

Monterey Bay Area Self Insurance Authority

**An Actuarial Review of the
Liability Self-Insurance Program**

**BAY ACTUARIAL CONSULTANTS
Moraga, California
March 4, 2025**

Bay Actuarial Consultants

March 4, 2025

Mr. Conor Boughey
Vice President
Alliant Insurance Services
560 Mission Street, 6th Floor
San Francisco, CA 94105

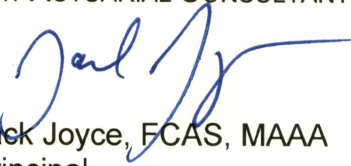
Dear Mr. Boughey:

We are pleased to present Bay Actuarial's Actuarial Review of the Monterey Bay Area Self Insurance Authority's General and Auto Liability self-insurance program. 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

Monterey Bay Area Self Insurance Authority

An Actuarial Review of the Liability Self-Insurance Program

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Monterey Bay Area Self Insurance Authority

An Actuarial Review of the Liability Self-Insurance Program

Introduction

Monterey Bay Area Self Insurance Authority

An Actuarial Review of the Liability Self-Insurance Program

Introduction

Background & Purpose

The Monterey Bay Area Self Insurance Authority (“MBASIA”) self-insures its general and auto liability claims. The Authority has asked Bay Actuarial Consultants to provide an actuarial report on its liability self-insurance program. This report covers the following topics:

- 1) **Projected 2025-26 Losses & Rate of Loss.** It includes a projection of the losses expected to be incurred during 2025-26, expressed as a total dollar amount and also as a rate of loss per \$100 of payroll.
- 2) **Unpaid Losses.** It shows the estimated the liability for unpaid losses as of 12/31/24 and the projected 6/30/25 liability.
- 3) **Discounting.** The projected 2025-26 losses and the estimated liability are discounted to present value at **3.0%** interest. Discounting takes the time value of money into account as an offset to future expenses.
- 4) **Quantification of Uncertainty.** It includes an analysis of these items in terms of “probability levels.”
- 5) **Short-Term versus Long-Term.** The liabilities are broken out into short-term and long-term components.

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 the Authority with coverage against property and liability claims to must perform their own actuarial analysis and may not rely upon our work.

Risk Management Services and Alliant Insurance Services provided the loss, payroll, and excess insurance information. 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 associated with a specific claim. These include loss payments, attorney's fees, and other such expenses.

The actuarial projections in this report are uncertain estimates. Uncertainty is inherent and unavoidable because many of the events that will determine future claims costs have not yet taken place. These events include, but are not limited to, future legislation that may affect the tort liability system, changes in the rate of inflation, and the outcomes of current and future litigation and settlement negotiations. 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

The rest of this report comprises seven sections: the *Management Summary*, the *Technical Approach* section, the *Summary Exhibits*, the *Fiscal Year End Exhibits*, the *Loss Projection Exhibits*, the *Future Loss Exhibits*, and the *Discounting Exhibits*.

The *Management Summary* gives an overview of the results. The *Technical Approach* section explains and discusses the assumptions and details. The *Exhibits* document the calculations.

Monterey Bay Area Self Insurance Authority

An Actuarial Review of the Liability Self-Insurance Program

Management Summary

Monterey Bay Area Self Insurance Authority

An Actuarial Review of the Liability Self-Insurance Program

Management Summary

Projected 25-26 Losses and Rates of Loss

Tables I and II shows the projected 25-26 losses and loss rates at various probability levels, discounted and undiscounted. The amounts in Table I are gross of the \$25,000 per loss deductible, while in Table II the deductibles have been taken out. The discounting is at **3.0%** interest. The amounts in Tables I and II do not include claims handling fees (“ULAE”), administrative costs, or the cost of excess insurance coverage. CARMA is assumed to cover the portion of any general or auto liability loss above \$1,000,000. The Employment Risk Management Authority (“ERMA”) is expected to cover the portion of any EPL loss above \$500,000 that is reported during 25-26.

Tables I and II show “actuarial central estimates,” plus estimates at higher probability levels. A designated probability level estimate has the associated (estimated) probability of being adequate. For example, there is an estimated 80% probability that the actual 25-26 losses, including the full amounts of the deductibles (Table I) will be less than **\$4,541,259**. There is a table on page 13 that shows the adjustments to make to discount at interest rates other than **3.0%**. The 24-25 loss numbers in the next to last row are last year’s Table 1 rates times the latest 24-25 payroll estimate of **\$88.94 million**.

Table I: Projected 25-26 Losses and Rates of Loss per \$100 Payroll \$1M SIR (\$500K EPL SIR), Gross of \$25K Deductible, 3.0% Interest Rate				
Probability Level	Undiscounted Losses	Discounted Losses	Undiscounted Loss Rate	Discounted Loss Rate
Central Estimate	\$3,339,161	\$3,025,280	\$3.61	\$3.27
70%	3,940,210	3,569,830	4.26	3.86
75%	4,207,343	3,811,853	4.55	4.12
80%	\$4,541,259	4,114,381	4.91	4.45
90%	5,409,441	4,900,953	5.85	5.30
2024-25 C.E.	\$3,228,520	\$2,941,181	\$3.63	\$3.31
% Change from 24-25	+3.4%	+2.9%	-0.6%	-1.2%
2024-25 80%	\$4,261,646	\$3,882,359	\$4.79	\$4.37
% Change from 24-25	+6.6%	+6.0%	+2.5%	+1.8%

Table II: Projected 25-26 Losses and Loss Rates				
\$1M SIR (\$500K EPL SIR), NET of \$25K Deductible, 3.0% Interest Rate				
Probability Level	Undiscounted Losses	Discounted Losses	Undiscounted Loss Rate	Discounted Loss Rate
Central Estimate	\$2,806,257	\$2,528,437	\$3.03	\$2.73
70%	3,367,508	3,034,125	3.64	3.28
75%	3,676,196	3,312,253	3.97	3.58
80%	\$4,012,947	3,615,665	4.33	3.90
90%	4,967,074	4,475,334	5.36	4.83
2024-25 C.E.	\$2,693,698	\$2,440,491	\$3.03	\$2.75
% Change from 24-25	+4.2%	+3.6%	+0.0%	-0.7%
2024-25 80%	\$3,663,430	\$3,319,067	\$4.12	\$3.74
% Change from 24-25	+9.5%	+8.9%	+5.1%	+4.3%

Projected 25-26 Losses and Rates of Loss at \$1.5M and \$2M

Tables III through VI show the projected 25-26 losses and loss rates at limits of \$1.5M and \$2M both gross and net of the \$25,000 deductible.

Table III: Projected 25-26 Losses and Loss Rates				
\$1.5M SIR (\$500K EPL SIR), Gross of \$25K Deductible, 3.0% Interest Rate				
Probability Level	Undiscounted Losses	Discounted Losses	Undiscounted Loss Rate	Discounted Loss Rate
Central Estimate	\$3,598,154	\$3,255,913	\$3.89	\$3.52
70%	4,245,822	3,841,978	4.59	4.15
75%	4,533,674	4,102,451	4.90	4.44
80%	\$4,857,508	4,395,483	5.25	4.75
90%	5,793,028	5,242,021	6.26	5.67

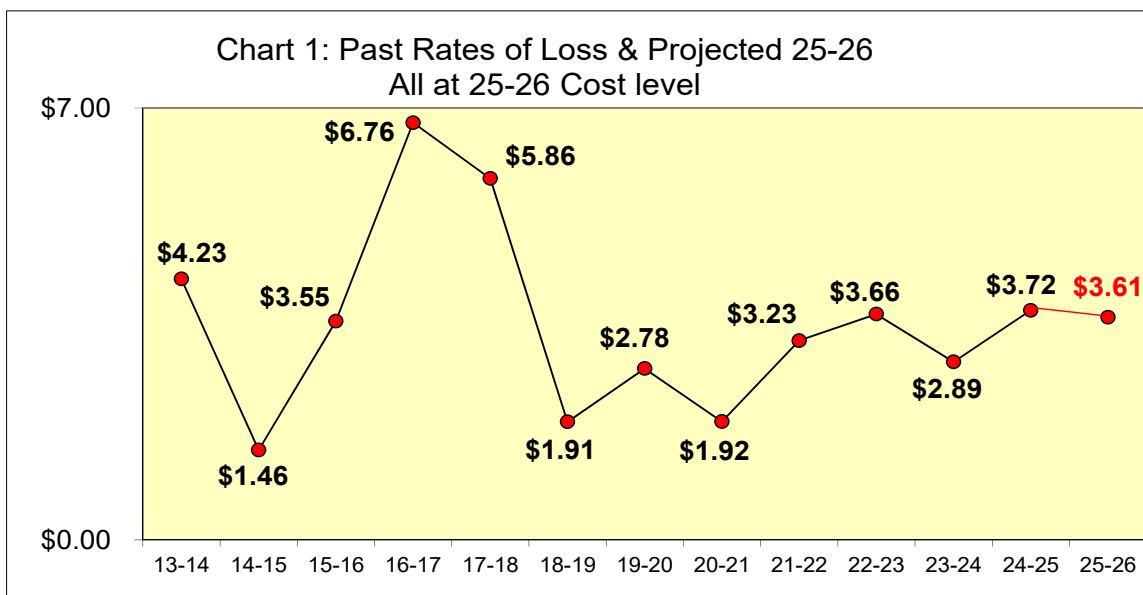
Table IV: Projected 25-26 Losses and Loss Rates				
\$1.5M SIR (\$500K EPL SIR), NET of \$25K Deductible, 3.0% Interest Rate				
Probability Level	Undiscounted Losses	Discounted Losses	Undiscounted Loss Rate	Discounted Loss Rate
Central Estimate	\$3,061,669	\$2,774,926	\$3.31	\$3.00
70%	3,674,002	3,329,911	3.97	3.60
75%	3,980,169	3,607,404	4.30	3.90
80%	\$4,347,569	3,940,395	4.70	4.26
90%	5,388,537	4,883,870	5.83	5.28

Table V: Projected 25-26 Losses and Loss Rates \$2.0M SIR (\$500K EPL SIR), Gross of \$25K Deductible, 3.0% Interest Rate				
Probability Level	Undiscounted Losses	Discounted Losses	Undiscounted Loss Rate	Discounted Loss Rate
Central Estimate	\$3,709,151	\$3,357,661	\$4.01	\$3.63
70%	4,376,799	3,962,040	4.73	4.28
75%	4,673,531	4,230,652	5.05	4.57
80%	\$5,007,354	4,532,842	5.41	4.90
90%	5,971,734	5,405,834	6.46	5.84

Table VI: Projected 25-26 Losses and Loss Rates \$2.0M SIR (\$500K EPL SIR), NET of \$25K Deductible, 3.0% Interest Rate				
Probability Level	Undiscounted Losses	Discounted Losses	Undiscounted Loss Rate	Discounted Loss Rate
Central Estimate	\$3,172,666	\$2,876,673	\$3.43	\$3.11
70%	3,838,925	3,480,775	4.15	3.76
75%	4,156,192	3,768,442	4.49	4.07
80%	\$4,568,638	4,142,410	4.94	4.48
90%	5,710,798	5,178,012	6.17	5.60

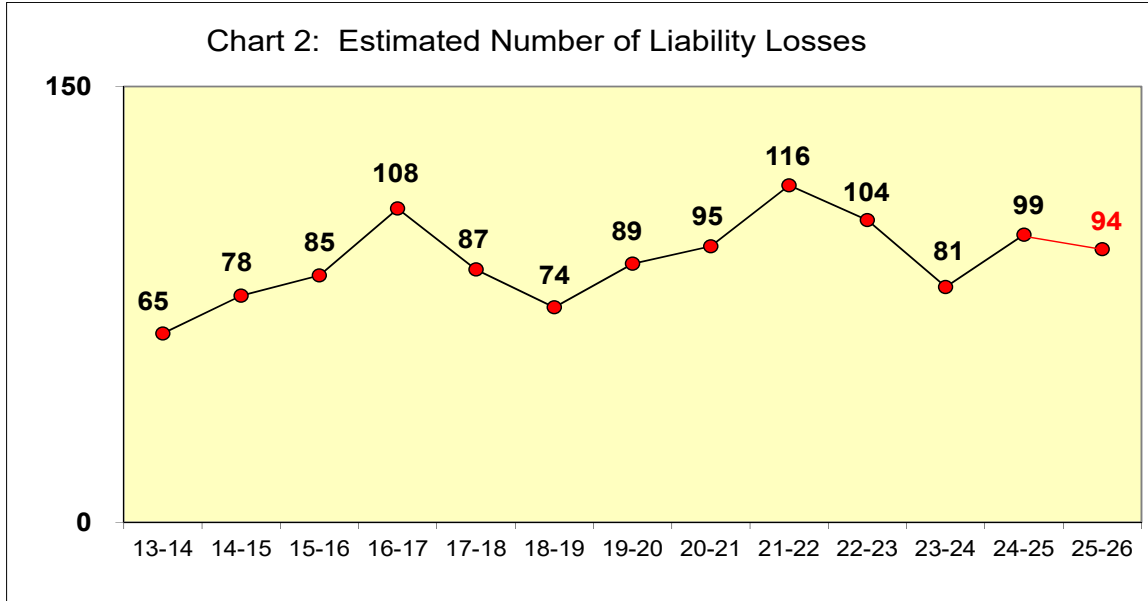
The Authority's Past Rates of Loss

Chart 1 shows the Authority's estimated past rates of loss at the \$1M/\$500K (\$500K EPL) SIR in 25-26 dollars. The rates for the older years equal the estimated total losses for the year divided by the year's payroll, all stated in 25-26 dollars. The **\$3.61** rate for 25-26 is from Table I. Five of the twelve older rates in chart are above the projected 25-26 rate of **\$3.61** and seven are below. So the 25-26 central estimate is slightly above center, right where it should be.



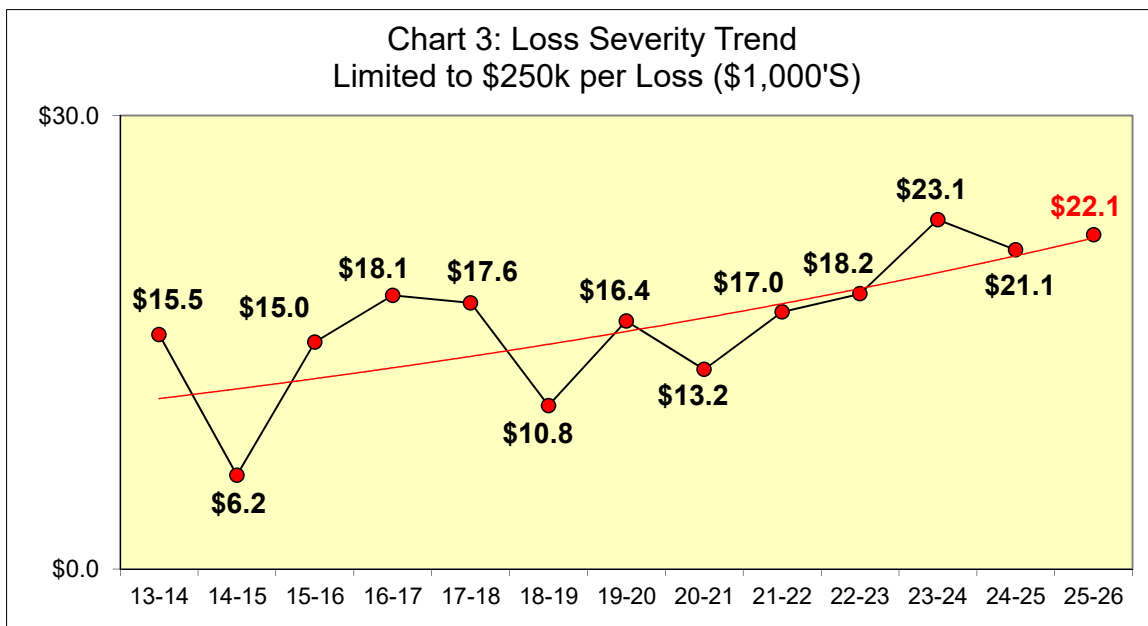
Cost Drivers: Frequency & Severity

MBASIA's total costs are driven by the number of claims (frequency) and the average amount of a claim (severity). Chart 2 shows the estimated number of liability claims for past program years plus the projection for **25-26**.



The 24-25 estimate of **99** is an actuarial projection based on the **29** claims actually reported as of 12/31/24, so that 24-25 estimate is currently very uncertain. The projection of **94** claims for 25-26 is even more uncertain since the year won't begin until 7/1/25. The chart does not show any particular trend.

Chart 3 shows average claim amounts by program year with all losses limited to \$250,000 per loss occurrence. Using the lower \$250,000 limit makes it easier to see the trend, which is **5.7%** per year in the chart.



The trend at the \$1 million limit is somewhat higher but would be more scattered and difficult to pick out in this type of chart.

Liability at 12/31/24

We estimate that the Authority's liability for unpaid losses was **\$6,705,536** on 12/31/24. This is an undiscounted estimate that does not include the portion of the losses that the members will pay under their \$25,000 deductibles. Table VII shows this central estimate plus the corresponding discounted amount. The Table also includes higher probability estimates for the liability.

Table VII: Estimated Liability for Unpaid Losses as of 12/31/24 – Net of Deductibles		
Probability Level	Undiscounted Losses	Discounted at 3.0%
Central Estimate	\$6,705,536	\$6,343,437
60%	6,839,647	6,470,306
70%	7,376,090	6,977,781
75%	7,644,311	7,231,518
80%	7,979,588	7,548,690
90%	9,052,474	8,563,640
85%	9,991,249	9,451,722
98%	11,198,245	10,593,540

Reconciling the 12/31/23 & 12/31/24 Liability Estimates

Table VIII reconciles last year's estimate of the 12/31/23 liability, **\$6,523,959**, with the new estimate of the 12/31/24 liability, **\$6,705,536**.

Table VIII: Reconcile 12/31/23 & 12/31/24 Liabilities	
Estimated 12/31/23 Net Liability	\$6,523,959
Payments in Calendar 2024	-815,849
Change in Estimates for 12/31/23 and Prior	-1,175,574
Estimated Losses Calendar 2024	+2,173,000
Estimated 12/31/24 Net Liability	\$6,705,536

Projected 6/30/25 Liability

Table IX shows the projection of the 6/30/25 liability.

Table IX: Projected 6/30/25 Liability Net of Deductibles	
12/31/24 Liability Central Estimate	\$6,705,536
Projected Payments 1/1/25 to 6/30/25	-1,052,799
Projected New Losses 1/1/25 to 6/30/25	+1,270,000
Projected 6/30/25 Central Estimate	\$6,922,737

Table X shows the projected probability levels for the projected 6/30/25 liability. These probability levels are based on the assumption that the claims payments over the next six months and the new losses that will occur will match those projected in Table IX. There is, of course, a great deal of uncertainty about the actual claim activity that will occur over the next six months.

Table X: Projected Estimate of 6/30/25 Liability Net of Deductibles		
Probability Level	Undiscounted Losses	Discounted at 3.0%
Central Estimate	\$6,922,737	\$6,548,909
60%	7,061,192	6,679,887
70%	7,615,011	7,203,800
75%	7,891,920	7,465,756
80%	8,307,284	7,858,691
90%	9,345,695	8,841,027
95%	10,314,878	9,757,875
98%	11,560,971	10,936,678

Short-Term Liability

Short-term liabilities are those expected to be discharged over the next twelve months. The total projected 6/30/25 liability of **\$6,922,737** comprises **\$1,932,257** of short-term and **\$4,990,480** of long-term liabilities.

Capital Requirements

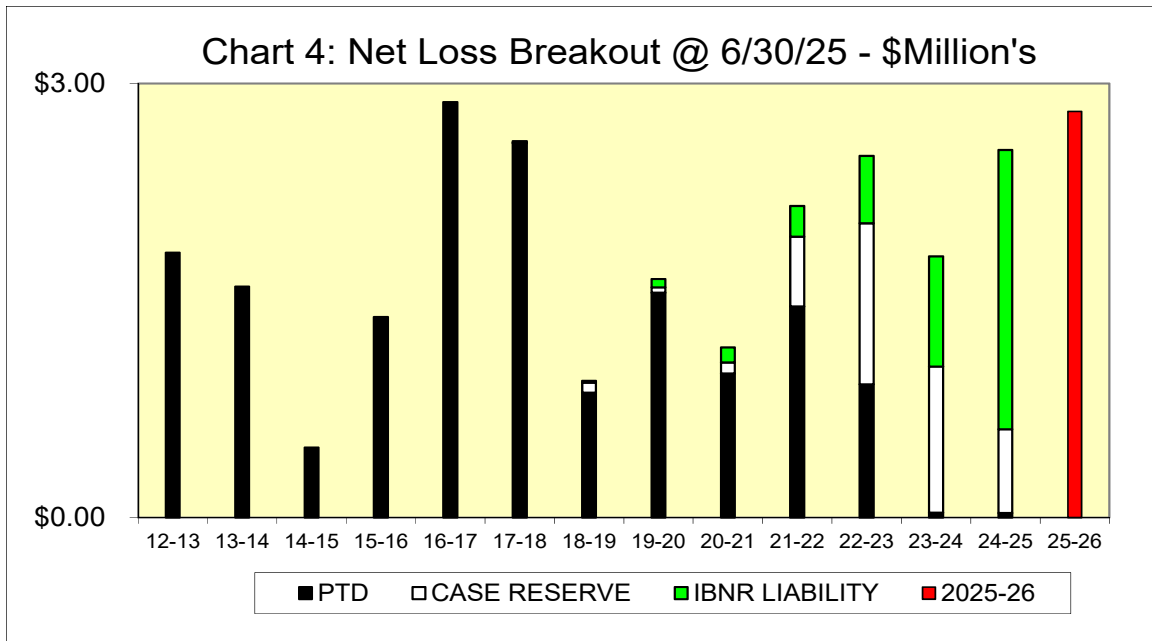
Subtracting the central estimate from a higher probability estimate produces an estimate of the capital required to attain that higher probability level. For example, in Table VII the difference between the 75% level and the undiscounted central estimate is **\$938,775**, so that was the capital required to attain 75% at 12/31/24. A similar calculation based on Table X shows that a total of **\$969,183** will be required to attain 75% at 6/30/25 if the projections of claims activity over the next six months shown in Table IX turn out to be correct.

ULAE Liability

We estimate the liability for unpaid unallocated loss adjustment expenses (“ULAE”) at **\$400,884** on both 12/31/24 and 6/30/25. This is on page 22.

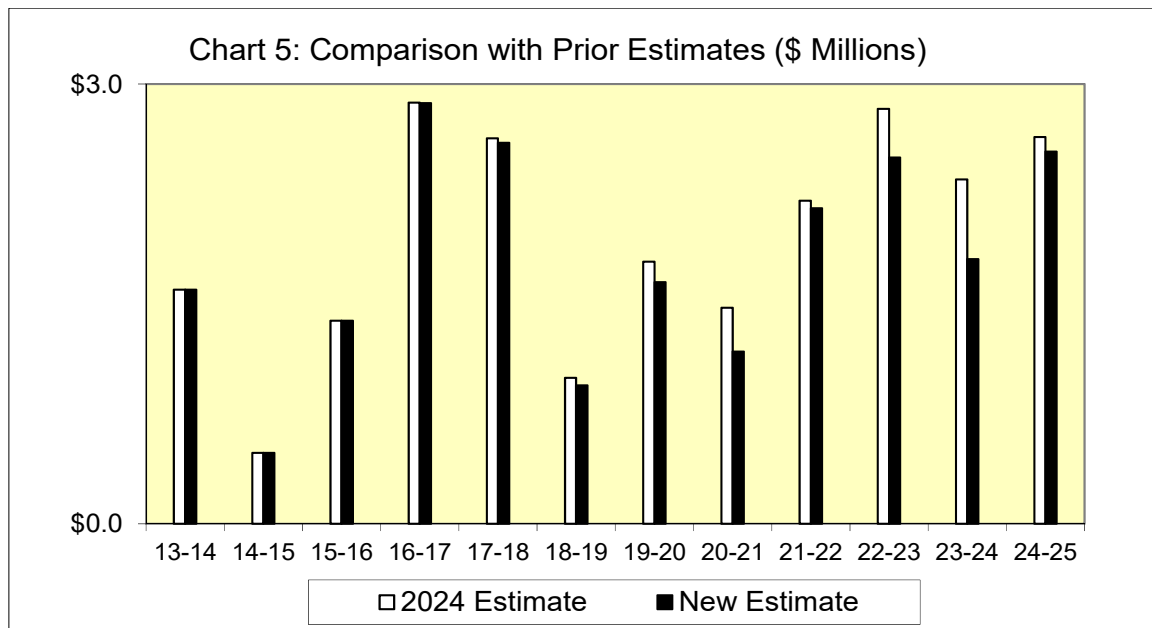
Projected Loss Breakout as of 6/30/25

In Tables IX and X show the Authority's projected 6/30/25 liability of **\$6,922,737**, net of deductibles. This total comprises projected case reserves for known claims of **\$3,371,013** and an IBNR liability of **\$3,551,724**. This is **\$1.05** of IBNR liability for every **\$1.00** of case reserves. Chart 4 breaks out the projected losses into their components: losses paid, case reserves, and IBNR liability. The projected 6/30/25 dollar amounts are shown on page 24.



Comparison with 2024 Estimates

Chart 5 compares last year's estimates of the net of deductible losses with the new estimates. The overall drop in the estimates for all years through 2023-24 was **\$1,447,574**.



Interest Rates

The discounted liabilities and rates in this report were discounted at **3.0%** interest. Here are the adjustments to make for different interest rate assumptions:

Interest Rate	0.0%	3.0%	3.5%	4.00%	4.25%
Net Contribution Rates	+10.4%	+0.0%	-1.7%	-3.2%	-4.0%
6/30/25 Liability	+11.0%	+0.0%	-1.7%	-3.3%	-4.1%

The timing and amounts of the projected future loss payments are one of the products of the actuarial analysis. If that information is combined with information that the US Treasury publishes on interest rates, one can evaluate the reasonableness of the **3.0%** interest rate assumed in this report.

Matching the projected future claims payments with zero coupon US Treasury bonds (“strips”) of the appropriate maturity date as of 1/31/25 produced an overall interest rate of **4.25%** for both the projected 2025-26 rate of loss and the estimated self-insurance liability. Therefore, as of 1/31/25, **3.0%** was very conservative. That **4.25%** yield to maturity could have been “locked in” on that date.

Monterey Bay Area Self Insurance Authority

An Actuarial Review of the Liability Self-Insurance Program

Technical Approach

Monterey Bay Area Self Insurance Authority

An Actuarial Review of the Liability Self-Insurance Program

Technical Approach

This section describes the actuarial calculations.

Exhibits

Summary Exhibits

These exhibits summarize the analysis and conclusions. Summary Exhibits 1 and 2 show the estimated liability as of 12/31/24 and the projected 6/30/25 liability. The 6/30/25 projection is based on the assumption that losses will develop over the next six months as we currently project. Summary Exhibit 3 shows the projected rate of loss for the 25-26 program year, which runs from 7/1/25 to 6/30/26. Summary Exhibit 4 shows the projected unpaid losses as of 6/30/25 by program year on both discounted and non-discounted bases. Summary Exhibit 5 shows the projected ULAE liability.

Fiscal Year End Exhibits

These exhibits show the calculation of the estimated unpaid losses as of 12/31/24 and the projected unpaid losses as of 6/30/25.

Loss Projection Exhibits

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

There are 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.

Loss Projection Exhibit 1 summarizes the results of these methods.

Limited Loss Exhibits - \$250,000 Limit

These exhibits show the estimated ultimate losses limited to \$250,000 per loss. This limited loss analysis is used in calculating the projected 25-26 loss rate.

Future Loss Exhibits

These exhibits show the projection of the expected rate for 25-26.

Discounting Exhibits

These exhibits show the discounting of the remaining unpaid losses and the projected future loss rate. They also include the Program Information Exhibit.

Deductibles Exhibits

These exhibits show the estimation of the losses that fall under the \$25,000 deductible.

Claims Data

We included development triangles for reported losses and losses paid plus a Program Information Exhibit.

Monterey Bay Area Self Insurance Authority

**Actuarial Analysis of the
General and Auto Liability Program**

Summary Exhibits

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Unpaid Losses as of 12/31/24
Losses Limited to SIR, NET of Deductible

	<u>12/31/24</u>
(1) Estimated Unpaid Losses:	\$6,705,536
(2) Discounted Value of Unpaid Losses: (Assuming 3.0% Interest Rate)	\$6,343,437

Probability Levels for 12/31/24 Liabilities			
Probability Level <u>(3)</u>	Probability Factor <u>(4)</u>	Undiscounted <u>(5)</u>	Discounted at 3.00% Interest <u>(6)</u>
Central Estimate	1.00	\$6,705,536	\$6,343,437
60%	1.02	6,839,647	6,470,306
70%	1.10	7,376,090	6,977,781
75%	1.14	7,644,311	7,231,518
80%	1.19	7,979,588	7,548,690
90%	1.35	9,052,474	8,563,640
95%	1.49	9,991,249	9,451,722
98%	1.67	11,198,245	10,593,540

Notes:

- (1) Page 25, Column (6).
- (2) (1), discounted at 3.00% interest.
- (3) Estimated probability that funding will be adequate.
- (4) Estimated by BAC.
- (5) (1) x (4).
- (6) (2) x (4).

Monterey Bay Area Self Insurance Authority
Property & Liability Programs

Projected 6/30/25 Estimate of Liability

	Net of Deductibles
(1) Estimated Unpaid Losses: 12/31/24	\$6,705,536
(2) Projected payments over next six months:	\$1,052,799
(3) Projected new losses over next six months:	\$1,270,000
(4) Projected Unpaid Losses: 6/30/25	\$6,922,737

Probability Level (5)	Projected Estimated Probability Factor (6)	Undiscounted Net of Deductibles (7)	Discounted at 3.00% Interest Net of Deductibles (8)
Central Estimate	1.00	\$6,922,737	\$6,548,909
60%	1.02	7,061,192	6,679,887
70%	1.10	7,615,011	7,203,800
75%	1.14	7,891,920	7,465,756
80%	1.20	8,307,284	7,858,691
90%	1.35	9,345,695	8,841,027
95%	1.49	10,314,878	9,757,875
98%	1.67	11,560,971	10,936,678

Items (7) & (8) are useful to the extent that the projections in items (2) & (3) turn out to be accurate. Actual expenditures and actual new loss occurrences must match items (2) & (3).	
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Notes:

- (1) Page 18, Item (1).
- (2) Projected by BAC.
- (3) Projected by BAC.
- (4) (1) - (2) + (3).
- (5) Projected Probability on 6/30/25.
- (6) Projected by BAC.
- (7) (4) x (6).
- (8) (7), discounted at 3.00% interest.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Projected Loss Funding Rate for 2025-26
Losses Limited to \$1,000,000, NET of \$25K Deductible

(1) Discounted Loss Rate: Loss Rates
\$2.73
(as of 7/1/25, 3.0% interest rate)

Probability Levels		
Probability Level (2)	Probability Factor (3)	Discounted at 3.00% Interest (4)
50%	0.89	2.43
Central Estimate	1.00	\$2.73
60%	1.04	2.84
70%	1.20	3.28
75%	1.31	3.58
80%	1.43	3.90
90%	1.77	4.83
* Multiply by 1.110 to obtain undiscounted values.		

Notes:

- (1) [Page 55, Column (7)] x [Page 61, Column (4)], adjusted for \$25,000 deductible.
- (2) Estimated probability that funding will be adequate.
- (3) Estimated by BAC.
- (4) (1) x (3).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Projected Unpaid Losses as of 6/30/25
Losses Limited to SIR, NET of Deductible

Program Year	Undiscounted Value: Claims Liabilities as of 6/30/25 (1)	Discounted (3.0% Interest) Claims Liabilities as of 6/30/25 (2)	Estimated Ultimate Losses (3)
2013-14	\$0	\$0	\$1,597,495
2014-15	0	0	484,373
2015-16	0	0	1,385,944
2016-17	0	0	2,870,426
2017-18	13,754	13,552	2,600,734
2018-19	81,381	79,814	945,174
2019-20	94,985	91,881	1,649,000
2020-21	180,804	175,023	1,176,000
2021-22	693,687	668,449	2,153,000
2022-23	1,578,215	1,514,982	2,499,000
2023-24	1,771,760	1,677,707	1,806,000
2024-25	2,508,151	2,324,318	2,540,000
Total	\$6,922,737	\$6,545,726	

Notes:

- (1) Page 24, Column (6).
- (2) Page 59, Column (3).
- (3) Page 24, Column (1).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

ULAE Projections and Calculation of Unpaid ULAE

(1) Selected ULAE Ratio: **8.7%**

	Case Reserves with <u>Development</u>	"True" <u>IBNR</u>	<u>Total</u>
(2) ULAE Ratio:	4.3%	8.7%	
(3) Estimated Unpaid Losses as of 12/31/24:	\$5,973,932	\$1,659,395	\$7,633,327
(4) Estimated Unpaid ULAE as of 12/31/24:	\$256,879	\$144,005	\$400,884
(5) Discounted Unpaid ULAE as of 12/31/24: (3.0% interest rate)			\$379,236

We project that the 6/30/25 ULAE liability
will equal the 12/31/24 ULAE liability.

Notes:

- (1) Estimated by BAC.
- (2) "50-50 Rule."
- (3) Page 31, assuming 50% of IBNR is
development on known claims.
- (4) (2) x [(3)].
- (5) (4) x [Page 59, Item].

Monterey Bay Area Self Insurance Authority

**Actuarial Analysis of the
General and Auto Liability Program**

Fiscal Year End Exhibits

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Projected Unpaid Losses as of 6/30/25
Losses Limited to SIR, NET of Deductible

Program Year	Estimated Ultimate Losses (1)	Projected Losses Paid as of 6/30/25 (2)	Projected Case Reserves 6/30/25 (3)	Projected Losses Reported as of 6/30/25 (4)	Projected IBNR as of 6/30/25 (5)	Projected Unpaid Losses as of 6/30/25 (6)
2013-14	\$1,597,495	\$1,597,495	\$0	\$1,597,495	\$0	\$0
2014-15	484,373	484,373	0	484,373	0	0
2015-16	1,385,944	1,385,944	0	1,385,944	0	0
2016-17	2,870,426	2,870,425	0	2,870,425	0	0
2017-18	2,600,734	2,586,980	4,466	2,591,446	9,288	13,754
2018-19	945,174	863,793	68,046	931,839	13,335	81,381
2019-20	1,649,000	1,554,015	37,802	1,591,816	57,184	94,985
2020-21	1,176,000	995,196	76,426	1,071,621	104,379	180,804
2021-22	2,153,000	1,459,313	481,588	1,940,901	212,099	693,687
2022-23	2,499,000	920,785	1,113,591	2,034,376	464,624	1,578,215
2023-24	1,806,000	34,240	1,010,366	1,044,606	761,394	1,771,760
2024-25	2,540,000	31,849	578,729	610,579	1,929,421	2,508,151
Total	\$21,707,146	\$14,784,409	\$3,371,013	\$18,155,422	\$3,551,724	\$6,922,737

Notes:

(1) through (6) Page 26 entries minus Page 29 entries.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Estimated Unpaid Losses as of 12/31/24
Losses Limited to SIR, NET of Deductible

Program Year	Estimated Ultimate Losses (1)	Losses Paid as of 12/31/24 (2)	Case Reserves 12/31/24 (3)	Losses Reported as of 12/31/24 (4)	Estimated IBNR as of 12/31/24 (5)	Estimated Unpaid Losses as of 12/31/24 (6)
2013-14	\$1,597,495	\$1,597,495	\$0	\$1,597,495	\$0	\$0
2014-15	484,373	484,373	0	484,373	0	0
2015-16	1,385,944	1,385,944	0	1,385,944	0	0
2016-17	2,870,426	2,870,425	0	2,870,425	0	0
2017-18	2,600,734	2,573,159	8,969	2,582,128	18,606	27,575
2018-19	945,174	815,742	110,053	925,796	19,378	129,432
2019-20	1,649,000	1,528,689	38,437	1,567,126	81,874	120,311
2020-21	1,176,000	895,077	130,567	1,025,644	150,356	280,923
2021-22	2,153,000	1,245,805	666,334	1,912,138	240,862	907,195
2022-23	2,499,000	300,660	1,685,356	1,986,016	512,984	2,198,340
2023-24	1,806,000	34,240	611,760	646,000	1,160,000	1,771,760
2024-25	1,270,000	0	210,000	210,000	1,060,000	1,270,000
Total	\$20,437,146	\$13,731,610	\$3,461,475	\$17,193,085	\$3,244,061	\$6,705,536

Notes:

(1) through (6) Page 28 entries minus Page 31 entries.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Projected Unpaid Losses as of 6/30/25
Losses Limited to SIR, Gross of Deductible

Program Year	Estimated Ultimate Losses (1)	Projected Losses Paid as of 6/30/25 (2)	Projected Case Reserves 6/30/25 (3)	Projected Losses Reported as of 6/30/25 (4)	Projected IBNR as of 6/30/25 (5)	Projected Unpaid Losses as of 6/30/25 (6)
2013-14	\$1,756,276	\$1,756,276	\$0	\$1,756,276	\$0	\$0
2014-15	628,110	628,110	0	628,110	0	0
2015-16	1,584,642	1,584,642	0	1,584,642	0	0
2016-17	3,136,304	3,136,304	0	3,136,304	0	0
2017-18	2,820,000	2,806,246	4,466	2,810,712	9,288	13,754
2018-19	1,110,000	1,028,619	68,046	1,096,665	13,335	81,381
2019-20	1,880,000	1,784,350	38,169	1,822,519	57,481	95,650
2020-21	1,370,000	1,187,935	77,369	1,265,303	104,697	182,065
2021-22	2,430,000	1,723,644	493,421	2,217,065	212,935	706,356
2022-23	2,900,000	1,253,904	1,178,198	2,432,102	467,898	1,646,096
2023-24	2,410,000	355,363	1,271,930	1,627,293	782,707	2,054,637
2024-25	3,270,000	140,783	1,001,122	1,141,905	2,128,095	3,129,217
Total	\$25,295,332	\$17,386,176	\$4,132,721	\$21,518,898	\$3,776,434	\$7,909,156

Notes:

- (1) Page 33, Column (6).
- (2) Page 27, Column (3).
- (3) (4) - (2).
- (4) Page 27, Column (6).
- (5) (1) - (4).
- (6) (3) + (5).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Projected Paid and Reported Losses between 1/1/25 and 6/30/25
Losses Limited to SIR, Gross of Deductible

Program Year	Losses Paid as of 12/31/24 (1)	Projected Losses Paid 1/1/25 - 6/30/25 (2)	Projected Losses Paid as of 6/30/25 (3)	Losses Reported as of 12/31/24 (4)	Projected Losses Reported 1/1/25 - 6/30/25 (5)	Projected Losses Reported as of 6/30/25 (6)
2013-14	\$1,756,276	\$0	\$1,756,276	\$1,756,276	\$0	\$1,756,276
2014-15	628,110	0	628,110	628,110	0	628,110
2015-16	1,584,642	0	1,584,642	1,584,642	0	1,584,642
2016-17	3,136,304	0	3,136,304	3,136,304	0	3,136,304
2017-18	2,792,425	13,821	2,806,246	2,801,394	9,318	2,810,712
2018-19	980,568	48,051	1,028,619	1,090,622	6,044	1,096,665
2019-20	1,758,358	25,992	1,784,350	1,797,532	24,987	1,822,519
2020-21	1,087,672	100,262	1,187,935	1,219,202	46,101	1,265,303
2021-22	1,499,044	224,600	1,723,644	2,188,096	28,969	2,217,065
2022-23	597,243	656,661	1,253,904	2,381,971	50,131	2,432,102
2023-24	196,599	158,764	355,363	1,214,656	412,637	1,627,293
2024-25	9,763	131,020	140,783	542,738	599,168	1,141,905
Total	\$16,027,005	\$1,359,171	\$17,386,176	\$20,341,542	\$1,177,356	\$21,518,898

Notes:

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

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Estimated Unpaid Losses as of 12/31/24
Losses Limited to SIR, Gross of Deductible

Program Year	Estimated Ultimate Losses (1)	Losses Paid as of 12/31/24 (2)	Case Reserves 12/31/24 (3)	Losses Reported as of 12/31/24 (4)	Estimated IBNR as of 12/31/24 (5)	Estimated Unpaid Losses as of 12/31/24 (6)
2013-14	\$1,756,276	\$1,756,276	\$0	\$1,756,276	\$0	\$0
2014-15	628,110	628,110	0	628,110	0	0
2015-16	1,584,642	1,584,642	0	1,584,642	0	0
2016-17	3,136,304	3,136,304	0	3,136,304	0	0
2017-18	2,820,000	2,792,425	8,969	2,801,394	18,606	27,575
2018-19	1,110,000	980,568	110,053	1,090,622	19,378	129,432
2019-20	1,880,000	1,758,358	39,174	1,797,532	82,468	121,642
2020-21	1,370,000	1,087,672	131,530	1,219,202	150,798	282,328
2021-22	2,430,000	1,499,044	689,052	2,188,096	241,904	930,956
2022-23	2,900,000	597,243	1,784,728	2,381,971	518,029	2,302,757
2023-24	2,410,000	196,599	1,018,057	1,214,656	1,195,344	2,213,401
2024-25	1,635,000	9,763	532,975	542,738	1,092,262	1,625,237
Total	\$23,660,332	\$16,027,005	\$4,314,537	\$20,341,542	\$3,318,790	\$7,633,327

Notes:

- (1) Page 33, Column (6).
2024-25 entry adjusted for incomplete year through 12/31/24.
- (2) Page 35, Column (1).
- (3) (4) - (2).
- (4) Page 34, Column (1).
- (5) (1) - (4).
- (6) (1) - (2).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Projected Unpaid Deductibles as of 6/30/25
Losses Limited to Deductible

Program Year	Estimated Ultimate Deductibles (1)	Projected Ded Paid as of 6/30/25 (2)	Projected Case Reserves 6/30/25 (3)	Projected Ded Reported as of 6/30/25 (4)	Projected Deductible IBNR as of 6/30/25 (5)	Projected Deductible Losses as of 6/30/25 (6)
2013-14	\$158,781	\$158,781	\$0	\$158,781	\$0	\$0
2014-15	143,737	143,737	0	143,737	0	0
2015-16	198,698	198,698	0	198,698	0	0
2016-17	265,878	265,878	0	265,878	0	0
2017-18	219,266	219,266	0	219,266	0	0
2018-19	164,826	164,826	0	164,826	0	0
2019-20	231,000	230,336	368	230,703	297	664
2020-21	194,000	192,739	943	193,682	318	1,261
2021-22	277,000	264,330	11,833	276,163	837	12,670
2022-23	401,000	333,119	64,608	397,727	3,273	67,881
2023-24	604,000	321,124	261,564	582,688	21,312	282,876
2024-25	730,000	108,934	422,393	531,327	198,673	621,066
Total	\$3,588,186	\$2,601,768	\$761,708	\$3,363,476	\$224,710	\$986,419

Notes:

- (1) Page 63, Column (3).
- (2) Page 30, Column (3).
- (3) (4) - (2).
- (4) Page 30, Column (6).
- (5) (1) - (4).
- (6) (3) + (5).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Projected Paid and Reported Deductibles between 1/1/25 and 6/30/25
Losses Limited to \$10K or \$25K Deductible

Program Year	Ded Paid as of 12/31/24 (1)	Projected Losses Paid 1/1/25 - 6/30/25 (2)	Projected Losses Paid as of 6/30/25 (3)	Ded Reported as of 12/31/24 (4)	Projected Losses Reported 1/1/25 - 6/30/25 (5)	Projected Losses Reported as of 6/30/25 (6)
2013-14	\$158,781	\$0	\$158,781	\$158,781	\$0	\$158,781
2014-15	143,737	0	143,737	143,737	0	143,737
2015-16	198,698	0	198,698	198,698	0	198,698
2016-17	265,878	0	265,878	265,878	0	265,878
2017-18	219,266	0	219,266	219,266	0	219,266
2018-19	164,826	0	164,826	164,826	0	164,826
2019-20	229,670	666	230,336	230,407	297	230,703
2020-21	192,595	144	192,739	193,558	124	193,682
2021-22	253,239	11,091	264,330	275,958	206	276,163
2022-23	296,583	36,537	333,119	395,955	1,772	397,727
2023-24	162,359	158,764	321,124	568,656	14,031	582,688
2024-25	9,763	99,170	108,934	332,738	198,589	531,327
Total	\$2,295,396	\$306,372	\$2,601,768	\$3,148,457	\$215,019	\$3,363,476

Notes:

- (1) Page 31, Column (2).
- (2) Projected by BAC.
- (3) (1) + (2).
- (4) Page 31, Column (4).
- (5) Projected by BAC.
- (6) (4) + (5).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Estimated Unpaid Deductibles as of 12/31/24
Losses Limited to Deductible Amount

Program Year	Estimated Ultimate Deductibles (1)	Ded Paid as of 12/31/24 (2)	Case Reserves 12/31/24 (3)	Ded Reported as of 12/31/24 (4)	Estimated Deductible IBNR as of 12/31/24 (5)	Estimated Deductible Unpaid Losses as of 12/31/24 (6)
2013-14	\$158,781	\$158,781	\$0	\$158,781	\$0	\$0
2014-15	143,737	143,737	0	143,737	0	0
2015-16	198,698	198,698	0	198,698	0	0
2016-17	265,878	265,878	0	265,878	0	0
2017-18	219,266	219,266	0	219,266	0	0
2018-19	164,826	164,826	0	164,826	0	0
2019-20	231,000	229,670	737	230,407	593	1,330
2020-21	194,000	192,595	963	193,558	442	1,405
2021-22	277,000	253,239	22,718	275,958	1,042	23,761
2022-23	401,000	296,583	99,372	395,955	5,045	104,417
2023-24	604,000	162,359	406,297	568,656	35,344	441,641
2024-25	365,000	9,763	322,975	332,738	32,262	355,237
Total	\$3,223,186	\$2,295,396	\$853,062	\$3,148,457	\$74,729	\$927,791

Notes:

- (1) Page 63, Column (3).
2022-23 onward from Page 66, Column (3).
2024-25 adjusted for incomplete year through 12/31/24.
- (2) Provided by Risk Management Services.
- (3) (4) - (2).
- (4) Page 64, Column (1).
- (5) (1) - (4).
- (6) (1) - (2).

Monterey Bay Area Self Insurance Authority

**Actuarial Analysis of the
General and Auto Liability Program**

Loss Projection Exhibits

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Selected Ultimate Losses
Losses Limited to SIR, Gross of Deductible

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)
2013-14	\$1,756,276	\$1,756,276	\$1,756,276	\$1,756,276	\$1,074,662	\$1,756,276
2014-15	628,110	628,110	628,110	628,110	1,325,866	628,110
2015-16	1,584,642	1,584,642	1,584,642	1,584,642	1,485,667	1,584,642
2016-17	3,143,773	3,142,375	3,136,304	3,139,543	1,941,213	3,136,304
2017-18	2,808,831	2,801,463	2,842,434	2,806,434	1,608,290	2,820,000
2018-19	1,107,445	1,018,302	1,167,109	1,120,980	1,633,396	1,110,000
2019-20	1,856,325	1,945,259	1,816,805	1,873,112	2,272,498	1,880,000
2020-21	1,327,010	1,348,798	1,314,298	1,421,108	2,535,384	1,370,000
2021-22	2,408,552	2,295,395	2,434,776	2,429,653	3,234,034	2,430,000
2022-23	2,909,147	1,580,524	3,115,494	2,882,760	3,026,548	2,900,000
2023-24	2,250,919	1,944,269	2,283,616	2,556,189	2,461,610	2,410,000
2024-25	4,791,094	3,012,176	4,837,450	3,264,434	3,138,300	3,270,000
Total	\$26,572,124	\$23,057,589	\$26,917,313	\$25,463,240	\$25,737,468	\$25,295,332

Notes:

- (1) Page 34, Column (3).
- (2) Page 35, Column (3).
- (3) Page 36, Column (6).
- (4) Page 37, Column (6).
- (5) Page 41, Column (4).
- (6) Selected on the basis of (1) - (5).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Reported Loss Development
Losses Limited to SIR, Gross of Deductible

Program Year	Cumulative Reported Losses as of 12/31/24 (1)	Reported Development Factor as of 12/31/24 (2)	Projected Ultimate Losses (3)
2013-14	\$1,756,276	1.000	\$1,756,276
2014-15	628,110	1.000	628,110
2015-16	1,584,642	1.000	1,584,642
2016-17	3,136,304	1.002	3,143,773
2017-18	2,801,394	1.003	2,808,831
2018-19	1,090,622	1.015	1,107,445
2019-20	1,797,532	1.033	1,856,325
2020-21	1,219,202	1.088	1,327,010
2021-22	2,188,096	1.101	2,408,552
2022-23	2,381,971	1.221	2,909,147
2023-24	1,214,656	1.853	2,250,919
2024-25	542,738	8.828	4,791,094
Total	\$20,341,542		\$26,572,124

Notes:

- (1) Provided by Risk Management Services.
- (2) Page 70.
- (3) (1) x (2), rounded.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Paid Loss Projection
Losses Limited to SIR, Gross of Deductible

Program Year	Cumulative Paid Losses as of 12/31/24 (1)	Paid Development Factor as of 12/31/24 (2)	Projected Ultimate Losses (3)
2013-14	\$1,756,276	1.000	\$1,756,276
2014-15	628,110	1.000	628,110
2015-16	1,584,642	1.000	1,584,642
2016-17	3,136,304	1.002	3,142,375
2017-18	2,792,425	1.003	2,801,463
2018-19	980,568	1.038	1,018,302
2019-20	1,758,358	1.106	1,945,259
2020-21	1,087,672	1.240	1,348,798
2021-22	1,499,044	1.531	2,295,395
2022-23	597,243	2.646	1,580,524
2023-24	196,599	9.890	1,944,269
2024-25	9,763	308.527	3,012,176
Total	\$16,027,005		\$23,057,589

Notes:

- (1) Provided by Risk Management Services.
- (2) Page 71.
- (3) (1) x (2), rounded.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

IBNR to Case Reserves Ratio Method
Losses Limited to SIR, Gross of Deductible

Program Year	Reported Development Factor as of 12/31/24 (1)	Paid Development Factor as of 12/31/24 (2)	IBNR to Case Reserves Ratio (3)	Case Reserves 12/31/24 (4)	Estimated IBNR as of 12/31/24 (5)	Estimated Ultimate Losses (6)
2013-14	1.000	1.000	0.000	\$0	\$0	\$1,756,276
2014-15	1.000	1.000	0.000	0	0	628,110
2015-16	1.000	1.000	0.000	0	0	1,584,642
2016-17	1.002	1.002	-5.356	0	0	3,136,304
2017-18	1.003	1.003	4.576	8,969	41,040	2,842,434
2018-19	1.015	1.038	0.695	110,053	76,487	1,167,109
2019-20	1.033	1.106	0.492	39,174	19,273	1,816,805
2020-21	1.088	1.240	0.723	131,530	95,096	1,314,298
2021-22	1.101	1.531	0.358	689,052	246,680	2,434,776
2022-23	1.221	2.646	0.411	1,784,728	733,523	3,115,494
2023-24	1.853	9.890	1.050	1,018,057	1,068,960	2,283,616
2024-25	8.828	308.527	8.058	532,975	4,294,712	4,837,450
Total				\$4,314,537	\$6,575,771	\$26,917,313

Notes:

- (1) Page 34, Column (2).
- (2) Page 35, Column (2).
- (3) $[(1) - 1.000] \times (2) / [(2) - (1)]$.
- (4) Page 34, Column (1) - Page 35, Column (1).
- (5) (3) x (4), rounded.
- (6) (5) + Page 34, Column (1).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Bornhuetter-Ferguson Using Reported Losses
Losses Limited to SIR, Gross of Deductible

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 12/31/24 (5)	Estimated Ultimate Losses (6)
2013-14	\$1,451,388	1.000	0.0%	\$0	\$1,756,276	\$1,756,276
2014-15	1,503,727	1.000	0.0%	\$0	628,110	628,110
2015-16	1,559,721	1.000	0.0%	0	1,584,642	1,584,642
2016-17	1,619,458	1.002	0.2%	3,239	3,136,304	3,139,543
2017-18	1,680,143	1.003	0.3%	5,040	2,801,394	2,806,434
2018-19	2,023,849	1.015	1.5%	30,358	1,090,622	1,120,980
2019-20	2,361,870	1.033	3.2%	75,580	1,797,532	1,873,112
2020-21	2,492,662	1.088	8.1%	201,906	1,219,202	1,421,108
2021-22	2,625,617	1.101	9.2%	241,557	2,188,096	2,429,653
2022-23	2,766,791	1.221	18.1%	500,789	2,381,971	2,882,760
2023-24	2,916,375	1.853	46.0%	1,341,533	1,214,656	2,556,189
2024-25	3,068,428	8.828	88.7%	2,721,696	542,738	3,264,434

Notes:

- (1) Page 38, Column (4).
- (2) Page 34, Column (2).
- (3) $100\% - [1.000 / (2)]$.
- (4) $(1) \times (3)$.
- (5) Page 34, Column (1).
- (6) $(4) + (5)$.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

A Priori Losses for Bornhuetter-Ferguson
Losses Limited to SIR, Gross of Deductible

Program Year	<i>A Priori</i> 2024-25 Loss (1)	Factor to Remove Trend (2)	Payroll Trended to 2024-25 (\$100's) (3)	<i>A Priori</i> Ultimate Losses (4)
2013-14	\$3.45	0.522	\$805,924	\$1,451,388
2014-15	3.45	0.536	813,177	1,503,727
2015-16	3.45	0.551	820,496	1,559,721
2016-17	3.45	0.567	827,880	1,619,458
2017-18	3.45	0.583	835,331	1,680,143
2018-19	3.45	0.696	842,849	2,023,849
2019-20	3.45	0.805	850,435	2,361,870
2020-21	3.45	0.842	858,089	2,492,662
2021-22	3.45	0.879	865,811	2,625,617
2022-23	3.45	0.918	873,604	2,766,791
2023-24	3.45	0.959	881,466	2,916,375
2024-25	3.45	1.000	889,399	3,068,428

Notes:

- (1) Page 39, Average of Column (3).
- (2) $1.000 / [\text{Page 39, Column (2)}]$.
- (3) Page 73, Average of Column (3).
- (4) $(1) \times (2) \times (3)$.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

A Priori Loss Rate for Bornhuetter-Ferguson Method
At \$1M SIR, Gross of Deductible

Program Year	<i>A Priori</i> Ultimate Losses (1)	Estimated Pure Premium Trend (2)	Constant Dollar Ultimate Losses (3)	Payroll Trended to 2024-25 (\$100's) (4)	Rate at 2024-25 Cost Level (5)	Selected Weights (6)
2013-14	\$1,756,276	1.917	\$3,367,390	\$805,924	\$4.18	1.00
2014-15	628,110	1.865	1,171,359	813,177	1.44	1.00
2015-16	1,584,642	1.814	2,874,007	820,496	3.50	1.00
2016-17	3,136,304	1.764	5,531,308	827,880	6.68	1.00
2017-18	2,805,148	1.715	4,810,275	835,331	5.76	1.00
2018-19	1,090,622	1.436	1,566,295	842,849	1.86	0.98
2019-20	1,899,262	1.241	2,357,929	850,435	2.77	0.97
2020-21	1,337,195	1.188	1,588,305	858,089	1.85	0.92
2021-22	2,361,228	1.137	2,684,792	865,811	3.10	0.91
2022-23	2,489,601	1.089	2,711,907	873,604	3.10	0.82
2023-24	2,202,526	1.043	2,297,450	881,466	2.61	0.54
Weighted Average All years					\$3.41	
Weighted Average 20/21-23/24					\$3.45	
(7) Selected A Priori 2024-25 Loss Rate:					\$3.45	

Notes:

- (1) Page 40, Column (3).
- (2) Estimated by BAC.
- (3) (1) x (2).
- (4) Page 73, Column (3).
- (7) (3) / (4).
- (6) Inverse of LDF on Page 34.
- (7) Weighted Average 2020-21 to 2023-24.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

A Priori Ultimate losses
Losses Limited to SIR, Gross of Deductible

Program Year	Reported Loss Projection (1)	Paid Loss Projection (2)	<i>A Priori</i> Selection (3)
2013-14	\$1,756,276	\$1,756,276	\$1,756,276
2014-15	628,110	628,110	628,110
2015-16	1,584,642	1,584,642	1,584,642
2016-17	3,143,773	3,142,375	3,136,304
2017-18	2,808,831	2,801,463	2,805,148
2018-19	1,107,445	1,018,302	1,090,622
2019-20	1,856,325	1,945,259	1,899,262
2020-21	1,327,010	1,348,798	1,337,195
2021-22	2,408,552	2,295,395	2,361,228
2022-23	2,909,147	1,580,524	2,489,601
2023-24	2,250,919	1,944,269	2,202,526
2024-25	4,791,094	3,012,176	4,741,611
Total	\$26,572,124	\$23,057,589	\$26,032,525

Notes:

- (1) Page 34, Column (3).
- (2) Page 35, Column (3).
- (3) Selected on the basis of (1) and (2).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Frequency Times Severity Method
Losses Limited to SIR, Gross of Deductible

Program Year	Selected Claim Severity (1)	Factor to Remove Trend (2)	Selected Ultimate Claims (3)	Estimated Ultimate Losses (4)
2013-14	\$31,700	0.522	65	\$1,074,662
2014-15	31,700	0.536	78	1,325,866
2015-16	31,700	0.551	85	1,485,667
2016-17	31,700	0.567	108	1,941,213
2017-18	31,700	0.583	87	1,608,290
2018-19	31,700	0.696	74	1,633,396
2019-20	31,700	0.805	89	2,272,498
2020-21	31,700	0.842	95	2,535,384
2021-22	31,700	0.879	116	3,234,034
2022-23	31,700	0.918	104	3,026,548
2023-24	31,700	0.959	81	2,461,610
2024-25	31,700	1.000	99	3,138,300

Notes:

- (1) Page 42, Item (5).
- (2) $1.000 / [\text{Page 42, Column (2)}]$.
- (3) Page 43, Column (3).
- (4) $(1) \times (2) \times (3)$.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Calculation of Expected Claim Severity
Frequency Times Severity Method
At \$1M SIR, Gross of Deductible

Program Year	<i>A Priori</i> Ultimate Losses (1)	Estimated Severity Trend (2)	Selected Claim Count (3)	Trended Claim Severity (4)
2013-14	\$1,756,276	1.917	65	\$51,806
2014-15	628,110	1.865	78	15,017
2015-16	1,584,642	1.814	85	33,812
2016-17	3,136,304	1.764	108	51,216
2017-18	2,805,148	1.715	87	55,291
2018-19	1,090,622	1.436	74	21,166
2019-20	1,899,262	1.241	89	26,494
2020-21	1,337,195	1.188	95	16,719
2021-22	2,361,228	1.137	116	23,145
2022-23	2,489,601	1.089	104	26,076
2023-24	2,202,526	1.043	81	28,364
2024-25	4,741,611	1.000	99	47,895
Average				\$33,083
13/14-23/24				\$31,737
			(5) Selected Severity:	\$31,700

Notes:

- (1) Page 40, Column (3).
- (2) Estimated by BAC.
- (3) Page 43, Column (3).
- (4) (1) x (2) / (3).
- (5) Selected on the basis of (4).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Selected Claim Counts

Program Year	Reported Claim Count Projection (1)	Bornhuetter- Ferguson Method (2)	Selected Claim Count (3)
2013-14	65		65
2014-15	78		78
2015-16	85		85
2016-17	108		108
2017-18	87		87
2018-19	74		74
2019-20	89		89
2020-21	95		95
2021-22	116		116
2022-23	104		104
2023-24	81		81
2024-25	113	99	99

Notes:

- (1) Page 44, Column (3).
- (2) Page 45, Column (6).
- (3) Selected on the basis of (1) and (2).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Projection of Ultimate Claim Counts
Projection of Reported Claims

Program Year	Total Claims Reported 12/31/24 <u>(1)</u>	Development Factors as of 12/31/24 <u>(2)</u>	Projected Ultimate Claims <u>(3)</u>
2013-14	65	1.000	65
2014-15	78	1.000	78
2015-16	85	1.000	85
2016-17	107	1.005	108
2017-18	86	1.011	87
2018-19	73	1.017	74
2019-20	86	1.034	89
2020-21	91	1.043	95
2021-22	111	1.049	116
2022-23	97	1.077	104
2023-24	73	1.115	81
2024-25	29	3.883	113

Notes:

- (1) Provided by Risk Management Services.
- (2) Page 72.
- (3) (1) x (2), rounded.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Projection of Ultimate Claim Counts
Bornhuetter-Ferguson Method

Program Year	A Priori Claim Count (1)	Claim Development Factor (2)	Estimated Percentage of Claims Unreported (3)	Estimated Unreported Claims (4)	Reported Claims as of 12/31/24 (5)	Projected Ultimate Claims (6)
2024-25	94	3.883	74.2%	70	29	99

Notes:

- (1) Page 46, Item (6).
- (2) Page 44, Column (2).
- (3) $100\% - [1.000 / (2)]$.
- (4) $(1) \times (3)$.
- (5) Page 44, Column (1).
- (6) $(4) + (5)$.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Calculation of Expected # of Indemnity Claims
A Priori Claim Count

Program Year	Projected Ultimate Indemnity Claims (1)	Payroll Trended to 2024-25 (\$Millions) (2)	Indicated Indemnity Claim Frequency (3)
2013-14	65	\$80.6	0.81
2014-15	78	81.3	0.96
2015-16	85	82.0	1.04
2016-17	108	82.8	1.30
2017-18	87	83.5	1.04
2018-19	74	84.3	0.88
2019-20	89	85.0	1.05
2020-21	95	85.8	1.11
2021-22	116	86.6	1.34
2022-23	104	87.4	1.19
2023-24	81	88.1	0.92
2024-25	113	88.9	1.27
Average			1.07
13/14-23/24			1.06
(4) Selected Claim Frequency:			1.06
(5) 2024-25 Trended Payroll (\$Millions):			\$88.9
(6) 2024-25 A Priori Indemnity Claims:			94

Notes:

- (1) Page 44, Column (3).
- (2) Page 73, Column (3) / 10,000.
- (3) (1) / (2).
- (4) Selected on the basis of (3).
- (5) (2).
- (6) (4) x (5).

Monterey Bay Area Self Insurance Authority

**Actuarial Analysis of the
General and Auto Liability Program**

**Limited Loss Analysis
Losses Limited to \$250,000 per Loss**

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Selected Ultimate Losses
Losses Limited to \$250,000, Gross of Deductible

Program Year	Reported Projection (1)	Paid Projection (2)	IBNR to Case Reserves Ratio (3)	B-F Method Using Reported (4)	B-F Method Using Paid (5)	Selected Ultimate Losses (6)
2013-14	\$1,006,276	\$1,006,276	\$1,006,276	\$1,006,276	\$1,006,276	\$1,006,276
2014-15	483,248	483,248	483,248	483,248	483,248	483,248
2015-16	1,273,122	1,273,122	1,273,122	1,273,122	1,273,122	1,273,122
2016-17	1,954,733	1,954,733	1,950,089	1,952,406	1,952,406	1,950,089
2017-18	1,532,247	1,532,247	1,528,190	1,531,762	1,531,762	1,528,190
2018-19	782,769	677,870	938,818	791,224	694,735	800,000
2019-20	1,457,183	1,478,004	1,441,940	1,459,353	1,480,580	1,460,000
2020-21	1,242,424	1,249,738	1,239,924	1,256,994	1,299,941	1,250,000
2021-22	1,955,384	1,644,331	2,009,039	1,937,183	1,641,542	1,970,000
2022-23	1,893,039	1,330,607	1,967,773	1,867,310	1,536,866	1,890,000
2023-24	1,885,627	1,587,668	1,911,007	1,841,601	1,739,306	1,870,000
2024-25	3,481,339	2,014,018	3,521,002	2,084,939	1,827,879	2,090,000
Total	\$18,947,391	\$16,231,862	\$19,270,430	\$17,485,420	\$16,467,664	\$17,570,925

Notes:

- (1) Page 49, Column (3).
- (2) Page 50, Column (3).
- (3) Page 51, Column (6).
- (4) Page 52, Column (6).
- (5) Page 53, Column (6).
- (6) Selected on the basis of (1) - (5).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Reported Loss Development
Losses Limited to \$250,000, Gross of Deductible

Program Year	Cumulative Reported Losses as of 12/31/24 <u>(1)</u>	Reported Development Factor as of 12/31/24 <u>(2)</u>	Projected Ultimate Losses <u>(3)</u>
2013-14	\$1,006,276	1.000	\$1,006,276
2014-15	483,248	1.000	483,248
2015-16	1,273,122	1.000	1,273,122
2016-17	1,950,089	1.002	1,954,733
2017-18	1,528,190	1.003	1,532,247
2018-19	770,877	1.015	782,769
2019-20	1,411,032	1.033	1,457,183
2020-21	1,186,260	1.047	1,242,424
2021-22	1,842,496	1.061	1,955,384
2022-23	1,645,160	1.151	1,893,039
2023-24	1,214,656	1.552	1,885,627
2024-25	542,738	6.414	3,481,339

Notes:

- (1) Provided by Risk Management Services.
- (2) Estimated by BAC.
- (3) (1) x (2), rounded.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Paid Loss Development
Losses Limited to \$250,000, Gross of Deductible

Program Year	Cumulative Paid Losses as of 12/31/24 (1)	Paid Development Factor as of 12/31/24 (2)	Projected Ultimate Losses (3)
2013-14	\$1,006,276	1.000	\$1,006,276
2014-15	483,248	1.000	483,248
2015-16	1,273,122	1.000	1,273,122
2016-17	1,950,089	1.002	1,954,733
2017-18	1,528,190	1.003	1,532,247
2018-19	660,824	1.026	677,870
2019-20	1,371,858	1.077	1,478,004
2020-21	1,054,730	1.185	1,249,738
2021-22	1,159,945	1.418	1,644,331
2022-23	580,432	2.292	1,330,607
2023-24	196,599	8.076	1,587,668
2024-25	9,763	206.289	2,014,018

Notes:

- (1) Provided by Risk Management Services.
- (2) Estimated by BAC.
- (3) (1) x (2), rounded.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

IBNR to Case Reserves Ratio Method
Losses Limited to \$250,000, Gross of Deductible

Program Year	Reported LDF (1)	Paid LDF (2)	IBNR to Case Reserves Ratio (3)	Case Reserves as of 12/31/24 (4)	Estimated IBNR as of as of 12/31/24 (5)	Estimated Ultimate Losses (6)
2013-14	1.000	1.000	0.000	\$0	\$0	\$1,006,276
2014-15	1.000	1.000	0.000	0	0	483,248
2015-16	1.000	1.000	0.000	0	0	1,273,122
2016-17	1.002	1.002	0.000	0	0	1,950,089
2017-18	1.003	1.003	0.000	0	0	1,528,190
2018-19	1.015	1.026	1.526	110,053	167,941	938,818
2019-20	1.033	1.077	0.789	39,174	30,908	1,441,940
2020-21	1.047	1.185	0.408	131,530	53,664	1,239,924
2021-22	1.061	1.418	0.244	682,552	166,543	2,009,039
2022-23	1.151	2.292	0.303	1,064,728	322,613	1,967,773
2023-24	1.552	8.076	0.684	1,018,057	696,351	1,911,007
2024-25	6.414	206.289	5.588	532,975	2,978,264	3,521,002

Notes:

- (1) Page 49, Column (2).
- (2) Page 50, Column (2).
- (3) $[(1) - 1.000] \times (2) / [(2) - (1)]$.
- (4) Page 49, Column (1) - Page 50, Column (1).
- (5) (3) x (4), rounded.
- (6) (5) + Page 49, Column (1).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Bornhuetter-Ferguson Using Reported Losses
Losses Limited to \$250,000, Gross of Deductible

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 12/31/24 (5)	Estimated Ultimate Losses (6)
2013-14	\$1,067,849	1.000	0.0%	\$0	\$1,006,276	\$1,006,276
2014-15	1,095,930	1.000	0.0%	0	483,248	483,248
2015-16	1,126,040	1.000	0.0%	0	1,273,122	1,273,122
2016-17	1,158,320	1.002	0.2%	2,317	1,950,089	1,952,406
2017-18	1,190,738	1.003	0.3%	3,572	1,528,190	1,531,762
2018-19	1,356,438	1.015	1.5%	20,347	770,877	791,224
2019-20	1,510,030	1.033	3.2%	48,321	1,411,032	1,459,353
2020-21	1,571,862	1.047	4.5%	70,734	1,186,260	1,256,994
2021-22	1,632,531	1.061	5.8%	94,687	1,842,496	1,937,183
2022-23	1,695,805	1.151	13.1%	222,150	1,645,160	1,867,310
2023-24	1,761,081	1.552	35.6%	626,945	1,214,656	1,841,601
2024-25	1,827,252	6.414	84.4%	1,542,201	542,738	2,084,939

Notes:

- (1) Page 33, Column (6), adjusted for \$250K limit.
- (2) Page 49, Column (2).
- (3) $100\% - [1.000 / (2)]$.
- (4) $(1) \times (3)$.
- (5) Page 49, Column (1).
- (6) $(4) + (5)$.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Bornhuetter-Ferguson Using Paid Losses
Losses Limited to \$250,000, Gross of Deductible

Program Year	<i>A Priori</i> Ultimate Losses (1)	Cumulative Paid Loss Development Factors (2)	Percentage of Losses Not Yet Paid (3)	Expected Unpaid Losses (4)	Losses Paid as of 12/31/24 (5)	Estimated Ultimate Losses (6)
2013-14	\$1,067,849	1.000	0.0%	\$0	\$1,006,276	\$1,006,276
2014-15	1,095,930	1.000	0.0%	0	483,248	483,248
2015-16	1,126,040	1.000	0.0%	0	1,273,122	1,273,122
2016-17	1,158,320	1.002	0.2%	2,317	1,950,089	1,952,406
2017-18	1,190,738	1.003	0.3%	3,572	1,528,190	1,531,762
2018-19	1,356,438	1.026	2.5%	33,911	660,824	694,735
2019-20	1,510,030	1.077	7.2%	108,722	1,371,858	1,480,580
2020-21	1,571,862	1.185	15.6%	245,211	1,054,730	1,299,941
2021-22	1,632,531	1.418	29.5%	481,597	1,159,945	1,641,542
2022-23	1,695,805	2.292	56.4%	956,434	580,432	1,536,866
2023-24	1,761,081	8.076	87.6%	1,542,707	196,599	1,739,306
2024-25	1,827,252	206.289	99.5%	1,818,116	9,763	1,827,879

Notes:

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

Monterey Bay Area Self Insurance Authority

**Actuarial Analysis of the
General and Auto Liability Program**

Future Loss Exhibits

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Projected 1M/500K Loss Rate for 2025-26 *
Gross of \$25K Deductible

Based on 250K Limit Analysis

Program Year	250K Limit Loss Rate (1)	Factor for 1M/500K SIR (2)	Projected 1M/500K SIR Loss Rate (3)
2025-26	\$2.24	1.639	\$3.67

Based on 1M/500K Limit Analysis

Program Year	1M/500K SIR Loss Rate (4)	Factor for 1M/500K SIR (5)	Projected 1M/500K SIR Loss Rate (6)
2025-26	\$3.55	1.000	\$3.55

Program Year	Selected 2025-26 1M/500K SIR Loss Rate (7)	Projected 2025-26 Payroll (\$00's) (8)	Projected Ultimate Losses (9)
2025-26	\$3.61	\$924,975	\$3,339,161
25K Deductible:	\$0.58		\$532,904
Net of 25K Deductible:	\$3.03		\$2,806,257

* EPL Losses are limited to \$500K per occurrence

Notes:

- (1) Page 56, Item (7).
 - (2) Estimated by BAC.
 - (3) (1) x (2), rounded.
 - (4) Page 57, Item (7).
 - (5) Estimated by BAC.
 - (6) (4) x (5), rounded.
 - (7) Selected by BAC.
 - (8) Page 73, Column (2).
 - (9) (7) x (8), rounded.
- Deductible calculated as % of \$250K limit losses.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Projected Future Loss Rate
Losses Limited to \$250,000, Gross of \$25K Deductible

Program Year	Estimated Ultimate Losses (1)	Trend to 2025-26 (2)	Losses Trended to 2025-26 (3)	Payroll Trended to 2025-26 (\$100's) (4)	Rate at 2025-26 Cost Level (5)	Selected Weights (6)
2013-14	\$1,006,276	1.597	\$1,606,622	\$830,685	\$1.93	1.00
2014-15	483,248	1.568	757,588	838,161	0.90	1.00
2015-16	1,273,122	1.539	1,959,487	845,704	2.32	1.00
2016-17	1,950,089	1.511	2,945,967	853,316	3.45	1.00
2017-18	1,528,190	1.482	2,265,395	860,995	2.63	1.00
2018-19	800,000	1.313	1,050,243	868,744	1.21	0.98
2019-20	1,460,000	1.190	1,736,967	876,563	1.98	0.97
2020-21	1,250,000	1.154	1,442,515	884,452	1.63	0.95
2021-22	1,970,000	1.120	2,207,148	892,412	2.47	0.94
2022-23	1,890,000	1.089	2,057,925	900,444	2.29	0.87
2023-24	1,870,000	1.058	1,979,034	908,548	2.18	0.64
Weighted Average:					\$2.09	
Weighted Average 16-17 through 23-24:					\$2.24	
Weighted Average 16-17 through 22-23:					\$2.24	
(7) Projected 2025-26 \$250K Limit Rate:					\$2.24	
(8) Projected 2025-26 \$250K Limit Losses:					\$2,073,558	

Notes:

- (1) Page 48, Column (6).
- (2) Estimated by BAC.
- (3) (1) x (2).
- (4) Page 73, Column (4).
- (5) (4) / (3).
- (6) Inverse of LDF on Page 50.
- (7) Based on (5).
- (8) (7) x 2025-26 projected payroll.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Projected Future Loss Rate
Losses Limited to \$1M/\$500K, Gross of \$25K Deductible

Program Year	Estimated Ultimate Losses (1)	Trend to 2025-26 (2)	Losses Trended to 2025-26 (3)	Payroll Trended to 2025-26 (\$100's) (4)	Rate at 2025-26 Cost Level (5)	Selected Weights (6)
2013-14	\$1,756,276	2.000	\$3,512,913	\$830,685	\$4.23	1.00
2014-15	628,110	1.945	1,221,979	838,161	1.46	1.00
2015-16	1,584,642	1.892	2,998,209	845,704	3.55	1.00
2016-17	3,136,304	1.840	5,770,346	853,316	6.76	1.00
2017-18	2,820,000	1.789	5,044,722	860,995	5.86	1.00
2018-19	1,110,000	1.498	1,663,016	868,744	1.91	0.98
2019-20	1,880,000	1.295	2,434,881	876,563	2.78	0.97
2020-21	1,370,000	1.239	1,697,593	884,452	1.92	0.92
2021-22	2,430,000	1.186	2,882,392	892,412	3.23	0.91
2022-23	2,900,000	1.136	3,295,467	900,444	3.66	0.82
2023-24	2,410,000	1.088	2,622,504	908,548	2.89	0.54
Weighted Average:					\$3.52	
Weighted Average 16-17 through 23-24:					\$3.70	
Weighted Average 16-17 through 22-23:					\$3.77	
(7) Projected 2025-26 \$1M/\$500k Limit Rate:					\$3.55	

Notes:

- (1) Page 33, Column (6).
- (2) Estimated by BAC.
- (3) (1) x (2).
- (4) Page 73, Column (4).
- (5) (4) / (3).
- (6) Inverse of LDF on Page 34.
- (7) Based on (5).

Monterey Bay Area Self Insurance Authority

**Actuarial Analysis of the
General and Auto Liability Program**

Discounting Exhibits

Monterey Bay Area Self Insurance Authority
 General and Auto Liability Program

Discounted Value of Unpaid Losses as of 6/30/25
 Assuming a 3.0% Interest Rate

Losses Limited to SIR, NET of Deductible

Program Year	Projected Unpaid Losses (1)	Discount Factor (2)	Discounted Unpaid Losses (3)
2013-14	\$0	1.000	\$0
2014-15	0	1.000	0
2015-16	0	1.000	0
2016-17	0	1.000	0
2017-18	13,754	0.985	13,552
2018-19	81,381	0.981	79,814
2019-20	94,985	0.967	91,881
2020-21	180,804	0.968	175,023
2021-22	693,687	0.964	668,449
2022-23	1,578,215	0.960	1,514,982
2023-24	1,771,760	0.947	1,677,707
2024-25	2,508,151	0.927	2,324,318
Total	\$6,922,737		\$6,545,726
	(4) Indicated Discount Factor:		0.946

Notes:

- (1) Page 24, Column (6).
- (2) (3) / (1).
- (3) Based upon a 3.0% interest rate.
- (4) [Sum of Column (3)] / [Sum of Column (1)].

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Discounted Value of 2025-26 Losses as of 7/1/25
Assuming a 3.0% Interest Rate

Losses Limited to \$1M SIR, Gross of \$25K Deductible

Program Year	Projected Loss Payments (1)	Discounted Value Factor (2)	Discounted Value of Payments (3)
2025-26	\$143,761	0.985	\$141,651
2026-27	348,611	0.957	333,492
2027-28	951,417	0.929	883,645
2028-29	924,739	0.902	833,852
2029-30	526,877	0.875	461,256
2030-31	273,868	0.850	232,775
2031-32	76,801	0.825	63,376
2032-33	76,801	0.801	61,530
2033-34	16,286	0.778	12,668
2034-35	0	0.755	0
2035-36	0	0.733	0
Total	\$3,339,161		\$3,024,245

(4) Indicated Discount Factor: 0.906

Notes:

- (1) Based upon the observed payment pattern.
- (2) Based upon a 3.0% interest rate.
- (3) (1) x (2).
- (4) [Sum of Column (3)] / [Sum of Column (1)].

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Discounted Value of 2025-26 Losses as of 7/1/25
Assuming a 3.0% Interest Rate

Losses Limited to \$1M SIR, NET of \$25K Deductible

Program Year	Projected Loss Payments (1)	Discount Factor (2)	Discounted Value of Payments (3)
2025-26	\$35,188	0.985	\$34,672
2026-27	309,478	0.957	296,056
2027-28	689,331	0.929	640,229
2028-29	868,096	0.902	782,776
2029-30	472,714	0.875	413,839
2030-31	269,803	0.850	229,320
2031-32	73,807	0.825	60,906
2032-33	73,807	0.801	59,132
2033-34	14,031	0.778	10,914
2034-35	0	0.755	0
2035-36	0	0.733	0
Total	\$2,806,257		\$2,527,844

(4) Indicated Discount Factor: 0.901

Notes:

- (1) Based upon the observed payment pattern.
- (2) Based upon a 3.0% interest rate.
- (3) (1) x (2).
- (4) [Sum of Column (3)] / [Sum of Column (1)].

Monterey Bay Area Self Insurance Authority

**Actuarial Analysis of the
General and Auto Liability Program**

Deductibles

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Selected Ultimate Deductible Losses
Losses Limited to \$10,000 Deductible

Program Year	Reported Projection (1)	B-F Method Using Reported (2)	Selected Ultimate Losses (3)
2013-14	\$158,781	\$158,781	\$158,781
2014-15	143,737	143,737	143,737
2015-16	198,698	198,698	198,698
2016-17	265,878	265,878	265,878
2017-18	219,266	219,266	219,266
2018-19	164,826	164,826	164,826
2019-20	230,407	230,407	231,000
2020-21	193,683	193,747	194,000
2021-22	276,229	276,254	277,000
2022-23	210,383	210,641	211,000
2023-24	314,361	312,693	313,000
2024-25	623,352	401,302	410,000
Total	\$2,999,601	\$2,776,230	\$2,787,186

Notes:

- (1) Page 64, Column (3).
- (2) Page 65, Column (6).
- (3) Selected on the basis of (1) - (2).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Reported Loss Development
Deductible Losses Limited to \$10,000

Program Year	Cumulative Reported Losses as of 12/31/24 (1)	Reported Development Factor as of 12/31/24 (2)	Projected Ultimate Losses (3)
2013-14	\$158,781	1.000	\$158,781
2014-15	143,737	1.000	143,737
2015-16	198,698	1.000	198,698
2016-17	265,878	1.000	265,878
2017-18	219,266	1.000	219,266
2018-19	164,826	1.000	164,826
2019-20	230,407	1.000	230,407
2020-21	193,558	1.001	193,683
2021-22	275,958	1.001	276,229
2022-23	209,516	1.004	210,383
2023-24	301,656	1.042	314,361
2024-25	187,238	3.329	623,352
Total	\$2,549,519		\$2,999,601

Notes:

- (1) Provided by Risk Management Services.
- (2) Estimated by BAC.
- (3) (1) x (2), rounded.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Bornhuetter-Ferguson Using Reported Losses
Deductible Losses Limited to \$10,000

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 12/31/24 (5)	Estimated Ultimate Deductible Losses (6)
2013-14	\$171,434	1.000	0.0%	\$0	\$158,781	\$158,781
2014-15	81,815	1.000	0.0%	0	143,737	143,737
2015-16	214,150	1.000	0.0%	0	198,698	198,698
2016-17	325,862	1.000	0.0%	0	265,878	265,878
2017-18	253,630	1.000	0.0%	0	219,266	219,266
2018-19	126,865	1.000	0.0%	0	164,826	164,826
2019-20	223,427	1.000	0.0%	0	230,407	230,407
2020-21	189,329	1.001	0.1%	189	193,558	193,747
2021-22	295,535	1.001	0.1%	296	275,958	276,254
2022-23	281,185	1.004	0.4%	1,125	209,516	210,641
2023-24	275,917	1.042	4.0%	11,037	301,656	312,693
2024-25	305,806	3.329	70.0%	214,064	187,238	401,302
Total	\$2,744,955			\$226,711	\$2,549,519	\$2,776,230

Notes:

- (1) Page 48, Column (6), adjusted for \$10K limit.
- (2) Page 64, Column (2).
- (3) $100\% - [1.000 / (2)]$.
- (4) $(1) \times (3)$.
- (5) Page 64, Column (1).
- (6) $(4) + (5)$.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Selected Ultimate Deductible Losses
Losses Limited to \$25,000 Deductible

Program Year	Reported Projection (1)	B-F Method Using Reported (2)	Selected Ultimate Losses (3)
2013-14	\$288,623	\$288,623	\$288,623
2014-15	202,656	202,656	202,656
2015-16	371,484	371,484	371,484
2016-17	467,269	467,269	467,269
2017-18	406,857	406,857	406,857
2018-19	293,921	293,921	293,921
2019-20	470,462	470,462	471,000
2020-21	344,885	344,885	345,000
2021-22	459,594	459,594	460,000
2022-23	399,411	400,454	401,000
2023-24	612,336	603,427	604,000
2024-25	1,185,683	722,551	730,000
Total	\$5,503,181	\$5,032,184	\$5,041,810

Notes:

- (1) Page 67, Column (3).
- (2) Page 68, Column (6).
- (3) Selected on the basis of (1) - (2).

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Reported Loss Development
Deductible Losses Limited to \$25,000

Program Year	Cumulative Reported Losses as of 12/31/24 (1)	Reported Development Factor as of 12/31/24 (2)	Projected Ultimate Losses (3)
2013-14	288,623	1.000	\$288,623
2014-15	202,656	1.000	202,656
2015-16	371,484	1.000	371,484
2016-17	467,269	1.000	467,269
2017-18	406,857	1.000	406,857
2018-19	293,921	1.000	293,921
2019-20	470,462	1.000	470,462
2020-21	344,885	1.000	344,885
2021-22	459,594	1.000	459,594
2022-23	395,955	1.009	399,411
2023-24	568,656	1.077	612,336
2024-25	332,738	3.563	1,185,683
Total	\$4,603,101		\$5,503,181

Notes:

- (1) Provided by Risk Management Services.
- (2) Estimated by BAC.
- (3) (1) x (2), rounded.

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Bornhuetter-Ferguson Using Reported Losses
Deductible Losses Limited to \$25,000

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 12/31/24 (5)	Estimated Ultimate Deductible Losses (6)
2013-14	310,040	1.000	0.0%	\$0	\$288,623	\$288,623
2014-15	147,914	1.000	0.0%	0	202,656	202,656
2015-16	387,005	1.000	0.0%	0	371,484	371,484
2016-17	588,516	1.000	0.0%	0	467,269	467,269
2017-18	457,632	1.000	0.0%	0	406,857	406,857
2018-19	227,659	1.000	0.0%	0	293,921	293,921
2019-20	398,732	1.000	0.0%	0	470,462	470,462
2020-21	337,484	1.000	0.0%	0	344,885	344,885
2021-22	526,328	1.000	0.0%	0	459,594	459,594
2022-23	499,940	1.009	0.9%	4,499	395,955	400,454
2023-24	489,727	1.077	7.1%	34,771	568,656	603,427
2024-25	542,160	3.563	71.9%	389,813	332,738	722,551
Total	\$4,913,136			\$429,083	\$4,603,101	\$5,032,184

Notes:

- (1) Page 48, Column (6), adjusted for \$25K limit.
- (2) Page 67, Column (2).
- (3) $100\% - [1.000 / (2)]$.
- (4) $(1) \times (3)$.
- (5) Page 67, Column (1).
- (6) $(4) + (5)$.

Monterey Bay Area Self Insurance Authority

**Actuarial Analysis of the
General and Auto Liability Program**

Claims Data Exhibits

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program - Includes EPL

Cumulative Reported Losses (\$000's) - Limited to \$1M per Loss - Includes ALAE - 12/31/24

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>
2006					618	557	557	557	557	557	557
2007				451	424	401	401	401	401	401	401
2008			662	617	500	500	500	500	500	500	500
2009		541	307	355	405	452	455	454	455	455	455
2010	151	569	1,025	1,082	721	729	729	729	729	729	729
2011	76	819	2,507	2,500	2,304	2,334	2,240	2,240	2,240	2,240	2,240
2012	19	278	593	856	896	996	903	902	902	921	925
2013	55	343	454	777	703	934	796	796	806	806	806
2014	7	1,443	1,714	2,384	2,359	2,359	1,684	2,402	1,754	2,402	1,756
2015	13	534	685	589	589	589	629	628	628	628	628
2016	55	828	1,339	1,160	1,185	1,285	1,585	1,585	1,585	1,585	
2017	13	1,619	2,544	1,764	1,960	2,495	3,127	3,137	3,136		
2018	277	1,500	1,522	2,123	2,332	2,933	2,800	2,801			
2019	102	380	1,057	751	1,261	1,090	1,091				
2020	232	1,381	1,606	1,806	1,819	1,798					
2021	41	1,484	1,152	1,468	1,219						
2022	235	1,364	2,117	2,188							
2023	204	2,557	2,382								
2024	421	1,215									
2025	543										
	<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 - Ult.</u>
VOL AVG	8.582	1.343	1.059	1.000	1.076	0.991	1.044	0.956	1.063	0.933	
AVG	32.525	1.517	1.110	1.011	1.060	0.997	1.033	0.979	1.036	0.973	
REFERENCE	3.197	1.462	1.162	1.083	1.053	1.018	1.050	1.017	1.003	1.037	1.019
SELECT	4.764	1.517	1.110	1.011	1.054	1.017	1.013	1.000	1.002	1.000	1.000
CUMULATIVE	8.828	1.853	1.221	1.101	1.088	1.033	1.015	1.003	1.002	1.000	1.000

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program - Includes EPL

Cumulative Paid Losses (\$000's) - Limited to \$1M per Loss - Includes ALAE - 12/31/24

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>
2006					565	557	557	557	557	557	557
2007				386	406	401	401	401	401	401	401
2008			337	497	500	500	500	500	500	500	500
2009		151	255	274	306	372	455	454	455	455	455
2010	15	122	524	727	721	729	729	729	729	729	729
2011	5	194	646	1,932	2,200	2,221	2,240	2,240	2,240	2,240	2,240
2012	13	113	177	387	897	899	902	902	902	921	924
2013	3	124	373	702	703	716	796	796	806	806	806
2014	4	478	935	2,311	2,324	2,329	1,684	2,402	2,402	2,402	1,756
2015	10	56	510	589	589	589	628	628	628	628	628
2016	13	142	575	1,072	1,134	1,233	1,585	1,585	1,585	1,585	
2017	7	309	966	1,608	1,719	2,451	3,127	3,136	3,136		
2018	21	243	679	984	2,160	2,332	2,715	2,792			
2019	15	75	283	383	468	931	981				
2020	7	701	1,011	1,372	1,757	1,758					
2021	9	181	436	1,023	1,088						
2022	6	137	1,179	1,499							
2023	7	122	597								
2024	13	197									
2025	10										
	<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 - Ult.</u>
VOL AVG	21.615	2.906	1.729	1.191	1.095	1.064	1.049	1.001	1.002	0.933	
AVG	31.197	3.737	1.728	1.235	1.121	1.065	1.035	1.001	1.002	0.973	
REFERENCE	9.956	2.890	2.648	1.352	1.115	1.138	1.043	1.042	1.020	1.010	1.000
SELECT	31.197	3.737	1.728	1.235	1.121	1.065	1.035	1.001	1.002	1.000	1.000
CUMULATIVE	308.527	9.890	2.646	1.531	1.240	1.106	1.038	1.003	1.002	1.000	1.000

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Cumulative # of Reported Losses - 12/31/24

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>
2007										
2008										
2009										
2010										
2011										70
2012									75	74
2013								69	69	69
2014							64	62	62	65
2015						74	76	76	78	78
2016					81	81	80	85	85	85
2017				103	102	100	107	107	107	
2018			81	81	81	86	86	86		
2019		64	68	71	73	73	73			
2020	26	82	84	85	86	86				
2021	22	85	87	91	91					
2022	29	102	108	111						
2023	27	96	97							
2024	22	73								
2025	29									
	<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 - Ult.</u>
ALLYR VOL	3.476	1.035	1.026	1.005	1.007	1.019	1.007	1.005	1.005	
ALL YR AVG	3.482	1.036	1.026	1.006	1.008	1.017	1.006	1.005	1.007	
SELECT	3.482	1.036	1.026	1.006	1.008	1.017	1.006	1.005	1.005	1.000
CUMULATIVE	3.883	1.115	1.077	1.049	1.043	1.034	1.017	1.011	1.005	1.000

Monterey Bay Area Self Insurance Authority
General and Auto Liability Program

Program Information
Program Years run July 1 to June 30

Program Year	Self-Insured Retention (SIR) * (1)	Payroll (\$00's) (2)	Payroll Trended to 2024-25 (\$00's) (3)	Payroll Trended to 2025-26 (\$00's) (4)	Deductible (5)
2013-14	\$1,000,000	\$436,959	\$805,924	\$830,685	\$10,000
2014-15	1,000,000	455,957	813,177	838,161	10,000
2015-16	1,000,000	472,388	820,496	845,704	10,000
2016-17	1,000,000	518,291	827,880	853,316	10,000
2017-18	1,000,000	545,055	835,331	860,995	10,000
2018-19	1,000,000	590,304	842,849	868,744	10,000
2019-20	1,000,000	622,825	850,435	876,563	10,000
2020-21	1,000,000	628,497	858,089	884,452	10,000
2021-22	1,000,000	692,817	865,811	892,412	10,000
2022-23	1,000,000	755,191	873,604	900,444	25,000
2023-24	1,000,000	825,569	881,466	908,548	25,000
2024-25	1,000,000	889,399	889,399	916,725	25,000
2025-26	?	924,975	897,404	924,975	25,000

Notes:

- (1) Provided by MBASIA.
* EPL SIR is \$500,000 claims made starting 2011-12.
- (2) Provided by MBASIA.
- (3) Trending parallels 0.90% per year growth in population.
- (4) Trending parallels 0.90% per year growth in population.
- (5) Provided by MBASIA. \$25,000 started in 2022-23.
Deductible assumed to apply to combined loss & ALAE.
(Unconfirmed).