregate stop loss. See Appendix I - Tail.

Santa Clara County Schools Insurance Group - Workers' Compensation

Case Reserves as of 6/30/19

Accident Year (A)	Unlimited Reserves (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Reserves (E)	Reserves Over SIR (F)	Reserves Over \$100,000 (G)	Reserves Capped at \$100,000 (H)	Reserves \$100,000 to SIR Layer (I)	Reserves Capped at SIR (J)	Reserves Capped at SIR & Aggregate (K)
1977-1978	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1978-1979	0	0	0	0	0	0	0	0	0	0
1979-1980	12,336	0	0	12,336	0	12,336	0	12,336	12,336	12,336
1980-1981	48,342	0	0	48,342	0	37,688	10,654	37,688	48,342	48,342
1981-1982	0	0	0	0	0	0	0	0	0	0
1982-1983	101,079	0	0	101,079	0	16,311	84,768	16,311	101,079	101,079
1983-1984	0	0	0	0	0	0	0	0	0	0
1984-1985	0	0	0	0	0	0	0	0	0	0
1985-1986	46,510	0	0	46,510	19,637	44,637	1,873	25,000	26,873	26,873
1986-1987	68,736	0	0	68,736	32,129	68,736	0	36,607	36,607	36,607
1987-1988	6,980	0	0	6,980	6,980	6,980	0	0	0	0
1988-1989	298,424	0	0	298,424	289,996	289,996	8,427	0	8,427	8,427
1989-1990	81,320	0	0	81,320	1,510	67,652	13,668	66,142	79,810	79,810
1990-1991	237,199	0	0	237,199	165,894	165,894	71,304	0	71,304	71,304
1991-1992	940,899	0	0	940,899	838,758	899,603	41,297	60,845	102,142	102,142
1992-1993	23,537	0	0	23,537	23,537	23,537	0	0	0	0
1993-1994	169,116	0	0	169,116	85,775	115,194	53,923	29,418	83,341	83,341
1994-1995	273,676	0	0	273,676	149,551	157,896	115,780	8,346	124,126	124,126
1995-1996	68,622	0	0	68,622	40,875	58,103	10,519	17,228	27,747	27,747
0	0	0	0	0	0	0	0	0	0	0
Total	\$2,376,776	\$0	\$0	\$2,376,776	\$1,654,642	\$1,964,563	\$412,213	\$309,922	\$722,135	\$722,135

Notes:

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Claim Counts as of 6/30/19

Accident Year (A)	Reported Claims (B)	Additions to Reported Claims (C)	Subtractions from Reported Claims (D)	Adjusted Reported Claims (E)	Closed Claims (F)	Additions to Closed Claims (G)	Subtractions from Closed Claims (H)	Adjusted Closed Claims (I)	Open Claims (J)	Adjusted Open Claims (K)
1977-1978	1	8	0	9	1	8	0	9	0	0
1978-1979	17	1,238	0	1,255	17	1,238	0	1,255	0	0
1979-1980	46	1,315	0	1,361	45	1,315	0	1,360	1	1
1980-1981	73	1,408	0	1,481	71	1,408	0	1,479	2	2
1981-1982	132	1,326	0	1,458	132	1,326	0	1,458	0	0
1982-1983	308	1,122	0	1,430	306	1,122	0	1,428	2	2
1983-1984	1,509	0	0	1,509	1,509	0	0	1,509	0	0
1984-1985	1,457	0	0	1,457	1,457	0	0	1,457	0	0
1985-1986	1,556	0	0	1,556	1,554	0	0	1,554	2	2
1986-1987	1,715	0	0	1,715	1,713	0	0	1,713	2	2
1987-1988	1,731	0	0	1,731	1,730	0	0	1,730	1	1
1988-1989	1,655	0	0	1,655	1,653	0	0	1,653	2	2
1989-1990	1,739	0	0	1,739	1,736	0	0	1,736	3	3
1990-1991	1,846	0	0	1,846	1,842	0	0	1,842	4	4
1991-1992	1,859	0	0	1,859	1,854	0	0	1,854	5	5
1992-1993	1,763	0	0	1,763	1,762	0	0	1,762	1	1
1993-1994	1,707	0	0	1,707	1,703	0	0	1,703	4	4
1994-1995	1,656	0	0	1,656	1,649	0	0	1,649	7	7
1995-1996	832	0	0	832	829	0	0	829	3	3
0	0	0	0	0	0	0	0	0	0	0
Total	21,602	6,417	0	28,019	21,563	6,417	0	27,980	39	39

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Group.
- (C) Closed claims no longer listed in the current loss data.
- (D)
- (E) (B) + (C) - (D).
- (F) Provided by the Group.
- (G) Closed claims no longer listed in the current loss data.
- (H)
- (I) (F) + (G) - (H).
- (J) (B) - (F).
- (K) (E) - (I).

Santa Clara County Schools Insurance Group - Workers' Compensation  
Funding Options for Program Year 2019-2020 (SIR = \$250,000)

	Dollar Amount	Payroll Rate			
(A) Estimated Ultimate Losses Incurred in Accident Year 2019-2020: (From Exhibit 3 - Projected Funding, Page 1, (K))	\$13,565,000	\$0.987			
(B) Estimated Claims Administration Fees Incurred in Accident Year 2019-2020: (From Exhibit 3 - Projected Funding, Page 1, (L))	1,017,000	0.074			
(C) Total Claims Costs Incurred in Accident Year 2019-2020: ((A) + (B))	\$14,582,000	\$1.061			
(D) Loss Discount Factor (Based on a Discount Rate of 2.0%.): (Appendix F - Projected Funding, (G))	0.909				
(E) Discounted Total Claims Costs Incurred in Accident Year 2019-2020: ((C) x (D))	\$13,261,000	\$0.965			
	Marginally Acceptable		Recommended		Conservative
	70%	75%	80%	85%	90%
(F) Confidence Level Factor: (From Appendix G - Projected Funding)	1.085	1.117	1.154	1.199	1.258
(G) Margin for Adverse Experience: ((E) x [(F) - 1])	1,127,000	1,552,000	2,042,000	2,639,000	3,421,000
(H) Recommended Funding in 2019-2020 for Claims Costs and Other Expenses: ((E) + (G))	\$14,388,000	\$14,813,000	\$15,303,000	\$15,900,000	\$16,682,000
(I) Rate per \$100 of Payroll: ((H) / \$13,744,145)	\$1.047	\$1.078	\$1.113	\$1.157	\$1.214

Payroll rates are per hundred dollars of 2019-2020 payroll of \$1,374,414,500.

Santa Clara County Schools Insurance Group - Workers' Compensation  
Funding Options for Program Year 2020-2021 (SIR = \$250,000)

	Dollar Amount	Payroll Rate			
(A) Estimated Ultimate Losses Incurred in Accident Year 2020-2021: (From Exhibit 3 - Projected Funding, Page 1, (K))	\$14,241,000	\$1.006			
(B) Estimated Claims Administration Fees Incurred in Accident Year 2020-2021: (From Exhibit 3 - Projected Funding, Page 1, (L))	1,068,000	0.075			
(C) Total Claims Costs Incurred in Accident Year 2020-2021: ((A) + (B))	\$15,309,000	\$1.081			
(D) Loss Discount Factor (Based on a Discount Rate of 2.0%.): (Appendix F - Projected Funding, (G))	0.909				
(E) Discounted Total Claims Costs Incurred in Accident Year 2020-2021: ((C) x (D))	\$13,922,000	\$0.983			
	Marginally Acceptable		Recommended		Conservative
	70%	75%	80%	85%	90%
(F) Confidence Level Factor: (From Appendix G - Projected Funding)	1.085	1.117	1.154	1.199	1.258
(G) Margin for Adverse Experience: ((E) x [(F) - 1])	1,183,000	1,629,000	2,144,000	2,770,000	3,592,000
(H) Recommended Funding in 2020-2021 for Claims Costs and Other Expenses: ((E) + (G))	\$15,105,000	\$15,551,000	\$16,066,000	\$16,692,000	\$17,514,000
(I) Rate per \$100 of Payroll: ((H) / \$14,156,470)	\$1.067	\$1.099	\$1.135	\$1.179	\$1.237

Payroll rates are per hundred dollars of 2020-2021 payroll of \$1,415,647,000.

Santa Clara County Schools Insurance Group - Workers' Compensation

Estimated Ultimate Program Losses

Accident Year	Reported Loss Development Method (A)	Paid Loss Development Method (B)	Exposure Method Based on Reported Losses (C)	Exposure Method Based on Paid Losses (D)	Frequency-Severity Method (E)	Selected Estimate of Ultimate Losses (F)
2003-2004	13,682,875	14,378,148	13,655,818	14,237,399	12,822,634	14,031,000
2004-2005	9,543,361	10,096,593	9,520,017	9,969,546	8,793,735	9,737,000
2005-2006	7,863,393	7,962,822	7,841,125	7,881,689	7,159,433	7,913,000
2006-2007	7,309,196	7,696,282	7,303,352	7,637,291	7,256,094	7,503,000
2007-2008	10,644,633	10,961,556	10,574,268	10,735,909	9,365,496	10,803,000
2008-2009	10,115,889	10,821,908	10,067,294	10,597,682	9,495,480	10,469,000
2009-2010	8,544,551	9,111,594	8,533,459	8,993,549	8,579,560	8,828,000
2010-2011	8,824,980	9,411,531	8,771,937	9,172,569	8,353,134	9,118,000
2011-2012	8,235,444	8,695,749	8,212,554	8,549,439	8,088,540	8,281,000
2012-2013	7,537,314	7,434,748	7,504,228	7,397,769	7,241,390	7,537,000
2013-2014	8,412,472	8,664,509	8,338,744	8,431,700	7,943,413	8,475,000
2014-2015	6,833,321	7,603,728	7,238,378	8,204,273	10,218,192	7,209,000
2015-2016	8,567,287	8,694,914	8,817,282	9,176,166	10,122,408	8,777,000
2016-2017	11,259,326	11,778,100	11,547,045	12,110,893	13,391,240	11,829,000
2017-2018	13,463,890	12,364,840	13,325,813	12,785,183	12,679,800	13,055,000
2018-2019	14,269,054	11,501,486	13,827,309	12,894,683	13,099,858	13,493,000
Totals						\$157,058,000
			Projected Losses for the Year 2019-2020 (G)			\$13,565,000
			Projected Losses for the Year 2020-2021 (H)			\$14,241,000

Notes:

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

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

Santa Clara County Schools Insurance Group - Workers' Compensation

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

Accident Year	Reported Loss Development Method (A)	Paid Loss Development Method (B)	Exposure Method Based on Reported Losses (C)	Exposure Method Based on Paid Losses (D)	Frequency-Severity Method (E)	Selected Ultimate Limited Losses (F)
2003-2004	10,478,998	10,601,826	10,480,755	10,597,957	10,539,562	10,540,000
2004-2005	7,170,831	7,215,036	7,172,483	7,216,862	7,192,740	7,193,000
2005-2006	5,831,827	5,821,737	5,833,499	5,822,869	5,827,289	5,827,000
2006-2007	5,835,936	5,918,726	5,838,035	5,914,246	5,877,285	5,877,000
2007-2008	7,500,136	7,598,200	7,503,583	7,593,296	7,549,064	7,549,000
2008-2009	7,489,318	7,744,138	7,486,526	7,725,108	7,616,895	7,617,000
2009-2010	6,741,056	6,950,436	6,740,536	6,934,668	6,845,916	6,846,000
2010-2011	6,512,560	6,755,460	6,515,283	6,731,078	6,633,804	6,634,000
2011-2012	6,354,835	6,431,696	6,354,876	6,420,400	6,392,862	6,393,000
2012-2013	5,729,804	5,587,268	5,729,154	5,609,198	5,693,896	5,694,000
2013-2014	6,165,974	6,268,772	6,166,338	6,251,435	6,216,681	6,217,000
2014-2015	5,373,713	5,704,836	5,503,649	6,030,849	7,955,460	5,696,000
2015-2016	6,035,772	5,993,610	6,164,794	6,458,937	7,844,202	6,163,000
2016-2017	8,462,575	8,333,262	8,585,563	8,790,850	10,324,960	8,688,000
2017-2018	9,734,409	9,436,732	9,780,475	9,720,521	9,731,400	9,765,000
2018-2019	10,448,332	8,813,588	10,353,720	9,776,462	10,002,714	10,069,000
Totals						\$116,768,000
						Projected Losses for the Year 2019-2020 (G) \$10,311,000
						Projected Losses for the Year 2020-2021 (H) \$10,771,000

Notes:

- (A) From Appendix A - Projected Funding, Page 1, Column (D).
- (B) From Appendix B - Projected Funding, Page 1, Column (D).
- (C) Based on results in Appendix C - Projected Funding, Page 1.
- (D) Based on results in Appendix C - Projected Funding, Page 2.
- (E) Based on results in Appendix D - Projected Funding, Page 1.
- (F) Selected averages of (A), (B), (C), (D), and (E).
- (G) From Exhibit 3 - Projected Funding, Page 1, Line (K) / Line (G).
- (H) From Exhibit 3 - Projected Funding, Page 1, Line (K) / Line (G).

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

Santa Clara County Schools Insurance Group - Workers' Compensation

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

Accident Year	Ultimate Limited Losses (A)	Trend Factor (B)	Trended Limited Losses (C)	Trended Payroll (\$00) (D)	Trended Limited Loss Rate (E)
2003-2004	10,540,000	1.237	13,037,980	11,541,491	1.130
2004-2005	7,193,000	1.574	11,321,782	11,246,066	1.007
2005-2006	5,827,000	1.685	9,818,495	11,436,655	0.859
2006-2007	5,877,000	1.578	9,273,906	11,226,115	0.826
2007-2008	7,549,000	1.449	10,938,501	12,812,609	0.854
2008-2009	7,617,000	1.337	10,183,929	12,010,784	0.848
2009-2010	6,846,000	1.211	8,290,506	10,747,954	0.771
2010-2011	6,634,000	1.143	7,582,662	10,135,755	0.748
2011-2012	6,393,000	1.127	7,204,911	9,743,022	0.739
2012-2013	5,694,000	1.131	6,439,914	9,633,469	0.668
2013-2014	6,217,000	1.127	7,006,559	9,989,079	0.701
2014-2015	5,696,000	1.094	6,231,424	10,555,755	0.590
2015-2016	6,163,000	1.084	6,680,692	11,011,368	0.607
2016-2017	8,688,000	1.071	9,304,848	13,709,429	0.679
2017-2018	9,765,000	1.036	10,116,540	13,829,435	0.732
2018-2019	10,069,000	1.016	10,230,104	13,721,905	0.746
Totals	\$116,768,000		\$143,662,753	183,350,891	\$0.784
13/14-17/18	36,529,000		39,340,063	59,095,066	0.666
14/15-18/19	40,381,000		42,563,608	62,827,892	0.677

(F) Selected Limited Rate: \$0.750  
Prior: \$0.775

Program Year:	2019-2020	2020-2021
(G) Factor to SIR:	1.316	1.322
(H) Trend Factor:	1.000	1.014
(I) Program Rate:	\$0.987	\$1.006
(J) Trended Payroll (\$00):	13,744,145	14,156,470
(K) Projected Program Losses:	13,565,000	14,241,000
(L) Projected ULAE:	1,017,000	1,068,000
(M) Projected Loss and ULAE:	\$14,582,000	\$15,309,000

Notes appear on the next page.

Santa Clara County Schools Insurance Group - Workers' Compensation

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

Notes:

- (A) From Exhibit 2 - Projected Funding, Page 2, Column (F).  
For purposes of projecting future losses, losses are capped at \$100,000 per occurrence.
- (B) From Appendix E - Projected Funding, Page 1, Column (B).
- (C)  $(A) \times (B)$ .
- (D) From Appendix I - Projected Funding, Column (C).
- (E)  $(C) / (D)$ .
- (F) Selected based on (E).
- (G) Based on a Weibull distribution, a mathematical model of claim sizes.
- (H) From Appendix E - Projected Funding.  
(I)  $(F) \times (G) \times (H)$ .
- (J) From Appendix I - Projected Funding, Column (C).
- (K)  $(I) \times (J)$ .
- (L) Based on an estimated claim closing pattern and the Group's historical claims administration expenses.
- (M)  $(K) + (L)$ .

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

## Santa Clara County Schools Insurance Group - Workers' Compensation

## Reported Loss Development

Accident Year (A)	Limited Reported Losses as of 6/30/19 (B)	Reported Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Reported Losses of 6/30/19 (E)	Reported Loss Development Factor (F)	Ultimate Program Losses (G)
2003-2004	10,344,519	1.013	10,478,998	13,375,244	1.023	13,682,875
2004-2005	7,064,858	1.015	7,170,831	9,274,403	1.029	9,543,361
2005-2006	5,734,343	1.017	5,831,827	7,590,148	1.036	7,863,393
2006-2007	5,727,121	1.019	5,835,936	7,007,858	1.043	7,309,196
2007-2008	7,338,685	1.022	7,500,136	10,118,472	1.052	10,644,633
2008-2009	7,306,652	1.025	7,489,318	9,525,319	1.062	10,115,889
2009-2010	6,538,367	1.031	6,741,056	7,933,659	1.077	8,544,551
2010-2011	6,274,143	1.038	6,512,560	8,074,090	1.093	8,824,980
2011-2012	6,075,368	1.046	6,354,835	7,392,679	1.114	8,235,444
2012-2013	5,431,094	1.055	5,729,804	6,629,124	1.137	7,537,314
2013-2014	5,784,216	1.066	6,165,974	7,221,006	1.165	8,412,472
2014-2015	4,989,520	1.077	5,373,713	5,703,941	1.198	6,833,321
2015-2016	5,547,585	1.088	6,035,772	6,870,318	1.247	8,567,287
2016-2017	7,549,130	1.121	8,462,575	8,484,797	1.327	11,259,326
2017-2018	8,078,348	1.205	9,734,409	9,048,313	1.488	13,463,890
2018-2019	7,538,479	1.386	10,448,332	8,047,972	1.773	14,269,054
Totals	\$107,322,428		\$115,866,076	\$132,297,343		\$155,106,986

## Notes:

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

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

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

Santa Clara County Schools Insurance Group - Workers' Compensation  
Reported Loss Development

Limited Losses Reported as of:

Accident Year	12 Months	24 Months	36 Months	48 Months	60 Months	72 Months	84 Months	96 Months	108 Months	120 Months
2003-2004								10,171,126	10,174,297	10,157,920
2004-2005							7,281,949	7,168,404	7,035,128	6,963,509
2005-2006						5,321,738	5,353,545	5,390,749	5,510,792	5,837,426
2006-2007					5,663,946	5,700,712	5,708,082	5,756,499	5,789,254	5,739,943
2007-2008				7,016,158	6,949,534	6,965,545	6,998,969	7,110,548	7,269,606	7,401,894
2008-2009			7,053,957	7,699,037	7,630,764	7,281,262	7,375,249	7,214,069	7,299,208	7,368,279
2009-2010		6,387,237	6,513,123	6,307,459	6,460,909	6,381,654	6,437,897	6,321,318	6,578,851	6,538,367
2010-2011	4,414,580	6,303,384	6,289,246	6,091,817	6,144,422	6,310,911	6,214,752	6,333,618	6,274,143	
2011-2012	4,768,917	5,707,302	5,933,869	6,036,674	5,939,206	5,900,865	5,826,619	6,075,368		
2012-2013	4,905,883	5,324,561	4,951,569	5,172,924	5,075,695	5,236,778	5,431,094			
2013-2014	4,023,015	5,542,817	5,608,289	5,807,411	5,892,413	5,784,216				
2014-2015	4,787,300	4,905,091	4,876,228	4,958,159	4,989,520					
2015-2016	4,269,613	5,283,660	5,497,993	5,547,585						
2016-2017	7,095,309	7,913,842	7,549,130							
2017-2018	7,950,992	8,078,348								
2018-2019	7,538,479									

Reported Loss Development Factors:

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
2003-2004								1.000	0.998	1.013
2004-2005							0.984	0.981	0.990	1.023
2005-2006						1.006	1.007	1.022	1.059	0.985
2006-2007					1.006	1.001	1.008	1.006	0.991	1.000
2007-2008				0.991	1.002	1.005	1.016	1.022	1.018	0.997
2008-2009			1.091	0.991	0.954	1.013	0.978	1.012	1.009	0.992
2009-2010		1.020	0.968	1.024	0.988	1.009	0.982	1.041	0.994	
2010-2011	1.428	0.998	0.969	1.009	1.027	0.985	1.019	0.991		
2011-2012	1.197	1.040	1.017	0.984	0.994	0.987	1.043			
2012-2013	1.085	0.930	1.045	0.981	1.032	1.037				
2013-2014	1.378	1.012	1.036	1.015	0.982					
2014-2015	1.025	0.994	1.017	1.006						
2015-2016	1.238	1.041	1.009							
2016-2017	1.115	0.954								
2017-2018	1.016									

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
Average Dollar-Weighted Averages	1.185	0.999	1.019	1.000	0.998	1.005	1.005	1.009	1.008	1.002
3-yr	1.101	0.990	1.021	1.001	1.001	1.001	1.014	1.014	1.008	0.996
4-yr	1.086	0.995	1.026	0.996	1.008	1.003	1.003	1.016	1.004	0.994
Comparative Factors	1.470	1.120	1.025	1.015	1.010	1.010	1.009	1.008	1.007	1.006
Prior	1.275	1.100	1.030	1.010	1.010	1.010	1.009	1.008	1.007	1.006
Selected	1.150	1.075	1.030	1.010	1.010	1.010	1.009	1.008	1.007	1.006
Cumulated	1.386	1.205	1.121	1.088	1.077	1.066	1.055	1.046	1.038	1.031

Santa Clara County Schools Insurance Group - Workers' Compensation  
Reported Loss Development

Limited Losses Reported as of:

Accident Year	132 Months	144 Months	156 Months	168 Months	180 Months	192 Months
2003-2004	10,293,472	10,218,025	10,289,946	10,306,952	10,291,773	10,344,519
2004-2005	7,125,503	7,150,725	7,068,627	7,042,371	7,064,858	
2005-2006	5,750,615	5,815,130	5,802,187	5,734,343		
2006-2007	5,739,289	5,632,749	5,727,121			
2007-2008	7,380,744	7,338,685				
2008-2009	7,306,652					
2009-2010						
2010-2011						
2011-2012						
2012-2013						
2013-2014						
2014-2015						
2015-2016						
2016-2017						
2017-2018						
2018-2019						

Reported Loss Development Factors:

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-Ult. Months
2003-2004	0.993	1.007	1.002	0.999	1.005	
2004-2005	1.004	0.989	0.996	1.003		
2005-2006	1.011	0.998	0.988			
2006-2007	0.981	1.017				
2007-2008	0.994					
2008-2009						
2009-2010						
2010-2011						
2011-2012						
2012-2013						
2013-2014						
2014-2015						
2015-2016						
2016-2017						
2017-2018						

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-Ult. Months
Average Dollar-Weighted Averages	0.997	1.003	0.995	1.001	1.005	
3-yr	0.996	1.000	0.997			
4-yr	0.998	1.002				
Comparative Factors	1.005	1.005	1.004	1.003	1.003	1.018
Prior	1.003	1.003	1.002	1.002	1.015	
Selected	1.003	1.003	1.002	1.002	1.002	1.013
Cumulated	1.025	1.022	1.019	1.017	1.015	1.013

Santa Clara County Schools Insurance Group - Workers' Compensation  
 Reported between \$100,000 and \$500,000 Loss Development

Accident Year	<u>Losses Reported as of:</u>									
	12 Months	24 Months	36 Months	48 Months	60 Months	72 Months	84 Months	96 Months	108 Months	120 Months
2003-2004								5,254,446	5,061,040	4,711,620
2004-2005							3,511,440	3,467,212	3,603,569	3,360,841
2005-2006						2,003,288	1,932,149	2,167,393	2,059,470	2,486,706
2006-2007					2,078,720	1,930,597	1,883,123	1,811,468	1,720,323	1,711,240
2007-2008				2,296,578	3,184,246	3,567,010	3,492,131	3,849,024	4,427,484	4,419,934
2008-2009			1,564,401	2,580,461	3,137,408	3,433,294	3,575,547	3,442,184	3,218,578	2,908,025
2009-2010		600,367	1,073,513	1,299,327	1,839,178	1,844,043	1,691,729	1,982,920	1,672,949	1,743,732
2010-2011	318,337	722,616	1,566,438	2,112,983	2,022,048	2,454,885	2,641,027	2,422,072	2,421,303	
2011-2012	195,174	483,799	899,395	1,313,131	1,693,019	1,751,181	1,994,771	1,748,944		
2012-2013	416,075	836,477	1,070,213	1,454,255	1,301,618	1,470,988	1,509,409			
2013-2014	22,513	345,198	1,153,973	1,409,529	1,877,046	2,079,358				
2014-2015	85,883	250,487	338,302	762,126	772,420					
2015-2016		303,045	1,398,882	1,751,750						
2016-2017	708,553	976,611	1,073,636							
2017-2018	344,234	1,062,623								
2018-2019	509,493									

Reported Loss Development Factors:

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
	2003-2004								0.963	0.931
2004-2005							0.987	1.039	0.933	1.105
2005-2006						0.964	1.122	0.950	1.207	1.099
2006-2007					0.929	0.975	0.962	0.950	0.995	0.961
2007-2008				1.387	1.120	0.979	1.102	1.150	0.998	0.980
2008-2009			1.649	1.216	1.094	1.041	0.963	0.935	0.904	1.035
2009-2010		1.788	1.210	1.415	1.003	0.917	1.172	0.844	1.042	
2010-2011	2.270	2.168	1.349	0.957	1.214	1.076	0.917	1.000		
2011-2012	2.479	1.859	1.460	1.289	1.034	1.139	0.877			
2012-2013	2.010	1.279	1.359	0.895	1.130	1.026				
2013-2014	15.334	3.343	1.221	1.332	1.108					
2014-2015	2.917	1.351	2.253	1.014						
2015-2016		4.616	1.252							
2016-2017	1.378	1.099								
2017-2018	3.087									

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
Average Dollar-Weighted Averages	4.211	2.188	1.469	1.188	1.079	1.015	1.013	0.979	1.001	1.025
3-yr		1.837	1.357	1.090	1.088	1.082	0.973	0.932	0.973	0.994
4-yr		2.114	1.358	1.143	1.125	1.042	0.969	1.004	0.977	1.017
Comparative Factors	2.750	1.900	1.380	1.270	1.130	1.100	1.080	1.070	1.055	1.050
Prior	2.750	1.900	1.380	1.270	1.130	1.100	1.080	1.070	1.055	1.050
Selected	2.750	1.900	1.380	1.270	1.130	1.100	1.080	1.070	1.055	1.050
Cumulated	18.114	6.587	3.467	2.512	1.978	1.750	1.591	1.473	1.377	1.305

Santa Clara County Schools Insurance Group - Workers' Compensation  
Reported between \$100,000 and \$500,000 Loss Development

Accident Year	<u>Losses Reported as of:</u>					
	132 Months	144 Months	156 Months	168 Months	180 Months	192 Months
2003-2004	4,573,973	4,711,702	4,880,578	5,053,629	4,909,646	4,947,392
2004-2005	3,712,428	3,805,120	3,654,152	3,425,443	3,442,170	
2005-2006	2,732,758	2,957,206	2,910,923	2,474,861		
2006-2007	1,644,233	1,646,039	1,573,603			
2007-2008	4,329,834	4,488,342				
2008-2009	3,009,310					
2009-2010						
2010-2011						
2011-2012						
2012-2013						
2013-2014						
2014-2015						
2015-2016						
2016-2017						
2017-2018						
2018-2019						

	<u>Reported Loss Development Factors:</u>					
	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-Ult. Months
2003-2004	1.030	1.036	1.035	0.972	1.008	
2004-2005	1.025	0.960	0.937	1.005		
2005-2006	1.082	0.984	0.850			
2006-2007	1.001	0.956				
2007-2008	1.037					
2008-2009						
2009-2010						
2010-2011						
2011-2012						
2012-2013						
2013-2014						
2014-2015						
2015-2016						
2016-2017						
2017-2018						

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-Ult. Months
Average Dollar-Weighted Averages	1.035	0.984	0.941	0.989	1.008	
3-yr	1.044	0.968	0.957			
4-yr	1.038	0.992				
Comparative Factors	1.040	1.029	1.030	1.026	1.024	1.071
Prior	1.040	1.030	1.030	1.026	1.097	
Selected	1.040	1.030	1.030	1.026	1.024	1.071
Cumulated	1.243	1.195	1.160	1.126	1.097	1.071

## Santa Clara County Schools Insurance Group - Workers' Compensation

## Paid Loss Development

Accident Year (A)	Limited Paid Losses as of 6/30/19 (B)	Paid Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Paid Losses of 6/30/19 (E)	Paid Loss Development Factor (F)	Ultimate Program Losses (G)
2003-2004	10,273,087	1.032	10,601,826	13,178,871	1.091	14,378,148
2004-2005	6,944,212	1.039	7,215,036	9,153,756	1.103	10,096,593
2005-2006	5,560,398	1.047	5,821,737	7,128,757	1.117	7,962,822
2006-2007	5,604,854	1.056	5,918,726	6,786,845	1.134	7,696,282
2007-2008	7,121,087	1.067	7,598,200	9,498,749	1.154	10,961,556
2008-2009	7,170,498	1.080	7,744,138	9,186,679	1.178	10,821,908
2009-2010	6,341,639	1.096	6,950,436	7,548,959	1.207	9,111,594
2010-2011	6,053,280	1.116	6,755,460	7,571,626	1.243	9,411,531
2011-2012	5,651,754	1.138	6,431,696	6,740,891	1.290	8,695,749
2012-2013	4,812,462	1.161	5,587,268	5,523,587	1.346	7,434,748
2013-2014	5,228,334	1.199	6,268,772	6,101,767	1.420	8,664,509
2014-2015	4,488,463	1.271	5,704,836	4,921,507	1.545	7,603,728
2015-2016	4,287,275	1.398	5,993,610	4,997,077	1.740	8,694,914
2016-2017	5,297,687	1.573	8,333,262	5,874,364	2.005	11,778,100
2017-2018	4,704,253	2.006	9,436,732	4,764,871	2.595	12,364,840
2018-2019	2,343,416	3.761	8,813,588	2,343,416	4.908	11,501,486
Totals	\$91,882,699		\$115,175,323	\$111,321,722		\$157,178,508

## Notes:

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

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

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

Santa Clara County Schools Insurance Group - Workers' Compensation  
Paid Loss Development

Limited Losses Paid as of:

Accident Year	12 Months	24 Months	36 Months	48 Months	60 Months	72 Months	84 Months	96 Months	108 Months	120 Months
2003-2004								9,383,333	9,514,317	9,623,831
2004-2005							6,370,329	6,571,591	6,646,168	6,683,708
2005-2006						4,631,761	4,794,900	5,026,211	5,094,708	5,356,177
2006-2007					4,745,443	5,066,453	5,274,981	5,378,543	5,415,722	5,463,191
2007-2008				5,523,674	5,796,133	6,042,586	6,283,023	6,462,177	6,799,299	6,864,215
2008-2009			5,101,263	5,789,634	6,230,257	6,422,096	6,781,217	6,860,253	6,914,670	7,064,771
2009-2010		3,890,645	4,756,516	5,291,852	5,701,156	5,853,613	5,953,965	6,083,988	6,307,769	6,341,639
2010-2011	1,747,661	3,677,697	4,850,151	5,267,867	5,651,246	5,827,723	5,948,256	6,012,656	6,053,280	
2011-2012	1,665,512	3,268,854	4,165,766	4,678,727	5,008,674	5,321,469	5,527,413	5,651,754		
2012-2013	1,728,542	3,090,199	3,758,576	4,231,193	4,421,579	4,701,687	4,812,462			
2013-2014	1,626,471	3,047,641	3,869,358	4,369,042	4,940,706	5,228,334				
2014-2015	1,588,591	2,885,051	3,594,665	4,033,060	4,488,463					
2015-2016	1,488,344	2,723,385	3,770,229	4,287,275						
2016-2017	2,472,329	4,375,019	5,297,687							
2017-2018	2,522,996	4,704,253								
2018-2019	2,343,416									

Paid Loss Development Factors:

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
2003-2004								1.014	1.012	1.042
2004-2005							1.032	1.011	1.006	1.011
2005-2006						1.035	1.048	1.014	1.051	1.005
2006-2007					1.068	1.041	1.020	1.007	1.009	1.019
2007-2008				1.049	1.043	1.040	1.029	1.052	1.010	1.018
2008-2009			1.135	1.076	1.031	1.056	1.012	1.008	1.022	1.015
2009-2010		1.223	1.113	1.077	1.027	1.017	1.022	1.037	1.005	
2010-2011	2.104	1.319	1.086	1.073	1.031	1.021	1.011	1.007		
2011-2012	1.963	1.274	1.123	1.071	1.062	1.039	1.022			
2012-2013	1.788	1.216	1.126	1.045	1.063	1.024				
2013-2014	1.874	1.270	1.129	1.131	1.058					
2014-2015	1.816	1.246	1.122	1.113						
2015-2016	1.830	1.384	1.137							
2016-2017	1.770	1.211								
2017-2018	1.865									

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
Average Dollar-Weighted Averages	1.876	1.268	1.121	1.079	1.048	1.034	1.025	1.019	1.016	1.018
3-yr	1.820	1.268	1.130	1.096	1.061	1.028	1.018	1.017	1.012	1.017
4-yr	1.820	1.269	1.129	1.089	1.053	1.025	1.016	1.026	1.012	1.015
Comparative Factors	2.500	1.400	1.170	1.090	1.050	1.033	1.020	1.015	1.012	1.010
Prior	1.875	1.275	1.125	1.075	1.050	1.033	1.020	1.020	1.018	1.015
Selected	1.875	1.275	1.125	1.100	1.060	1.033	1.020	1.020	1.018	1.015
Cumulated	3.761	2.006	1.573	1.398	1.271	1.199	1.161	1.138	1.116	1.096

Santa Clara County Schools Insurance Group - Workers' Compensation  
Paid Loss Development

Limited Losses Paid as of:

Accident Year	132 Months	144 Months	156 Months	168 Months	180 Months	192 Months
2003-2004	10,032,083	10,071,810	10,087,139	10,139,012	10,218,359	10,273,087
2004-2005	6,757,155	6,774,600	6,798,108	6,829,833	6,944,212	
2005-2006	5,384,787	5,455,352	5,560,940	5,560,398		
2006-2007	5,568,923	5,522,608	5,604,854			
2007-2008	6,985,745	7,121,087				
2008-2009	7,170,498					
2009-2010						
2010-2011						
2011-2012						
2012-2013						
2013-2014						
2014-2015						
2015-2016						
2016-2017						
2017-2018						
2018-2019						

Paid Loss Development Factors:

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-Ult. Months
2003-2004	1.004	1.002	1.005	1.008	1.005	
2004-2005	1.003	1.003	1.005	1.017		
2005-2006	1.013	1.019	1.000			
2006-2007	0.992	1.015				
2007-2008	1.019					
2008-2009						
2009-2010						
2010-2011						
2011-2012						
2012-2013						
2013-2014						
2014-2015						
2015-2016						
2016-2017						
2017-2018						

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-Ult. Months
Average Dollar-Weighted Averages	1.006	1.010	1.003	1.013	1.005	
3-yr	1.009	1.012	1.004			
4-yr	1.007	1.008				
Comparative Factors	1.009	1.008	1.007	1.006	1.005	1.034
Prior	1.012	1.010	1.009	1.008	1.039	
Selected	1.012	1.010	1.009	1.008	1.007	1.032
Cumulated	1.080	1.067	1.056	1.047	1.039	1.032

Santa Clara County Schools Insurance Group - Workers' Compensation  
Paid between \$100,000 and \$500,000 Loss Development

Accident Year	<u>Losses Paid as of:</u>									
	12 Months	24 Months	36 Months	48 Months	60 Months	72 Months	84 Months	96 Months	108 Months	120 Months
2003-2004								2,960,648	3,515,602	3,772,256
2004-2005							1,846,627	2,025,686	2,281,493	2,410,700
2005-2006						810,765	1,122,838	1,225,888	1,301,377	1,624,329
2006-2007					889,151	1,072,547	1,202,293	1,408,535	1,303,434	1,428,435
2007-2008				757,481	1,205,653	1,726,370	2,003,898	2,420,123	3,255,484	3,567,291
2008-2009			284,526	741,612	1,247,209	1,712,141	1,978,892	1,906,590	2,419,571	2,486,554
2009-2010		31,795	305,655	423,059	765,017	870,830	945,854	1,219,632	1,364,663	1,422,779
2010-2011		174,558	351,424	709,885	1,128,213	1,419,220	1,532,743	1,818,910	1,847,210	
2011-2012	52,906	145,119	289,508	404,275	610,637	881,307	1,027,397	1,264,443		
2012-2013	350,000	371,879	479,102	727,982	868,167	936,486	961,125			
2013-2014		6,180	240,700	344,511	603,842	963,408				
2014-2015		3,211	110,403	150,964	491,043					
2015-2016			273,314	824,545						
2016-2017	215,042	464,519	714,646							
2017-2018	13,542	60,618								
2018-2019										

Paid Loss Development Factors:

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
2003-2004								1.187	1.073	1.083
2004-2005							1.097	1.126	1.057	1.100
2005-2006						1.385	1.092	1.062	1.248	1.021
2006-2007					1.206	1.121	1.172	0.925	1.096	1.045
2007-2008				1.592	1.432	1.161	1.208	1.345	1.096	1.063
2008-2009			2.606	1.682	1.373	1.156	0.963	1.269	1.028	1.068
2009-2010		9.613	1.384	1.808	1.138	1.086	1.289	1.119	1.043	
2010-2011		2.013	2.020	1.589	1.258	1.080	1.187	1.016		
2011-2012	2.743	1.995	1.396	1.510	1.443	1.166	1.231			
2012-2013	1.063	1.288	1.519	1.193	1.079	1.026				
2013-2014		38.948	1.431	1.753	1.595					
2014-2015		34.383	1.367	3.253						
2015-2016			3.017							
2016-2017	2.160	1.538								
2017-2018	4.476									

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months
Average Dollar-Weighted Averages	2.611	12.825	1.843	1.798	1.316	1.148	1.155	1.131	1.092	1.063
3-yr			2.114	1.605	1.335	1.088	1.227	1.139	1.062	1.061
4-yr			1.856	1.581	1.308	1.087	1.132	1.207	1.067	1.054
Comparative Factors	4.000	3.100	2.400	1.750	1.500	1.300	1.250	1.175	1.100	1.080
Prior	4.000	3.100	2.400	1.750	1.500	1.300	1.250	1.175	1.100	1.080
Selected	4.000	3.100	2.400	1.750	1.500	1.300	1.250	1.175	1.100	1.080
Cumulated	331.020	82.755	26.695	11.123	6.356	4.237	3.259	2.607	2.219	2.017

Santa Clara County Schools Insurance Group - Workers' Compensation  
Paid between \$100,000 and \$500,000 Loss Development

Losses Paid as of:

Accident Year	132 Months	144 Months	156 Months	168 Months	180 Months	192 Months
2003-2004	4,087,200	4,323,847	4,461,430	4,495,135	4,799,642	4,786,750
2004-2005	2,652,453	2,808,721	2,901,040	3,125,909	3,442,170	
2005-2006	1,659,020	2,014,747	2,419,102	2,126,860		
2006-2007	1,492,943	1,417,773	1,474,858			
2007-2008	3,793,429	3,782,192				
2008-2009	2,654,636					
2009-2010						
2010-2011						
2011-2012						
2012-2013						
2013-2014						
2014-2015						
2015-2016						
2016-2017						
2017-2018						
2018-2019						

Paid Loss Development Factors:

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-Ult. Months
2003-2004	1.058	1.032	1.008	1.068	0.997	
2004-2005	1.059	1.033	1.078	1.101		
2005-2006	1.214	1.201	0.879			
2006-2007	0.950	1.040				
2007-2008	0.997					
2008-2009						
2009-2010						
2010-2011						
2011-2012						
2012-2013						
2013-2014						
2014-2015						
2015-2016						
2016-2017						
2017-2018						

	132-144 Months	144-156 Months	156-168 Months	168-180 Months	180-192 Months	192-Ult. Months
Average Dollar-Weighted Averages	1.056	1.077	0.988	1.085	0.997	
3-yr	1.039	1.089	0.997			
4-yr	1.044	1.065				
Comparative Factors	1.070	1.055	1.045	1.035	1.035	1.478
Prior	1.070	1.055	1.045	1.035	1.530	
Selected	1.070	1.055	1.045	1.035	1.035	1.478
Cumulated	1.868	1.746	1.655	1.584	1.530	1.478

Santa Clara County Schools Insurance Group - Workers' Compensation

Exposure and Development Method  
Based on Reported Losses

Accident Year	Trended Payroll (\$00) (A)	Reported Losses as of 6/30/19 (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)
2003-2004	11,541,491	13,375,244	1.023	0.022	1.105	280,574	13,655,818
2004-2005	11,246,066	9,274,403	1.029	0.028	0.780	245,614	9,520,017
2005-2006	11,436,655	7,590,148	1.036	0.035	0.627	250,977	7,841,125
2006-2007	11,226,115	7,007,858	1.043	0.041	0.642	295,494	7,303,352
2007-2008	12,812,609	10,118,472	1.052	0.049	0.726	455,796	10,574,268
2008-2009	12,010,784	9,525,319	1.062	0.058	0.778	541,975	10,067,294
2009-2010	10,747,954	7,933,659	1.077	0.071	0.786	599,800	8,533,459
2010-2011	10,135,755	8,074,090	1.093	0.085	0.810	697,847	8,771,937
2011-2012	9,743,022	7,392,679	1.114	0.102	0.825	819,875	8,212,554
2012-2013	9,633,469	6,629,124	1.137	0.120	0.757	875,104	7,504,228
2013-2014	9,989,079	7,221,006	1.165	0.142	0.788	1,117,738	8,338,744
2014-2015	10,555,755	5,703,941	1.198	0.165	0.881	1,534,437	7,238,378
2015-2016	11,011,368	6,870,318	1.247	0.198	0.893	1,946,964	8,817,282
2016-2017	13,709,429	8,484,797	1.327	0.246	0.908	3,062,248	11,547,045
2017-2018	13,829,435	9,048,313	1.488	0.328	0.943	4,277,500	13,325,813
2018-2019	13,721,905	8,047,972	1.773	0.436	0.966	5,779,337	13,827,309
Totals	183,350,891	\$132,297,343				\$22,781,280	\$155,078,623

Notes:

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

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Exposure and Development Method  
Based on Paid Losses

Accident Year	Trended Payroll (\$00) (A)	Paid Losses as of 6/30/19 (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	11,541,491	13,178,871	1.091	0.083	1.105	1,058,528	14,237,399
2004-2005	11,246,066	9,153,756	1.103	0.093	0.780	815,790	9,969,546
2005-2006	11,436,655	7,128,757	1.117	0.105	0.627	752,932	7,881,689
2006-2007	11,226,115	6,786,845	1.134	0.118	0.642	850,446	7,637,291
2007-2008	12,812,609	9,498,749	1.154	0.133	0.726	1,237,160	10,735,909
2008-2009	12,010,784	9,186,679	1.178	0.151	0.778	1,411,003	10,597,682
2009-2010	10,747,954	7,548,959	1.207	0.171	0.786	1,444,590	8,993,549
2010-2011	10,135,755	7,571,626	1.243	0.195	0.810	1,600,943	9,172,569
2011-2012	9,743,022	6,740,891	1.290	0.225	0.825	1,808,548	8,549,439
2012-2013	9,633,469	5,523,587	1.346	0.257	0.757	1,874,182	7,397,769
2013-2014	9,989,079	6,101,767	1.420	0.296	0.788	2,329,933	8,431,700
2014-2015	10,555,755	4,921,507	1.545	0.353	0.881	3,282,766	8,204,273
2015-2016	11,011,368	4,997,077	1.740	0.425	0.893	4,179,089	9,176,166
2016-2017	13,709,429	5,874,364	2.005	0.501	0.908	6,236,529	12,110,893
2017-2018	13,829,435	4,764,871	2.595	0.615	0.943	8,020,312	12,785,183
2018-2019	13,721,905	2,343,416	4.908	0.796	0.966	10,551,267	12,894,683
Totals	183,350,891	\$111,321,722				\$47,454,018	\$158,775,740

Notes:

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

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Exposure and Development Method

Accident Year	Trended Payroll (\$00) (A)	Ultimate Limited Losses (B)	Trend Factor (C)	Trended Limited Losses (D)	Trended Limited Loss Rate (E)	Limited Loss Rate (F)	Factor to SIR (G)	Program Loss Rate (H)
2003-2004	11,541,491	10,479,000	1.237	12,962,523	1.123	0.908	1.217	1.105
2004-2005	11,246,066	7,171,000	1.574	11,287,154	1.004	0.638	1.223	0.780
2005-2006	11,436,655	5,832,000	1.685	9,826,920	0.859	0.510	1.229	0.627
2006-2007	11,226,115	5,836,000	1.578	9,209,208	0.820	0.520	1.235	0.642
2007-2008	12,812,609	7,500,000	1.449	10,867,500	0.848	0.585	1.241	0.726
2008-2009	12,010,784	7,489,000	1.337	10,012,793	0.834	0.624	1.247	0.778
2009-2010	10,747,954	6,741,000	1.211	8,163,351	0.760	0.627	1.253	0.786
2010-2011	10,135,755	6,513,000	1.143	7,444,359	0.734	0.643	1.259	0.810
2011-2012	9,743,022	6,355,000	1.127	7,162,085	0.735	0.652	1.265	0.825
2012-2013	9,633,469	5,730,000	1.131	6,480,630	0.673	0.595	1.272	0.757
2013-2014	9,989,079	6,166,000	1.127	6,949,082	0.696	0.617	1.278	0.788
2014-2015	10,555,755	5,374,000	1.094	5,879,156	0.557	0.686	1.284	0.881
2015-2016	11,011,368	6,015,000	1.084	6,520,260	0.592	0.692	1.290	0.893
2016-2017	13,709,429	8,463,000	1.071	9,063,873	0.661	0.700	1.297	0.908
2017-2018	13,829,435	9,586,000	1.036	9,931,096	0.718	0.724	1.303	0.943
2018-2019	13,721,905	9,631,000	1.016	9,785,096	0.713	0.738	1.310	0.966
Total/Avg	183,350,891	\$114,881,000		\$141,545,086	\$0.772			
13/14-17/18	59,095,066	35,604,000		38,343,467	0.649			
16/17-18/19	41,260,769	27,680,000		28,780,065	0.698			
				Selected Limited Rate:	\$0.750			
				Prior:	\$0.750			

Notes:

- (A) From Appendix I - Projected Funding, Column (C).
- (B) Selected average of results from Appendices A and B.
- (C) From Appendix E - Projected Funding, Page 1, Column (B).
- (D) (B) x (C).
- (E) (D) / (A).
- (F) Selected Limited Rate / (C). For 2013-2014 and prior (B) / (A).
- (G) Based on a Weibull distribution, a mathematical model of claim sizes.
- (H) (F) x (G).

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Frequency and Severity Method

Accident Year	Ultimate Program Severity (A)	Adjusted Ultimate Claims (B)	Ultimate Program Losses (C)
2003-2004	12,401	1,034	12,822,634
2004-2005	9,365	939	8,793,735
2005-2006	8,513	841	7,159,433
2006-2007	10,562	687	7,256,094
2007-2008	10,941	856	9,365,496
2008-2009	11,944	795	9,495,480
2009-2010	12,580	682	8,579,560
2010-2011	12,486	669	8,353,134
2011-2012	11,930	678	8,088,540
2012-2013	10,510	689	7,241,390
2013-2014	10,691	743	7,943,413
2014-2015	13,236	772	10,218,192
2015-2016	13,716	738	10,122,408
2016-2017	14,246	940	13,391,240
2017-2018	15,095	840	12,679,800
2018-2019	15,802	829	13,099,858
Total		12,732	\$154,610,407

Notes:

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

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Frequency and Severity Method

Accident Year	Ultimate Limited Losses (A)	Adjusted Ultimate Claims (B)	Ultimate Limited Severity (C)	Trend Factor (D)	Trended Limited Severity (E)	Limited Severity (F)	Factor to SIR (G)	Program Severity (H)
2003-2004	10,540,000	1,034	10,193	1.719	17,522	10,193	1.217	12,401
2004-2005	7,193,000	939	7,660	2.143	16,415	7,660	1.223	9,365
2005-2006	5,827,000	841	6,929	2.248	15,576	6,929	1.229	8,513
2006-2007	5,877,000	687	8,555	2.061	17,632	8,555	1.235	10,562
2007-2008	7,549,000	856	8,819	1.854	16,350	8,819	1.241	10,941
2008-2009	7,617,000	795	9,581	1.675	16,048	9,581	1.247	11,944
2009-2010	6,846,000	682	10,038	1.487	14,927	10,038	1.253	12,580
2010-2011	6,634,000	669	9,916	1.375	13,635	9,916	1.259	12,486
2011-2012	6,393,000	678	9,429	1.329	12,531	9,429	1.265	11,930
2012-2013	5,694,000	689	8,264	1.306	10,793	8,264	1.272	10,510
2013-2014	6,217,000	743	8,367	1.275	10,668	8,367	1.278	10,691
2014-2015	5,696,000	772	7,378	1.213	8,950	10,305	1.284	13,236
2015-2016	6,163,000	738	8,351	1.176	9,821	10,629	1.290	13,716
2016-2017	8,688,000	940	9,243	1.138	10,519	10,984	1.297	14,246
2017-2018	9,765,000	840	11,625	1.079	12,543	11,585	1.303	15,095
2018-2019	10,069,000	829	12,146	1.036	12,583	12,066	1.310	15,802

Average Limited Severity: \$13,532  
Average 13/14-17/18 Limited Severity: 10,500  
Average 16/17-18/19 Limited Severity: 11,882

Selected Limited Severity: \$12,500  
Prior: \$11,000

Notes:

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

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Frequency and Severity Method  
Projection of Ultimate Claims

Accident Year	Reported Claim Development (A)	Closed Claim Development (B)	Selected Ultimate Claims (C)	Trended Payroll (\$000,000) (D)	Claim Frequency (E)	Trend Factor (F)	Trended Claim Frequency (G)
2003-2004	1,034	1,038	1,034	1,154.1	0.896	0.725	0.650
2004-2005	939	943	939	1,124.6	0.835	0.740	0.618
2005-2006	841	839	841	1,143.7	0.735	0.755	0.555
2006-2007	687	691	687	1,122.6	0.612	0.769	0.471
2007-2008	856	853	856	1,281.3	0.668	0.785	0.524
2008-2009	795	798	795	1,201.1	0.662	0.801	0.530
2009-2010	682	690	682	1,074.8	0.635	0.817	0.519
2010-2011	669	679	669	1,013.6	0.660	0.834	0.550
2011-2012	678	685	678	974.3	0.696	0.851	0.592
2012-2013	689	704	689	963.3	0.715	0.868	0.621
2013-2014	743	765	743	998.9	0.744	0.886	0.659
2014-2015	772	814	772	1,055.6	0.731	0.904	0.661
2015-2016	738	762	738	1,101.1	0.670	0.922	0.618
2016-2017	940	990	940	1,370.9	0.686	0.942	0.646
2017-2018	840	874	840	1,382.9	0.607	0.961	0.583
2018-2019	829	881	829	1,372.2	0.604	0.980	0.592
Total	12,732	13,006	12,732	18,335.1			0.586
13/14-17/18	4,033	4,205	4,033	5,909.5			0.631
					(H) Selected Frequency:		0.600
					Prior:		0.675
Program Year:				2019-2020	2020-2021		
(I) Trend Factor:				1.000	0.980		
(J) Selected Frequency:				0.600	0.588		
(K) Est. Payroll (\$000,000):				1,374.4	1,415.6		
(L) Ultimate Claims:				825	832		

Notes:

- (A) From Appendix D - Projected Funding, Page 4, (C).
- (B) From Appendix D - Projected Funding, Page 5, (C).
- (C) Selected from (A) and (B).
- (D) From Appendix I - Projected Funding, Column (C) / 10,000.
- (E) (C) / (D).
- (F) From Appendix E - Projected Funding, Page 1, Column (H)
- (G) (E) x (F).
- (H) The selected frequency of 0.600 is based on (G).
- (I) From Appendix E - Projected Funding, Page 1, Colu
- (J) (H) x (I).
- (K) From Appendix I - Projected Funding, Column (C) /
- (L) (J) x (K).

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Frequency and Severity Method  
Reported Claim Count Development

Accident Year	Claims Reported as of 6/30/2019 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2003-2004	1,034	1.000	1,034	0.650
2004-2005	939	1.000	939	0.618
2005-2006	841	1.000	841	0.555
2006-2007	687	1.000	687	0.471
2007-2008	856	1.000	856	0.524
2008-2009	795	1.000	795	0.530
2009-2010	682	1.000	682	0.518
2010-2011	669	1.000	669	0.550
2011-2012	678	1.000	678	0.592
2012-2013	689	1.000	689	0.621
2013-2014	742	1.001	743	0.659
2014-2015	770	1.003	772	0.661
2015-2016	734	1.006	738	0.618
2016-2017	931	1.010	940	0.646
2017-2018	824	1.020	840	0.584
2018-2019	778	1.066	829	0.592
Total	12,649		12,732	0.586

Notes:

- (A) Provided by the Group.
- (B) From Appendix D - Projected Funding, Page 6.
- (C) (A) x (B).
- (D) (C) / [Appendix D - Projected Funding, Page 3, (D)] x [Appendix D - Projected Funding, Pa

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Frequency and Severity Method  
Closed Claim Count Development

Accident Year	Claims Closed as of 6/30/2019 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2003-2004	1,028	1.010	1,038	0.652
2004-2005	933	1.011	943	0.621
2005-2006	829	1.012	839	0.554
2006-2007	682	1.013	691	0.473
2007-2008	840	1.015	853	0.523
2008-2009	784	1.018	798	0.532
2009-2010	674	1.023	690	0.524
2010-2011	659	1.030	679	0.559
2011-2012	659	1.040	685	0.598
2012-2013	669	1.052	704	0.634
2013-2014	716	1.069	765	0.679
2014-2015	747	1.090	814	0.697
2015-2016	682	1.117	762	0.638
2016-2017	856	1.156	990	0.680
2017-2018	703	1.243	874	0.607
2018-2019	545	1.616	881	0.629
Total	12,006		13,006	0.600

Notes:

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

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

Santa Clara County Schools Insurance Group - Workers' Compensation  
Reported Claim Count Development

Claims Reported as of:

Accident Year	12 Months	24 Months	36 Months	48 Months	60 Months	72 Months	84 Months	96 Months	108 Months	120 Months	132 Months	144 Months	156 Months
2003-2004								1,033	1,034	1,034	1,034	1,034	1,034
2004-2005							936	938	938	939	939	939	939
2005-2006						838	838	839	840	841	841	841	841
2006-2007					684	683	683	687	687	687	687	687	687
2007-2008				856	856	856	856	856	856	856	856	856	856
2008-2009			789	793	793	793	793	793	795	795	795		
2009-2010		670	678	679	681	681	682	682	682	682			
2010-2011	627	660	663	666	666	667	668	668	669				
2011-2012	629	662	668	670	674	674	675	678					
2012-2013	650	671	679	683	684	686	689						
2013-2014	708	730	737	738	741	742							
2014-2015	730	761	769	770	770								
2015-2016	690	722	731	734									
2016-2017	877	920	931										
2017-2018	793	824											
2018-2019	778												

Reported Claim Count Development Factors:

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months
2003-2004								1.001	1.000	1.000	1.000	1.000	1.000
2004-2005							1.002	1.000	1.001	1.000	1.000	1.000	1.000
2005-2006						1.000	1.001	1.001	1.001	1.000	1.000	1.000	1.000
2006-2007					0.999	1.000	1.006	1.000	1.000	1.000	1.000	1.000	
2007-2008				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2008-2009			1.005	1.000	1.000	1.000	1.000	1.003	1.000	1.000			
2009-2010		1.012	1.001	1.003	1.000	1.001	1.000	1.000	1.000				
2010-2011	1.053	1.005	1.005	1.000	1.002	1.001	1.000	1.001					
2011-2012	1.052	1.009	1.003	1.006	1.000	1.001	1.004						
2012-2013	1.032	1.012	1.006	1.001	1.003	1.004							
2013-2014	1.031	1.010	1.001	1.004	1.001								
2014-2015	1.042	1.011	1.001	1.000									
2015-2016	1.046	1.012	1.004										
2016-2017	1.049	1.012											
2017-2018	1.039												

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months
Average Claim-Weighted Averages	1.043	1.010	1.003	1.002	1.001	1.001	1.002	1.001	1.000	1.000	1.000	1.000	1.000
3-yr	1.045	1.012	1.002	1.002	1.001	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000
4-yr	1.044	1.011	1.003	1.003	1.001	1.002	1.001	1.001	1.000	1.000	1.000	1.000	
Comparative Factors	1.100	1.007	1.004	1.003	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.045	1.010	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.045	1.010	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	1.066	1.020	1.010	1.006	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Santa Clara County Schools Insurance Group - Workers' Compensation  
Closed Claim Development

Accident Year	Claims Closed as of:												
	12 Months	24 Months	36 Months	48 Months	60 Months	72 Months	84 Months	96 Months	108 Months	120 Months	132 Months	144 Months	156 Months
2003-2004								978	986	993	1,010	1,017	1,019
2004-2005							881	896	907	915	912	916	922
2005-2006						789	799	807	813	816	821	822	826
2006-2007					625	642	651	657	666	675	678	680	682
2007-2008				753	779	796	811	819	827	832	837	840	
2008-2009			670	703	721	742	755	767	777	779	784		
2009-2010		532	580	612	632	642	652	663	670	674			
2010-2011	375	529	585	617	630	637	652	654	659				
2011-2012	387	542	587	613	631	643	653	659					
2012-2013	394	565	612	634	652	664	669						
2013-2014	485	631	668	685	700	716							
2014-2015	499	675	713	731	747								
2015-2016	485	631	662	682									
2016-2017	612	792	856										
2017-2018	548	703											
2018-2019	545												

Closed Claim Count Development Factors:

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months
2003-2004								1.008	1.007	1.017	1.007	1.002	1.000
2004-2005							1.017	1.012	1.009	0.997	1.004	1.007	1.005
2005-2006						1.013	1.010	1.007	1.004	1.006	1.001	1.005	1.004
2006-2007					1.027	1.014	1.009	1.014	1.014	1.004	1.003	1.003	
2007-2008				1.035	1.022	1.019	1.010	1.010	1.006	1.006	1.004		
2008-2009			1.049	1.026	1.029	1.018	1.016	1.013	1.003	1.006			
2009-2010		1.090	1.055	1.033	1.016	1.016	1.017	1.011	1.006				
2010-2011	1.411	1.106	1.055	1.021	1.011	1.024	1.003	1.008					
2011-2012	1.401	1.083	1.044	1.029	1.019	1.016	1.009						
2012-2013	1.434	1.083	1.036	1.028	1.018	1.008							
2013-2014	1.301	1.059	1.025	1.022	1.023								
2014-2015	1.353	1.056	1.025	1.022									
2015-2016	1.301	1.049	1.030										
2016-2017	1.294	1.081											
2017-2018	1.283												

	12-24 Months	24-36 Months	36-48 Months	48-60 Months	60-72 Months	72-84 Months	84-96 Months	96-108 Months	108-120 Months	120-132 Months	132-144 Months	144-156 Months	156-168 Months
Average Claim-Weighted Averages	1.347	1.076	1.040	1.027	1.021	1.016	1.011	1.010	1.007	1.006	1.004	1.004	1.003
3-yr	1.292	1.063	1.027	1.024	1.020	1.015	1.010	1.011	1.005	1.006	1.003	1.005	1.003
4-yr	1.306	1.062	1.029	1.025	1.018	1.015	1.011	1.010	1.007	1.006	1.003	1.004	
Comparative Factors	1.600	1.080	1.050	1.030	1.025	1.015	1.010	1.008	1.005	1.004	1.003	1.002	1.001
Prior	1.350	1.075	1.045	1.028	1.020	1.016	1.012	1.010	1.007	1.005	1.003	1.002	1.001
Selected	1.300	1.075	1.035	1.025	1.020	1.016	1.012	1.010	1.007	1.005	1.003	1.002	1.001
Cumulated	1.616	1.243	1.156	1.117	1.090	1.069	1.052	1.040	1.030	1.023	1.018	1.015	1.013

Santa Clara County Schools Insurance Group - Workers' Compensation

Loss Trend Factors

Accident Year	Benefit Level Factor (A)	Factor to 2019-2020 Loss Rate Level (B)	Factor to 2020-2021 Loss Rate Level (C)	Factor to 2021-2022 Loss Rate Level (D)	Factor to 2022-2023 Loss Rate Level (E)	Factor to 2019-2020 Frequency Level (F)	Factor to 2020-2021 Frequency Level (G)	Factor to 2021-2022 Frequency Level (H)	Factor to 2022-2023 Frequency Level (I)	Factor to 2019-2020 Severity Level (J)
1998-1999	0.896	1.199	1.216	1.232	1.250	0.655	0.642	0.629	0.616	1.847
1999-2000	0.801	1.058	1.072	1.087	1.102	0.668	0.655	0.642	0.629	1.597
2000-2001	0.756	0.984	0.998	1.012	1.026	0.682	0.669	0.655	0.642	1.455
2001-2002	0.760	0.976	0.990	1.003	1.017	0.696	0.682	0.668	0.655	1.414
2002-2003	0.801	1.014	1.028	1.042	1.057	0.710	0.696	0.682	0.668	1.438
2003-2004	0.990	1.237	1.254	1.271	1.289	0.725	0.710	0.696	0.682	1.719
2004-2005	1.277	1.574	1.595	1.617	1.640	0.740	0.725	0.710	0.696	2.143
2005-2006	1.387	1.685	1.708	1.731	1.755	0.755	0.740	0.724	0.710	2.248
2006-2007	1.316	1.578	1.599	1.621	1.644	0.769	0.754	0.739	0.724	2.061
2007-2008	1.226	1.449	1.469	1.490	1.510	0.785	0.770	0.754	0.739	1.854
2008-2009	1.147	1.337	1.355	1.374	1.393	0.801	0.785	0.769	0.754	1.675
2009-2010	1.054	1.211	1.228	1.245	1.262	0.817	0.801	0.785	0.769	1.487
2010-2011	1.008	1.143	1.158	1.174	1.191	0.834	0.818	0.801	0.785	1.375
2011-2012	1.008	1.127	1.143	1.159	1.175	0.851	0.834	0.817	0.801	1.329
2012-2013	1.026	1.131	1.146	1.162	1.178	0.868	0.851	0.834	0.817	1.306
2013-2014	1.036	1.127	1.142	1.158	1.174	0.886	0.869	0.851	0.834	1.275
2014-2015	1.020	1.094	1.109	1.124	1.140	0.904	0.886	0.868	0.851	1.213
2015-2016	1.025	1.084	1.098	1.113	1.129	0.922	0.904	0.886	0.868	1.176
2016-2017	1.026	1.071	1.085	1.100	1.116	0.942	0.923	0.904	0.886	1.138
2017-2018	1.007	1.036	1.050	1.065	1.080	0.961	0.942	0.922	0.904	1.079
2018-2019	1.001	1.016	1.029	1.044	1.058	0.980	0.960	0.941	0.922	1.036
2019-2020	1.000	1.000	1.014	1.028	1.042	1.000	0.980	0.960	0.941	1.000
2020-2021	1.000	--	1.000	1.014	1.028	--	1.000	0.980	0.960	--
2021-2022	1.000	--	--	1.000	1.014	--	--	1.000	0.980	--
2022-2023	1.000	--	--	--	1.000	--	--	--	1.000	--

Notes:

- (A) Based on WCIRB.
- (B) - (E) (A) adjusted for a 1.4% annual loss rate trend.
- (F) - (I) (A) adjusted for a -2.0% annual frequency trend.
- (J) (A) adjusted for a 3.5% annual severity trend.

This exhibit shows the calculation of the ways in which we expect claims costs to have changed over the past twenty years due to changes in statutory workers' compensation benefit levels and changes in actual claims costs in excess of changes in payroll. Changes in the ways in which claims are filed as a result of greater awareness of workers' compensation benefits are not generally reflected in the statutory benefit level factors shown above, but may be part of the reason for changes in actual claims costs in excess of payroll changes.

Santa Clara County Schools Insurance Group - Workers' Compensation

Residual Trend Factors

Accident Year	Initial Estimate of Ultimate Limited Losses (A)	Ultimate Reported Claims (B)	BLF (C)	Adjusted Limited Severity (D)	Trended Payroll (\$00) (E)	Ultimate Frequency (F)
2003-2004	10,479,000	1,034	0.990	10,035	11,541,491	0.896
2004-2005	7,171,000	939	1.277	9,752	11,246,066	0.835
2005-2006	5,832,000	841	1.387	9,616	11,436,655	0.735
2006-2007	5,836,000	687	1.316	11,181	11,226,115	0.612
2007-2008	7,500,000	856	1.226	10,741	12,812,609	0.668
2008-2009	7,489,000	795	1.147	10,800	12,010,784	0.662
2009-2010	6,741,000	682	1.054	10,414	10,747,954	0.635
2010-2011	6,513,000	669	1.008	9,817	10,135,755	0.660
2011-2012	6,355,000	678	1.008	9,452	9,743,022	0.696
2012-2013	5,730,000	689	1.026	8,529	9,633,469	0.715
2013-2014	6,166,000	743	1.036	8,601	9,989,079	0.744
2014-2015	5,374,000	772	1.020	7,103	10,555,755	0.731
2015-2016	6,015,000	738	1.025	8,351	11,011,368	0.670
2016-2017	8,463,000	940	1.026	9,241	13,709,429	0.686
2017-2018	9,586,000	840	1.007	11,496	13,829,435	0.607
2018-2019	9,631,000	829	1.001	11,631	13,721,905	0.604

	<u>Severity Trend Factors</u>	<u>Frequency Trend Factors</u>
Latest 10 x 2018-2019	0.988	1.000
Latest 5 x 2018-2019	1.088	0.954
Prior	1.025	0.980
Default	1.025	0.980
Selected Residual Trend	1.035	0.980

Notes:

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

## Santa Clara County Schools Insurance Group - Workers' Compensation

## Calculation of Discount Factors

Payment Year (A)	Payment Pattern (B)	Return on Investment (C)	Discounted Reserves (D)	Undiscounted Reserves (E)	Discount Factor (F)
22	6.1%	2.0%	0.060	0.061	0.990
21	0.8%	2.0%	0.067	0.069	0.973
20	0.9%	2.0%	0.074	0.077	0.958
19	0.8%	2.0%	0.081	0.086	0.944
18	0.7%	2.0%	0.087	0.093	0.931
17	0.9%	2.0%	0.094	0.102	0.919
16	1.0%	2.0%	0.102	0.113	0.909
15	1.1%	2.0%	0.111	0.124	0.900
14	1.3%	2.0%	0.122	0.136	0.893
13	1.5%	2.0%	0.135	0.152	0.887
12	1.8%	2.0%	0.149	0.169	0.882
11	2.0%	2.0%	0.166	0.189	0.878
10	2.4%	2.0%	0.186	0.213	0.875
9	2.9%	2.0%	0.211	0.242	0.874
8	3.2%	2.0%	0.239	0.274	0.872
7	3.8%	2.0%	0.272	0.312	0.872
6	5.5%	2.0%	0.321	0.367	0.875
5	7.0%	2.0%	0.384	0.437	0.879
4	7.3%	2.0%	0.449	0.510	0.880
3	11.0%	2.0%	0.549	0.620	0.885
2	17.8%	2.0%	0.715	0.798	0.895
1	20.2%	2.0%	0.900	1.000	0.900
(G) Discount Factor for Future Funding:				2019-2020	0.909
				2020-2021	0.909

## Notes:

- (A) This is the year of payment relative to the accident year. For example, year 7 refers to payments made in the seventh year after the inception of the accident year. We assume that payments are made at midyear.
- (B) Percent of ultimate loss paid this year. This payment pattern is based on the paid loss development pattern selected in Appendix B - Projected Funding, Page 2.
- (C) Assumed Investment Income Rates.
- (D) Discounted Reserves at the beginning of this year is next year's Discounted Reserves discounted one year plus this year's payments discounted six months. For example, in year 2,  $71.5\% = [54.9\% / 1.020] + [17.8\% / (1.010)]$ .
- (E) Summation of future (B) values. This is the percent of ultimate loss unpaid at the beginning of the year.
- (F) (D) / (E).
- (G) (F) at year 1, with interest accumulated for six months. We assume that the required funding is deposited at the middle of the first year.

This exhibit shows the calculation of the effect of anticipated investment income on future claims costs. Thus, if the discount factor in item (F) is 0.91, on a discounted basis, \$0.91 must be budgeted for every \$1 that will actually be paid on claims that will be incurred in the next fiscal year.

## Santa Clara County Schools Insurance Group - Workers' Compensation

## Confidence Level Table

Probability	Projected Losses
95%	1.352
90%	1.258
85%	1.199
80%	1.154
75%	1.117
70%	1.085
65%	1.056
60%	1.029
55%	1.004
50%	0.979
45%	0.956
40%	0.932
35%	0.909
30%	0.885
25%	0.860

To read table: For the above retention, there is a 90% chance that final loss settlements will be less than 1.258 times the average expected amount of losses.

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

Santa Clara County Schools Insurance Group - Workers' Compensation

Incurred Losses as of 6/30/19

Accident Year (A)	Unlimited Incurred (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Incurred (E)	Incurred Over SIR (F)	Incurred Over \$100,000 (G)	Incurred Capped at \$100,000 (H)	Incurred \$100,000 to SIR Layer (I)	Incurred Capped at SIR (J)	Incurred Capped at SIR & Aggregate (K)
2003-2004	\$16,534,651	\$0	\$0	\$16,534,651	\$3,159,406	\$6,190,131	\$10,344,519	\$3,030,725	\$13,375,244	\$13,375,244
2004-2005	11,538,067	0	0	11,538,067	2,263,665	4,473,210	7,064,858	2,209,545	9,274,403	9,274,403
2005-2006	8,988,823	0	0	8,988,823	1,398,675	3,254,480	5,734,343	1,855,805	7,590,148	7,590,148
2006-2007	7,438,856	0	0	7,438,856	430,999	1,711,735	5,727,121	1,280,737	7,007,858	7,007,858
2007-2008	12,631,127	0	0	12,631,127	2,512,655	5,292,441	7,338,685	2,779,787	10,118,472	10,118,472
2008-2009	10,586,627	0	0	10,586,627	1,061,308	3,279,975	7,306,652	2,218,667	9,525,319	9,525,319
2009-2010	8,449,086	0	0	8,449,086	515,427	1,910,718	6,538,367	1,395,291	7,933,659	7,933,659
2010-2011	9,475,481	0	0	9,475,481	1,401,391	3,201,338	6,274,143	1,799,947	8,074,090	8,074,090
2011-2012	7,836,958	0	0	7,836,958	444,278	1,761,590	6,075,368	1,317,311	7,392,679	7,392,679
2012-2013	11,454,464	0	0	11,454,464	4,825,340	6,023,370	5,431,094	1,198,030	6,629,124	6,629,124
2013-2014	7,863,574	0	0	7,863,574	642,568	2,079,358	5,784,216	1,436,790	7,221,006	7,221,006
2014-2015	5,761,940	0	0	5,761,940	57,999	772,420	4,989,520	714,421	5,703,941	5,703,941
2015-2016	7,299,334	0	0	7,299,334	429,016	1,751,750	5,547,585	1,322,733	6,870,318	6,870,318
2016-2017	8,622,766	0	0	8,622,766	137,969	1,073,636	7,549,130	935,667	8,484,797	8,484,797
2017-2018	9,140,971	0	0	9,140,971	92,659	1,062,623	8,078,348	969,965	9,048,313	9,048,313
2018-2019	8,047,972	0	0	8,047,972	0	509,493	7,538,479	509,493	8,047,972	8,047,972
2019-2020	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>\$151,670,697</b>	<b>\$0</b>	<b>\$0</b>	<b>\$151,670,697</b>	<b>\$19,373,354</b>	<b>\$44,348,268</b>	<b>\$107,322,430</b>	<b>\$24,974,914</b>	<b>\$132,297,343</b>	<b>\$132,297,343</b>

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Group.
- (C)
- (D)
- (E) (B) + (C) - (D).
- (F) Sum of incurred losses in excess of SIR.
- (G) Sum of incurred losses in excess of \$100,000.
- (H) (E) - (G).
- (I) (G) - (F).
- (J) (E) - (F).
- (K) Minimum of (J) and the aggregate stop loss. See Not Included.

Santa Clara County Schools Insurance Group - Workers' Compensation

Paid Losses as of 6/30/19

Accident Year (A)	Unlimited Paid (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Paid (E)	Paid Over SIR (F)	Paid Over \$100,000 (G)	Paid Capped at \$100,000 (H)	Paid \$100,000 to SIR Layer (I)	Paid Capped at SIR (J)	Paid Capped at SIR & Aggregate (K)
2003-2004	\$16,302,577	\$0	\$0	\$16,302,577	\$3,123,705	\$6,029,489	\$10,273,087	\$2,905,784	\$13,178,871	\$13,178,871
2004-2005	11,329,797	0	0	11,329,797	2,176,040	4,385,585	6,944,212	2,209,545	9,153,756	9,153,756
2005-2006	8,466,876	0	0	8,466,876	1,338,119	2,906,479	5,560,398	1,568,359	7,128,757	7,128,757
2006-2007	7,217,844	0	0	7,217,844	430,999	1,612,990	5,604,854	1,181,991	6,786,845	6,786,845
2007-2008	11,246,974	0	0	11,246,974	1,748,226	4,125,888	7,121,087	2,377,662	9,498,749	9,498,749
2008-2009	9,927,582	0	0	9,927,582	740,903	2,757,084	7,170,498	2,016,181	9,186,679	9,186,679
2009-2010	7,764,418	0	0	7,764,418	215,458	1,422,779	6,341,639	1,207,320	7,548,959	7,548,959
2010-2011	8,076,320	0	0	8,076,320	504,694	2,023,040	6,053,280	1,518,346	7,571,626	7,571,626
2011-2012	6,916,197	0	0	6,916,197	175,306	1,264,443	5,651,754	1,089,137	6,740,891	6,740,891
2012-2013	10,287,548	0	0	10,287,548	4,763,961	5,475,086	4,812,462	711,125	5,523,587	5,523,587
2013-2014	6,191,742	0	0	6,191,742	89,975	963,408	5,228,334	873,433	6,101,767	6,101,767
2014-2015	4,979,506	0	0	4,979,506	57,999	491,043	4,488,463	433,044	4,921,507	4,921,507
2015-2016	5,111,820	0	0	5,111,820	114,743	824,545	4,287,275	709,802	4,997,077	4,997,077
2016-2017	6,012,333	0	0	6,012,333	137,969	714,646	5,297,687	576,677	5,874,364	5,874,364
2017-2018	4,764,871	0	0	4,764,871	0	60,618	4,704,253	60,618	4,764,871	4,764,871
2018-2019	2,343,416	0	0	2,343,416	0	0	2,343,416	0	2,343,416	2,343,416
2019-2020	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>\$126,939,819</b>	<b>\$0</b>	<b>\$0</b>	<b>\$126,939,819</b>	<b>\$15,618,097</b>	<b>\$35,057,121</b>	<b>\$91,882,698</b>	<b>\$19,439,024</b>	<b>\$111,321,722</b>	<b>\$111,321,722</b>

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Group.
- (C)
- (D)
- (E) (B) + (C) - (D).
- (F) Sum of paid losses in excess of SIR.
- (G) Sum of paid losses in excess of \$100,000.
- (H) (E) - (G).
- (I) (G) - (F).
- (J) (E) - (F).
- (K) Minimum of (J) and the aggregate stop loss. See Not Included.

Santa Clara County Schools Insurance Group - Workers' Compensation

Case Reserves as of 6/30/19

Accident Year (A)	Unlimited Reserves (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Reserves (E)	Reserves Over SIR (F)	Reserves Over \$100,000 (G)	Reserves Capped at \$100,000 (H)	Reserves \$100,000 to SIR Layer (I)	Reserves Capped at SIR (J)	Reserves Capped at SIR & Aggregate (K)
2003-2004	\$232,074	\$0	\$0	\$232,074	\$35,701	\$160,642	\$71,432	\$124,941	\$196,373	\$196,373
2004-2005	208,271	0	0	208,271	87,625	87,625	120,646	0	120,646	120,646
2005-2006	521,947	0	0	521,947	60,556	348,002	173,945	287,446	461,391	461,391
2006-2007	221,013	0	0	221,013	0	98,745	122,267	98,745	221,013	221,013
2007-2008	1,384,152	0	0	1,384,152	764,429	1,166,554	217,599	402,124	619,723	619,723
2008-2009	659,046	0	0	659,046	320,405	522,891	136,155	202,486	338,641	338,641
2009-2010	684,668	0	0	684,668	299,968	487,940	196,728	187,971	384,700	384,700
2010-2011	1,399,161	0	0	1,399,161	896,697	1,178,298	220,863	281,601	502,464	502,464
2011-2012	920,761	0	0	920,761	268,973	497,147	423,614	228,174	651,788	651,788
2012-2013	1,166,917	0	0	1,166,917	61,379	548,284	618,632	486,905	1,105,537	1,105,537
2013-2014	1,671,832	0	0	1,671,832	552,593	1,115,950	555,882	563,357	1,119,239	1,119,239
2014-2015	782,434	0	0	782,434	0	281,377	501,057	281,377	782,434	782,434
2015-2016	2,187,514	0	0	2,187,514	314,273	927,205	1,260,310	612,932	1,873,241	1,873,241
2016-2017	2,610,433	0	0	2,610,433	0	358,990	2,251,443	358,990	2,610,433	2,610,433
2017-2018	4,376,101	0	0	4,376,101	92,659	1,002,005	3,374,095	909,347	4,283,442	4,283,442
2018-2019	5,704,556	0	0	5,704,556	0	509,493	5,195,064	509,493	5,704,556	5,704,556
2019-2020	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>\$24,730,878</b>	<b>\$0</b>	<b>\$0</b>	<b>\$24,730,878</b>	<b>\$3,755,257</b>	<b>\$9,291,146</b>	<b>\$15,439,732</b>	<b>\$5,535,889</b>	<b>\$20,975,621</b>	<b>\$20,975,621</b>

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Appendix H - Projected Funding, Page 1, Column (B) - Appendix H - Projected Funding, Page 2, Column (B).
- (C) Appendix H - Projected Funding, Page 1, Column (C) - Appendix H - Projected Funding, Page 2, Column (C).
- (D) Appendix H - Projected Funding, Page 1, Column (D) - Appendix H - Projected Funding, Page 2, Column (D).
- (E) (B) + (C) - (D).
- (F) Sum of case reserves in excess of SIR.
- (G) Sum of case reserves in excess of \$100,000.
- (H) (E) - (G).
- (I) (G) - (F).
- (J) (E) - (F).
- (K) Minimum of (J) and the aggregate stop loss. See Not Included.

Santa Clara County Schools Insurance Group - Workers' Compensation

Claim Counts as of 6/30/19

Accident Year (A)	Reported Claims (B)	Additions to Reported Claims (C)	Subtractions from Reported Claims (D)	Adjusted Reported Claims (E)	Closed Claims (F)	Additions to Closed Claims (G)	Subtractions from Closed Claims (H)	Adjusted Closed Claims (I)	Open Claims (J)	Adjusted Open Claims (K)
2003-2004	1,034	0	0	1,034	1,028	0	0	1,028	6	6
2004-2005	939	0	0	939	933	0	0	933	6	6
2005-2006	841	0	0	841	829	0	0	829	12	12
2006-2007	687	0	0	687	682	0	0	682	5	5
2007-2008	856	0	0	856	840	0	0	840	16	16
2008-2009	795	0	0	795	784	0	0	784	11	11
2009-2010	682	0	0	682	674	0	0	674	8	8
2010-2011	669	0	0	669	659	0	0	659	10	10
2011-2012	678	0	0	678	659	0	0	659	19	19
2012-2013	689	0	0	689	669	0	0	669	20	20
2013-2014	742	0	0	742	716	0	0	716	26	26
2014-2015	770	0	0	770	747	0	0	747	23	23
2015-2016	734	0	0	734	682	0	0	682	52	52
2016-2017	931	0	0	931	856	0	0	856	75	75
2017-2018	824	0	0	824	703	0	0	703	121	121
2018-2019	778	0	0	778	545	0	0	545	233	233
2019-2020	100	0	0	100	50	0	0	50	50	50
Total	12,749	0	0	12,749	12,056	0	0	12,056	693	693

Notes:

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

## Santa Clara County Schools Insurance Group - Workers' Compensation

## Exposure Measures

Accident Year	Total Payroll (\$00) (A)	Inflation Trend Factor (B)	Trended Payroll (\$00) (C)
2003-2004	7,777,285	1.484	11,541,491
2004-2005	7,766,620	1.448	11,246,066
2005-2006	8,093,882	1.413	11,436,655
2006-2007	8,140,765	1.379	11,226,115
2007-2008	9,526,103	1.345	12,812,609
2008-2009	9,154,561	1.312	12,010,784
2009-2010	8,396,839	1.280	10,747,954
2010-2011	8,115,096	1.249	10,135,755
2011-2012	7,992,635	1.219	9,743,022
2012-2013	8,102,161	1.189	9,633,469
2013-2014	8,611,275	1.160	9,989,079
2014-2015	9,324,872	1.132	10,555,755
2015-2016	9,974,065	1.104	11,011,368
2016-2017	12,729,275	1.077	13,709,429
2017-2018	13,158,359	1.051	13,829,435
2018-2019	13,387,224	1.025	13,721,905
2019-2020	13,744,145	1.000	13,744,145
2020-2021	14,156,470	1.000	14,156,470

## Notes:

- (A) Provided by the Group.
- (B) Based on WCIRB.
- (C) (A) x (B).