

**West San Gabriel Workers' Compensation  
Joint Powers Authority**

**An Actuarial Review of the  
Workers' Compensation Program**

**BAY ACTUARIAL CONSULTANTS**

**Moraga, California**

**January 14, 2022**

# Bay Actuarial Consultants

January 14, 2022

Board of Directors  
West San Gabriel Workers' Compensation Joint Powers Authority  
c/o Ms. Lilian VanVieldt  
JPA Manager  
Alliant Insurance Services  
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Newport Beach, CA 92660

To the Board:

We are pleased to present Bay Actuarial's 2022 actuarial review of the West San Gabriel Workers' Compensation Joint Powers Authority. We appreciate the opportunity to serve the Authority.

Please call me at (925) 377-5269 if you have any questions.

Respectfully,

BAY ACTUARIAL CONSULTANTS



Jack Joyce, FCAS, MAAA  
Principal

# West San Gabriel Workers' Compensation Joint Powers Authority

## An Actuarial Review of the Workers' Compensation Program

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**West San Gabriel Workers' Compensation  
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**An Actuarial Review of the  
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**Introduction**

# **West San Gabriel Workers' Compensation Joint Powers Authority**

## **An Actuarial Review of the Workers' Compensation Program**

### **Introduction**

#### **Background & Purpose**

The West San Gabriel Workers' Compensation Joint Powers Authority ("the Authority") self-insured its workers' compensation claims until July 1, 1995, when it began to purchase 1<sup>st</sup> dollar coverage from commercial insurers. It subsequently ceded its remaining self-insured liabilities to commercial insurers.

The Authority has asked Bay Actuarial Consultants to provide an actuarial report on its workers' compensation program. This report covers the following topics:

- 1) Projected 2022-23 Losses and Rates of Loss.** It includes a projection of the losses that will be incurred in 2021-22, expressed as a full dollar amount and also as a rate of loss per \$100 of projected payroll.
- 2) Discounting.** The projected 2022-23 rates of loss are discounted to present value. Workers' compensation claims pay out over an extended timeframe. Discounting the projected future claims payments to recognize the time value of money is an effort to quantify the financial benefit of the delayed payments.
- 3) Quantification of Uncertainty.** It includes an analysis of items (1) and (2) above, in terms of "probability levels."
- 4) Unpaid Losses.** We also estimated the remaining unpaid self-insured losses that are now the responsibility of commercial insurers.

#### **Conditions & Limitations**

This report is for the Authority's internal use. The Authority may provide a copy to its financial auditors. Bay Actuarial does not authorize any other use. In

particular, those interested in providing insurance to the Authority must perform their own actuarial analysis and may not rely upon our work.

York Insurance Services, Keenan & Associates, and Alliant Insurance Services provided the loss and payroll data. We did not audit this data and are not responsible for its accuracy. In any actuarial analysis the accuracy and relevance of the conclusions and the reasonableness of the recommendations depend upon the accuracy and relevance of the underlying data.

The term “losses” refers to all costs that can be tied to a specific claim. These include loss payments, attorney’s fees, and other expenses linked to a specific claim. We did not calculate the cost of management fees or Unallocated Loss Adjustment Expenses (“ULAE”). The Authority’s claims administrator determines these.

The actuarial projections in this report are uncertain estimates. Many of the events that will determine future claims costs have not yet taken place and cannot be evaluated with certainty. These events include, but are not limited to, future legislation or ballot initiatives that may change statutory benefit levels or the workers’ compensation laws, changes in the rate of inflation, and the outcomes of future administrative proceedings and litigation. Our projections are based upon the Authority’s historical experience. We did not anticipate any extraordinary changes in the various factors that might affect the future cost of claims. We used actuarial methods that should produce reasonable results given current information. There is no guarantee, express or implied, that losses will develop as projected in this report.

### **Structure of the Report**

We divided the remainder of this report into ten sections: the *Management Summary*, the *Technical Approach* section, the *Summary Exhibits*, the *Fiscal Year End Exhibits*, the *Ceded Limited Losses*, the *Ceded Gross Losses*, the *Gross Loss Exhibits*, the *Future Loss Exhibits*, the *Discounting Exhibits*, and the *Claims Data Exhibits*.

The *Management Summary* gives an overview of the results of our analysis. The *Technical Approach* section explains and discusses the assumptions and details underlying our calculations. The *Exhibits* document the actual calculations used in developing our results.

**West San Gabriel Workers' Compensation  
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**An Actuarial Review of the  
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**Management Summary**

# West San Gabriel Workers' Compensation Joint Powers Authority

## An Actuarial Review of the Workers' Compensation Program

### Management Summary

#### Projected 2022-23 Losses and Rates of Loss

Table I shows the projected losses for 2022-23 at some different self-insured retentions ("SIR's"): \$250,000, \$350,000, \$500,000, \$1 million, and unlimited. The table shows actuarial central estimates plus estimates at three higher probability levels. The probability level estimates correspond to the estimated probability that the indicated amount will not be exceeded. For example, we estimate that there is a 70% probability that the actual 2022-23 unlimited losses will be less than **\$9,310,660**. These projections don't reflect the full cost of self-insurance because they do not include claims handling fees, administrative costs, or the cost of excess insurance coverage.

<b>Table I: Projected 2022-23 Losses</b>					
Probability Level	\$250,000 SIR	\$350,000 SIR	\$500,000 SIR	\$1,000,000 SIR	Unlimited No SIR
<b>Central Estimate</b>	<b>\$6,415,254</b>	<b>\$6,921,702</b>	<b>\$7,298,805</b>	<b>\$7,679,213</b>	<b>\$7,940,353</b>
70%	7,143,374	7,735,589	8,182,539	8,698,645	<b>\$9,310,660</b>
80%	7,698,504	8,362,524	8,869,415	9,516,172	10,561,072
90%	8,514,149	9,285,802	9,882,989	10,730,836	12,468,728

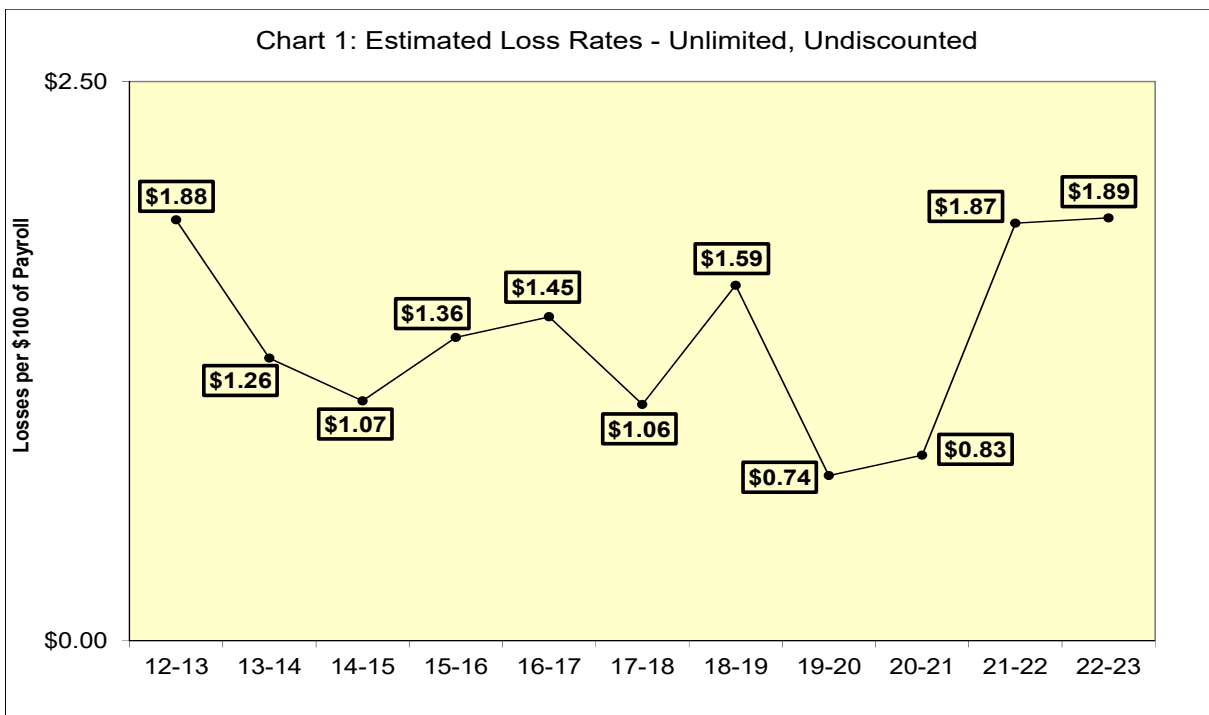
The amounts in Table I can be converted into discounted rates of loss by dividing by projected 2022-23 payroll and multiplying by a present value factor. Projected 2022-23 payroll is **\$420,216,087**. The present value factors, assuming a **1.5%** interest rate, range between **0.910** for the unlimited rate and **0.927** for the \$250K SIR rate. The Table II shows projected rates of loss.



Table II: Projected 2022-23 Discounted Loss Rates (1.5% Interest)					
Projected Loss per \$100 of Payroll					
Probability Level	\$250,000 SIR	\$350,000 SIR	\$500,000 SIR	\$1,000,000 SIR	Unlimited No SIR
<b>Central Estimate</b>	<b>\$1.42</b>	<b>\$1.52</b>	<b>\$1.59</b>	<b>\$1.67</b>	<b>\$1.72</b>
70%	1.58	1.70	1.79	1.89	<b>\$2.02</b>
80%	1.70	1.84	1.94	2.07	2.29
90%	1.88	2.04	2.16	2.33	2.70

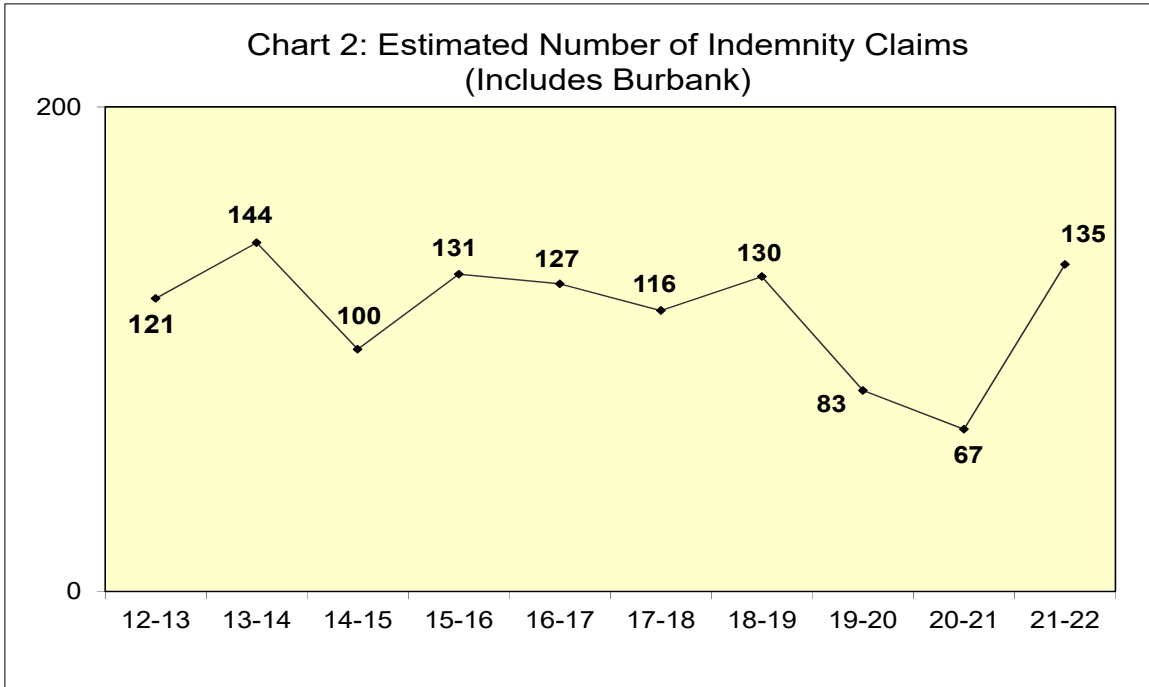
Last year we projected the benchmark 70% probability unlimited rate of loss for 2021-22 at **\$2.06**. Last year the interest rate was 0.75%; this year it is 1.5%. Last year's benchmark rate would have been **\$1.97** had the interest rate been 1.5%. So after correcting for the change in the interest rate the benchmark rate increased from **\$1.97** to **\$2.02**, or 2.5%.

The school closures caused by the pandemic reduced the number of claims incurred in 2019-20 and 2020-21. Therefore the calculations that underlie the 2022-23 projections do not use any of the claims data from these program years. The actuarial assumption is that claims activity will return to normal in 2022-23. Chart 1 shows the effect that the pandemic had on rates of loss. It shows the program's estimated loss rates for past years and the projected rate for 2022-23. All of these rates are unlimited and undiscounted. The chart is consistent with Tables I and II. The projected rate of **\$1.89** for 2022-23 is the undiscounted version of the **\$1.72** central estimate rate in from Table II.



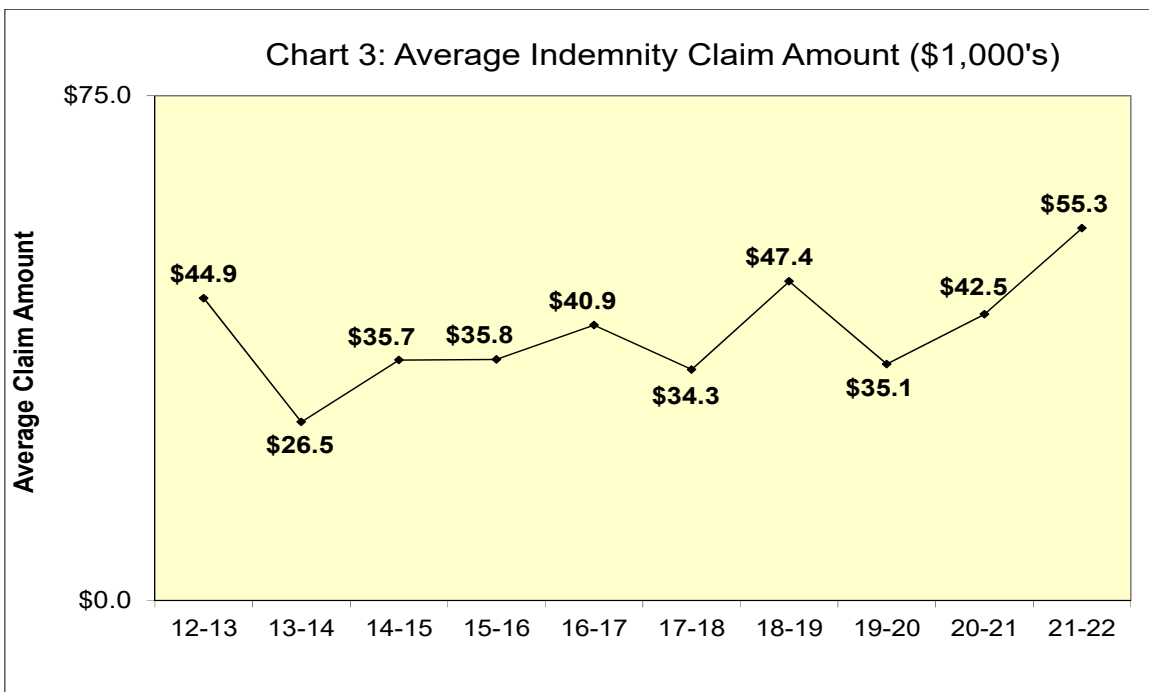
### Number of Indemnity Claims

Chart 2 shows the estimated ultimate number of indemnity claims received. 19-20 and 20-21 reflect the lower number of claims being filed during the pandemic.



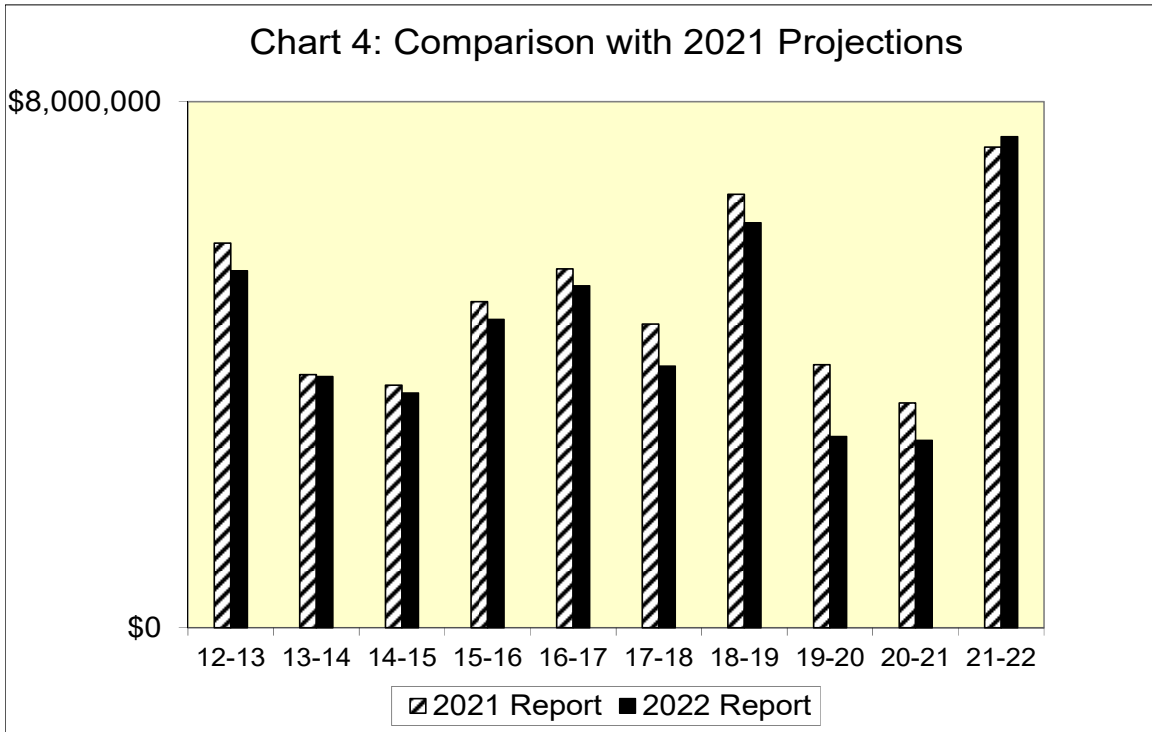
### Average Indemnity Claim Amount

The average indemnity claim amount is the estimated annual losses divided by the number of indemnity claims. The pandemic does not have a large impact on the average claim amount.



### Comparison with Last Year's Estimates

Chart 4 compares last year's estimates with this year's.



All estimates declined, except for 21-22 which increased slightly after six months of actual claims experience through 12/31/21. The largest drop in percentage terms was in 19-20, where estimated losses roughly equal those from 20-21 even though the pandemic only affected the last three or four months of the program year.

### Ceded Unpaid Legacy Losses @ 12/31/21

The Authority terminated its self-insurance program on 7/1/95 and subsequently ceded the unpaid losses to a reinsurer. In this report we estimated the amount of the remaining unpaid ceded losses using the latest 12/31/21 claims data.

The “assuming” reinsurer was protected by the “specific excess” insurance that had covered the excess portions of large losses. Therefore Table IV shows the estimated unpaid losses both gross and net of that excess insurance coverage. The discounting is based on a **1.0%** interest rate. This interest rate is lower than the **1.5%** rate used for the 2022-23 program year projections because these remaining unpaid losses are expected to pay out much faster than the 2022-23 losses and need to be matched with bonds that have a shorter maturity.

<b>Table IV: Estimated Ceded Unpaid Losses as of 12/31/21</b>				
<b>Probability Level</b>	<b>Gross Undiscounted</b>	<b>Gross Discounted @ 1.0%</b>	<b>Limited Undiscounted</b>	<b>Limited Discounted @ 1.0%</b>
10%	\$43,900	\$42,627	\$41,587	\$40,214
20%	97,555	94,726	92,415	89,365
30%	156,088	151,562	147,864	142,984
40%	229,255	222,606	217,175	210,008
50%	321,932	312,596	304,969	294,905
60%	434,121	421,531	411,246	397,675
<b>Central Estimate</b>	<b>\$487,776</b>	<b>\$473,631</b>	<b>\$462,074</b>	<b>\$446,826</b>
70%	580,454	563,620	549,868	531,723
80%	790,197	767,282	748,560	723,858
90%	1,365,773	1,326,166	1,090,495	1,054,509

### Projected Ceded Unpaid Legacy Losses @ 6/30/22

Table V shows the projected unpaid losses as of 6/30/22 after deducting the payments expected to occur between 1/1/22 and 6/30/22.

<b>Table V: Projected Ceded Unpaid Losses as of 6/30/22</b>				
<b>Probability Level</b>	<b>Gross Undiscounted</b>	<b>Gross Discounted @ 1.0%</b>	<b>Limited Undiscounted</b>	<b>Limited Discounted @ 1.0%</b>
<b>Central Estimate</b>	<b>\$437,442</b>	<b>\$424,757</b>	<b>\$424,780</b>	<b>\$410,762</b>

### Reconciliation with 12/31/20 Liability

Tables VI and VII reconcile the 12/31/20 and 12/31/21 estimates of the ceded unpaid losses.

**Table VI: Reconcile 12/31/20 with 12/31/21 Gross Ceded Unpaid Losses**

<b>Estimated 12/31/20 Gross Ceded Unpaid Losses</b>	<b>\$488,647</b>
2021 Claims Expenditures	-871
Change in Loss Estimates	+0
<b>Estimated 12/31/21 Gross Ceded Unpaid Losses</b>	<b>\$487,776</b>

**Table VII: Reconcile 12/31/20 with 12/31/21 Net Unpaid Losses**

<b>Estimated 12/31/20 Net Ceded Unpaid Losses</b>	<b>\$440,516</b>
2021 Claims Expenditures	-442
Change in Loss Estimates	+22,000
<b>Estimated 12/31/21 Net Ceded Unpaid Losses</b>	<b>\$462,074</b>

**West San Gabriel Workers' Compensation  
Joint Powers Authority**

**An Actuarial Review of the  
Workers' Compensation Program**

**Technical Approach**

# **West San Gabriel Workers' Compensation Joint Powers Authority**

## **An Actuarial Review of the Workers' Compensation Program**

### **Technical Approach**

This section describes the actuarial calculations.

#### **Exhibits**

##### ***Summary Exhibits***

These exhibits summarize the analysis and conclusions. Summary Exhibit 1 shows the projected unlimited rate of loss for the 2022-23 program year. Summary Exhibits 2 and 3 show the estimated limited ceded and unlimited ceded unpaid self-insured losses as of 12/31/21.

##### ***Fiscal Year End Exhibits***

These exhibits show the calculation of the estimated ceded unpaid losses from the self-insured period, as of 12/31/21 and 6/30/22. These unpaid losses are shown both gross and limited to the stated excess insurance retentions.

##### ***Limited Loss Exhibits***

These exhibits show the calculation of the remaining limited self-insured losses (through June 30, 1995) that were ceded to an insurer. These calculations take into account the excess insurance that was in place.

##### ***Old Gross Loss Exhibits***

These exhibits show the calculation of the remaining gross self-insured losses (through June 30, 1995) that were ceded to an insurer. These calculations do not take into account the excess insurance that was in place.

### ***Gross Loss Exhibits***

These exhibits show the various actuarial projection methods and summarize the results for each program year.

We used five different actuarial methods:

- 1) Reported loss projection method;
- 2) Paid loss projection method;
- 3) IBNR to Case Reserves Ratio method;
- 4) Bornhuetter-Ferguson method using reported losses; and
- 5) Frequency times Severity method.

Gross Loss Exhibit 1 summarizes the results of these methods.

### ***Future Loss Exhibits***

These exhibits show the calculation of the projected rate for 2022-23.

### ***Discounting Exhibits***

These exhibits show the discounting of the projected future loss rate and the limited and gross unpaid losses. They also include the Program Information Exhibits.

### ***Claims Data Exhibits***

These exhibits show the reported loss, paid loss, and claim count triangles as of 12/31/21, and the associated loss and claim development factors.



**West San Gabriel Workers' Compensation  
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**Actuarial Analysis of the  
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**Summary Exhibits**

West San Gabriel Workers' Compensation  
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Projected Unlimited Loss Funding Rate for 2022-23

(1) Discounted Loss Rate: Loss Rates  
**\$1.72**  
(as of 7/1/22, 1.50% interest rate)

<u>Probability Levels</u>		
Probability Level <u>(2)</u>	Probability Factor <u>(3)</u>	Discounted * Rate <u>(4)</u>
0.20	0.64	1.10
0.30	0.74	1.27
0.40	0.84	1.44
0.50	0.94	1.62
<b>Central Estimate</b>	<b>1.00</b>	<b>1.72</b>
0.60	1.05	1.81
0.70	1.17	2.01
0.80	1.33	2.29
0.90	1.57	2.70

\* Multiply by 1.099 to obtain undiscounted values.

Notes:

- (1) [Page 54, Column (5)] x [Page 57, Item (4)].
- (2) Estimated probability that funding will be adequate.
- (3) Estimated by BAC.
- (4) (1) x (3).

West San Gabriel Workers' Compensation  
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Estimated Limited Unpaid Ceded Losses as of 12/31/21

Old Self-Insurance Program 1980-81 through 1994-95

(1) Estimated Limited Unpaid Losses:		\$462,074
(2) Discounted Limited Unpaid Losses: (Assuming 1.00% Interest Rate)		\$446,826

<b>Probability Levels</b>			
Probability Level (3)	Probability Factor (4)	Undiscounted Liability (5)	Discounted Liability (6)
10%	0.09	\$41,587	\$40,214
20%	0.20	92,415	89,365
30%	0.32	147,864	142,984
40%	0.47	217,175	210,008
50%	0.66	304,969	294,905
60%	0.89	411,246	397,675
<b>Central Estimate</b>	<b>1.00</b>	<b>\$462,074</b>	<b>\$446,826</b>
70%	1.19	549,868	531,723
80%	1.62	748,560	723,858
90%	2.36	1,090,495	1,054,509

Notes:

- (1) Page 22, Column (6).
- (2) (1), discounted at 1.00% interest.
- (3) Estimated probability that funding will be adequate.
- (4) Estimated by BAC.
- (5) (1) x (4).
- (6) (2) x (4).

West San Gabriel Workers' Compensation  
Joint Powers Authority

Estimated Gross Unpaid Ceded Losses as of 12/31/21

Old Self-Insurance Program 1980-81 through 1994-95

(1)	Estimated Gross Unpaid Losses:	\$487,776
(2)	Discounted Gross Unpaid Losses: (Assuming 1.00% Interest Rate)	\$473,631

<b>Probability Levels</b>			
Probability Level <u>(3)</u>	Probability Factor <u>(4)</u>	Undiscounted Liability <u>(5)</u>	Discounted Liability <u>(6)</u>
10%	0.09	\$43,900	\$42,627
20%	0.20	97,555	94,726
30%	0.32	156,088	151,562
40%	0.47	229,255	222,606
50%	0.66	321,932	312,596
60%	0.89	434,121	421,531
<b>Central Estimate</b>	<b>1.00</b>	<b>\$487,776</b>	<b>\$473,631</b>
70%	1.19	580,454	563,620
80%	1.62	790,197	767,282
90%	2.80	1,365,773	1,326,166

Notes:

- (1) Page 25, Column (6).
- (2) (1), discounted at 1.00% interest.
- (3) Estimated probability that funding will be adequate.
- (4) Estimated by BAC.
- (5) (1) x (4).
- (6) (2) x (4).

**West San Gabriel Workers' Compensation  
Joint Powers Authority**

**Actuarial Analysis of the  
Joint Powers Authority**

**Old Self-Insurance Program  
Fiscal Year End Exhibits**

West San Gabriel Workers' Compensation  
Joint Powers Authority

Projected Limited Unpaid Ceded Losses as of 6/30/22  
Old Self-Insurance Program Losses Limited to SIR

Program Year	Estimated Lim Ultimate Losses (1)	Projected Lim Paid Losses as of 6/30/22 (2)	Projected Lim Case Reserves 6/30/22 (3)	Projected Limited Reported Losses as of 6/30/22 (4)	Projected Lim IBNR as of 6/30/22 (5)	Projected Limited Unpaid Losses as of 6/30/22 (6)
1980-81	\$737,000	\$733,995	\$0	\$733,995	\$3,005	\$3,005
1981-82	993,000	989,067	0	989,067	3,933	3,933
1982-83	1,530,000	1,529,200	0	1,529,200	800	800
1983-84	1,351,000	1,348,336	0	1,348,336	2,664	2,664
1984-85	1,239,000	1,234,648	0	1,234,648	4,352	4,352
1985-86	2,158,000	2,144,859	0	2,144,859	13,141	13,141
1986-87	1,819,000	1,804,008	1,225	1,805,233	13,767	14,992
1987-88	1,877,000	1,849,441	561	1,850,003	26,997	27,559
1988-89	2,364,000	2,311,603	11,730	2,323,333	40,667	52,397
1989-90	3,323,000	3,255,899	1,051	3,256,950	66,050	67,101
1990-91	2,968,000	2,930,469	0	2,930,469	37,531	37,531
1991-92	2,850,000	2,774,682	2,807	2,777,489	72,511	75,318
1992-93	2,951,000	2,860,972	6,058	2,867,031	83,969	90,028
1993-94	767,000	748,259	2,020	750,280	16,720	18,741
1994-95	1,462,000	1,448,782	601	1,449,382	12,618	13,218
Total	\$28,389,000	\$27,964,220	\$26,054	\$27,990,274	\$398,726	\$424,780

## Notes:

- (1) Page 22, Column (1).
- (2) Page 21, Column (3).
- (3) (4) - (2).
- (4) Page 21, Column (6).
- (5) (1) - (4).
- (6) (3) + (5).

West San Gabriel Workers' Compensation  
Joint Powers Authority

Projected Paid and Reported Losses between 1/1/22 and 6/30/22  
Old Self-Insurance Program Losses Limited to SIR

Program Year	Losses Paid as of 12/31/21 (1)	Projected Losses Paid 1/1/22 - 6/30/22 (2)	Projected Losses Paid as of 6/30/22 (3)	Losses Reported as of 12/31/21 (4)	Projected Losses Reported 1/1/22 - 6/30/22 (5)	Projected Losses Reported as of 6/30/22 (6)
1980-81	\$733,995	\$0	\$733,995	\$733,995	\$0	\$733,995
1981-82	989,067	0	989,067	989,067	0	989,067
1982-83	1,528,433	767	1,529,200	1,528,433	767	1,529,200
1983-84	1,347,412	924	1,348,336	1,347,412	924	1,348,336
1984-85	1,233,337	1,310	1,234,648	1,233,337	1,310	1,234,648
1985-86	2,140,197	4,662	2,144,859	2,140,197	4,662	2,144,859
1986-87	1,800,713	3,295	1,804,008	1,800,713	4,520	1,805,233
1987-88	1,844,625	4,816	1,849,441	1,844,625	5,378	1,850,003
1988-89	2,306,516	5,086	2,311,603	2,313,915	9,418	2,323,333
1989-90	3,252,634	3,265	3,255,899	3,252,634	4,316	3,256,950
1990-91	2,928,393	2,076	2,930,469	2,928,393	2,076	2,930,469
1991-92	2,769,011	5,671	2,774,682	2,769,011	8,478	2,777,489
1992-93	2,855,983	4,989	2,860,972	2,855,983	11,048	2,867,031
1993-94	747,917	342	748,259	747,917	2,362	750,280
1994-95	1,448,693	89	1,448,782	1,448,693	690	1,449,382
Total	\$27,926,926	\$37,294	\$27,964,220	\$27,934,324	\$55,949	\$27,990,274

## Notes:

- (1) Page 22, Column (2).
- (2) Projected by BAC.
- (3) (1) + (2).
- (4) Page 22, Column (4).
- (5) Projected by BAC.
- (6) (4) + (5).

West San Gabriel Workers' Compensation  
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Estimated Limited Unpaid Losses as of 12/31/21  
Old Self-Insurance Program Losses Limited to SIR

Program Year	Estimated Lim Ultimate Losses (1)	Lim Paid Losses as of 12/31/21 (2)	Lim Case Reserves 12/31/21 (3)	Limited Reported Losses as of 12/31/21 (4)	Lim IBNR as of 12/31/21 (5)	Limited Unpaid Losses as of 12/31/21 (6)
1980-81	\$737,000	\$733,995	\$0	\$733,995	\$3,005	\$3,005
1981-82	993,000	989,067	0	989,067	3,933	3,933
1982-83	1,530,000	1,528,433	0	1,528,433	1,567	1,567
1983-84	1,351,000	1,347,412	0	1,347,412	3,588	3,588
1984-85	1,239,000	1,233,337	0	1,233,337	5,663	5,663
1985-86	2,158,000	2,140,197	0	2,140,197	17,803	17,803
1986-87	1,819,000	1,800,713	0	1,800,713	18,287	18,287
1987-88	1,877,000	1,844,625	0	1,844,625	32,375	32,375
1988-89	2,364,000	2,306,516	7,399	2,313,915	50,085	57,484
1989-90	3,323,000	3,252,634	0	3,252,634	70,366	70,366
1990-91	2,968,000	2,928,393	0	2,928,393	39,607	39,607
1991-92	2,850,000	2,769,011	0	2,769,011	80,989	80,989
1992-93	2,951,000	2,855,983	0	2,855,983	95,017	95,017
1993-94	767,000	747,917	0	747,917	19,083	19,083
1994-95	1,462,000	1,448,693	0	1,448,693	13,307	13,307
Total	\$28,389,000	\$27,926,926	\$7,399	\$27,934,324	\$454,676	\$462,074

## Notes:

- (1) Page 27, Column (6).
- (2) Page 29, Column (1).
- (3) (4) - (2).
- (4) Page 28, Column (1).
- (5) (1) - (4).
- (6) (3) + (5).



West San Gabriel Workers' Compensation  
Joint Powers Authority

Projected Unpaid Losses as of 6/30/22  
Unlimited Self-Insured Losses

Program Year	Estimated Ultimate Losses (1)	Projected Paid Losses as of 6/30/22 (2)	Projected Case Reserves 6/30/22 (3)	Projected Reported Losses as of 6/30/22 (4)	Projected IBNR as of 6/30/22 (5)	Projected Unpaid Losses as of 6/30/22 (6)
1980-81	\$831,000	\$828,276	\$0	\$828,276	\$2,724	\$2,724
1981-82	1,110,000	1,106,237	0	1,106,237	3,763	3,763
1982-83	1,937,000	1,936,233	0	1,936,233	767	767
1983-84	1,479,000	1,476,370	0	1,476,370	2,630	2,630
1984-85	1,292,000	1,287,942	0	1,287,942	4,058	4,058
1985-86	2,526,000	2,491,221	25,809	2,517,031	8,969	34,779
1986-87	2,018,000	2,003,217	1,225	2,004,442	13,558	14,783
1987-88	1,877,000	1,849,897	106	1,850,003	26,997	27,103
1988-89	2,368,000	2,316,049	11,950	2,328,000	40,000	51,951
1989-90	3,412,000	3,345,891	1,965	3,347,856	64,144	66,109
1990-91	3,604,000	3,567,300	0	3,567,300	36,700	36,700
1991-92	3,011,000	2,937,477	3,692	2,941,169	69,831	73,523
1992-93	2,994,000	2,906,279	6,909	2,913,188	80,812	87,721
1993-94	767,000	748,632	2,149	750,781	16,219	18,368
1994-95	1,944,000	1,931,536	724	1,932,260	11,740	12,464
Total	\$31,170,000	\$30,732,558	\$54,530	\$30,787,088	\$382,912	\$437,442

## Notes:

- (1) Page 25, Column (1).
- (2) Page 24, Column (3).
- (3) (4) - (2).
- (4) Page 24, Column (6).
- (5) (1) - (4).
- (6) (3) + (5).

West San Gabriel Workers' Compensation  
Joint Powers Authority

Projected Paid and Reported Losses between 1/1/22 and 6/30/22  
Unlimited Self-Insured Losses

Program Year	Losses Paid as of 12/31/21 (1)	Projected Losses Paid 1/1/22 - 6/30/22 (2)	Projected Losses Paid as of 6/30/22 (3)	Losses Reported as of 12/31/21 (4)	Projected Losses Reported 1/1/22 - 6/30/22 (5)	Projected Losses Reported as of 6/30/22 (6)
1980-81	\$828,276	\$0	\$828,276	\$828,276	\$0	\$828,276
1981-82	1,106,237	0	1,106,237	1,106,237	0	1,106,237
1982-83	1,935,466	767	1,936,233	1,935,466	767	1,936,233
1983-84	1,475,055	1,315	1,476,370	1,475,055	1,315	1,476,370
1984-85	1,286,592	1,350	1,287,942	1,286,592	1,350	1,287,942
1985-86	2,481,026	10,196	2,491,221	2,508,059	8,971	2,517,031
1986-87	1,999,922	3,295	2,003,217	1,999,922	4,520	2,004,442
1987-88	1,844,625	5,272	1,849,897	1,844,625	5,378	1,850,003
1988-89	2,309,951	6,099	2,316,049	2,317,349	10,650	2,328,000
1989-90	3,341,302	4,588	3,345,891	3,341,302	6,554	3,347,856
1990-91	3,564,518	2,782	3,567,300	3,564,518	2,782	3,567,300
1991-92	2,930,480	6,998	2,937,477	2,930,480	10,689	2,941,169
1992-93	2,899,666	6,613	2,906,279	2,899,666	13,522	2,913,188
1993-94	747,917	714	748,632	747,917	2,864	750,781
1994-95	1,931,192	344	1,931,536	1,931,192	1,068	1,932,260
Total	\$30,682,224	\$50,334	\$30,732,558	\$30,716,656	\$70,431	\$30,787,088

## Notes:

- (1) Page 25, Column (2).
- (2) Projected by BAC.
- (3) (1) + (2).
- (4) Page 25, Column (4).
- (5) Projected by BAC.
- (6) (4) + (5).

West San Gabriel Workers' Compensation  
Joint Powers Authority

Estimated Unpaid Losses as of 12/31/21  
Unlimited Self-Insured Losses

Program Year	Estimated Ultimate Losses (1)	Paid Losses as of 12/31/21 (2)	Case Reserves 12/31/21 (3)	Reported Losses as of 12/31/21 (4)	Estimated IBNR as of 12/31/21 (5)	Estimated Unpaid Losses as of 12/31/21 (6)
1980-81	\$831,000	\$828,276	\$0	\$828,276	\$2,724	\$2,724
1981-82	1,110,000	1,106,237	0	1,106,237	3,763	3,763
1982-83	1,937,000	1,935,466	0	1,935,466	1,534	1,534
1983-84	1,479,000	1,475,055	0	1,475,055	3,945	3,945
1984-85	1,292,000	1,286,592	0	1,286,592	5,408	5,408
1985-86	2,526,000	2,481,026	27,034	2,508,059	17,941	44,974
1986-87	2,018,000	1,999,922	0	1,999,922	18,078	18,078
1987-88	1,877,000	1,844,625	0	1,844,625	32,375	32,375
1988-89	2,368,000	2,309,951	7,399	2,317,349	50,651	58,049
1989-90	3,412,000	3,341,302	0	3,341,302	70,698	70,698
1990-91	3,604,000	3,564,518	0	3,564,518	39,482	39,482
1991-92	3,011,000	2,930,480	0	2,930,480	80,520	80,520
1992-93	2,994,000	2,899,666	0	2,899,666	94,334	94,334
1993-94	767,000	747,917	0	747,917	19,083	19,083
1994-95	1,944,000	1,931,192	0	1,931,192	12,808	12,808
Total	\$31,170,000	\$30,682,224	\$34,433	\$30,716,656	\$453,344	\$487,776

## Notes:

- (1) Page 34, Column (4).
- (2) Page 36, Column (1).
- (3) (4) - (2).
- (4) Page 35, Column (1).
- (5) (1) - (4).
- (6) (3) + (5).

**West San Gabriel Workers' Compensation  
Joint Powers Authority**

**Actuarial Analysis of the  
Joint Powers Authority**

**Old Self-Insurance Program  
Limited Loss Exhibits**

West San Gabriel Workers' Compensation  
Joint Powers Authority

Selected Ultimate Losses  
Old Self-Insurance Program Losses Limited to SIR

Program Year	Lim Reported Development (1)	Lim Paid Development (2)	Lim IBNR to Case Reserves Ratio (3)	Lim B-F Method Using Reported (4)	Lim B-F Method Using Paid (5)	Selected Ultimate Losses (6)
1980-81	\$733,995	\$733,995	\$733,995	\$733,995	\$733,995	\$737,000
1981-82	989,067	989,067	989,067	989,067	989,067	993,000
1982-83	1,528,433	1,528,735	1,528,433	1,528,433	1,528,433	1,530,000
1983-84	1,347,412	1,347,962	1,347,412	1,347,412	1,347,412	1,351,000
1984-85	1,233,337	1,234,274	1,233,337	1,233,337	1,234,476	1,239,000
1985-86	2,140,197	2,143,612	2,140,197	2,140,197	2,144,789	2,158,000
1986-87	1,800,935	1,805,910	1,800,713	1,800,713	1,806,326	1,819,000
1987-88	1,845,257	1,852,211	1,844,625	1,844,625	1,851,572	1,877,000
1988-89	2,315,186	2,318,051	2,314,832	2,316,102	2,317,449	2,364,000
1989-90	3,254,670	3,270,573	3,252,634	3,255,778	3,268,355	3,323,000
1990-91	2,930,259	2,946,447	2,928,393	2,931,707	2,948,278	2,968,000
1991-92	2,771,242	2,788,881	2,769,011	2,771,774	2,788,352	2,850,000
1992-93	2,858,983	2,878,901	2,855,983	2,858,702	2,877,732	2,951,000
1993-94	748,962	754,144	747,917	748,606	753,425	767,000
1994-95	1,450,950	1,460,918	1,448,693	1,452,139	1,462,477	1,462,000
Total	\$27,948,885	\$28,053,681	\$27,935,241	\$27,952,586	\$28,052,138	\$28,389,000

## Notes:

- (1) Page 28, Column (3).
- (2) Page 29, Column (3).
- (3) Page 30, Column (6).
- (4) Page 31, Column (6).
- (5) Page 32, Column (6).
- (6) Selected on the basis of (1) - (5).

West San Gabriel Workers' Compensation  
Joint Powers Authority

Reported Loss Development

Old Self-Insurance Program Losses Limited to SIR

Program Year	Cumulative Reported Losses as of 12/31/21 <u>(1)</u>	Reported Development Factor as of 12/31/21 <u>(2)</u>	Projected Ultimate Losses <u>(3)</u>
1980-81	\$733,995	1.000	\$733,995
1981-82	989,067	1.000	989,067
1982-83	1,528,433	1.000	1,528,433
1983-84	1,347,412	1.000	1,347,412
1984-85	1,233,337	1.000	1,233,337
1985-86	2,140,197	1.000	2,140,197
1986-87	1,800,713	1.000	1,800,935
1987-88	1,844,625	1.000	1,845,257
1988-89	2,313,915	1.001	2,315,186
1989-90	3,252,634	1.001	3,254,670
1990-91	2,928,393	1.001	2,930,259
1991-92	2,769,011	1.001	2,771,242
1992-93	2,855,983	1.001	2,858,983
1993-94	747,917	1.001	748,962
1994-95	1,448,693	1.002	1,450,950
Total	\$27,934,324		\$27,948,885

Notes:

- (1) Provided by Keenan & Associates.
- (2) Page 35, Column (2), tempered for SIR.
- (3) (1) x (2), rounded.

West San Gabriel Workers' Compensation  
Joint Powers Authority

Paid Loss Development

Old Self-Insurance Program Losses Limited to SIR

Program Year	Cumulative Paid Losses as of 12/31/21 (1)	Paid Development Factor as of 12/31/21 (2)	Projected Ultimate Losses (3)
1980-81	\$733,995	1.000	\$733,995
1981-82	989,067	1.000	989,067
1982-83	1,528,433	1.000	1,528,735
1983-84	1,347,412	1.000	1,347,962
1984-85	1,233,337	1.001	1,234,274
1985-86	2,140,197	1.002	2,143,612
1986-87	1,800,713	1.003	1,805,910
1987-88	1,844,625	1.004	1,852,211
1988-89	2,306,516	1.005	2,318,051
1989-90	3,252,634	1.006	3,270,573
1990-91	2,928,393	1.006	2,946,447
1991-92	2,769,011	1.007	2,788,881
1992-93	2,855,983	1.008	2,878,901
1993-94	747,917	1.008	754,144
1994-95	1,448,693	1.008	1,460,918
Total	\$27,926,926		\$28,053,681

Notes:

- (1) Provided by Keenan & Associates.
- (2) Page 36, Column (2), tempered for SIR.
- (3) (1) x (2), rounded.

West San Gabriel Workers' Compensation  
Joint Powers Authority

IBNR to Case Reserves Ratio Method  
Old Self-Insurance Program Losses Limited to SIR

Program Year	Lim Reported Development Factor as of 12/31/21 <u>(1)</u>	Lim Paid Development Factor as of 12/31/21 <u>(2)</u>	Limoted IBNR to Case Reserves Ratio <u>(3)</u>	Lim Case Reserves 12/31/21 <u>(4)</u>	Estimated Lim IBNR Losses as of 12/31/21 <u>(5)</u>	Estimated Lim Ultimate Losses <u>(6)</u>
1980-81	1.000	1.000	0.000	\$0	\$0	\$733,995
1981-82	1.000	1.000	0.000	0	0	989,067
1982-83	1.000	1.000	0.000	0	0	1,528,433
1983-84	1.000	1.000	0.000	0	0	1,347,412
1984-85	1.000	1.001	0.000	0	0	1,233,337
1985-86	1.000	1.002	0.000	0	0	2,140,197
1986-87	1.000	1.003	0.045	0	0	1,800,713
1987-88	1.000	1.004	0.091	0	0	1,844,625
1988-89	1.001	1.005	0.124	7,399	917	2,314,832
1989-90	1.001	1.006	0.129	0	0	3,252,634
1990-91	1.001	1.006	0.116	0	0	2,928,393
1991-92	1.001	1.007	0.127	0	0	2,769,011
1992-93	1.001	1.008	0.152	0	0	2,855,983
1993-94	1.001	1.008	0.203	0	0	747,917
1994-95	1.002	1.008	0.228	0	0	1,448,693
Total				\$7,399	\$917	\$27,935,241

## Notes:

- (1) Page 28, Column (2).
- (2) Page 29, Column (2).
- (3)  $[(1) - 1.000] \times (2) / [(2) - (1)]$ .
- (4) [Page 28, Column (1)] - [Page 29, Column (1)].
- (5) (3) x (4), rounded.
- (6) (5) + [Page 28, Column (1)].



West San Gabriel Workers' Compensation  
Joint Powers Authority

Bornhuetter-Ferguson Using Reported Losses  
Old Self-Insurance Program Losses Limited to SIR

Program Year	<i>A Priori</i> Ultimate Losses (1)	Cumulative Reported Loss Development Factors (2)	Percentage of Losses Not Yet Reported (3)	Expected Unreported Losses (4)	Limited Losses Reported as of 12/31/21 (5)	Estimated Ultimate Limited Losses (6)
1980-81	\$741,236	1.000	0.0%	\$0	\$733,995	\$733,995
1981-82	1,038,599	1.000	0.0%	0	989,067	989,067
1982-83	1,809,256	1.000	0.0%	0	1,528,433	1,528,433
1983-84	1,307,745	1.000	0.0%	0	1,347,412	1,347,412
1984-85	1,138,908	1.000	0.0%	0	1,233,337	1,233,337
1985-86	2,296,168	1.000	0.0%	0	2,140,197	2,140,197
1986-87	1,870,875	1.000	0.0%	0	1,800,713	1,800,713
1987-88	1,736,728	1.000	0.0%	0	1,844,625	1,844,625
1988-89	2,186,586	1.001	0.1%	2,187	2,313,915	2,316,102
1989-90	3,144,138	1.001	0.1%	3,144	3,252,634	3,255,778
1990-91	3,314,157	1.001	0.1%	3,314	2,928,393	2,931,707
1991-92	2,762,964	1.001	0.1%	2,763	2,769,011	2,771,774
1992-93	2,718,676	1.001	0.1%	2,719	2,855,983	2,858,702
1993-94	688,521	1.001	0.1%	689	747,917	748,606
1994-95	1,723,017	1.002	0.2%	3,446	1,448,693	1,452,139

## Notes:

- (1) Page 39, Column (6), adjusted for SIR.
- (2) Page 28, Column (2).
- (3)  $100\% - [1.000 / (2)]$ .
- (4)  $(1) \times (3)$ .
- (5) Page 28, Column (1).
- (6)  $(4) + (5)$ .

West San Gabriel Workers' Compensation  
Joint Powers Authority

Bornhuetter-Ferguson Using Paid Losses  
Old Self-Insurance Program Losses Limited to SIR

Program Year	<i>A Priori</i> Ultimate Losses (1)	Cumulative Lim Paid Loss Development Factors (2)	Percentage of Losses Not Yet Paid (3)	Expected Lim Unpaid Losses (4)	Lim Losses Paid as of 12/31/21 (5)	Estimated Lim Ultimate Losses (6)
1980-81	\$741,236	1.000	0.0%	\$0	\$733,995	\$733,995
1981-82	1,038,599	1.000	0.0%	0	989,067	989,067
1982-83	1,809,256	1.000	0.0%	0	1,528,433	1,528,433
1983-84	1,307,745	1.000	0.0%	0	1,347,412	1,347,412
1984-85	1,138,908	1.001	0.1%	1,139	1,233,337	1,234,476
1985-86	2,296,168	1.002	0.2%	4,592	2,140,197	2,144,789
1986-87	1,870,875	1.003	0.3%	5,613	1,800,713	1,806,326
1987-88	1,736,728	1.004	0.4%	6,947	1,844,625	1,851,572
1988-89	2,186,586	1.005	0.5%	10,933	2,306,516	2,317,449
1989-90	3,144,138	1.006	0.5%	15,721	3,252,634	3,268,355
1990-91	3,314,157	1.006	0.6%	19,885	2,928,393	2,948,278
1991-92	2,762,964	1.007	0.7%	19,341	2,769,011	2,788,352
1992-93	2,718,676	1.008	0.8%	21,749	2,855,983	2,877,732
1993-94	688,521	1.008	0.8%	5,508	747,917	753,425
1994-95	1,723,017	1.008	0.8%	13,784	1,448,693	1,462,477

## Notes:

- (1) Page 31, Column (1).
- (2) Page 29, Column (2).
- (3)  $100\% - [1.000 / (2)]$ .
- (4)  $(1) \times (3)$ .
- (5) Page 29, Column (1).
- (6)  $(4) + (5)$ .

**West San Gabriel Workers' Compensation  
Joint Powers Authority**

**Actuarial Analysis of the  
Joint Powers Authority**

**Old Self-Insurance Program  
Gross Loss Exhibits**

West San Gabriel Workers' Compensation  
Joint Powers Authority

Selected Ultimate Losses

Gross Unlimited Losses

Program Year	Reported Projection (1)	Paid Projection (2)	IBNR to Case Reserves Ratio (3)	Selected Ultimate Losses (4)
1980-81	\$828,276	\$828,276	\$828,276	\$831,000
1981-82	1,106,237	1,106,237	1,106,237	1,110,000
1982-83	1,935,466	1,936,433	1,935,466	1,937,000
1983-84	1,475,055	1,477,267	1,475,055	1,479,000
1984-85	1,286,592	1,290,450	1,286,592	1,292,000
1985-86	2,508,059	2,494,663	2,508,059	2,526,000
1986-87	2,000,921	2,017,267	1,999,922	2,018,000
1987-88	1,847,391	1,868,437	1,844,625	1,877,000
1988-89	2,323,352	2,347,824	2,318,762	2,368,000
1989-90	3,351,933	3,404,406	3,341,302	3,412,000
1990-91	3,576,954	3,643,114	3,564,518	3,604,000
1991-92	2,944,415	3,009,035	2,930,480	3,011,000
1992-93	2,919,030	2,990,452	2,899,666	2,994,000
1993-94	755,072	773,292	747,917	767,000
1994-95	1,953,406	2,000,561	1,931,192	1,944,000
Total	\$30,812,159	\$31,187,714	\$30,718,069	\$31,170,000

Notes:

- (1) Page 35, Column (3).
- (2) Page 36, Column (3).
- (3) Page 37, Column (6).
- (4) Selected on the basis of (1) - (3).

West San Gabriel Workers' Compensation  
Joint Powers Authority

Reported Loss Development

Gross Unlimited Losses

Program Year	Cumulative Reported Losses as of 12/31/21 (1)	Reported Development Factor as of 12/31/21 (2)	Projected Ultimate Losses (3)
1980-81	\$828,276	1.000	\$828,276
1981-82	1,106,237	1.000	1,106,237
1982-83	1,935,466	1.000	1,935,466
1983-84	1,475,055	1.000	1,475,055
1984-85	1,286,592	1.000	1,286,592
1985-86	2,508,059	1.000	2,508,059
1986-87	1,999,922	1.000	2,000,921
1987-88	1,844,625	1.001	1,847,391
1988-89	2,317,349	1.003	2,323,352
1989-90	3,341,302	1.003	3,351,933
1990-91	3,564,518	1.003	3,576,954
1991-92	2,930,480	1.005	2,944,415
1992-93	2,899,666	1.007	2,919,030
1993-94	747,917	1.010	755,072
1994-95	1,931,192	1.012	1,953,406
Total	\$30,716,656		\$30,812,159

Notes:

- (1) Provided by Keenan & Associates.
- (2) Estimated by BAC.
- (3) (1) x (2), rounded.

West San Gabriel Workers' Compensation  
Joint Powers Authority

Paid Loss Development

Gross Unlimited Losses

Program Year	Cumulative Paid Losses as of 12/31/21 (1)	Paid Development Factor as of 12/31/21 (2)	Projected Ultimate Losses (3)
1980-81	\$828,276	1.000	\$828,276
1981-82	1,106,237	1.000	1,106,237
1982-83	1,935,466	1.000	1,936,433
1983-84	1,475,055	1.001	1,477,267
1984-85	1,286,592	1.003	1,290,450
1985-86	2,481,026	1.005	2,494,663
1986-87	1,999,922	1.009	2,017,267
1987-88	1,844,625	1.013	1,868,437
1988-89	2,309,951	1.016	2,347,824
1989-90	3,341,302	1.019	3,404,406
1990-91	3,564,518	1.022	3,643,114
1991-92	2,930,480	1.027	3,009,035
1992-93	2,899,666	1.031	2,990,452
1993-94	747,917	1.034	773,292
1994-95	1,931,192	1.036	2,000,561
Total	\$30,682,224		\$31,187,714

Notes:

- (1) Provided by Keenan & Associates.
- (2) Estimated by BAC.
- (3) (1) x (2), rounded.

West San Gabriel Workers' Compensation  
Joint Powers Authority

IBNR to Case Reserves Ratio Method

Gross Unlimited Losses

Program Year	Reported Development Factor as of 12/31/21 (1)	Paid Development Factor as of 12/31/21 (2)	IBNR to Case Reserves Ratio (3)	Case Reserves as of 12/31/21 (4)	Estimated IBNR as of 12/31/21 (5)	Estimated Ultimate Losses (6)
1980-81	1.000	1.000	0.000	\$0	\$0	\$828,276
1981-82	1.000	1.000	0.000	0	0	1,106,237
1982-83	1.000	1.000	0.000	0	0	1,935,466
1983-84	1.000	1.001	0.000	0	0	1,475,055
1984-85	1.000	1.003	0.000	0	0	1,286,592
1985-86	1.000	1.005	0.000	27,034	0	2,508,059
1986-87	1.000	1.009	0.062	0	0	1,999,922
1987-88	1.001	1.013	0.133	0	0	1,844,625
1988-89	1.003	1.016	0.191	7,399	1,413	2,318,762
1989-90	1.003	1.019	0.206	0	0	3,341,302
1990-91	1.003	1.022	0.192	0	0	3,564,518
1991-92	1.005	1.027	0.221	0	0	2,930,480
1992-93	1.007	1.031	0.280	0	0	2,899,666
1993-94	1.010	1.034	0.406	0	0	747,917
1994-95	1.012	1.036	0.488	0	0	1,931,192
Total				\$34,433	\$1,413	\$30,718,069

Notes:

- (1) Page 35, Column (2).
- (2) Page 36, Column (2).
- (3)  $[(1) - 1.000] \times (2) / [(2) - (1)]$ .
- (4) [Page 35, Column (1)] - [Page 36, Column (1)].
- (5) (3) x (4), rounded.
- (6) (5) + Page 35, Column (1).

**West San Gabriel Workers' Compensation  
Joint Powers Authority**

**Actuarial Analysis of the  
Joint Powers Authority**

**Gross Loss Exhibits**



West San Gabriel Workers' Compensation  
Joint Powers Authority

Selected Ultimate Losses

Gross Unlimited Losses

Program Year	Reported Projection (1)	Paid Projection (2)	IBNR to Case Reserves Ratio (3)	B-F Method Using Reported (4)	Frequency Times Severity (5)	Selected Ultimate Losses (6)
2003-04	\$4,286,523	\$4,576,404	\$4,211,154	\$4,255,671	\$3,551,866	\$4,260,000
2004-05	2,287,387	2,300,744	2,284,163	2,293,909	2,333,526	2,300,000
2005-06	3,117,627	3,251,490	3,087,380	3,131,909	3,143,976	3,150,000
2006-07	4,311,775	4,779,888	4,219,203	4,304,145	4,324,514	4,219,203
2007-08	4,531,396	5,032,379	4,446,443	4,523,092	3,796,954	4,510,000
2008-09	10,396,457	8,711,884	10,648,800	10,268,607	4,010,570	10,340,000
2009-10	3,314,059	3,597,370	3,275,342	3,340,981	3,639,312	3,390,000
2010-11	5,320,541	5,831,430	5,242,776	5,296,659	4,422,997	5,290,000
2011-12	4,369,566	5,008,128	4,256,377	4,375,423	4,578,694	4,340,000
2012-13	5,441,708	6,230,774	5,291,326	5,402,952	5,196,318	5,430,000
2013-14	3,740,839	4,105,618	3,593,002	3,824,217	6,380,199	3,820,000
2014-15	3,480,142	3,853,149	3,307,746	3,625,736	4,571,231	3,570,000
2015-16	4,663,996	4,651,930	4,675,243	4,768,739	6,178,256	4,690,000
2016-17	5,084,673	4,876,590	5,298,507	5,211,020	6,292,045	5,200,000
2017-18	3,819,127	4,148,007	3,542,692	4,371,466	6,037,256	3,980,000
2018-19	6,139,934	5,676,947	6,552,822	6,231,626	7,107,525	6,160,000
2019-20	2,656,215	2,618,792	2,681,121	3,450,374	4,767,016	2,910,000
2020-21	2,788,605	2,697,090	2,838,972	3,067,469	4,042,377	2,850,000
2021-22	7,252,912	8,186,603	6,996,849	7,461,385	8,556,363	7,470,000
Total	\$87,003,482	\$90,135,217	\$86,449,917	\$89,205,379	\$92,930,995	\$87,879,203

## Notes:

- (1) Page 40, Column (3).  
(2) Page 41, Column (3).  
(3) Page 42, Column (6).

- (4) Page 43, Column (6).  
(5) Page 47, Column (4).  
(6) Selected on the basis of (1) - (5).

West San Gabriel Workers' Compensation  
Joint Powers Authority

Reported Loss Development

Gross Unlimited Losses

Program Year	Cumulative Reported Losses as of 12/31/21 (1)	Reported Development Factor as of 12/31/21 (2)	Projected Ultimate Losses (3)
2003-04	\$4,203,568	1.020	\$4,286,523
2004-05	2,240,676	1.021	2,287,387
2005-06	3,050,649	1.022	3,117,627
2006-07	4,219,203	1.022	4,311,775
2007-08	4,434,203	1.022	4,531,396
2008-09	10,171,220	1.022	10,396,457
2009-10	3,238,577	1.023	3,314,059
2010-11	5,171,354	1.029	5,320,541
2011-12	4,208,843	1.038	4,369,566
2012-13	5,207,167	1.045	5,441,708
2013-14	3,450,749	1.084	3,740,839
2014-15	3,152,209	1.104	3,480,142
2015-16	3,899,182	1.196	4,663,996
2016-17	4,028,655	1.262	5,084,673
2017-18	2,892,251	1.320	3,819,127
2018-19	4,199,523	1.462	6,139,934
2019-20	1,605,660	1.654	2,656,215
2020-21	1,211,230	2.302	2,788,605
2021-22	863,727	8.397	7,252,912

Notes:

- (1) Provided by York Insurance Services.
- (2) Page 67.
- (3) (1) x (2), rounded.

West San Gabriel Workers' Compensation  
Joint Powers Authority

Paid Loss Projection

Gross Unlimited Losses

Program Year	Cumulative Paid Losses as of 12/31/21 (1)	Paid Development Factor as of 12/31/21 (2)	Projected Ultimate Losses (3)
2003-04	\$4,176,950	1.096	\$4,576,404
2004-05	2,077,805	1.107	2,300,744
2005-06	2,905,466	1.119	3,251,490
2006-07	4,219,203	1.133	4,779,888
2007-08	4,371,432	1.151	5,032,379
2008-09	7,442,190	1.171	8,711,884
2009-10	3,013,022	1.194	3,597,370
2010-11	4,787,362	1.218	5,831,430
2011-12	3,994,726	1.254	5,008,128
2012-13	4,862,255	1.281	6,230,774
2013-14	3,179,274	1.291	4,105,618
2014-15	2,899,302	1.329	3,853,149
2015-16	3,300,369	1.410	4,651,930
2016-17	3,214,125	1.517	4,876,590
2017-18	2,437,397	1.702	4,148,007
2018-19	2,866,209	1.981	5,676,947
2019-20	988,643	2.649	2,618,792
2020-21	577,374	4.671	2,697,090
2021-22	231,381	35.381	8,186,603

Notes:

- (1) Provided by York Insurance Services.
- (2) Page 68.
- (3) (1) x (2), rounded.

West San Gabriel Workers' Compensation  
Joint Powers Authority

IBNR to Case Reserves Ratio Method

Gross Unlimited Losses

Program Year	Reported Development Factor as of 12/31/21 (1)	Paid Development Factor as of 12/31/21 (2)	IBNR to Case Reserves Ratio (3)	Case Reserves as of 12/31/21 (4)	Estimated IBNR as of 12/31/21 (5)	Estimated Ultimate Losses (6)
2003-04	1.020	1.096	0.285	\$26,618	\$7,586	\$4,211,154
2004-05	1.021	1.107	0.267	162,872	43,487	2,284,163
2005-06	1.022	1.119	0.253	145,183	36,731	3,087,380
2006-07	1.022	1.133	0.224	0	0	4,219,203
2007-08	1.022	1.151	0.195	62,771	12,240	4,446,443
2008-09	1.022	1.171	0.175	2,729,030	477,580	10,648,800
2009-10	1.023	1.194	0.163	225,555	36,765	3,275,342
2010-11	1.029	1.218	0.186	383,991	71,422	5,242,776
2011-12	1.038	1.254	0.222	214,117	47,534	4,256,377
2012-13	1.045	1.281	0.244	344,912	84,159	5,291,326
2013-14	1.084	1.291	0.524	271,475	142,253	3,593,002
2014-15	1.104	1.329	0.615	252,906	155,537	3,307,746
2015-16	1.196	1.410	1.296	598,813	776,061	4,675,243
2016-17	1.262	1.517	1.559	814,530	1,269,852	5,298,507
2017-18	1.320	1.702	1.430	454,854	650,441	3,542,692
2018-19	1.462	1.981	1.765	1,333,314	2,353,299	6,552,822
2019-20	1.654	2.649	1.743	617,017	1,075,461	2,681,121
2020-21	2.302	4.671	2.568	633,856	1,627,742	2,838,972
2021-22	8.397	35.381	9.699	632,346	6,133,122	6,996,849
						86,449,917

## Notes:

- (1) Page 40, Column (2).
- (2) Page 41, Column (2).
- (3)  $[(1) - 1.000] \times (2) / [(2) - (1)]$ .
- (4) Page 40, Column (1) - Page 41, Column (1).
- (5) (3) x (4), rounded.
- (6) (5) + Page 40, Column (1).

West San Gabriel Workers' Compensation  
Joint Powers Authority

Bornhuetter-Ferguson Using Reported Losses

Gross Unlimited Losses

Program Year	<i>A Priori</i> Ultimate Losses (1)	Cumulative Reported Loss Development Factors (2)	Percentage of Losses Not Yet Reported (3)	Expected Unreported Losses (4)	Losses Reported as of 12/31/21 (5)	Estimated Ultimate Losses (6)
2003-04	\$2,742,286	1.020	1.9%	\$52,103	\$4,203,568	\$4,255,671
2004-05	2,661,631	1.021	2.0%	53,233	2,240,676	2,293,909
2005-06	3,869,503	1.022	2.1%	81,260	3,050,649	3,131,909
2006-07	4,044,866	1.022	2.1%	84,942	4,219,203	4,304,145
2007-08	4,232,833	1.022	2.1%	88,889	4,434,203	4,523,092
2008-09	4,426,701	1.022	2.2%	97,387	10,171,220	10,268,607
2009-10	4,452,330	1.023	2.3%	102,404	3,238,577	3,340,981
2010-11	4,475,162	1.029	2.8%	125,305	5,171,354	5,296,659
2011-12	4,502,153	1.038	3.7%	166,580	4,208,843	4,375,423
2012-13	4,553,136	1.045	4.3%	195,785	5,207,167	5,402,952
2013-14	4,788,046	1.084	7.8%	373,468	3,450,749	3,824,217
2014-15	5,037,517	1.104	9.4%	473,527	3,152,209	3,625,736
2015-16	5,302,179	1.196	16.4%	869,557	3,899,182	4,768,739
2016-17	5,684,449	1.262	20.8%	1,182,365	4,028,655	5,211,020
2017-18	6,087,304	1.320	24.3%	1,479,215	2,892,251	4,371,466
2018-19	6,430,706	1.462	31.6%	2,032,103	4,199,523	6,231,626
2019-20	4,658,368	1.654	39.6%	1,844,714	1,605,660	3,450,374
2020-21	3,279,574	2.302	56.6%	1,856,239	1,211,230	3,067,469
2021-22	7,488,829	8.397	88.1%	6,597,658	863,727	7,461,385

Notes:

- (1) Page 44, Column (4).
- (2) Page 40, Column (2).
- (3)  $100\% - [1.000 / (2)]$ .
- (4)  $(1) \times (3)$ .
- (5) Page 40, Column (1).
- (6)  $(4) + (5)$ .

West San Gabriel Workers' Compensation  
Joint Powers Authority

*A Priori* Losses for Bornhuetter-Ferguson

Gross Unlimited Losses

Program Year	<i>A Priori</i> Loss Rate (1)	Factor to Remove Trend (2)	Trended Payroll (\$00's) (3)	<i>A Priori</i> Ultimate Losses (4)
2003-04	\$1.87	0.578	\$2,535,446	\$2,742,286
2004-05	1.87	0.550	2,586,155	2,661,631
2005-06	1.87	0.564	3,666,448	3,869,503
2006-07	1.87	0.578	3,739,777	4,044,866
2007-08	1.87	0.593	3,814,573	4,232,833
2008-09	1.87	0.608	3,890,864	4,426,701
2009-10	1.87	0.624	3,813,047	4,452,330
2010-11	1.87	0.640	3,736,786	4,475,162
2011-12	1.87	0.657	3,662,050	4,502,153
2012-13	1.87	0.678	3,588,809	4,553,136
2013-14	1.87	0.699	3,660,586	4,788,046
2014-15	1.87	0.721	3,733,797	5,037,517
2015-16	1.87	0.744	3,808,473	5,302,179
2016-17	1.87	0.782	3,884,643	5,684,449
2017-18	1.87	0.821	3,962,336	6,087,304
2018-19	1.87	0.863	3,982,147	6,430,706
2019-20	1.28	0.906	4,002,058	4,658,368
2020-21	1.04	0.952	3,321,708	3,279,574
2021-22	1.87	1.000	4,002,058	7,488,829

Notes:

- (1) Page 45, Item (5). 2019-20 & 2020-21 adjusted for COVID
- (2) Estimated by BAC.
- (3) Page 64, Column (3).
- (4) (1) x (2) x (3).

West San Gabriel Workers' Compensation  
Joint Powers Authority

*A Priori* Loss Rate for Bornhuetter-Ferguson Method

Gross Unlimited Losses

Program Year	<i>A Priori</i> Ultimate Losses (1)	Estimated Pure Premium Trend (2)	Trended Payroll (\$00's) (3)	Loss Rate (4)
2003-04	\$4,426,264	1.731	\$2,535,446	\$3.02
2004-05	2,293,794	1.820	2,586,155	1.61
2005-06	3,181,522	1.774	3,666,448	1.54
2006-07	4,533,780	1.729	3,739,777	2.10
2007-08	4,766,985	1.686	3,814,573	2.11
2008-09	10,171,220	1.644	3,890,864	4.30
2009-10	3,444,813	1.602	3,813,047	1.45
2010-11	5,554,472	1.562	3,736,786	2.32
2011-12	4,658,826	1.523	3,662,050	1.94
2012-13	5,796,149	1.476	3,588,809	2.38
2013-14	3,907,312	1.430	3,660,586	1.53
2014-15	3,649,401	1.387	3,733,797	1.36
2015-16	4,658,457	1.344	3,808,473	1.64
2016-17	4,990,181	1.279	3,884,643	1.64
2017-18	3,962,818	1.218	3,962,336	1.22
2018-19	5,943,312	1.159	3,982,147	1.73
2019-20	2,641,828	1.104	4,002,058	0.73
2020-21	2,758,392	1.050	3,321,708	0.87
2021-22	7,432,004	1.000	4,002,058	1.86
Average				\$1.86
03/04-18/19				\$1.99
		(5) Selected A Priori 2021-22 Loss Rate:		\$1.87

Notes:

- (1) Page 46, Column (3).
- (2) Estimated by BAC.
- (3) Page 64, Column (3).
- (4)  $(1) \times (2) / (3)$ .
- (5) Selected on the basis of (4).

West San Gabriel Workers' Compensation  
Joint Powers Authority

*A Priori* Ultimate losses

Gross Unlimited Losses

Program Year	Reported Loss Projection (1)	Paid Loss Projection (2)	<i>A Priori</i> Selection (3)
2003-04	\$4,286,523	\$4,576,404	\$4,426,264
2004-05	2,287,387	2,300,744	2,293,794
2005-06	3,117,627	3,251,490	3,181,522
2006-07	4,311,775	4,779,888	4,533,780
2007-08	4,531,396	5,032,379	4,766,985
2008-09	10,396,457	8,711,884	10,171,220
2009-10	3,314,059	3,597,370	3,444,813
2010-11	5,320,541	5,831,430	5,554,472
2011-12	4,369,566	5,008,128	4,658,826
2012-13	5,441,708	6,230,774	5,796,149
2013-14	3,740,839	4,105,618	3,907,312
2014-15	3,480,142	3,853,149	3,649,401
2015-16	4,663,996	4,651,930	4,658,457
2016-17	5,084,673	4,876,590	4,990,181
2017-18	3,819,127	4,148,007	3,962,818
2018-19	6,139,934	5,676,947	5,943,312
2019-20	2,656,215	2,618,792	2,641,828
2020-21	2,788,605	2,697,090	2,758,392
2021-22	7,252,912	8,186,603	7,432,004
Total	\$87,003,482	\$90,135,217	\$88,771,530

## Notes:

- (1) Page 40, Column (3).
- (2) Page 41, Column (3).
- (3) Selected on the basis of (1) and (2).



West San Gabriel Workers' Compensation  
Joint Powers Authority

Frequency Times Severity Method

Gross Unlimited Losses

Program Year	Selected Claim Severity (1)	Factor to Remove Trend (2)	Selected Ultimate Claims (3)	Estimated Ultimate Losses (4)
2003-04	\$63,380	0.578	97	\$3,551,866
2004-05	63,380	0.550	67	2,333,526
2005-06	63,380	0.564	88	3,143,976
2006-07	63,380	0.578	118	4,324,514
2007-08	63,380	0.593	101	3,796,954
2008-09	63,380	0.608	104	4,010,570
2009-10	63,380	0.624	92	3,639,312
2010-11	63,380	0.640	109	4,422,997
2011-12	63,380	0.657	110	4,578,694
2012-13	63,380	0.678	121	5,196,318
2013-14	63,380	0.699	144	6,380,199
2014-15	63,380	0.721	100	4,571,231
2015-16	63,380	0.744	131	6,178,256
2016-17	63,380	0.782	127	6,292,045
2017-18	63,380	0.821	116	6,037,256
2018-19	63,380	0.863	130	7,107,525
2019-20	63,380	0.906	83	4,767,016
2020-21	63,380	0.952	67	4,042,377
2021-22	63,380	1.000	135	8,556,363

Notes:

- (1) Page 48, Item (5).
- (2) Estimated by BAC.
- (3) Page 49, Column (3).
- (4) (1) x (2) x (3).

West San Gabriel Workers' Compensation  
Joint Powers Authority

Calculation of Expected Indemnity Claim Severity  
Frequency Times Severity Method

Gross Unlimited Losses

Program Year	<i>A Priori</i> Ultimate Losses (1)	Estimated Severity Trend (2)	Selected Indemnity Claim Count (3)	Trended Indemnity Claim Severity (4)
2003-04	\$4,426,264	1.731	97	\$78,983
2004-05	2,293,794	1.820	67	62,301
2005-06	3,181,522	1.774	88	64,137
2006-07	4,533,780	1.729	118	66,447
2007-08	4,766,985	1.686	101	79,573
2008-09	10,171,220	1.644	104	160,739
2009-10	3,444,813	1.602	92	59,993
2010-11	5,554,472	1.562	109	79,594
2011-12	4,658,826	1.523	110	64,490
2012-13	5,796,149	1.476	121	70,697
2013-14	3,907,312	1.430	144	38,815
2014-15	3,649,401	1.387	100	50,599
2015-16	4,658,457	1.344	131	47,789
2016-17	4,990,181	1.279	127	50,267
2017-18	3,962,818	1.218	116	41,603
2018-19	5,943,312	1.159	130	52,999
2019-20	2,641,828	1.104	83	35,125
2020-21	2,758,392	1.050	67	43,249
2021-22	7,432,004	1.000	135	55,052
Average				\$63,287
03/04-20/21				\$63,744
			(5) Selected Severity :	\$63,380

## Notes:

- (1) Page 46, Column (3).
- (2) Estimated by BAC.
- (3) Page 49, Column (3).
- (4) (1) x (2) / (3).
- (5) Selected on the basis of (4).

West San Gabriel Workers' Compensation  
Joint Powers Authority

Selected Claim Counts

Program Year	Reported Claim Count Projection <u>(1)</u>	Bornhuetter- Ferguson Method <u>(2)</u>	Selected Claim Count <u>(3)</u>
2003-04	97		97
2004-05	67		67
2005-06	88		88
2006-07	118		118
2007-08	101		101
2008-09	104		104
2009-10	92		92
2010-11	109		109
2011-12	110		110
2012-13	121		121
2013-14	144		144
2014-15	100		100
2015-16	131		131
2016-17	127		127
2017-18	116		116
2018-19	130		130
2019-20	83		83
2020-21	67		67
2021-22	170	135	135

Notes:

- (1) Page 50, Column (3).
- (2) Page 51, Column (6).
- (3) Selected on the basis of (1) and (2).

West San Gabriel Workers' Compensation  
 Joint Powers Authority

Projection of Ultimate # of Indemnity Claims  
 Projection of Reported Claims

Program Year	Total Indemnity Claims Reported 12/31/21 (1)	Development Factors as of 12/31/21 (2)	Projected Ultimate Indemnity Claims (3)
2003-04	97	1.000	97
2004-05	67	1.000	67
2005-06	88	1.000	88
2006-07	118	1.000	118
2007-08	101	1.000	101
2008-09	104	1.000	104
2009-10	92	1.000	92
2010-11	109	1.000	109
2011-12	110	1.000	110
2012-13	121	1.000	121
2013-14	144	1.000	144
2014-15	100	1.000	100
2015-16	130	1.005	131
2016-17	126	1.010	127
2017-18	114	1.016	116
2018-19	127	1.027	130
2019-20	80	1.041	83
2020-21	61	1.096	67
2021-22	55	3.087	170

Notes:

- (1) Provided by York Insurance Services.
- (2) Page 69.
- (3) (1) x (2), rounded.

West San Gabriel Workers' Compensation  
Joint Powers Authority

Projection of Ultimate # of Indemnity Claims  
Bornhuetter-Ferguson Method

Program Year	A Priori Indemnity Claim Count <u>(1)</u>	Indemnity Claim Development Factor <u>(2)</u>	Estimated Percentage of Claims Unreported <u>(3)</u>	Estimated Unreported Indemnity Claims <u>(4)</u>	Indemnity Claims Reported as of 12/31/21 <u>(5)</u>	Projected Ultimate Indemnity Claims <u>(6)</u>
2021-22	119	3.087	67.6%	80	55	135

## Notes:

- (1) Page 52, Item (6).
- (2) Page 50, Column (2).
- (3)  $100\% - [1.000 / (2)]$ .
- (4)  $(1) \times (3)$ .
- (5) Page 50, Column (1).
- (6)  $(4) + (5)$ .

West San Gabriel Workers' Compensation  
 Joint Powers Authority

Calculation of Expected Claim Counts  
 A Priori Claim Count

Program Year	Projected Ultimate Claim Counts (1)	Trended Payroll (\$Millions) (2)	Indicated Claim Frequency (3)
2003-04	97	\$253.5	0.38
2004-05	67	258.6	0.26
2005-06	88	366.6	0.24
2006-07	118	374.0	0.32
2007-08	101	381.5	0.26
2008-09	104	389.1	0.27
2009-10	92	381.3	0.24
2010-11	109	373.7	0.29
2011-12	110	366.2	0.30
2012-13	121	358.9	0.34
2013-14	144	366.1	0.39
2014-15	100	373.4	0.27
2015-16	131	380.8	0.34
2016-17	127	388.5	0.33
2017-18	116	396.2	0.29
2018-19	130	398.2	0.33
2019-20	83	400.2	0.21
2020-21	67	332.2	0.20
2021-22	170	400.2	0.42
Average			0.30
03/04-19/20			0.30
(4) Selected Claim Frequency:			0.30
(5) 2021-22 Trended Payroll (\$Millions):			\$400.2
(6) 2021-22 A Priori Claim Count:			119

Notes:

- (1) Page 50, Column (3).
- (2) Page 64, Column (3) / 10,000.
- (3) (1) / (2).
- (4) Selected on the basis of (3).
- (5) Page 64, Column (3) / 10,000.
- (6) (4) x (5).

**West San Gabriel Workers' Compensation  
Joint Powers Authority**

**Actuarial Analysis of the  
Joint Powers Authority**

**Future Loss Exhibits**

West San Gabriel Workers' Compensation  
Joint Powers Authority

Projected Ultimate Losses for 2022-23

Program Year	2021-22 Level Loss Rate <u>(1)</u>	Expected Increase <u>(2)</u>	Trended 2022-23 Payroll (\$00's) <u>(3)</u>	Projected Ultimate Losses <u>(4)</u>	Projected 2022-23 Loss Rate <u>(5)</u>
2022-23	\$1.87	1.050	\$4,042,079	\$7,940,353	\$1.89

Notes:

- (1) Page 55, Item (11).
- (2) 5.0% increase estimated by BAC.
- (3) Page 64, Column (2).
- (4) (1) x (2) x (3), rounded.
- (5) (4) / (3), rounded.



West San Gabriel Workers' Compensation  
Joint Powers Authority

Future Loss Exhibit 2

Projected Future Loss Rate

Program Year	Estimated Ultimate Losses (1)	Pure Premium Trend (2)	Trended Payroll (\$00's) (3)	Trended Loss Rate (4)
2003-04	\$4,260,000	1.731	\$2,535,446	\$2.91
2004-05	2,300,000	1.820	2,586,155	1.62
2005-06	3,150,000	1.774	3,666,448	1.52
2006-07	4,219,203	1.729	3,739,777	1.95
2007-08	4,510,000	1.686	3,814,573	1.99
2008-09	10,340,000	1.644	3,890,864	4.37
2009-10	3,390,000	1.602	3,813,047	1.42
2010-11	5,290,000	1.562	3,736,786	2.21
2011-12	4,340,000	1.523	3,662,050	1.80
2012-13	5,430,000	1.476	3,588,809	2.23
2013-14	3,820,000	1.430	3,660,586	1.49
2014-15	3,570,000	1.387	3,733,797	1.33
2015-16	4,690,000	1.344	3,808,473	1.65
2016-17	5,200,000	1.279	3,884,643	1.71
2017-18	3,980,000	1.218	3,962,336	1.22
2018-19	6,160,000	1.159	3,982,147	1.79
2019-20	2,910,000	1.104	4,002,058	0.80
2020-21	2,850,000	1.050	3,321,708	0.90

(5) Selected Loss Rate: \$1.87

Program Year	Largest Reported Loss (6)	LDF (7)	Sev trend (8)	Trended Developed (9)
2008-09	\$5,885,496	1.022	1.644	\$9,887,309
2009-10	989,906	1.023	1.602	1,623,020
2010-11	1,042,746	1.029	1.562	1,675,697
2011-12	2,518,270	1.038	1.523	3,980,929
2012-13	3,024,391	1.045	1.476	4,664,625
2013-14	1,231,840	1.084	1.430	1,910,265
2014-15	1,074,098	1.104	1.387	1,644,175
2015-16	1,036,307	1.196	1.344	1,665,842
2016-17	1,879,283	1.262	1.279	3,034,328

(10) Factor for Unlimited Retention: 1.000

(11) Unlimited 2021-22 Rate: \$1.87

Notes:

- |  |                          |
|--|--------------------------|
| (1) Page 39, Column (6).                 | (7) Open claim LDF's.    |
| (2) Page 45, Column (2).                 | (8) Page 48, Column (2). |
| (3) Page 64, Column (3).                 | (9) (6) x (7) x (8).     |
| (4) (1) x (2) / (3).                     | (10) Estimated by BAC.   |
| (5) Based on Column (4).                 | (11) (5) x (10).         |
| (6) Provided by York Insurance Services. |                          |

**West San Gabriel Workers' Compensation  
Joint Powers Authority**

**Actuarial Analysis of the  
Joint Powers Authority**

**Discounting Exhibits**

West San Gabriel Workers' Compensation  
Joint Powers Authority

Discounted (Unlimited) 2022-23 Losses as of 7/1/22  
Assuming a 1.50% Interest rate

Program Year	Projected Payments (1)	Discount Factor (2)	Discounted Payments (3)
2022-23	\$979,682	0.993	\$972,416
2023-24	1,411,000	0.978	1,379,837
2024-25	949,416	0.963	914,727
2025-26	712,685	0.949	676,498
2026-27	564,959	0.935	528,347
2027-28	493,468	0.921	454,669
2028-29	336,265	0.908	305,247
2029-30	304,364	0.894	272,207
2030-31	257,192	0.881	226,619
2031-32	195,045	0.868	169,320
2032-33	176,205	0.855	150,704
2033-34	159,185	0.843	134,136
2034-35	143,809	0.830	119,388
2035-36	129,919	0.818	106,262
2036-37	117,369	0.806	94,580
2037-38	106,033	0.794	84,181
2038-39	95,791	0.782	74,926
2039-40	86,538	0.771	66,689
2040-41	78,179	0.759	59,357
2041-42	70,628	0.748	52,831
2042-43	63,806	0.737	47,022
2043-44	57,642	0.726	41,853
2044-45	52,075	0.715	37,251
2045-46	47,045	0.705	33,156
2046-47	42,501	0.694	29,510
2047-48	38,395	0.684	26,266
2048-49	34,687	0.674	23,378
2049-50	31,336	0.664	20,808
2050-51	28,309	0.654	18,520
2051-52	25,575	0.645	16,484
52-53 & later	151,252	0.602	91,072
<b>Total</b>	<b>\$7,940,353</b>		<b>\$7,228,261</b>

(4) Indicated Discount Factor: 0.910

Notes:

- (1) Based upon the observed payment pattern.
- (2) Based upon a 1.50% interest rate.
- (3) (1) x (2).
- (4) [ Sum of Column (3) ] / [ Sum of Column (1) ].

West San Gabriel Workers' Compensation  
Joint Powers Authority

Discounted \$1M Limit Losses 2022-23 Losses as of 7/1/22  
Assuming a 1.50% Interest rate

Program Year	Projected Payments (1)	Discount Factor (2)	Discounted Payments (3)
2022-23	\$949,226	0.993	\$942,186
2023-24	1,368,924	0.978	1,338,691
2024-25	924,075	0.963	890,312
2025-26	692,199	0.949	657,052
2026-27	548,565	0.935	513,016
2027-28	491,507	0.921	452,863
2028-29	337,667	0.908	306,520
2029-30	304,495	0.894	272,323
2030-31	256,829	0.881	226,299
2031-32	195,610	0.868	169,811
2032-33	175,730	0.855	150,297
2033-34	157,918	0.843	133,068
2034-35	141,559	0.830	117,520
2035-36	126,817	0.818	103,726
2036-37	113,551	0.806	91,503
2037-38	101,627	0.794	80,684
2038-39	90,919	0.782	71,116
2039-40	81,311	0.771	62,661
2040-41	72,696	0.759	55,194
2041-42	64,976	0.748	48,604
2042-43	58,061	0.737	42,789
2043-44	51,870	0.726	37,662
2044-45	46,329	0.715	33,141
2045-46	41,371	0.705	29,157
2046-47	36,935	0.694	25,646
2047-48	29,019	0.684	19,852
2048-49	26,460	0.674	17,834
2049-50	24,141	0.664	16,030
2050-51	22,038	0.654	14,418
2051-52	20,130	0.645	12,975
52-53 & later	126,656	0.601	76,137
Total	\$7,679,213		\$7,009,087

(4) Indicated Discount Factor: 0.913

Notes:

- (1) Based upon the observed payment pattern.
- (2) Based upon a 1.50% interest rate.
- (3) (1) x (2).
- (4) [ Sum of Column (3) ] / [ Sum of Column (1) ].

West San Gabriel Workers' Compensation  
Joint Powers Authority

Discounted \$500K Limit Losses 2022-23 Losses as of 7/1/22  
Assuming a 1.50% Interest rate

Program Year	Projected Payments (1)	Discount Factor (2)	Discounted Payments (3)
2022-23	\$916,494	0.993	\$909,696
2023-24	1,297,855	0.978	1,269,192
2024-25	883,910	0.963	851,615
2025-26	664,158	0.949	630,434
2026-27	526,463	0.935	492,346
2027-28	471,344	0.921	434,285
2028-29	324,442	0.908	294,515
2029-30	299,005	0.894	267,413
2030-31	251,850	0.881	221,912
2031-32	242,305	0.868	210,346
2032-33	268,852	0.855	229,943
2033-34	145,899	0.843	122,940
2034-35	128,358	0.830	106,561
2035-36	112,790	0.818	92,253
2036-37	99,012	0.806	79,786
2037-38	86,844	0.794	68,947
2038-39	76,117	0.782	59,538
2039-40	66,676	0.771	51,383
2040-41	58,376	0.759	44,321
2041-42	51,086	0.748	38,213
2042-43	44,688	0.737	32,933
2043-44	39,076	0.726	28,372
2044-45	34,155	0.715	24,433
2045-46	29,843	0.705	21,032
2046-47	26,065	0.694	18,098
2047-48	15,767	0.684	10,786
2048-49	14,648	0.674	9,873
2049-50	13,630	0.664	9,051
2050-51	12,704	0.654	8,311
2051-52	11,859	0.645	7,643
52-53 & later	84,534	0.599	50,651
<b>Total</b>	<b>\$7,298,805</b>		<b>\$6,696,822</b>

(4) Indicated Discount Factor: 0.918

Notes:

- (1) Based upon the observed payment pattern.
- (2) Based upon a 1.50% interest rate.
- (3) (1) x (2).
- (4) [ Sum of Column (3) ] / [ Sum of Column (1) ].

West San Gabriel Workers' Compensation  
 Joint Powers Authority

Discounted \$350K Limit Losses 2022-23 Losses as of 7/1/22  
 Assuming a 1.50% Interest rate

Program Year	Projected Payments (1)	Discount Factor (2)	Discounted Payments (3)
2022-23	\$883,750	0.993	\$877,196
2023-24	1,240,536	0.978	1,213,138
2024-25	849,745	0.963	818,697
2025-26	753,442	0.949	715,186
2026-27	587,234	0.935	549,179
2027-28	508,381	0.921	468,409
2028-29	261,245	0.908	237,147
2029-30	232,546	0.894	207,976
2030-31	228,541	0.881	201,374
2031-32	174,044	0.868	151,089
2032-33	230,894	0.855	197,478
2033-34	130,086	0.843	109,616
2034-35	113,359	0.830	94,109
2035-36	98,675	0.818	80,708
2036-37	85,818	0.806	69,155
2037-38	74,584	0.794	59,214
2038-39	64,783	0.782	50,672
2039-40	56,243	0.771	43,342
2040-41	48,809	0.759	37,057
2041-42	42,342	0.748	31,673
2042-43	36,720	0.737	27,061
2043-44	31,834	0.726	23,114
2044-45	27,590	0.715	19,736
2045-46	23,903	0.705	16,846
2046-47	20,700	0.694	14,373
2047-48	11,307	0.684	7,735
2048-49	10,585	0.674	7,134
2049-50	9,929	0.664	6,593
2050-51	9,332	0.654	6,105
2051-52	8,789	0.645	5,665
52-53 & later	65,958	0.598	39,469
Total	\$6,921,702		\$6,386,246

(4) Indicated Discount Factor: 0.923

Notes:

- (1) Based upon the observed payment pattern.
- (2) Based upon a 1.50% interest rate.
- (3) (1) x (2).
- (4) [ Sum of Column (3) ] / [ Sum of Column (1) ].

West San Gabriel Workers' Compensation  
 Joint Powers Authority

Discounted \$250K Limit Losses 2022-23 Losses as of 7/1/22  
 Assuming a 1.50% Interest rate

Program Year	Projected Payments (1)	Discount Factor (2)	Discounted Payments (3)
2022-23	\$846,706	0.993	\$840,427
2023-24	1,186,730	0.978	1,160,521
2024-25	806,743	0.963	777,266
2025-26	747,693	0.949	709,728
2026-27	540,697	0.935	505,657
2027-28	462,203	0.921	425,862
2028-29	267,557	0.908	242,877
2029-30	234,307	0.894	209,551
2030-31	177,043	0.881	155,997
2031-32	132,379	0.868	114,919
2032-33	263,977	0.855	225,773
2033-34	103,873	0.843	87,527
2034-35	89,765	0.830	74,521
2035-36	77,548	0.818	63,428
2036-37	66,981	0.806	53,975
2037-38	57,847	0.794	45,926
2038-39	49,956	0.782	39,075
2039-40	43,140	0.771	33,245
2040-41	37,254	0.759	28,285
2041-42	32,170	0.748	24,064
2042-43	27,779	0.737	20,472
2043-44	23,986	0.726	17,415
2044-45	20,708	0.715	14,813
2045-46	17,875	0.705	12,598
2046-47	15,427	0.694	10,712
2047-48	8,159	0.684	5,581
2048-49	7,653	0.674	5,158
2049-50	7,194	0.664	4,777
2050-51	6,777	0.654	4,434
2051-52	6,398	0.645	4,124
52-53 & later	48,729	0.598	29,149
<b>Total</b>	<b>\$6,415,254</b>		<b>\$5,947,857</b>

(4) Indicated Discount Factor: 0.927

Notes:

- (1) Based upon the observed payment pattern.
- (2) Based upon a 1.50% interest rate.
- (3) (1) x (2).
- (4) [ Sum of Column (3) ] / [ Sum of Column (1) ].

West San Gabriel Workers' Compensation  
Joint Powers Authority

Discounted Unpaid Losses as of 6/30/22  
Assuming a 1.00% Interest Rate

Old Self-Insurance Program Losses Limited to SIR

Program Year	Projected Unpaid Losses (1)	Discount Factor (2)	Discounted Unpaid Losses (3)
1980-81	\$3,005	1.000	\$3,005
1981-82	3,933	1.000	3,933
1982-83	800	0.995	796
1983-84	2,664	0.992	2,642
1984-85	4,352	0.988	4,301
1985-86	13,141	0.987	12,968
1986-87	14,992	0.986	14,776
1987-88	27,559	0.983	27,082
1988-89	52,397	0.978	51,249
1989-90	67,101	0.972	65,218
1990-91	37,531	0.966	36,238
1991-92	75,318	0.961	72,368
1992-93	90,028	0.957	86,123
1993-94	18,741	0.951	17,813
1994-95	13,218	0.942	12,457
Total	\$424,780		\$410,969

(4) Indicated Discount Factor: 0.967

Notes:

- (1) Page 20, Column (6).
- (2) (3) / (1).
- (3) Based upon a 1.00% interest rate.
- (4) [ Sum of Column (3) ] / [ Sum of Column (1) ].



West San Gabriel Workers' Compensation  
Joint Powers Authority

Discounted Unpaid Losses as of 6/30/22  
Assuming a 1.00% Interest Rate

Unlimited Self-Insured Losses

Program Year	Projected Unpaid Losses (1)	Discount Factor (2)	Discounted Unpaid Losses (3)
1980-81	\$2,724	1.000	\$2,724
1981-82	3,763	1.000	3,763
1982-83	767	1.000	767
1983-84	2,630	0.998	2,625
1984-85	4,058	0.993	4,027
1985-86	34,779	0.989	34,391
1986-87	14,783	0.986	14,572
1987-88	27,103	0.983	26,631
1988-89	51,951	0.979	50,847
1989-90	66,109	0.973	64,355
1990-91	36,700	0.968	35,530
1991-92	73,523	0.964	70,904
1992-93	87,721	0.961	84,313
1993-94	18,368	0.956	17,565
1994-95	12,464	0.950	11,839
Total	\$437,442		\$424,853

(4) Indicated Discount Factor: 0.971

Notes:

- (1) Page 23, Column (6).
- (2) Estimated by BAC.
- (3) (1) x (2).
- (4) [ Sum of Column (3) ] / [ Sum of Column (1) ].

West San Gabriel Workers' Compensation  
Joint Powers Authority

Program Information

Program Year	Self-Insured Retention (SIR) (1)	Payroll (\$00's) (2)	Payroll in Constant 2021-22 Dollars (\$00's) (3)
2003-04	Fully Insured	N/A	\$2,535,446
2004-05	Fully Insured	N/A	2,586,155
2005-06	Fully Insured	N/A	3,666,448
2006-07	Fully Insured	N/A	3,739,777
2007-08	Fully Insured	N/A	3,814,573
2008-09	Fully Insured	N/A	3,890,864
2009-10	Fully Insured	N/A	3,813,047
2010-11	Fully Insured	N/A	3,736,786
2011-12	Fully Insured	N/A	3,662,050
2012-13	Fully Insured	N/A	3,588,809
2013-14	Fully Insured	N/A	3,660,586
2014-15	Fully Insured	N/A	3,733,797
2015-16	Fully Insured	N/A	3,808,473
2016-17	Fully Insured	N/A	3,884,643
2017-18	Fully Insured	3,767,801	3,962,336
2018-19	Fully Insured	3,877,244	3,982,147
2019-20	Fully Insured	3,942,049	4,002,058
2020-21	Fully Insured	3,435,331	3,321,708
2021-22	Fully Insured	4,002,058	4,002,058
2022-23	?	4,202,161	4,042,079

## Notes:

- (1) Provided by Alliant Insurance Services.
- (2) Provided by Alliant Insurance Services.  
2021-22 & 2022-23 projected by BAC.
- (3) Estimated by BAC.

West San Gabriel Workers' Compensation  
Joint Powers Authority

Old Program Information

Program Year	Self-Insured Retention (SIR) (1)	Payroll (\$00's) (2)
1980-81	\$100,000	\$900,000
1981-82	150,000	900,000
1982-83	150,000	900,000
1983-84	100,000	989,080
1984-85	100,000	1,148,760
1985-86	125,000	1,330,870
1986-87	150,000	1,408,850
1987-88	150,000	1,505,980
1988-89	150,000	1,616,290
1989-90	150,000	1,774,780
1990-91	150,000	1,914,270
1991-92	150,000	2,164,460
1992-93	150,000	1,957,650
1993-94	150,000	712,980
1994-95	150,000	951,464

Notes:

- (1) Provided by Keenan & Associates.  
1982-83 SIR changed from  
\$150k to \$100k on 2/1/83.
- (2) Provided by Keenan & Associates.

**West San Gabriel Workers' Compensation  
Joint Powers Authority**

**Actuarial Analysis of the  
Joint Powers Authority**

**Claims Data Exhibits**

West San Gabriel Workers' Compensation  
Joint Powers Authority

Cumulative Reported Losses (\$000's) - Unlimited

Program Year	Months of Development											
	<u>6</u>	<u>18</u>	<u>30</u>	<u>42</u>	<u>54</u>	<u>66</u>	<u>78</u>	<u>90</u>	<u>102</u>	<u>114</u>	<u>126</u>	<u>138</u>
2004	442	1,273	1,724	1,871	1,999	2,117	2,585	2,814	3,220	3,690	3,528	3,715
2005	138	605	920	1,119	1,290	1,712	1,656	1,802	1,945	2,188	2,052	2,086
2006	238	795	976	1,105	1,494	1,467	1,760	2,054	2,061	1,985	1,945	2,153
2007	627	1,340	2,046	2,276	2,781	2,707	2,716	3,150	3,242	3,172	3,163	3,079
2008	261	1,046	1,844	2,511	2,989	3,455	3,860	3,877	3,933	3,816	3,778	3,710
2009	283	1,421	2,300	2,994	3,901	3,860	4,569	4,795	4,716	7,150	7,612	7,467
2010	417	1,572	1,790	1,887	1,964	2,217	2,288	2,361	2,318	2,285	2,287	2,297
2011	695	1,764	3,012	3,748	4,028	4,440	4,688	4,461	4,435	4,240	4,258	4,129
2012	520	1,251	1,352	1,514	1,763	1,865	1,665	1,753	1,781	1,671	1,691	
2013	444	1,424	2,136	2,261	2,366	2,144	2,132	2,132	2,170	2,183		
2014	550	1,449	1,992	2,190	2,352	2,191	2,248	2,247	2,219			
2015	392	1,344	1,621	1,762	1,898	2,010	2,043	2,078				
2016	466	2,009	2,591	2,842	2,745	2,837	2,863					
2017	444	1,487	2,020	2,257	2,183	2,149						
2018	450	1,990	2,907	3,004	2,889							
2019	489	3,094	3,985	4,200								
2020	564	1,261	1,606									
2021	206	1,211										
2022	864											
	<u>6 - 18</u>	<u>18 - 30</u>	<u>30 - 42</u>	<u>42 - 54</u>	<u>54 - 66</u>	<u>66 - 78</u>	<u>78 - 90</u>	<u>90 - 102</u>	<u>102 - 114</u>	<u>114 - 126</u>	<u>126 - 138</u>	<u>138 - Ult.</u>
ALL YR VOL	3.453	1.386	1.130	1.099	1.042	1.062	1.041	1.019	1.086	1.004	1.000	
4 YR VOL	4.423	1.343	1.070	0.985	1.001	1.011	1.015	1.001	0.970	1.033	0.981	
REFERENCE	2.839	1.259	1.099	1.052	1.037	1.024	1.011	1.012	1.009	1.007	1.009	1.029
SELECT	3.647	1.392	1.131	1.107	1.046	1.055	1.083	1.018	1.037	1.007	1.009	1.029
CUMULATIVE	8.397	2.302	1.654	1.462	1.320	1.262	1.196	1.104	1.084	1.045	1.038	1.029

West San Gabriel Workers' Compensation  
Joint Powers Authority

Cumulative Paid Losses (\$000's) - Unlimited

Program Year	<u>Months of Development</u>											
	<u>6</u>	<u>18</u>	<u>30</u>	<u>42</u>	<u>54</u>	<u>66</u>	<u>78</u>	<u>90</u>	<u>102</u>	<u>114</u>	<u>126</u>	<u>138</u>
2004	128	719	1,149	1,443	1,671	1,818	2,024	2,319	2,607	2,964	3,028	3,245
2005	36	315	545	815	989	1,388	1,496	1,575	1,639	1,886	1,912	1,920
2006	56	396	674	808	1,071	1,211	1,266	1,366	1,440	1,515	1,567	1,844
2007	72	837	1,344	1,671	2,002	2,177	2,161	2,681	2,747	2,797	2,900	2,987
2008	64	481	1,018	1,502	1,807	2,552	2,906	3,041	3,163	3,327	3,439	3,510
2009	38	617	1,170	1,830	2,410	2,926	3,322	3,550	4,295	4,547	4,955	5,198
2010	50	523	1,067	1,358	1,499	1,674	1,757	2,000	2,025	2,037	2,084	2,101
2011	106	909	1,689	2,252	2,664	3,140	3,502	3,789	3,868	3,979	3,995	4,005
2012	82	532	884	1,045	1,155	1,252	1,380	1,464	1,498	1,602	1,599	
2013	113	770	1,231	1,581	1,764	1,790	2,027	2,056	2,080	2,084		
2014	152	849	1,190	1,408	1,799	1,947	2,021	2,050	2,027			
2015	151	704	1,022	1,328	1,471	1,670	1,837	1,844				
2016	144	979	1,450	1,854	2,125	2,313	2,411					
2017	146	731	1,308	1,625	1,823	1,897						
2018	68	979	1,847	2,327	2,437							
2019	169	1,430	2,379	2,866								
2020	126	694	989									
2021	80	577										
2022	231											
	<u>6 - 18</u>	<u>18 - 30</u>	<u>30 - 42</u>	<u>42 - 54</u>	<u>54 - 66</u>	<u>66 - 78</u>	<u>78 - 90</u>	<u>90 - 102</u>	<u>102 - 114</u>	<u>114 - 126</u>	<u>126 - 138</u>	<u>138 - Ult.</u>
ALL YR VOL	7.330	1.681	1.288	1.168	1.145	1.087	1.079	1.058	1.054	1.034	1.039	
4 YR VOL	8.310	1.701	1.242	1.101	1.084	1.075	1.020	1.012	1.024	1.038	1.024	
REFERENCE	3.616	1.678	1.286	1.172	1.122	1.085	1.061	1.050	1.038	1.037	1.029	1.218
SELECT	7.574	1.764	1.337	1.164	1.122	1.076	1.061	1.029	1.008	1.022	1.029	1.218
CUMULATIVE	35.381	4.671	2.649	1.981	1.702	1.517	1.410	1.329	1.291	1.281	1.254	1.218

West San Gabriel Workers' Compensation  
Joint Powers Authority

Cumulative # of Indemnity Claims Reported

Program	<u>Months of Development</u>											
	<u>6</u>	<u>18</u>	<u>30</u>	<u>42</u>	<u>54</u>	<u>66</u>	<u>78</u>	<u>90</u>	<u>102</u>	<u>114</u>	<u>126</u>	<u>138</u>
2004	32	86	91	91	93	93	95	96	97	97	97	97
2005	14	57	63	65	68	68	68	68	68	68	68	68
2006	22	48	50	50	51	53	55	56	56	56	55	55
2007	28	76	76	75	77	77	77	77	78	78	78	78
2008	22	60	64	67	68	67	68	68	70	70	69	69
2009	18	55	57	57	58	59	58	59	59	59	59	59
2010	16	49	51	52	51	52	52	53	53	53	53	53
2011	25	77	79	81	81	81	80	80	80	80	80	81
2012	21	62	64	64	65	65	65	65	65	65	65	
2013	23	72	73	73	73	73	73	73	72	72		
2014	33	82	84	84	86	87	89	89	89			
2015	23	57	61	63	62	63	63	63				
2016	30	81	86	86	87	87	87					
2017	25	73	75	81	81	82						
2018	31	89	111	111	111							
2019	39	124	126	127								
2020	37	78	80									
2021	18	61										
2022	55											
	<u>6 - 18</u>	<u>18 - 30</u>	<u>30 - 42</u>	<u>42 - 54</u>	<u>54 - 66</u>	<u>66 - 78</u>	<u>78 - 90</u>	<u>90 - 102</u>	<u>102 - 114</u>	<u>114 - 126</u>	<u>126 - 138</u>	<u>138 - Ult.</u>
ALL YR VOL	2.816	1.053	1.013	1.011	1.006	1.005	1.005	1.004	1.000	0.997	1.002	
4 YR VOL	2.816	1.077	1.018	1.000	1.009	1.006	1.000	0.997	1.000	1.000	1.004	
SELECT	2.816	1.053	1.013	1.011	1.006	1.005	1.005	1.000	1.000	1.000	1.000	1.000
CUMULATIVE	3.087	1.096	1.041	1.027	1.016	1.010	1.005	1.000	1.000	1.000	1.000	1.000