



Actuarial Review of the Self-Insured Workers' Compensation Program

Experience Rating Modifications 2017-18

Presented to

Municipal Pooling Authority

July 2017



**Municipal Pooling Authority
Experience Modification Factors
Workers' Compensation**

Summary of Payroll

Member	Payroll			
	2013-14 (A)	2014-15 (B)	2015-16 (C)	2016-17 (D)
Antioch	\$25,199,811	\$27,630,980	\$26,401,944	\$29,126,502
Brentwood	25,752,916	26,579,508	28,155,455	29,450,256
Clayton	2,105,974	2,078,028	2,089,748	2,112,430
Danville	7,299,609	7,739,051	7,946,666	8,345,874
El Cerrito	16,561,319	17,477,122	18,228,784	20,059,109
Hercules	5,824,857	5,533,841	6,184,170	6,255,843
Lafayette	3,651,095	3,818,784	3,956,602	4,536,344
Manteca	28,823,381	30,851,064	34,001,716	36,031,385
Martinez	11,659,432	11,362,661	8,829,193	11,003,372
Moraga	3,239,814	3,173,502	3,083,580	3,450,690
Oakley	2,553,227	3,062,284	3,895,681	8,366,542
Orinda	2,971,613	3,026,567	3,184,893	3,789,866
Pacifica	16,310,386	16,433,619	16,883,606	19,354,446
Pinole	8,943,170	8,905,876	7,704,229	8,092,706
Pittsburg	20,921,554	22,660,155	24,171,140	25,608,922
Pleasant Hill	10,556,830	11,069,309	11,137,088	11,685,665
San Pablo	14,036,269	14,191,168	14,474,459	14,571,510
San Ramon	24,438,733	25,751,332	28,020,876	30,347,253
All Members	\$230,849,990	\$241,344,851	\$248,349,830	\$272,188,713

Notes:

1. Amounts were provided by the Authority.

**Municipal Pooling Authority
Experience Modification Factors
Workers' Compensation**

Summary of Loss Data

Member	Incurred Losses			Incurred Losses Capped at \$100K		
	2013-14 (A)	2014-15 (B)	2015-16 (C)	2013-14 (D)	2014-15 (E)	2015-16 (F)
Antioch	\$1,183,871	\$638,279	\$314,234	\$929,987	\$602,807	\$314,234
Brentwood	461,565	1,122,158	93,629	446,802	785,755	93,629
Clayton	72,355	2,974	1,240	72,355	2,974	1,240
Danville	78,069	268,568	54,734	78,069	252,142	54,734
El Cerrito	52,392	120,060	243,428	52,392	120,060	243,428
Hercules	86,837	103,853	11,087	86,837	103,853	11,087
Lafayette	6,783	0	261	6,783	0	261
Manteca	381,514	268,606	259,158	230,437	268,606	199,290
Martinez	781,133	204,980	157,891	550,921	204,980	157,891
Moraga	8,079	39,140	4,746	8,079	39,140	4,746
Oakley	0	14,959	1,188	0	14,959	1,188
Orinda	0	0	68,424	0	0	68,424
Pacifica	364,693	113,226	148,019	350,700	113,226	148,019
Pinole	1,374,968	123,118	200,640	449,312	123,118	200,640
Pittsburg	572,122	640,557	1,143,396	499,860	500,674	629,380
Pleasant Hill	174,950	244,739	117,564	138,703	244,739	117,564
San Pablo	414,307	405,577	45,760	326,854	264,864	45,760
San Ramon	478,518	293,267	192,424	478,518	252,596	192,424
All Members	\$6,492,157	\$4,604,062	\$3,057,824	\$4,706,609	\$3,894,493	\$2,483,940

Notes:

1. Reported incurred losses are the sum of losses paid and the total of the case loss reserves on individual claims. Reported incurred losses do not include actuarial estimates of loss development on reported claims and losses on claims incurred, but not reported.
2. Incurred losses include allocated loss expenses.
3. Incurred losses do not include 4850 benefits.
4. Losses are evaluated as of October 31, 2016.

Municipal Pooling Authority
Experience Modification Factors
Workers' Compensation

Calculation of 2017-18 Experience Modification Factors

Member	2013-14 to 2015-16 Payroll (A)	Weighting (B)	2013-14 to 2015-16 Incurred Losses (C)	2013-14 to 2015-16 Incurred Limited to \$100K (D)	2013-14 to 2015-16 Inc \$100K Loss Ratio (E)	2017-18 Experience Modification Factor (G)
Antioch	\$79,232,735	71.7%	\$2,136,384	\$1,847,028	2.331	1.383
Brentwood	80,487,879	72.0%	1,677,352	1,326,186	1.648	1.062
Clayton	6,273,750	16.7%	76,569	76,569	1.220	0.987
Danville *	22,985,326	42.4%	401,372	384,946	1.675	0.938
El Cerrito	52,267,225	62.6%	415,880	415,880	0.796	0.709
Hercules	17,542,868	36.0%	201,776	201,776	1.150	0.927
Lafayette *	11,426,481	26.8%	7,044	7,044	0.062	0.613
Manteca	93,676,161	75.0%	909,278	698,333	0.745	0.622
Martinez	31,851,286	50.5%	1,144,005	913,793	2.869	1.455
Moraga	9,496,896	23.3%	51,966	51,966	0.547	0.869
Oakley	9,511,192	23.3%	16,147	16,147	0.170	0.812
Orinda *	9,183,073	22.7%	68,424	68,424	0.745	0.746
Pacifica	49,627,611	61.4%	625,937	611,945	1.233	0.891
Pinole	25,553,275	45.0%	1,698,727	773,070	3.025	1.454
Pittsburg	67,752,849	68.5%	2,356,075	1,629,914	2.406	1.401
Pleasant Hill	32,763,227	51.2%	537,252	501,006	1.529	1.012
San Pablo	42,701,896	57.8%	865,644	637,478	1.493	0.997
San Ramon	78,210,941	71.5%	964,209	923,538	1.181	0.844
All Members	\$720,544,671		\$14,154,043	\$11,085,043	1.538	1.000
(F) Members w/o Safety *	43,594,880	58.3%	476,841	460,414	1.056	0.817
Members w Safety	676,949,791	95.6%	13,677,202	10,624,629	1.569	1.019

Notes:

- (A) Provided by the the Authority.
(B) $(A) / ((A) + \text{Maximum of } (A) / 3)$
(C) From Exhibit 2.
(D) From Exhibit 2.
(E) Limited to \$100K / Payroll x 100
(F) Based on the information in columns (A) through (E) for those members with and without safety.
(G) $[(B) \times (E) + (1 - (B) \times \text{Total}(E) \times (F))] / \text{Total}(E))$ and subject to an off-balance factor of 1.006
The experience rating modifications are adjusted for members with and without safety in total.
For members with safety, this adjustment is 1.019 and for those members without safety this adjustment is 0.817. See (F).

Municipal Pooling Authority Experience Modification Factors

Indicated Fiscal Year 2017-18 Premium With Excess Insurance Based on Payroll Only
at the 80% Confidence Level

Member	2016-17 Estimated Payroll (A)	2017-18 Base Rate = \$4.524 (B)	Preliminary Unmodified 2017-18 Premium (C)	2017-18 Experience Rating Modification (D)	2017-18 Experience Rated Premium (E)
Antioch	\$29,126,502	\$4.524	\$1,317,683	1.383	\$1,822,356
Brentwood	29,450,256	4.524	1,332,330	1.062	1,414,934
Clayton	2,112,430	4.524	95,566	0.987	94,324
Danville	8,345,874	4.524	377,567	0.938	354,158
El Cerrito	20,059,109	4.524	907,474	0.709	643,399
Hercules	6,255,843	4.524	283,014	0.927	262,354
Lafayette	4,536,344	4.524	205,224	0.613	125,802
Manteca	36,031,385	4.524	1,630,060	0.622	1,013,897
Martinez	11,003,372	4.524	497,793	1.455	724,288
Moraga	3,450,690	4.524	156,109	0.869	135,659
Oakley	8,366,542	4.524	378,502	0.812	307,344
Orinda	3,789,866	4.524	171,454	0.746	127,904
Pacifica	19,354,446	4.524	875,595	0.891	780,155
Pinole	8,092,706	4.524	366,114	1.454	532,330
Pittsburg	25,608,922	4.524	1,158,548	1.401	1,623,125
Pleasant Hill	11,685,665	4.524	528,659	1.012	535,003
San Pablo	14,571,510	4.524	659,215	0.997	657,237
San Ramon	30,347,253	4.524	1,372,910	0.844	1,158,736
All Members	\$272,188,713		\$12,313,817	1.000	\$12,313,005

Notes:

- (A) Provided by the the Authority.
- (B) From Exhibit 2, Page 2 of the actuarial study.
- (C) (A) /100 x (B)
- (D) From Exhibit 3.
- (E) (C) x (D)

**Municipal Pooling Authority
Experience Modification Factors
Workers' Compensation**

Experience Modification Factor Comparison

Member	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2016-17 to 2017-18 Change (J)
	Experience Modification Factor (A)	Experience Modification Factor (B)	Experience Modification Factor (C)	Experience Modification Factor (D)	Experience Modification Factor (E)	Experience Modification Factor (F)	Experience Modification Factor (G)	Experience Modification Factor (H)	Experience Modification Factor (I)	
Antioch	1.180	1.381	1.244	1.522	1.444	1.433	1.470	1.403	1.383	-1%
Brentwood	0.700	0.871	1.112	1.263	1.199	1.321	1.302	1.369	1.062	-22%
Clayton	1.030	1.066	0.873	0.835	0.906	1.011	1.084	0.967	0.987	2%
Danville	0.780	0.587	0.567	0.522	0.503	0.652	0.758	1.065	0.938	-12%
El Cerrito	0.900	0.849	0.975	0.806	0.816	0.615	0.608	0.552	0.709	28%
Hercules	0.840	0.904	1.002	0.872	0.808	0.780	0.946	0.937	0.927	-1%
Lafayette	0.520	0.502	0.490	0.508	0.459	0.602	0.582	0.738	0.613	-17%
Manteca	0.980	0.824	0.742	0.823	0.826	0.720	0.606	0.565	0.622	10%
Martinez	1.720	1.815	1.621	1.286	1.269	1.130	1.552	1.502	1.455	-3%
Moraga	1.610	1.528	1.201	0.842	0.822	0.808	0.776	0.792	0.869	10%
Oakley	0.850	0.555	0.546	0.544	0.501	0.622	0.636	0.845	0.812	-4%
Orinda	0.590	0.653	0.617	0.637	0.449	0.567	0.602	0.773	0.746	-4%
Pacifica	0.950	1.011	1.357	1.090	1.214	1.082	1.077	0.978	0.891	-9%
Pinole	1.050	0.879	1.082	1.153	1.423	1.403	1.393	1.158	1.454	26%
Pittsburg	1.390	1.309	1.201	1.009	0.910	0.787	0.797	1.100	1.401	27%
Pleasant Hill	0.860	0.945	0.995	0.883	0.928	1.123	0.972	1.130	1.012	-10%
San Pablo	0.930	0.764	0.813	0.879	0.789	0.788	0.781	0.912	0.997	9%
San Ramon	0.680	0.787	0.603	0.758	0.900	1.112	1.037	0.761	0.844	11%
All Members	0.988	0.996	0.998	1.001	1.001	0.998	0.980	0.985	1.000	2%

Notes: Amounts for 2016-17 and prior are from prior reports. The amounts for 2017-18 are from Exhibit 3.

**Municipal Pooling Authority
Experience Modification Factors
Workers' Compensation**

Experience Modification Factor Comparison

Member	Prior 2012-13 Capped Incurred Losses (A)	Prior 2013-14 Capped Incurred Losses (B)	Prior 2014-15 Capped Incurred Losses (C)	Prior Total Capped Incurred Losses (D)	Current 2013-14 Capped Incurred Losses (E)	Current 2014-15 Capped Incurred Losses (F)	Current 2015-16 Capped Incurred Losses (G)	Current Total Capped Incurred Losses (H)	Change in Capped Incurred Losses (I)	Percent Change in Capped Incurred Losses (J)	2016-17 Experience Modification Factor (K)	2017-18 Experience Modification Factor (L)	2016-17 to 2017-18 Change (M)
Antioch	\$627,001	\$906,134	\$504,318	\$2,037,453	\$929,987	\$602,807	\$314,234	\$1,847,028	-\$190,425	-9%	1.403	1.383	-1.4%
Brentwood	1,066,379	373,637	545,620	1,985,636	446,802	785,755	93,629	1,326,186	-659,450	-33%	1.369	1.062	-22.4%
Clayton	13,971	72,355	3,856	90,182	72,355	2,974	1,240	76,569	-13,613	-15%	0.967	0.987	2.1%
Danville	216,211	71,722	145,678	433,611	78,069	252,142	54,734	384,946	-48,665	-11%	1.065	0.938	-12.0%
El Cerrito	101,030	30,376	126,595	258,001	52,392	120,060	243,428	415,880	157,878	61%	0.552	0.709	28.4%
Hercules	89,829	90,788	63,149	243,766	86,837	103,853	11,087	201,776	-41,990	-17%	0.937	0.927	-1.1%
Lafayette	6,991	6,783	0	13,774	6,783	0	261	7,044	-6,730	-49%	0.738	0.613	-17.0%
Manteca	321,960	128,295	182,475	632,730	230,437	268,606	199,290	698,333	65,603	10%	0.565	0.622	10.0%
Martinez	388,524	555,989	195,683	1,140,195	550,921	204,980	157,891	913,793	-226,401	-20%	1.502	1.455	-3.2%
Moraga	5,335	8,079	14,640	28,055	8,079	39,140	4,746	51,966	23,911	85%	0.792	0.869	9.8%
Oakley	645	0	35,639	36,284	0	14,959	1,188	16,147	-20,137	-55%	0.845	0.812	-3.9%
Orinda	8,525	0	0	8,525	0	0	68,424	68,424	59,899	703%	0.773	0.746	-3.6%
Pacifica	353,450	333,869	116,239	803,558	350,700	113,226	148,019	611,945	-191,613	-24%	0.978	0.891	-8.8%
Pinole	140,528	390,724	78,644	609,896	449,312	123,118	200,640	773,070	163,174	27%	1.158	1.454	25.5%
Pittsburg	436,400	401,245	410,848	1,248,493	499,860	500,674	629,380	1,629,914	381,421	31%	1.100	1.401	27.4%
Pleasant Hill	299,430	114,660	276,726	690,816	138,703	244,739	117,564	501,006	-189,811	-27%	1.130	1.012	-10.5%
San Pablo	131,131	257,362	208,284	596,777	326,854	264,864	45,760	637,478	40,701	7%	0.912	0.997	9.4%
San Ramon	241,734	389,787	209,941	841,462	478,518	252,596	192,424	923,538	82,076	10%	0.761	0.844	10.9%
All Members	\$4,449,073	\$4,131,805	\$3,118,336	\$11,699,213	\$4,706,609	\$3,894,493	\$2,483,940	\$11,085,043	-\$614,170	-5%	0.985	1.000	1.5%

Notes:

- (A)-(C) From the prior report.
- (D) (A) + (B) + (C)
- (E)-(G) From Exhibit 2.
- (H) (E) + (F) + (G)
- (I) (H) - (G)
- (J) (I) / (D)
- (K)-(M) From Exhibit 5.