



**ALAMEDA COUNTY FIRE DEPARTMENT  
RETIREE HEALTHCARE PLAN**



**June 30, 2023 Actuarial Valuation**

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Katherine Moore, ASA, MAAA  
**Foster & Foster, Inc.**

February 27, 2024

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## BENEFIT SUMMARY

<p>■ Eligibility</p>	<p>■ Service or disability retirement under CalPERS</p>																					
<p>■ Medical Benefit</p>	<p>■ Full monthly premium up to cap<sup>1</sup>:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">OPEB Tier</th> <th style="width: 15%;">Retirement Date<sup>2</sup></th> <th style="width: 15%;">Hire Date</th> <th style="width: 40%;">Cap</th> <th style="width: 10%;">Vesting Schedule</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td rowspan="3" style="text-align: center; vertical-align: middle;">&lt; 6/30/22</td> <td style="text-align: center;">&lt; 4/1/09</td> <td rowspan="2" style="text-align: center;">100% of Kaiser Region 1 Premium – Single, 2-Party, or Family</td> <td style="text-align: center;">No</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">4/1/09-12/31/14</td> <td rowspan="2" style="text-align: center;">Yes</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">&gt; 1/1/15</td> <td style="text-align: center;">90% of Kaiser Region 1 Premium – Single or 2-Party</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">&gt; 6/30/22</td> <td style="text-align: center;">All</td> <td style="text-align: center;">90% of Kaiser Region 1 Premium – Single, 2-Party, or Family (2-Party Post-Medicare)</td> <td style="text-align: center;">Yes</td> </tr> </tbody> </table> <p>■ Kaiser cap varies by medical coverage and Medicare eligibility</p>	OPEB Tier	Retirement Date <sup>2</sup>	Hire Date	Cap	Vesting Schedule	1	< 6/30/22	< 4/1/09	100% of Kaiser Region 1 Premium – Single, 2-Party, or Family	No	2	4/1/09-12/31/14	Yes	3	> 1/1/15	90% of Kaiser Region 1 Premium – Single or 2-Party	4	> 6/30/22	All	90% of Kaiser Region 1 Premium – Single, 2-Party, or Family (2-Party Post-Medicare)	Yes
OPEB Tier	Retirement Date <sup>2</sup>	Hire Date	Cap	Vesting Schedule																		
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4	> 6/30/22	All	90% of Kaiser Region 1 Premium – Single, 2-Party, or Family (2-Party Post-Medicare)	Yes																		

<sup>1</sup> For special Safety group of retirees, cap is \$164.94/month single or \$250.85/month 2-Party.

<sup>2</sup> November 3, 2022 for unrepresented employees.



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## BENEFIT SUMMARY

<p>■ Grand-Fathered Eligibility for Tier 4</p>	<p>■ Grandfathered eligibility:</p> <ul style="list-style-type: none"> <li>● Hired before 4/1/09 with 14 years ACFD service on 6/30/22 – vesting schedule does not apply</li> <li>● Hired 4/1/09 to 6/30/22 – years of service for vesting schedule is based on total CalPERS service</li> </ul>																												
<p>■ Vesting Schedule</p>	<p>■ Vesting % based on service, minimum of 5 years ACFD service:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"><u>Service</u></th> <th style="width: 20%;"><u>Vesting %</u></th> <th style="width: 15%;"><u>Service</u></th> <th style="width: 20%;"><u>Vesting %</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">&lt;10</td> <td style="text-align: center;">PEMHCA Min</td> <td style="text-align: center;">15</td> <td style="text-align: center;">75%</td> </tr> <tr> <td style="text-align: center;">10</td> <td style="text-align: center;">50%</td> <td style="text-align: center;">16</td> <td style="text-align: center;">80%</td> </tr> <tr> <td style="text-align: center;">11</td> <td style="text-align: center;">55%</td> <td style="text-align: center;">17</td> <td style="text-align: center;">85%</td> </tr> <tr> <td style="text-align: center;">12</td> <td style="text-align: center;">60%</td> <td style="text-align: center;">18</td> <td style="text-align: center;">90%</td> </tr> <tr> <td style="text-align: center;">13</td> <td style="text-align: center;">65%</td> <td style="text-align: center;">19</td> <td style="text-align: center;">95%</td> </tr> <tr> <td style="text-align: center;">14</td> <td style="text-align: center;">70%</td> <td style="text-align: center;">20+</td> <td style="text-align: center;">100%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>■ Based on CalPERS service for retirees before 6/30/22 and grandfathered participants hired 4/1/09 to 6/30/22</li> <li>■ Based on ACFD service for hires after 6/30/22<sup>3</sup></li> <li>■ 100% vesting with disability retirement</li> </ul>	<u>Service</u>	<u>Vesting %</u>	<u>Service</u>	<u>Vesting %</u>	<10	PEMHCA Min	15	75%	10	50%	16	80%	11	55%	17	85%	12	60%	18	90%	13	65%	19	95%	14	70%	20+	100%
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<sup>3</sup> Includes prior service with an agency that has contracted with ACFD.



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## BENEFIT SUMMARY

<ul style="list-style-type: none"> <li>■ Employee Contrib.</li> </ul>	<ul style="list-style-type: none"> <li>■ 1/1/21 through 6/20/22: 5.25% of base pay</li> <li>■ 6/30/22 and later: 4% of Firefighter annual top step base pay<sup>4</sup></li> </ul>
<ul style="list-style-type: none"> <li>■ Surviving Spouse</li> </ul>	<ul style="list-style-type: none"> <li>■ 100% of retiree benefit continues to surviving spouse if retiree elects survivor annuity under CalPERS retirement plan</li> </ul>
<ul style="list-style-type: none"> <li>■ Other</li> </ul>	<ul style="list-style-type: none"> <li>■ No dental, vision, life, or Medicare Part B reimbursements.</li> </ul>

<sup>4</sup> For non-safety, 4% of employee's base pay if less than Firefighter top step base pay.



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## BENEFIT SUMMARY

<ul style="list-style-type: none"> <li>■ Pay-As-You-Go Costs</li> </ul>	<p>(amounts in \$ millions)</p> <table border="1"> <caption>Pay-As-You-Go Costs (Amounts in \$ millions)</caption> <thead> <tr> <th>Year</th> <th>Cash</th> <th>Implied Subsidy</th> <th>Total</th> </tr> </thead> <tbody> <tr><td>07/08</td><td>\$1.3</td><td>\$0.0</td><td>\$1.3</td></tr> <tr><td>08/09</td><td>\$1.4</td><td>\$0.0</td><td>\$1.4</td></tr> <tr><td>09/10</td><td>\$1.6</td><td>\$0.0</td><td>\$1.6</td></tr> <tr><td>10/11</td><td>\$1.8</td><td>\$0.0</td><td>\$1.8</td></tr> <tr><td>11/12</td><td>\$1.9</td><td>\$0.0</td><td>\$1.9</td></tr> <tr><td>12/13</td><td>\$2.1</td><td>\$0.0</td><td>\$2.1</td></tr> <tr><td>13/14</td><td>\$2.5</td><td>\$0.0</td><td>\$2.5</td></tr> <tr><td>14/15</td><td>\$2.8</td><td>\$0.0</td><td>\$2.8</td></tr> <tr><td>15/16</td><td>\$3.2</td><td>\$0.0</td><td>\$3.2</td></tr> <tr><td>16/17</td><td>\$3.5</td><td>\$0.7</td><td>\$4.2</td></tr> <tr><td>17/18</td><td>\$3.9</td><td>\$0.7</td><td>\$4.6</td></tr> <tr><td>18/19</td><td>\$4.1</td><td>\$0.9</td><td>\$5.0</td></tr> <tr><td>19/20</td><td>\$4.2</td><td>\$0.9</td><td>\$5.1</td></tr> <tr><td>20/21</td><td>\$4.4</td><td>\$1.1</td><td>\$5.5</td></tr> <tr><td>21/22</td><td>\$4.5</td><td>\$1.0</td><td>\$5.5</td></tr> <tr><td>22/23</td><td>\$4.5</td><td>\$0.0</td><td>\$4.5</td></tr> </tbody> </table>	Year	Cash	Implied Subsidy	Total	07/08	\$1.3	\$0.0	\$1.3	08/09	\$1.4	\$0.0	\$1.4	09/10	\$1.6	\$0.0	\$1.6	10/11	\$1.8	\$0.0	\$1.8	11/12	\$1.9	\$0.0	\$1.9	12/13	\$2.1	\$0.0	\$2.1	13/14	\$2.5	\$0.0	\$2.5	14/15	\$2.8	\$0.0	\$2.8	15/16	\$3.2	\$0.0	\$3.2	16/17	\$3.5	\$0.7	\$4.2	17/18	\$3.9	\$0.7	\$4.6	18/19	\$4.1	\$0.9	\$5.0	19/20	\$4.2	\$0.9	\$5.1	20/21	\$4.4	\$1.1	\$5.5	21/22	\$4.5	\$1.0	\$5.5	22/23	\$4.5	\$0.0	\$4.5
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<ul style="list-style-type: none"> <li>■ Contract Agencies</li> </ul>	<ul style="list-style-type: none"> <li>■ Costs allocated to contract agencies based on agencies' cost allocation percentage with ACFD</li> </ul>																																																																				

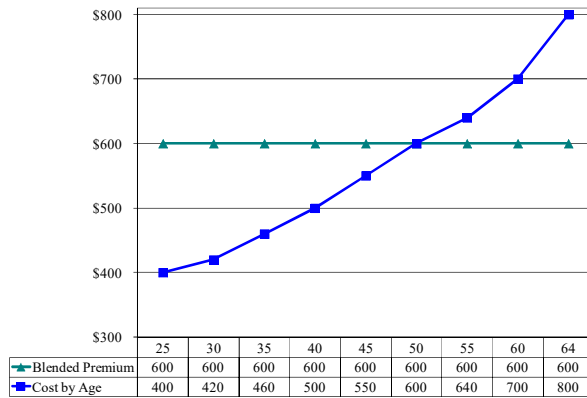


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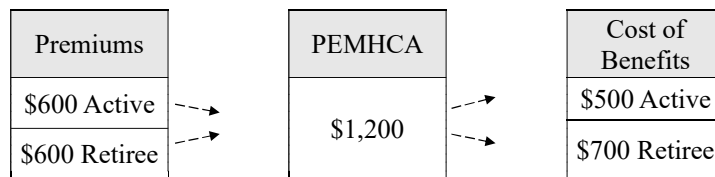


## IMPLIED SUBSIDY

- For PEMHCA, employer cost for allowing retirees to participate at active rates.
  - General trend:



- Sample active age 40, retiree age 60:



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## IMPLIED SUBSIDY

- GASB 75 defers to actuarial standards of practice.
- Actuarial Standards Board ASOP 6 (May 2014):
  - Requires implied subsidy valued for community rated plans such as PEMHCA.
  - Timing: effective with all valuations on or after March 31, 2015
- Valuations on and after June 30, 2015 include the PEMHCA implied subsidy.



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**DATA SUMMARY**

**Historical Participant Statistics**

	6/30/15	6/30/17	6/30/19	6/30/21	6/30/23
■ Actives:					
• Count	421	419	426	426	415
• Average:					
➢ Age	42.6	41.7	41.7	42.0	43.4
➢ ACFD Service	8.3	8.6	9.3	9.9	11.3
➢ CalPERS Service	13.0	12.1	12.3	12.6	13.8
➢ Salary	\$115,500	\$120,600	\$130,300	\$ 140,700	\$155,200
• Total Salary (000s)	\$48,607	50,541	55,516	59,923	64,418
■ Retirees:					
• Count	246	292	308	331	336
• Average:					
➢ Age	64.1	63.9	64.1	65.2	66.3
➢ Retirement Age					
○ Service	54.4	54.6	54.6	54.8	55.0
○ Disability	52.5	53.1	53.3	53.3	53.4



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**DATA SUMMARY**

**Participant Reconciliation**

	Actives	Retirees	Disabled	Surviving Spouses	Total
■ <b>June 30, 2021 Valuation</b>	426	206	100	25	757
• New Hires	22	-	-	-	22
• Terminations	(18)	-	-	-	(18)
• New Service Retirements	(11)	11	-	-	-
• New Disability Retirements	(4)	-	4	-	-
• Death with Survivor	-	(4)	(1)	5	-
• Death w/o Survivor or Cancelled	-	(2)	(1)	(7)	(10)
• Data Adjustments	-	(1)	1	-	-
■ <b>June 30, 2023 Valuation</b>	415	210	103	23	751



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## ACTUARIAL ASSUMPTIONS HIGHLIGHTS

### CERBT Investment Options

#### ■ 2018 Asset Allocation

	Strategy 1	Strategy 2	Strategy 3
Global Equity	59%	40%	22%
Fixed Income	25%	43%	49%
TIPS	5%	5%	16%
Commodities	3%	4%	5%
REITs	8%	8%	8%
Total	100%	100%	100%

#### ■ 2022 Asset Allocation (approved March 14, 2022)

	Strategy 1	Strategy 2	Strategy 3
Global Equity	49%	34%	23%
Fixed Income	23%	41%	51%
TIPS	5%	5%	9%
Commodities	3%	3%	3%
REITs	20%	17%	14%
Total	100%	100%	100%



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## ACTUARIAL ASSUMPTIONS HIGHLIGHTS

### Discount Rate

#### ■ Future expected returns

- Stochastic simulations of geometric average returns over 20 years
- 5,000 trials
- 2.50% inflation assumption
- Projections based on 8 independent Investment Advisors 2021 10-year Capital Market Assumptions and where available, investment advisors long-term trends
- Confidence levels (based on 2022 asset allocations):

	Strategy 1	Strategy 2	Strategy 3
50% Confidence Level	6.25%	5.75%	5.25%
55% Confidence Level	6.00%	5.50%	5.00%
60% Confidence Level	5.75%	5.25%	4.75%

- ACFD currently in Strategy 1.
- Separate sub-accounts for each contracting agency.
- Recommend 6.25% for full-funding discount rate



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## ACTUARIAL ASSUMPTIONS HIGHLIGHTS

	June 30, 2021 Valuation	June 30, 2023 Valuation
■ Valuation Date	<ul style="list-style-type: none"> <li>■ June 30, 2021</li> <li>■ 2022/23 and 2023/24 ADC</li> </ul>	<ul style="list-style-type: none"> <li>■ June 30, 2023</li> <li>■ 2024/25 and 2025/26 ADC</li> </ul>
■ General Inflation	<ul style="list-style-type: none"> <li>■ 2.50%</li> <li>■ Used for economic assumptions</li> </ul>	<ul style="list-style-type: none"> <li>■ Same</li> </ul>
■ Payroll Increases	<ul style="list-style-type: none"> <li>■ Aggregate Increases – 2.75%</li> <li>■ Merit Increases – CalPERS 2000-2019 Experience Study</li> </ul>	<ul style="list-style-type: none"> <li>■ Same</li> </ul>
■ Mortality, Termination, Disability, Retirement	<ul style="list-style-type: none"> <li>■ CalPERS 2000-2019 Experience Study</li> <li>■ Mortality projected with Scale MP-2021</li> </ul>	<ul style="list-style-type: none"> <li>■ Same</li> </ul>



## ACTUARIAL ASSUMPTIONS HIGHLIGHTS

■ Discount Rate	<ul style="list-style-type: none"> <li>■ 4.87% - approx. blended rate determined by allocating liabilities to agencies based on estimated pre-funding policies:                             <ul style="list-style-type: none"> <li>● 6.25% - full pre-funding rate used for Dispatch, City of Dublin, and LLNL</li> <li>● 5.00% - partial pre-funding rate (50% to 60% of ADC less paygo) used for ALCO, City of Newark, City of Emeryville, Union City, and LBNL</li> <li>● 4.00% - employee contributions only (20% of ADC less paygo) for City of San Leandro</li> </ul> </li> <li>■ 6.25% - side fund calculations, CERBT Strategy #1</li> </ul>	<ul style="list-style-type: none"> <li>■ 6.25% - CERBT Strategy #1</li> <li>■ Based on GASBS 75 crossover test methodology for the plan as a whole</li> </ul>
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## ACTUARIAL ASSUMPTIONS HIGHLIGHTS

■ Medical Trend	June 30, 2021 Valuation				June 30, 2023 Valuation			
	Calendar Year	Increase from Prior Year			Calendar Year	Increase from Prior Year		
		Pre-Medicare	Post-Medicare Kaiser	Post-Medicare Other		Pre-Medicare	Post-Medicare Kaiser	Post-Medicare Other
	2021	Actual 2021 Premiums			2021	n/a		
	2022	Actual 2022 Premiums*			2022	n/a		
	2023	6.50%	4.60%	5.65%	2023	Actual 2023 Premiums		
	2024	6.25%	4.45%	5.45%	2024	Actual 2024 Premiums		
	2025	6.00%	4.35%	5.25%	2025	8.50%	6.25%	7.50%
	2026	5.75%	4.25%	5.05%	2026	7.90%	5.65%	6.90%
	2027	5.55%	4.20%	4.90%	2027	7.35%	5.45%	6.50%
	2028	5.35%	4.15%	4.75%	2028	6.75%	5.25%	6.10%
	2029	5.15%	4.10%	4.60%	2029	6.20%	5.05%	5.70%
	2030	4.95%	4.05%	4.45%	2030	5.60%	4.85%	5.25%
	2031-35	4.80%	4.00%	4.35%	2031	5.05%	4.56%	4.85%
	2036-45	4.65%	3.95%	4.25%	2032-38	4.45%	4.45%	4.45%
	2046-55	4.50%	3.90%	4.20%	2039-40	4.35%	4.35%	4.35%
	2056-65	4.35%	3.85%	4.15%	2041	4.30%	4.30%	4.30%
	2066-75	4.05%	3.80%	3.95%	2042-44	4.25%	4.25%	4.25%
	2076+	3.75%	3.75%	3.75%	2045-47	4.20%	4.20%	4.20%
					2048-50	4.15%	4.15%	4.15%
					↓	↓	↓	↓
					2076+	3.45%	3.45%	3.45%

\*Medical premiums after 2022 and estimated claims after 2021 do not take into account buy-downs (CalPERS subsidizations of premium rates from reserves).



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## ACTUARIAL ASSUMPTIONS HIGHLIGHTS

■ PEMHCA Minimum Increases	June 30, 2021 Valuation		June 30, 2023 Valuation	
	Year	PEMHCA Min	Year	PEMHCA Min
	2021	\$143.00	2023	\$151.00
	2022	\$149.00	2024	\$157.00
	2023	\$151.00	2025+	3.50%/yr. increase
	2024+	4.00%/yr. increase		



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ACTUARIAL METHODS

	June 30, 2021 Valuation	June 30, 2023 Valuation
■ Cost Method	<ul style="list-style-type: none"><li>• Entry Age Normal</li><li>• Normal Cost is a level percent of payroll</li></ul>	<ul style="list-style-type: none"><li>• Same</li></ul>
■ Funding Policy	<ul style="list-style-type: none"><li>• Partial pre-funding, varies by agency</li><li>• Employees also contribute</li></ul>	<ul style="list-style-type: none"><li>• Same</li></ul>
■ Amortization Method	<ul style="list-style-type: none"><li>• Level percent of payroll</li></ul>	<ul style="list-style-type: none"><li>• Same</li></ul>
■ Amortization Periods	<ul style="list-style-type: none"><li>• 20-year, 25-year, and 28-year UAAL amortization shown for unfunded side fund liabilities</li></ul>	<ul style="list-style-type: none"><li>• 20-year UAAL amortization for ADCs</li><li>• 18-year, 23-year, and 26-year UAAL amortization shown for unfunded side fund liabilities</li></ul>



ACTUARIAL METHODS

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**ASSETS**

**Market Value of Plan Assets (MVA)<sup>5</sup>**

(Amounts in \$000's)

	2021/22	2022/23	Projected 2023/24
■ <b>Market Value</b> (Beginning of Year)	<b>\$46,847</b>	<b>\$44,963</b>	<b>\$51,317</b>
● Contributions – Employer	2,270	1,800	2,000
● Contributions – Employee	3,007	2,086	2,186
● Disbursements	(525)	(529)	(500)
● Administrative Expenses	(23)	(23)	(26)
● Investment Expense	(17)	(17)	-
● Investment Return	<u>(6,595)</u>	<u>3,037</u>	<u>3,320</u>
■ <b>Market Value</b> (End of Year)	<b>44,963</b>	<b>51,317</b>	<b>58,297</b>
■ <b>Approximate Annual Return</b>	(13.5%)	6.6%	6.25%

<sup>5</sup> Market value of assets from the CERBT quarterly statements.



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**ASSETS**

**Actuarial Value of Plan Assets (AVA)**

(Amounts in \$000's)

	2021/22	2022/23	Projected 2023/24
■ <b>Actuarial Value</b> (Beginning of Year)	<b>\$41,895</b>	<b>\$48,488</b>	<b>\$54,195</b>
● Contributions	5,277	3,886	4,186
● Benefit Payment/Disbursements	(525)	(529)	(500)
● Administrative Expenses	(23)	(23)	(26)
● Expected Investment Return	2,745	3,093	3,500
■ <b>Expected AVA (End of Year)</b>	<b>49,369</b>	<b>54,915</b>	<b>61,355</b>
■ <b>MVA (End of Year)</b>	<b>44,963</b>	<b>51,317</b>	<b>58,297</b>
■ <b>1/5 of (MVA - Expected AVA)</b>	<b>(881)</b>	<b>(720)</b>	<b>(612)</b>
■ <b>Preliminary AVA</b>	<b>48,488</b>	<b>54,195</b>	<b>60,743</b>
● Minimum AVA (80% of MVA)	35,971	41,053	46,637
● Maximum AVA (120% of MVA)	53,956	61,580	69,956
■ <b>Actuarial Value</b> (End of Year)	<b>48,488</b>	<b>54,195</b>	<b>60,743</b>
■ <b>Approximate AVA Return</b>	4.2%	4.8%	5.2%



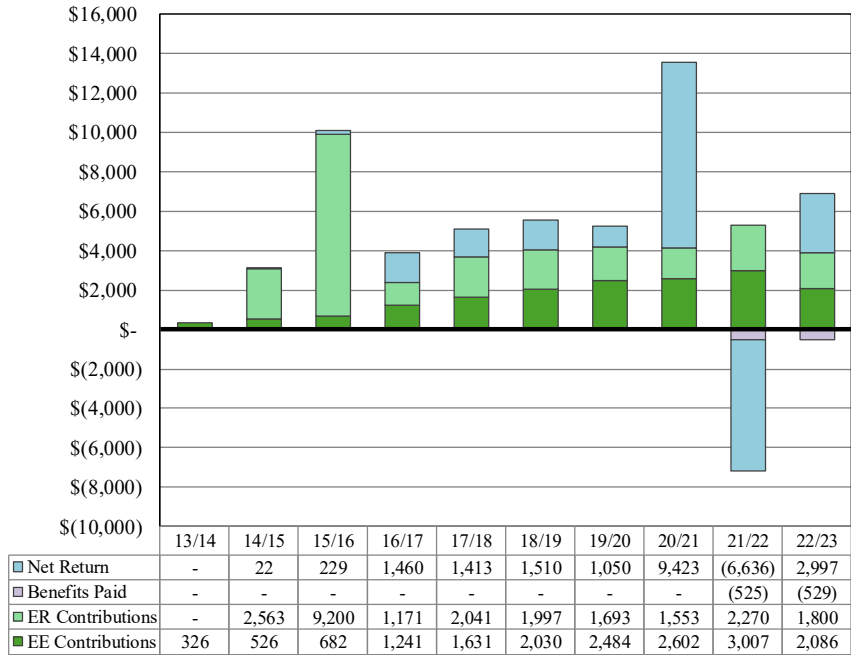
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## ASSETS

### Historical Asset Changes (Amounts in \$000's)



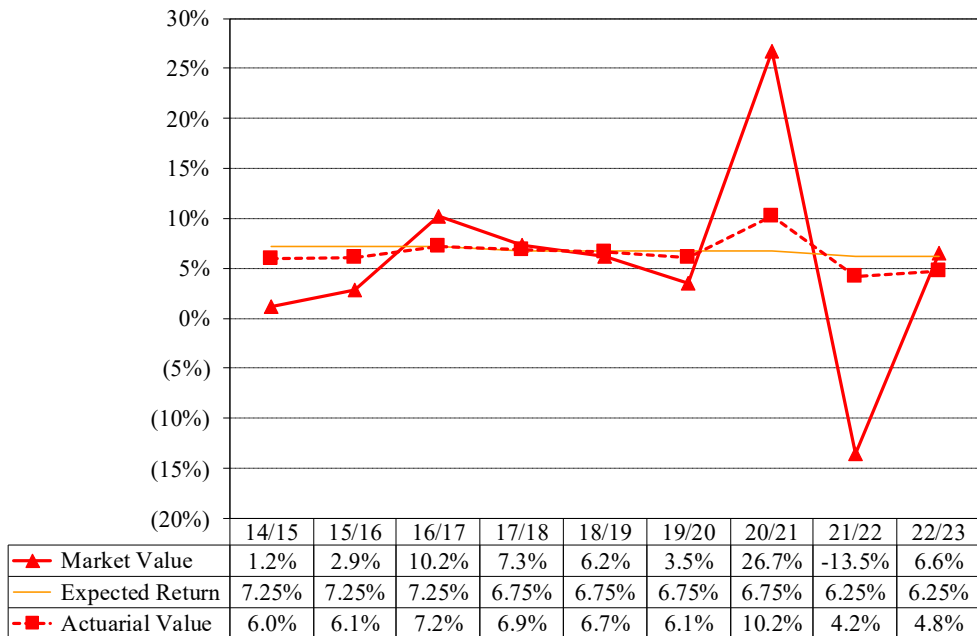
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## ASSETS

### Annualized Asset Returns



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## RESULTS

### Actuarial Obligations

(Amounts in \$000's)

	6/30/21 Valuation	6/30/23 Valuation
■ <b>Discount Rate</b>	4.87%	6.25%
■ <b>Present Value of Benefits</b>		
•Actives	\$ 116,268	\$100,897
•Retirees	<u>71,713</u>	<u>64,555</u>
•Total	187,981	165,452
■ <b>Actuarial Accrued Liability</b>		
•Actives	55,838	57,760
•Retirees	<u>71,713</u>	<u>64,555</u>
•Total	127,551	122,315
■ <b>Actuarial Value of Assets</b>	<u>(41,895)</u>	<u>(54,195)</u>
■ <b>Unfunded AAL</b>	85,656	68,120
■ <b>Funded Ratio</b>	32.8%	44.3%
■ <b>Pay-As-You-Go (22/23 &amp; 24/25)</b>	5,948	6,211



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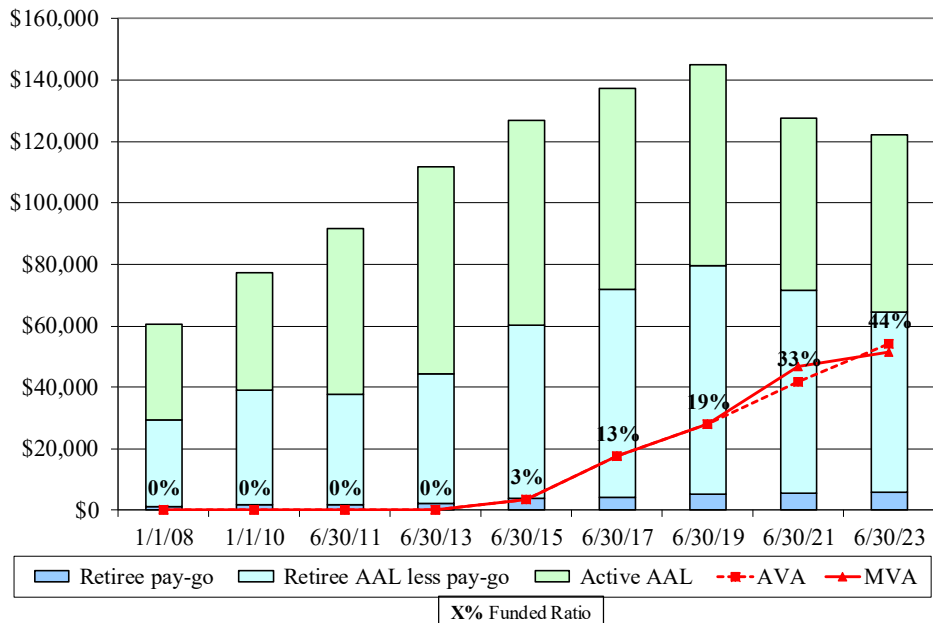
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## RESULTS

### Historical Actuarial Accrued Liability

(Amounts in \$000's)



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**RESULTS**

**Actuarial Gains & Losses**  
(Amounts in \$000's)

	<b>AAL</b>
■ 6/30/21 Actual	\$127,551
■ 6/30/23 Expected	138,918
■ Experience (Gains)/Losses:	
• Premiums/Claims Different than Expected	(1,959)
• Demographic & Other	(2,537)
■ Assumption Changes:	
• Healthcare & PEMHCA Minimum Trend	9,643
• Discount Rate (4.87% to 6.25%)	<u>(21,750)</u>
■ Total Changes	<u>(16,603)</u>
■ 6/30/23 Actual	122,315



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**RESULTS**

**Actuarially Determined Contribution (ADC)**  
(Amounts in \$000's)

	<b>2024/25</b>	<b>2025/26</b>
■ <b>ADC - \$</b>		
• Normal Cost	\$4,715	\$4,848
• UAAL Amortization <sup>6</sup>	<u>4,869</u>	<u>5,003</u>
• Total ADC	9,584	9,851
• Employee Contributions <sup>7</sup>	<u>(2,246)</u>	<u>(2,308)</u>
• Employer ADC	7,338	7,544
■ <b>Projected Payroll</b>	68,010	69,880
■ <b>ADC - %Pay</b>		
• Normal Cost	6.9%	6.9%
• UAAL Amortization	<u>7.2%</u>	<u>7.2%</u>
• Total ADC	14.1%	14.1%
• Employee Contributions	<u>(3.3%)</u>	<u>(3.3%)</u>
• Employer ADC	10.8%	10.8%

<sup>6</sup> Based on 20-year amortization periods.

<sup>7</sup> Estimated employee contributions for 23/24 provided by ACFD; projected to 2024/25 and 2025/26 based on payroll increase assumption.



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**RESULTS**

**Actuarial Obligations by Pre/Post Medicare**

(Amounts in \$000's)

	6/30/23 Valuation		
	Pre Medicare Results	Post Medicare Results	Total
■ <b>Present Value of Benefits</b>			
•Actives	\$73,109	\$27,788	\$100,897
•Retirees	<u>28,719</u>	<u>35,837</u>	<u>64,555</u>
•Total	101,828	63,625	165,452
■ <b>Actuarial Accrued Liability</b>			
•Actives	41,219	16,541	57,760
•Retirees	<u>28,719</u>	<u>35,837</u>	<u>64,555</u>
•Total	69,938	52,378	122,315
■ <b>Actuarial Value of Assets<sup>8</sup></b>	<u>(30,988)</u>	<u>(23,208)</u>	<u>(54,195)</u>
■ <b>Unfunded AAL</b>	38,950	29,170	68,120
■ <b>Funded Ratio</b>	44.3%	44.3%	44.3%

<sup>8</sup> Assets allocated to Pre/Post Medicare based on AAL.



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**RESULTS**

**Schedule of Funding Progress**

(Amounts in \$000's)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Entry Age Actuarial Accrued Liability (b)	Unfunded Actuarial Accrued Liability (b-a)	Funded Ratio (a/b)	Payroll (c)	UAAL as Percentage of Payroll ((b-a)/c)
1/1/08	\$ 0	\$ 60,663	\$ 60,663	0.0%	\$ 46,446	130.6%
1/1/10	0	77,388	77,388	0.0%	46,942	164.9%
6/30/11	0	91,574	91,574	0.0%	48,377	189.3%
6/30/13	0	111,712	111,712	0.0%	50,708	220.3%
6/30/15	3,528	126,879	123,351	2.8%	50,186	245.8%
6/30/17	17,434	137,238	119,804	12.7%	52,057	230.1%
6/30/19	28,091	145,153	117,062	19.4%	55,516	210.9%
6/30/21	41,895	127,551	85,656	32.8%	59,923	142.9%
6/30/23	54,195	122,315	68,120	44.3%	64,418	105.7%



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**RESULTS**

**Actuarial Obligations by Cash/Implied Subsidy**

**6/30/23 Valuation**  
(Amounts in \$000's)

	<b>Cash Subsidy</b>	<b>Implied Subsidy</b>	<b>Total</b>
■ <b>Present Value of Benefits</b>			
• Actives	\$86,203	\$14,694	\$100,897
• Retirees	<u>56,621</u>	<u>7,935</u>	<u>64,555</u>
• Total	142,824	22,629	165,452
■ <b>Actuarial Accrued Liability</b>			
• Actives	49,191	8,569	57,760
• Retirees	<u>56,621</u>	<u>7,935</u>	<u>64,555</u>
• Total	105,812	16,504	122,315
■ <b>Actuarial Value of Assets<sup>9</sup></b>	<u>(46,883)</u>	<u>(7,313)</u>	<u>(54,195)</u>
■ <b>Unfunded AAL</b>	58,929	9,191	68,120
■ <b>Funded Ratio</b>	44.3%	44.3%	44.3%
■ <b>2024/25 Pay-As-You-Go</b>	5,182	1,028	6,211

<sup>9</sup> Assets allocated to Cash/Implied Subsidy based on AAL.



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**RESULTS**

**Actuarially Determined Contribution (ADC) by Cash/Implied Subsidy**

**2024/25 Fiscal Year**  
(Amounts in \$000's)

	<b>Cash Subsidy</b>	<b>Implied Subsidy</b>	<b>Total</b>
■ <b>ADC - \$</b>			
• Normal Cost	\$4,055	\$660	\$4,715
• UAAL Amortization <sup>10</sup>	<u>4,219</u>	<u>650</u>	<u>4,869</u>
• Total ADC	8,274	1,310	9,584
• Employee Contributions	<u>(2,246)</u>	<u>-</u>	<u>(2,246)</u>
• Employer ADC	6,028	1,310	7,338
■ <b>Projected Payroll</b>	68,010	68,010	68,010
■ <b>ADC - %Pay</b>			
• Normal Cost	6.0%	1.0%	6.9%
• UAAL Amortization	<u>6.2%</u>	<u>1.0%</u>	<u>7.2%</u>
• Total ADC	12.2%	1.9%	14.1%
• Employee Contributions	<u>(3.3%)</u>	<u>(0.0%)</u>	<u>(3.3%)</u>
• Employer ADC	8.9%	1.9%	10.8%

<sup>10</sup> Based on 20-year amortization periods.



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**RESULTS**

**Actuarial Obligations by Group**

**6/30/23 Valuation**  
(Amounts in \$000's)

	Safety	Miscellaneous		Total
		Non-Dispatch	Dispatch	
<b>■ Present Value of Benefits</b>				
• Actives	\$92,213	\$5,220	\$3,464	\$100,897
• Retirees	<u>62,118</u>	<u>2,057</u>	<u>381</u>	<u>64,555</u>
• Total	154,331	7,277	3,845	165,452
<b>■ Actuarial Accrued Liability</b>				
• Actives	53,779	2,353	1,627	57,760
• Retirees	<u>62,118</u>	<u>2,057</u>	<u>381</u>	<u>64,555</u>
• Total	115,897	4,410	2,008	122,315
<b>■ Actuarial Value of Assets<sup>11</sup></b>	<u>(49,032)</u>	<u>(1,866)</u>	<u>(3,297)</u>	<u>(54,195)</u>
<b>■ Unfunded AAL</b>	66,865	2,544	(1,289)	68,120
<b>■ Funded Ratio</b>	42.3%	42.3%	164.2%	44.3%
<b>■ 2024/25 Pay-As-You-Go</b>	6,018	166	26	6,211

<sup>11</sup> Actual Dispatch assets, with Safety/Misc assets allocated on AAL.



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**RESULTS**

**Actuarially Determined Contribution (ADC) by Group**

**2024/25 Fiscal Year**  
(Amounts in \$000's)

	Safety	Miscellaneous		Total
		Non-Dispatch	Dispatch	
<b>■ ADC - \$</b>				
• Normal Cost	\$4,238	\$311	\$167	\$4,715
• UAAL Amortization <sup>12</sup>	<u>4,775</u>	<u>191</u>	<u>(97)</u>	<u>4,869</u>
• Total ADC	9,013	502	70	9,584
• Employee Contributions	<u>(1,904)</u>	<u>(203)</u>	<u>(139)</u>	<u>(2,246)</u>
• Employer ADC	7,109	298	(69)	7,338
<b>■ Projected Payroll</b>	60,309	4,264	3,436	68,010
<b>■ ADC - %Pay</b>				
• Normal Cost	7.0%	7.3%	4.9%	6.9%
• UAAL Amortization	<u>7.9%</u>	<u>4.5%</u>	<u>(2.8%)</u>	<u>7.2%</u>
• Total ADC	14.9%	11.8%	2.0%	14.1%
• Employee Contributions	<u>(3.2%)</u>	<u>(4.8%)</u>	<u>(4.0%)</u>	<u>(3.3%)</u>
• Employer ADC	11.8%	7.0%	(2.0%)	10.8%

<sup>12</sup> Based on 20-year amortization periods.



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**RESULTS**

**Benefit Payment Projection by Cash/Implied Subsidy**  
(Amounts in \$000's)

<b>Fiscal Year</b>	<b>Cash Subsidy</b>	<b>Implied Subsidy</b>	<b>Total</b>
2024/25	\$5,182	\$1,028	\$6,211
2025/26	5,621	1,101	6,722
2026/27	6,124	1,246	7,371
2027/28	6,495	1,267	7,762
2028/29	6,936	1,342	8,277
2029/30	7,282	1,360	8,641
2030/31	7,482	1,265	8,747
2031/32	7,789	1,252	9,041
2032/33	8,143	1,277	9,420
2033/34	8,665	1,403	10,068



**RESULTS**

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## SIDE FUND CALCULATIONS

### Side Funds – Purpose

- Allow each agency in ACFD the choice of pre-funding their OPEB benefit independent of the pre-funding choice of other agencies in ACFD
- Side Funds are established for each agency within ACFD based on the full pre-funding discount rate
- They represent the amount of unfunded liability for each agency due to past service, based on ACFD retiree medical benefit
- Each agency decides how much, if any, of its own side fund to pre-fund
- If paid off would fully pre-fund past-service liability for agency



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## SIDE FUND CALCULATIONS

### Side Funds – Methodology

- Initial side fund determined as of 6/30/08, or when joining ACFD if later, for each agency in ACFD.
- Yearly side fund calculation:
  - Allocate year's full pre-funding Normal Cost to each participating agency based on FTE, remaining is allocated based on allocation % of shared positions.
  - Each agency side fund will change:
    - (Beginning of year side fund with interest to end of year)
    - + (Allocated portion of full pre-funding NC)
    - (Allocated benefit payments with interest to end of year)
- Difference between total side fund amount and full pre-funding AAL is allocated to each agency based on FTE, remaining based on allocation % of shared positions.
- Each agency determines whether to make a pre-funding contribution to their CERBT sub-account or not, agency side fund is adjusted by any assets in sub-account:
  - (End of year side fund)
  - (End of year assets in CERBT sub-account)



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## SIDE FUND CALCULATIONS

### Side Fund Analysis and 6/30/22 Adjustment

- Side Funds were set up in 2008 to enable agencies to pre-fund OPEB benefits independent of the pre-funding choice of other agencies in ACFD.
- After 2008, Side Funds are projected forward based on a cost (liability) allocation methodology, with subsequent side funds set up for new agencies (Newark, Union City, Emeryville).
- While Side Fund liabilities generally seem reasonable, the LLNL Side Fund was in an overfunded position as of June 30, 2021 despite only employee contributions having been paid to CERBT trust.
- Main driver for LLNL anomaly is side fund liability set up in 2008 was not based on demographics of LLNL participants.
- Adjusted side funds - Recalculated the LLNL initial side fund amount based on LLNL demographics when joining ACFD, rolled-forward to June 30, 2022, and allocated a credit back to the other 4 agencies who were with ACFD at the time LLNL joined (ACFD, San Leandro, Dublin, and LBNL).
- This approach provides reasonable Side Funds for all agencies including LLNL. There would be no change to the side fund amounts for the cities of Newark, Union City, and Emeryville since their initial side funds were based on their demographics.



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## SIDE FUND CALCULATIONS

### Summary of Adjustments to LLNL Initial Side Fund Liability (SFL) and Original Agencies (Amounts in \$millions)

	Dispatch	ACFD	San Leandro	Dublin	LBNL	LLNL	Newark	Union City	Emeryville	Total
<b>Prior Calculation of 6/30/22 Side Funds without Adjustment</b>										
▪ SFL	\$1.9	\$52.3	\$29.6	\$12.8	\$1.6	\$0.1	\$5.2	\$6.6	\$2.9	\$113.1
▪ Assets	<u>3.0</u>	<u>17.0</u>	<u>3.3</u>	<u>14.8</u>	<u>0.9</u>	<u>1.6</u>	<u>4.2</u>	<u>2.5</u>	<u>1.2</u>	<u>48.5</u>
▪ Unfunded	(1.1)	35.3	26.3	(2.0)	0.7	(1.5)	1.0	4.1	1.7	64.6
<b>New Calculation of 6/30/22 Side Funds based on Adjustment to Initial Agencies' Side Funds<sup>13</sup></b>										
▪ Orig SFL	\$1.9	\$52.3	\$29.6	\$12.8	\$1.6	\$0.1	\$5.2	\$6.6	\$2.9	\$113.1
▪ Revise for LLNL	—	<u>(3.2)</u>	<u>(1.8)</u>	<u>(0.8)</u>	<u>(0.1)</u>	<u>6.0</u>	—	—	—	—
▪ Revised SFL	1.9	49.1	27.7	12.0	1.5	6.1	5.2	6.6	2.9	113.1
▪ Assets	<u>3.0</u>	<u>17.0</u>	<u>3.3</u>	<u>14.8</u>	<u>0.9</u>	<u>1.6</u>	<u>4.2</u>	<u>2.5</u>	<u>1.2</u>	<u>48.5</u>
▪ Revised Unfunded	(1.1)	32.1	24.4	(2.8)	0.6	4.5	1.0	4.1	1.7	64.6

<sup>13</sup> Revised LLNL side fund on 6/30/22 if initial 6/30/08 side fund had been based on hire dates of the 33 initial LLNL firefighters under age 50 (consistent with methodology for subsequent joining agencies). Agencies existing at LLNL entry (ACFD, San Leandro, Dublin, and LBNL) revised proportionately. Remaining agencies side funds are unchanged.



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**SIDE FUND CALCULATIONS**

**Actuarial Obligations for Side Fund Calculations**

**Full Funding Discount Rate**

(Amounts in \$000's)

	6/30/21 Valuation		6/30/23 Valuation	
	Projected		Projected	
	6/30/21	6/30/22	6/30/23	6/30/24
■ Full Funding Discount Rate	6.25%		6.25%	
■ Present Value of Benefits	\$148,385		\$165,452	
■ Actuarial Accrued Liability				
• Safety	\$102,697	\$106,917	\$115,897	\$121,564
• Misc Non Dispatch	3,854	4,235	4,410	4,857
• Misc Dispatch	<u>1,710</u>	<u>1,913</u>	<u>2,008</u>	<u>2,246</u>
• Total	108,261	113,065	122,315	128,667
■ Actuarial Value of Assets	<u>(41,895)</u>	<u>(48,488)</u>	<u>(54,195)</u>	<u>(60,743)</u>
■ Unfunded AAL	66,366	64,577	68,120	67,924
■ Normal Cost	n/a	4,190	n/a	4,715
■ Pay-As-You-Go	5,579	5,948	5,665	6,211



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**SIDE FUND CALCULATIONS**

**Actuarially Determined Contribution (ADC) for Side Fund Calculations**

	6/30/21 Valuation		6/30/23 Valuation	
	2022/23	2023/24	2024/25	2025/26
	6.25%		6.25%	
■ ADC - \$				
• Normal Cost	\$4,190	\$4,308	\$4,715	\$4,848
• UAAL Amortization <sup>14</sup>	<u>4,628</u>	<u>4,755</u>	<u>4,869</u>	<u>5,003</u>
• Total ADC	8,818	9,063	9,584	9,851
• Employee Contributions <sup>15</sup>	<u>(2,088)</u>	<u>(2,146)</u>	<u>(2,246)</u>	<u>(2,308)</u>
• Employer ADC	6,730	6,917	7,338	7,544
■ Projected Payroll	63,264	65,004	68,010	69,880
■ ADC - %Pay				
• Normal Cost	6.6%	6.6%	6.9%	6.9%
• UAAL Amortization	<u>7.3%</u>	<u>7.3%</u>	<u>7.2%</u>	<u>7.2%</u>
• Total ADC	13.9%	13.9%	14.1%	14.1%
• Employee Contributions	<u>(3.3%)</u>	<u>(3.3%)</u>	<u>(3.3%)</u>	<u>(3.3%)</u>
• Employer ADC	10.6%	10.6%	10.8%	10.8%

<sup>14</sup> Based on 20-year amortization periods.

<sup>15</sup> Actual 2022/23 and projected 23/24 employee contributions provided by ACFD; projected to 2024/25 and 2025/26 based on payroll increase. assumption.



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**SIDE FUND CALCULATIONS**

**CERBT Sub-Accounts and AVA Calculation**

**Fiscal Year 2022/23**

**(Amounts in \$000's)**

	Dis- patch	ALCO	San Leandro	Dublin	LBNL	LLNL	Newark	Union City	Emery- ville	Total
■ <b>MVA 6/30/22</b>	\$2,802	\$15,757	\$3,091	\$13,726	\$865	\$1,471	\$3,855	\$2,300	\$1,095	\$44,963
• EE Contrib.	135	593	402	229	76	191	172	172	115	2,086
• ER Contrib.	-	1,800	-	-	-	-	-	-	-	1,800
• Disbursements	-	-	-	(529)	-	-	-	-	-	(529)
• Inv. Earnings	186	1,057	217	927	59	103	256	156	76	3,037
• Admin. Exp.	(1)	(8)	(2)	(7)	(0)	(1)	(2)	(1)	(1)	(23)
• Invest. Exp.	(1)	(6)	(1)	(5)	(0)	(1)	(1)	(1)	(0)	(17)
■ <b>MVA 6/30/23</b>	3,122	19,194	3,707	14,341	1,000	1,764	4,280	2,626	1,284	51,317
• AVA Ratio <sup>16</sup>	← 105.61% →									
■ <b>AVA 6/30/23</b>	3,297	20,270	3,915	15,145	1,056	1,863	4,520	2,773	1,356	54,195

<sup>16</sup> Ratio of valuation 6/30/23 Actuarial Value of Assets (\$54,195) to Market Value of Assets (\$51,317) = 105.61%.



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**SIDE FUND CALCULATIONS**

**CERBT Sub-Accounts and AVA Calculation**

**Estimated Fiscal Year 2023/24**

**(Amounts in \$000's)**

	Dis- patch	ALCO	San Leandro	Dublin	LBNL	LLNL	Newark	Union City	Emery- ville	Total
■ <b>MVA 6/30/23</b>	\$3,122	\$19,194	\$3,707	\$14,341	\$1,000	\$1,764	\$4,280	\$2,626	\$1,284	\$51,317
• EE Contrib.	135	624	422	241	80	201	181	181	121	2,186
• ER Contrib.	-	2,000	-	-	-	-	-	-	-	2,000
• Disbursements	-	-	-	(500)	-	-	-	-	-	(500)
• Inv. Earnings	199	1,281	245	888	65	116	273	170	84	3,320
• Admin. Exp.	(2)	(10)	(2)	(7)	(1)	(1)	(2)	(1)	(1)	(26)
• Invest. Exp.	-	-	-	-	-	-	-	-	-	-
■ <b>MVA 6/30/24</b>	3,454	23,088	4,372	14,963	1,145	2,081	4,731	2,975	1,488	58,297
• AVA Ratio <sup>17</sup>	← 104.20% →									
■ <b>AVA 6/30/24</b>	3,599	24,058	4,555	15,590	1,193	2,168	4,930	3,100	1,550	60,743

<sup>17</sup> Ratio of valuation projected 6/30/24 Actuarial Value of Assets (\$60,743) to projected Market Value of Assets (\$58,297) = 104.20%.



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## SIDE FUND CALCULATIONS

### Side Fund Liability (SFL) Calculations 2022/23 Fiscal Year – 6.25% Discount Rate Based on Adjusted 6/30/22 Side Fund Amounts (Amounts in \$000's)

	Dis- patch	ALCO	San Leandro	Dublin	LBNL	LLNL	Newark	Union City	Emery- ville	Total
■ Allocation %	0.00%	30.41%	20.59%	11.76%	3.92%	9.80%	8.82%	8.82%	5.88%	100.00%
■ Side Fund BOY	\$1,912	\$49,086	\$27,718	\$12,017	\$1,484	\$6,117	\$5,185	\$6,633	\$2,913	\$113,065
• Pool NC <sup>18</sup>	154	1,190	750	436	140	349	332	332	227	3,909
• BP	(50)	(1,700)	(1,164)	(665)	(222)	(554)	(499)	(499)	(332)	(5,685)
• Invest. Return	<u>128</u>	<u>3,090</u>	<u>1,743</u>	<u>758</u>	<u>95</u>	<u>387</u>	<u>329</u>	<u>420</u>	<u>186</u>	<u>7,136</u>
■ Exp. SFL EOY	2,143	51,666	29,048	12,546	1,497	6,299	5,347	6,886	2,993	118,425
■ (Gains)/Losses <sup>19</sup>	<u>(135)</u>	<u>1,245</u>	<u>818</u>	<u>471</u>	<u>154</u>	<u>385</u>	<u>356</u>	<u>356</u>	<u>240</u>	<u>3,890</u>
■ Side Fund EOY	2,008	52,911	29,866	13,017	1,651	6,684	5,703	7,242	3,233	122,315
■ AVA EOY	<u>(3,297)</u>	<u>(20,270)</u>	<u>(3,915)</u>	<u>(15,145)</u>	<u>(1,056)</u>	<u>(1,863)</u>	<u>(4,520)</u>	<u>(2,773)</u>	<u>(1,356)</u>	<u>(54,195)</u>
■ Unfunded SFL	(1,289)	32,641	25,951	(2,128)	595	4,821	1,183	4,469	1,877	68,120
■ Unfunded SFL on MVA basis	(1,114)	33,717	26,159	(1,324)	651	4,920	1,423	4,616	1,949	70,998

<sup>18</sup> Allocated based on FTE first, and then allocation % of shared positions, except for Dispatch which is based on actual Dispatch valuation results.

<sup>19</sup> Difference between expected 6/30/23 side fund amounts and actual based on the 6/30/23 OPEB valuation results.



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## SIDE FUND CALCULATIONS

### Side Fund Liability (SFL) Calculations Estimated 2023/24 Fiscal Year – 6.25% Discount Rate Based on Adjusted 6/30/22 Side Fund Amounts (Amounts in \$000's)

	Dis- patch	ALCO	San Leandro	Dublin	LBNL	LLNL	Newark	Union City	Emery- ville	Total
■ Allocation %	0.00%	30.41%	20.59%	11.76%	3.92%	9.80%	8.82%	8.82%	5.88%	100.00%
■ Side Fund BOY	\$2,008	\$52,911	\$29,866	\$13,017	\$1,651	\$6,684	\$5,703	\$7,242	\$3,233	\$122,315
• Pool NC <sup>20</sup>	152	1,306	825	480	153	384	365	365	249	4,279
• BP	(47)	(1,708)	(1,157)	(661)	(220)	(551)	(495)	(495)	(330)	(5,665)
• Invest. Return	<u>134</u>	<u>3,336</u>	<u>1,883</u>	<u>823</u>	<u>106</u>	<u>425</u>	<u>364</u>	<u>460</u>	<u>207</u>	<u>7,738</u>
■ Exp. SFL EOY	2,246	55,846	31,417	13,659	1,690	6,942	5,936	7,571	3,360	128,667
■ (Gains)/Losses <sup>21</sup>	—	—	—	—	—	—	—	—	—	—
■ Side Fund EOY	2,246	55,846	31,417	13,659	1,690	6,942	5,936	7,571	3,360	128,667
■ AVA EOY	<u>(3,599)</u>	<u>(24,058)</u>	<u>(4,555)</u>	<u>(15,590)</u>	<u>(1,193)</u>	<u>(2,168)</u>	<u>(4,930)</u>	<u>(3,100)</u>	<u>(1,550)</u>	<u>(60,743)</u>
■ Unfunded SFL	(1,353)	31,788	26,862	(1,931)	497	4,774	1,006	4,471	1,810	67,924
■ Unfunded SFL on MVA basis	(1,208)	32,758	27,045	(1,304)	545	4,861	1,205	4,596	1,872	70,370

<sup>20</sup> Allocated based on FTE first, and then allocation % of shared positions, except for Dispatch which is based on actual Dispatch valuation results.

<sup>21</sup> No (gains)/losses since estimated 6/30/24 SFL is calculated based on expected (not actual) benefit payments and investment return.



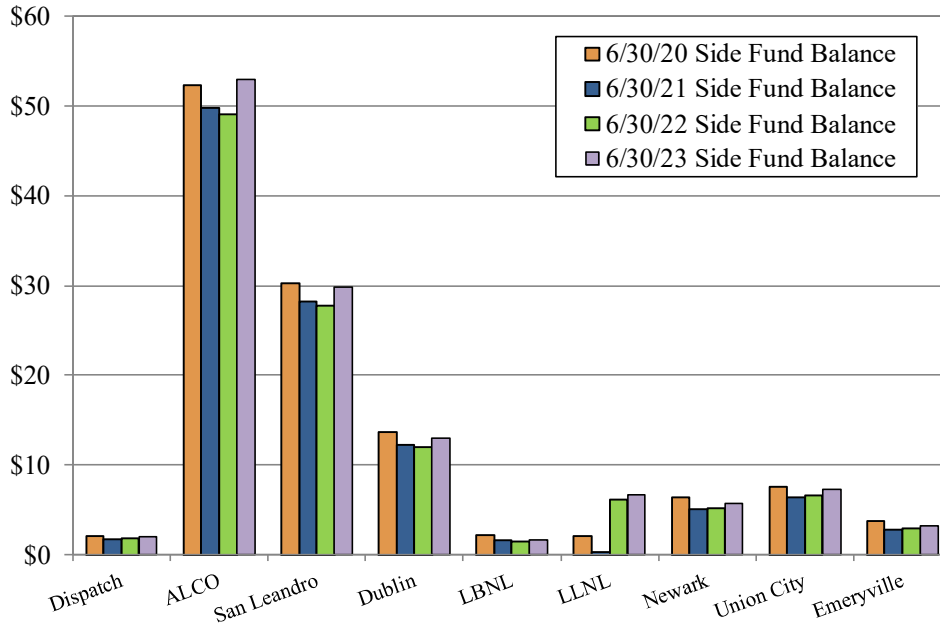
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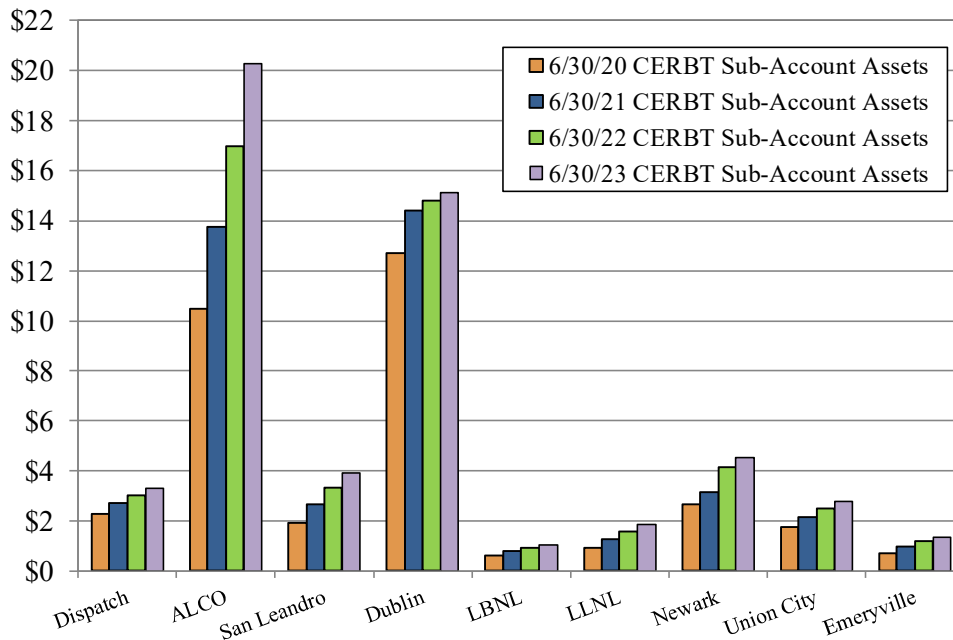
## SIDE FUND CALCULATIONS

### Side Fund Liability Balances (Amounts in millions)



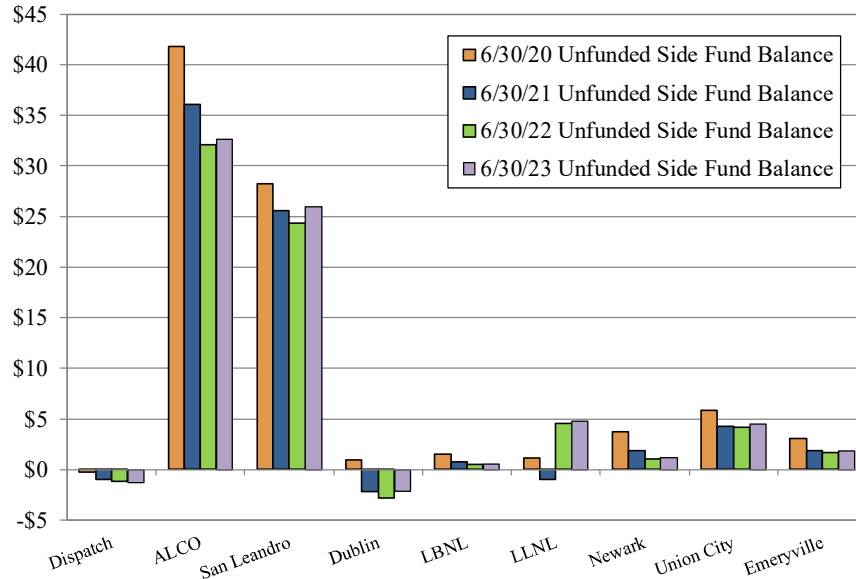
## SIDE FUND CALCULATIONS

### CERBT Sub-Account Assets (AVA) (Amounts in millions)



## SIDE FUND CALCULATIONS

### Unfunded Side Fund Liability (Unfunded SFL) Side Fund Balance less CERBT Sub-Account Assets (Amounts in millions)



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## SIDE FUND CALCULATIONS

### Sample 2024/25 ADCs at Varying UAAL Amortization Periods 6.25% Discount Rate (Amounts in \$000's)

	Dis- patch	ALCO	San Leandro	Dublin	LBNL	LLNL	Newark	Union City	Emery- ville	Total
<i>18-Year UAAL Amortization</i>										
■ 2024/25 ADC										
• Normal Cost	\$167	\$1,437	\$910	\$529	\$170	\$423	\$402	\$402	\$275	\$4,715
• UAAL Amort	<u>(105)</u>	<u>2,457</u>	<u>2,076</u>	<u>(149)</u>	<u>38</u>	<u>369</u>	<u>78</u>	<u>346</u>	<u>140</u>	<u>5,250</u>
• Total ADC	62	3,894	2,986	380	208	792	480	748	415	9,965
<i>23-Year UAAL Amortization</i>										
■ 2024/25 ADC										
• Normal Cost	\$167	\$1,437	\$910	\$529	\$170	\$423	\$402	\$402	\$275	\$4,715
• UAAL Amort	<u>(88)</u>	<u>2,071</u>	<u>1,750</u>	<u>(126)</u>	<u>32</u>	<u>311</u>	<u>66</u>	<u>291</u>	<u>118</u>	<u>4,425</u>
• Total ADC	79	3,508	2,660	403	202	734	468	693	393	9,140
<i>26-Year UAAL Amortization</i>										
■ 2024/25 ADC										
• Normal Cost	\$167	\$1,437	\$910	\$529	\$170	\$423	\$402	\$402	\$275	\$4,715
• UAAL Amort	<u>(81)</u>	<u>1,914</u>	<u>1,617</u>	<u>(116)</u>	<u>30</u>	<u>287</u>	<u>61</u>	<u>269</u>	<u>109</u>	<u>4,090</u>
• Total ADC	86	3,351	2,527	413	200	710	463	671	384	8,805



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## SIDE FUND CALCULATIONS

### Sample 2024/25 Trust Contributions at Varying UAAL Amortization Periods 6.25% Discount Rate (Amounts in \$000's)

	Dis- patch	ALCO	San Leandro	Dublin	LBNL	LLNL	Newark	Union City	Emery- ville	Total
<i>18-Year UAAL Amortization</i>										
■ 2024/25 ADC	\$62	\$3,894	\$2,986	\$ 380	\$208	\$792	\$480	\$748	\$415	\$9,965
• Minus BP	(26)	(1,881)	(1,273)	(727)	(242)	(606)	(546)	(546)	(364)	(6,211)
• Minus EE Cont.	<u>(224)</u>	<u>(712)</u>	<u>(468)</u>	<u>(267)</u>	<u>(89)</u>	<u>(223)</u>	<u>(200)</u>	<u>(200)</u>	<u>(134)</u>	<u>(2,517)</u>
• Trust Contrib.	(188)	1,301	1,245	(614)	(123)	(37)	(266)	2	(83)	1,237
<i>23-Year UAAL Amortization</i>										
■ 2024/25 ADC	\$79	\$3,508	\$2,660	\$403	\$202	\$734	\$468	\$693	\$393	\$9,140
• Minus BP	(26)	(1,881)	(1,273)	(727)	(242)	(606)	(546)	(546)	(364)	(6,211)
• Minus EE Cont.	<u>(224)</u>	<u>(712)</u>	<u>(468)</u>	<u>(267)</u>	<u>(89)</u>	<u>(223)</u>	<u>(200)</u>	<u>(200)</u>	<u>(134)</u>	<u>(2,517)</u>
• Trust Contrib.	(171)	915	919	(591)	(129)	(95)	(278)	(53)	(105)	412
<i>26-Year UAAL Amortization</i>										
■ 2024/25 ADC	\$86	\$3,351	\$2,527	\$413	\$200	\$710	\$463	\$671	\$384	\$8,805
• Minus BP	(26)	(1,881)	(1,273)	(727)	(242)	(606)	(546)	(546)	(364)	(6,211)
• Minus EE Cont.	<u>(224)</u>	<u>(712)</u>	<u>(468)</u>	<u>(267)</u>	<u>(89)</u>	<u>(223)</u>	<u>(200)</u>	<u>(200)</u>	<u>(134)</u>	<u>(2,517)</u>
• Trust Contrib.	(164)	758	786	(581)	(131)	(119)	(283)	(75)	(114)	77



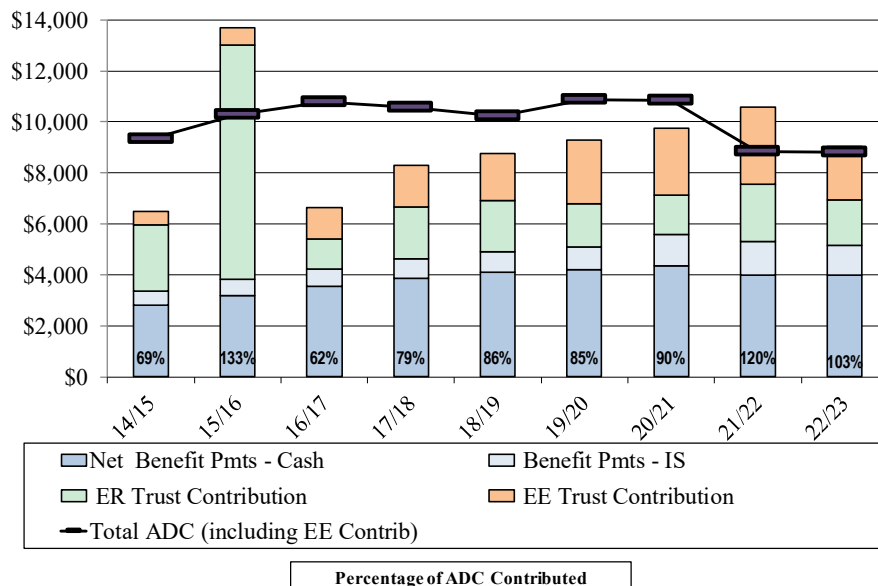
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## SIDE FUND CALCULATIONS

### Historical Contributions and Full Pre-Funding ADCs<sup>22</sup> (Amounts in \$000's)



<sup>22</sup> 20-year UAAL amortization.



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## ACTUARIAL CERTIFICATION

This report presents the Alameda County Fire Department Retiree Healthcare Plan (“Plan”) June 30, 2023 actuarial valuation. The purpose of this valuation is to:

- Determine the June 30, 2023 Benefit Obligations,
- Determine the Plan’s June 30, 2023 Funded Status, and
- Calculate the June 30, 2023 Side Funds Balances and 2024/25 Actuarially Determined Contributions.

The report provides information intended for funding the Plan, but may not be appropriate for other purposes. Information provided in this report may be useful for the Plan’s financial management. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: plan experience differing from that anticipated by the assumptions; changes in assumptions; changes expected as part of the natural progression of the plan; and changes in plan provisions or applicable law. Actuarial models necessarily rely on the use of estimates and are sensitive to changes. Small variations in estimates may lead to significant changes in actuarial measurements. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of such measurements.

The valuation is based on Plan provisions, participant data, and asset information provided by the Department as summarized in this report, which we relied on and did not audit. We reviewed the participant data for reasonableness.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principles and practices. As members of the American Academy of Actuaries meeting the Academy Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,



Doug Pryor, ASA, EA, MAAA  
Foster & Foster, Inc  
February 27, 2024.



Catherine A. Wandro, ASA, MAAA  
Foster & Foster, Inc.  
February 27, 2024



Katherine Moore, ASA, MAAA  
Foster & Foster, Inc.  
February 27, 2024



February 27, 2024

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## ACTUARIAL CERTIFICATION

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**EXHIBITS - PREMIUMS**

**2023 PEMHCA Monthly Medical Premiums**

**Region 1**

Medical Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Anthem Select	\$1,128.83	\$2,257.66	\$2,934.96	\$413.59	\$827.18	\$1,240.77
Anthem Traditional	1,210.71	2,421.42	3,147.85	413.59	827.18	1,240.77
Blue Shield Access+	1,035.21	2,070.42	2,691.55	361.90	723.80	1,085.70
Blue Shield Trio	888.94	1,777.88	2,311.24	361.90	723.80	1,085.70
Health Net SmartCare	1,174.50	2,349.00	3,053.70	n/a	n/a	n/a
Kaiser	913.74	1,827.48	2,375.72	283.25	566.50	849.75
Kaiser Summit	n/a	n/a	n/a	336.29	672.58	1,008.87
UnitedHealthcare Alliance	1,044.07	2,088.14	2,714.58	n/a	n/a	n/a
UnitedHealthcare Group	n/a	n/a	n/a	299.68	599.36	899.04
UnitedHealthcare Edge	n/a	n/a	n/a	357.70	715.40	1,073.10
Western Health Advantage	760.17	1,520.34	1,976.44	331.11	662.22	993.33
PERS Platinum	1,200.12	2,400.24	3,120.31	420.02	840.04	1,260.06
PERS Gold	825.61	1,651.22	2,146.59	392.71	785.42	1,178.13
PORAC	825.00	1,875.00	2,300.00	465.00	1,030.00	1,395.00



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**EXHIBITS - PREMIUMS**

**2024 PEMHCA Monthly Medical Premiums**

**Region 1**

Medical Plan	Non-Medicare Eligible			Medicare Eligible		
	Single	2-Party	Family	Single	2-Party	Family
Anthem Select	\$1,138.86	\$2,277.72	\$2,961.04	\$405.83	\$811.66	\$1,217.49
Anthem Traditional	1,339.70	2,679.40	3,483.22	405.83	811.66	1,217.49
Blue Shield Access+	1,076.84	2,153.68	2,799.78	392.68	785.36	1,178.04
Blue Shield Trio	946.84	1,893.68	2,461.78	392.68	785.36	1,178.04
Kaiser	1,021.41	2,042.82	2,655.67	324.79	649.58	974.37
Kaiser Summit	n/a	n/a	n/a	386.55	773.10	1,159.65
UnitedHealthcare Alliance	1,091.13	2,182.26	2,836.94	n/a	n/a	n/a
UnitedHealthcare Harmony	937.39	1,874.78	2,437.21	n/a	n/a	n/a
UnitedHealthcare Group	n/a	n/a	n/a	341.72	683.44	1,025.16
UnitedHealthcare Edge	n/a	n/a	n/a	366.01	732.02	1,098.03
Western Health Advantage	807.23	1,614.46	2,098.80	268.62	537.24	805.86
PERS Platinum	1,314.27	2,628.54	3,417.10	448.15	896.30	1,344.45
PERS Gold	914.82	1,829.64	2,378.53	406.60	813.20	1,219.80
PORAC	931.00	2,117.00	2,651.00	465.00	1,030.00	1,395.00



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**EXHIBITS – PARTICIPANT STATISTICS**

**Participant Statistics**  
**June 30, 2023**

	Safety	Miscellaneous		Total
		Non-Dispatch	Dispatch	
■ Actives:				
• Count	337	46	32	415
• Average Age	43.1	47.9	39.3	43.4
• Average Service				
➢ ACFD	12.2	7.6	7.5	11.3
➢ CalPERS	15.0	9.1	8.3	13.8
• Average 22/23 Salary	\$169,500	\$87,800	\$101,700	\$155,200
• Total 22/23 Salary (000s)	57,124	4,039	3,255	64,418
■ Retirees:				
• Count	317	13	6	336 <sup>23</sup>
• Average Age	66.2	68.0	67.4	66.3
• Average Retirement Age				
➢ Service Retirement	54.5	61.6	59.5	55.0
➢ Disability Retirement	53.4	54.2	n/a	53.4

<sup>23</sup> Includes 23 retirees who waive medical coverage.



**EXHIBITS – PARTICIPANT STATISTICS**

**Participant Statistics**  
**June 30, 2021**

	Safety	Miscellaneous		Total
		Non-Dispatch	Dispatch	
■ Actives:				
• Count	347	42	37	426
• Average Age	41.8	47.2	37.8	42.0
• Average Service				
➢ ACFD	10.6	7.9	5.9	9.9
➢ CalPERS	13.5	9.8	6.9	12.6
• Average 20/21 Salary	\$150,500	\$99,400	\$95,200	\$140,700
• Total 20/21 Salary (000s)	52,226	4,173	3,523	59,923
■ Retirees:				
• Count	314	11	6	331 <sup>24</sup>
• Average Age	65.1	68.0	65.6	65.2
• Average Retirement Age				
➢ Service Retirement	54.3	61.9	59.2	54.8
➢ Disability Retirement	53.3	54.2	n/a	53.3

<sup>24</sup> Includes 23 retirees who waive medical coverage.



**EXHIBITS – PARTICIPANT STATISTICS**

**Medical Plan Participation**

Medical Plan	Actives	Retirees		
		Pre-65	Post-65	Total
Anthem Select	0%	3%	n/a	1%
Anthem Traditional	1%	0%	n/a	0%
Blue Shield Access+	1%	5%	n/a	2%
Blue Shield Trio	0%	1%	n/a	0%
Health Net SmartCare	0%	0%	n/a	0%
Kaiser	64%	39%	45%	42%
UnitedHealthcare	1%	0%	10%	6%
Western Health Adv.	1%	1%	0%	1%
PERS Platinum	3%	9%	25%	18%
PERS Gold	1%	1%	2%	1%
PORAC	28%	41%	14%	27%
Anthem Medicare Preferred	n/a	n/a	3%	2%
Blue Shield Medicare	n/a	n/a	1%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>



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**EXHIBITS – PARTICIPANT STATISTICS**

**Current Active Medical Plan Coverage**

Medical Plan	Single	2-Party	Family	Waived	Total
Anthem Select	2	-	-	-	2
Anthem Traditional	-	-	3	-	3
Blue Shield Access+	-	-	4	-	4
Blue Shield Trio	-	-	2	-	2
Health Net SmartCare	-	-	2	-	2
Kaiser	65	36	147	-	248
UnitedHealthcare Alliance	-	-	3	-	3
Western Health Advantage	-	-	2	-	2
PERS Platinum	3	2	5	-	10
PERS Gold	-	1	3	-	4
PORAC	17	15	76	-	108
Waived	-	-	-	27	27
<b>Total</b>	<b>87</b>	<b>54</b>	<b>247</b>	<b>27</b>	<b>415</b>



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**EXHIBITS – PARTICIPANT STATISTICS**

**Retiree Medical Plan Coverage - Pre 65**

<b>Medical Plan</b>	<b>Single</b>	<b>2-Party</b>	<b>Family</b>	<b>Waived</b>	<b>Total</b>
Anthem Select	-	1	3	-	4
Blue Shield Access+	-	5	2	-	7
Blue Shield Trio	-	1	-	-	1
Kaiser	7	30	20	-	57
Western Health Adv.	1	1	-	-	2
PERS Platinum	3	6	5	-	14
PERS Gold	-	1	1	-	2
PORAC	6	32	23	-	61
Waived	-	-	-	11	11
<b>Total</b>	<b>17</b>	<b>77</b>	<b>54</b>	<b>11</b>	<b>159</b>



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**EXHIBITS – PARTICIPANT STATISTICS**

**Retiree Medical Plan Coverage - Post 65**

<b>Medical Plan</b>	<b>Single</b>	<b>2-Party</b>	<b>Family</b>	<b>Waived</b>	<b>Total</b>
Anthem Medicare	1	4	-	-	5
Blue Shield Medicare	-	1	-	-	1
Kaiser	30	41	3	-	74
Kaiser Summit	-	1	-	-	1
UnitedHealthcare Group	9	7	-	-	16
UnitedHealthcare Edge	1	-	-	-	1
PERS Platinum	16	25	1	-	42
PERS Gold	-	2	-	-	2
PORAC	5	14	4	-	23
Waived	-	-	-	12	12
<b>Total</b>	<b>62</b>	<b>95</b>	<b>8</b>	<b>12</b>	<b>177</b>



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**EXHIBITS – PARTICIPANT STATISTICS**

**Retirees Medical Plan Coverage by Age**

Age	Medical Coverage				
	Single	2-Party	Family	Waived	Total
Under 50	-	1	2	3	6
50-54	-	4	5	2	11
55-59	1	20	27	1	49
60-64	16	52	20	5	93
65-69	25	34	5	6	70
70-74	19	30	1	3	53
75-79	10	29	1	2	42
80-84	8	2	1	1	12
85 & Over	-	-	-	-	-
<b>Total</b>	79	172	62	23	336
<b>Average Age</b>	70.3	67.0	59.8	64.4	66.3



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**EXHIBITS – PARTICIPANT STATISTICS**

**Actives by Age and Service – Safety**

Age	ACFD Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	-	2	-	-	-	-	-	2
25-29	-	14	1	-	-	-	-	15
30-34	-	20	33	1	-	-	-	54
35-39	-	8	30	19	4	-	-	61
40-44	-	2	19	17	26	9	-	73
45-49	-	2	2	14	17	16	-	51
50-54	-	-	1	21	9	12	1	44
55-59	-	-	1	13	4	2	4	24
60-64	-	-	1	3	4	-	4	12
≥ 65	-	1	-	-	-	-	-	1
<b>Total</b>	-	49	88	88	64	39	9	337



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**EXHIBITS – PARTICIPANT STATISTICS**

**Actives by Age and Service – Miscellaneous (Non-Dispatch)**

Age	ACFD Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-
30-34	1	2	1	-	-	-	-	4
35-39	1	-	3	-	-	-	-	4
40-44	-	4	5	1	-	-	-	10
45-49	3	1	4	1	-	1	-	10
50-54	-	1	4	-	2	-	-	7
55-59	2	-	2	-	-	-	1	5
60-64	-	-	1	1	2	-	1	5
≥ 65	-	-	-	1	-	-	-	1
<b>Total</b>	<b>7</b>	<b>8</b>	<b>20</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>46</b>



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**EXHIBITS – PARTICIPANT STATISTICS**

**Actives by Age and Service – Miscellaneous (Dispatch)**

Age	ACFD Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	-	-	-	-	-	-	-	-
25-29	-	3	-	-	-	-	-	3
30-34	1	6	1	-	-	-	-	8
35-39	-	2	3	1	-	-	-	6
40-44	-	1	4	1	2	-	-	8
45-49	-	1	-	1	1	-	-	3
50-54	-	-	-	-	3	-	-	3
55-59	-	-	-	-	1	-	-	1
60-64	-	-	-	-	-	-	-	-
≥ 65	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1</b>	<b>13</b>	<b>8</b>	<b>3</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>32</b>



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**EXHIBITS – PARTICIPANT STATISTICS**

**Actives by Age and Service – Total**

Age	ACFD Service							Total
	< 1	1-4	5-9	10-14	15-19	20-24	≥ 25	
< 25	-	2	-	-	-	-	-	2
25-29	-	17	1	-	-	-	-	18
30-34	2	28	35	1	-	-	-	66
35-39	1	10	36	20	4	-	-	71
40-44	-	7	28	19	28	9	-	91
45-49	3	4	6	16	18	17	-	64
50-54	-	1	5	21	14	12	1	54
55-59	2	-	3	13	5	2	5	30
60-64	-	-	2	4	6	-	5	17
≥ 65	-	1	-	1	-	-	-	2
<b>Total</b>	<b>8</b>	<b>70</b>	<b>116</b>	<b>95</b>	<b>75</b>	<b>40</b>	<b>11</b>	<b>415</b>



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**EXHIBITS - ACTUARIAL ASSUMPTIONS**

	<b>June 30, 2021 Valuation</b>	<b>June 30, 2023 Valuation</b>																		
■ Valuation Date	■ June 30, 2021 ■ 2022/23 and 2023/24 ADC	■ June 30, 2023 ■ 2024/25 and 2025/26 ADC																		
■ General Inflation	■ 2.50% ■ Used for economic assumptions	■ Same																		
■ Payroll Increases	■ Aggregate Increases – 2.75% ■ Merit Increases – CalPERS 2000-2019 Experience Study	■ Same																		
■ Admin. Expenses	■ 0.25% of retiree PEMHCA premiums ■ 0.05% of CERBT Assets ■ Added to Normal Cost	■ Same																		
■ PEMHCA Minimum Increases	<table border="0"> <tr> <td><u>Year</u></td> <td><u>PEMHCA Min</u></td> </tr> <tr> <td>2021</td> <td>\$143.00</td> </tr> <tr> <td>2022</td> <td>\$149.00</td> </tr> <tr> <td>2023</td> <td>\$151.00</td> </tr> <tr> <td>2024+</td> <td>4.00%/yr. increase</td> </tr> </table>	<u>Year</u>	<u>PEMHCA Min</u>	2021	\$143.00	2022	\$149.00	2023	\$151.00	2024+	4.00%/yr. increase	<table border="0"> <tr> <td><u>Year</u></td> <td><u>PEMHCA Min</u></td> </tr> <tr> <td>2023</td> <td>\$151.00</td> </tr> <tr> <td>2024</td> <td>\$157.00</td> </tr> <tr> <td>2025+</td> <td>3.50%/yr. increase</td> </tr> </table>	<u>Year</u>	<u>PEMHCA Min</u>	2023	\$151.00	2024	\$157.00	2025+	3.50%/yr. increase
<u>Year</u>	<u>PEMHCA Min</u>																			
2021	\$143.00																			
2022	\$149.00																			
2023	\$151.00																			
2024+	4.00%/yr. increase																			
<u>Year</u>	<u>PEMHCA Min</u>																			
2023	\$151.00																			
2024	\$157.00																			
2025+	3.50%/yr. increase																			



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**EXHIBITS - ACTUARIAL ASSUMPTIONS**

	<b>June 30, 2021 Valuation</b>	<b>June 30, 2023 Valuation</b>
<p>■ Discount Rate</p>	<p>■ 4.87% - approx. blended rate determined by allocating liabilities to agencies based on estimated pre-funding policies:</p> <ul style="list-style-type: none"> <li>● 6.25% - full pre-funding rate used for Dispatch, City of Dublin, and LLNL</li> <li>● 5.00% - partial pre-funding rate (50% to 60% of ADC less paygo) used for ALCO, City of Newark, City of Emeryville, Union City, and LBNL</li> <li>● 4.00% - employee contributions only (20% of ADC less paygo) for City of San Leandro</li> </ul> <p>■ 6.25% - side fund calculations, CERBT Strategy #1</p>	<p>■ 6.25% - CERBT Strategy #1</p> <p>■ Based on GASBS 75 crossover test methodology for the plan as a whole</p>



**EXHIBITS - ACTUARIAL ASSUMPTIONS**

	<b>June 30, 2021 Valuation</b>				<b>June 30, 2023 Valuation</b>			
	<u>Increase from Prior Year</u>				<u>Increase from Prior Year</u>			
	Calendar Year	Pre-Medicare	Post-Medicare Kaiser	Post-Medicare Other	Calendar Year	Pre-Medicare	Post-Medicare Kaiser	Post-Medicare Other
<p>■ Medical Trend</p>	2021	Actual 2021 Premiums			2021	n/a		
	2022	Actual 2022 Premiums*			2022	n/a		
	2023	6.50%	4.60%	5.65%	2023	Actual 2023 Premiums		
	2024	6.25%	4.45%	5.45%	2024	Actual 2024 Premiums		
	2025	6.00%	4.35%	5.25%	2025	8.50%	6.25%	7.50%
	2026	5.75%	4.25%	5.05%	2026	7.90%	5.65%	6.90%
	2027	5.55%	4.20%	4.90%	2027	7.35%	5.45%	6.50%
	2028	5.35%	4.15%	4.75%	2028	6.75%	5.25%	6.10%
	2029	5.15%	4.10%	4.60%	2029	6.20%	5.05%	5.70%
	2030	4.95%	4.05%	4.45%	2030	5.60%	4.85%	5.25%
	2031-35	4.80%	4.00%	4.35%	2031	5.05%	4.56%	4.85%
	2036-45	4.65%	3.95%	4.25%	2032-38	4.45%	4.45%	4.45%
	2046-55	4.50%	3.90%	4.20%	2039-40	4.35%	4.35%	4.35%
	2056-65	4.35%	3.85%	4.15%	2041	4.30%	4.30%	4.30%
	2066-75	4.05%	3.80%	3.95%	2042-44	4.25%	4.25%	4.25%
	2076+	3.75%	3.75%	3.75%	2045-47	4.20%	4.20%	4.20%
				2048-50	4.15%	4.15%	4.15%	
				↓	↓	↓	↓	
				2076+	3.45%	3.45%	3.45%	

\*Medical premiums after 2022 and estimated claims after 2021 do not take into account buy-downs (CalPERS subsidizations of premium rates from reserves).



**EXHIBITS - ACTUARIAL ASSUMPTIONS**

	<b>June 30, 2021 Valuation</b>	<b>June 30, 2023 Valuation</b>
■ Unit 002 Cap Incr.	■ 0%	■ Same
■ Age-related Claims Costs for Medicare Advantage Plans	■ Due to age-risk adjusted federal subsidies, no age-based claims costs were included for Medicare Advantage plans.	■ Same
■ Mortality, Termination, Disability, Retirement	<ul style="list-style-type: none"> <li>■ CalPERS 2000-2019 Experience Study</li> <li>■ Mortality projected with Scale MP-2021</li> </ul>	<ul style="list-style-type: none"> <li>■ CalPERS 2000-2019 Experience Study</li> <li>■ Mortality projected with Scale MP-2021</li> </ul>
■ Waived Retirees	<ul style="list-style-type: none"> <li>■ Pre 65: 10% re-elect at age 65</li> <li>■ Post 65: 0% re-elect</li> </ul>	■ Same



**EXHIBITS - ACTUARIAL ASSUMPTIONS**

	<b>June 30, 2021 Valuation</b>	<b>June 30, 2023 Valuation</b>										
■ Medical Plan at Retirement	<ul style="list-style-type: none"> <li>■ Currently covered: same as current medical plan</li> <li>■ Currently waived: Kaiser Region 1</li> </ul>	■ Same										
■ Participation at Retirement	<ul style="list-style-type: none"> <li>■ Hired before 4/1/09:                             <ul style="list-style-type: none"> <li>● Currently covered - 100%</li> <li>● Currently waived - 90%</li> </ul> </li> <li>■ Hired on or after 4/1/09:                             <table border="0" style="margin-left: 20px;"> <thead> <tr> <th style="text-align: left;"><u>Service</u></th> <th style="text-align: left;"><u>Participation</u></th> </tr> </thead> <tbody> <tr> <td>&lt; 10</td> <td>60%</td> </tr> <tr> <td>10-14</td> <td>90%</td> </tr> <tr> <td>15-19</td> <td>95%</td> </tr> <tr> <td>≥ 20</td> <td>100%</td> </tr> </tbody> </table> </li> </ul>	<u>Service</u>	<u>Participation</u>	< 10	60%	10-14	90%	15-19	95%	≥ 20	100%	■ Same
<u>Service</u>	<u>Participation</u>											
< 10	60%											
10-14	90%											
15-19	95%											
≥ 20	100%											



**EXHIBITS - ACTUARIAL ASSUMPTIONS**

	<b>June 30, 2021 Valuation</b>	<b>June 30, 2023 Valuation</b>
<ul style="list-style-type: none"> <li>■ Medicare Eligibility</li> </ul>	<ul style="list-style-type: none"> <li>■ Actives and pre-65 retirees: 100%</li> <li>■ Post-65 retirees: Current Medicare status</li> <li>■ Everyone eligible for Medicare will elect Part B coverage</li> </ul>	<ul style="list-style-type: none"> <li>■ Same</li> </ul>
<ul style="list-style-type: none"> <li>■ Marital Status at Retirement</li> </ul>	<ul style="list-style-type: none"> <li>■ Actives:                             <ul style="list-style-type: none"> <li>• Currently covered - current marital status</li> <li>• Currently waived - 80% married</li> </ul> </li> <li>■ Retirees - current marital status</li> </ul>	<ul style="list-style-type: none"> <li>■ Same</li> </ul>
<ul style="list-style-type: none"> <li>■ Spouse Age</li> </ul>	<ul style="list-style-type: none"> <li>■ Actives: Males 3 years older than females</li> <li>■ Retirees: Males 3 years older than females if spouse birth date not available</li> </ul>	<ul style="list-style-type: none"> <li>■ Same</li> </ul>



**EXHIBITS - ACTUARIAL ASSUMPTIONS**

	<b>June 30, 2021 Valuation</b>	<b>June 30, 2023 Valuation</b>
<ul style="list-style-type: none"> <li>■ Dependents at Retirement</li> </ul>	<ul style="list-style-type: none"> <li>■ % electing family coverage at retirement                             <ul style="list-style-type: none"> <li>• Misc: 10%</li> <li>• Safety: 30%</li> </ul> </li> <li>■ No family coverage <math>\geq</math> 65</li> </ul>	<ul style="list-style-type: none"> <li>■ Same</li> </ul>
<ul style="list-style-type: none"> <li>■ Actuarial Models</li> </ul>	<ul style="list-style-type: none"> <li>■ Our valuations were performed using and relying on ProVal, an actuarial model leased from Wintech. Our use of ProVal is consistent with its intended purpose. We have reviewed and understand ProVal and its operation, sensitivities and dependencies.</li> </ul>	
<ul style="list-style-type: none"> <li>■ Data Quality</li> </ul>	<ul style="list-style-type: none"> <li>■ Our valuations used census data provided by ACFD. We reviewed the data for reasonableness and resolved any questions with ACFD. We believe the resulting data can be relied on for all purposes of this valuation without limitation</li> </ul>	
<ul style="list-style-type: none"> <li>■ COVID-19</li> </ul>	<ul style="list-style-type: none"> <li>■ No adjustments to the assumptions have been made for COVID-19 since there is not yet enough data to evaluate the future impacts</li> </ul>	



**EXHIBITS - ACTUARIAL ASSUMPTIONS**

		<b>June 30, 2023 Valuation</b>									
<b>■ HMO Medical Claims Cost 2024</b>	<b>■ Sample estimated monthly claims costs:</b>										
	Region 1 - HMO										
		Anthem Select		Anthem Traditional		Blue Shield Access+		Kaiser		United Healthcare Alliance	
	<u>Age</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>
	25	\$413	\$682	\$486	\$803	\$391	\$645	\$371	\$612	\$396	\$654
	35	543	955	639	1,124	513	903	487	857	520	915
	45	776	1,034	913	1,216	734	978	696	927	743	991
	55	1,220	1,333	1,435	1,569	1,154	1,261	1,094	1,196	1,169	1,278
	60	1,535	1,545	1,805	1,817	1,451	1,461	1,376	1,386	1,470	1,480
	64	1,824	1,760	2,146	2,071	1,725	1,664	1,636	1,579	1,748	1,687



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**EXHIBITS - ACTUARIAL ASSUMPTIONS**

		<b>June 30, 2023 Valuation</b>							
<b>■ PPO Medical Claims Cost 2024</b>	<b>■ Sample estimated monthly claims costs:</b>								
	Region 1 – Medicare Eligible								
		PERS Platinum		PERS Gold		PORAC			
	<u>Age</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>		
	25	\$443	\$722	\$307	\$499	\$362	\$603		
	35	578	1,005	399	694	478	846		
	45	819	1,086	565	750	686	917		
	55	1,279	1,396	883	964	1,083	1,184		
	60	1,605	1,616	1,107	1,115	1,364	1,373		
	64	1,905	1,839	1,314	1,269	1,622	1,566		
	65	447	428	370	354	408	391		
	70	484	463	401	384	442	423		
75	516	495	427	410	471	452			
80	532	514	440	425	486	469			
85	526	512	435	424	480	468			



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## EXHIBITS - ACTUARIAL ASSUMPTIONS

<b>June 30, 2023 Valuation</b>	
<ul style="list-style-type: none"> <li>■ Basis for Assumptions</li> </ul>	<ul style="list-style-type: none"> <li>■ CalPERS 2021 experience study based on 2000 to 2019 demographic experience</li> <li>■ Mortality improvement based on Society of Actuaries table</li> <li>■ Inflation based on our estimate for the Plan's long time horizon</li> <li>■ Capital market assumptions based on 2021 Foster &amp; Foster stochastic analysis, taking into account capital market assumptions of investment advisory firms</li> <li>■ Age-based claims were based on demographic data provided by CalPERS and Society of Actuaries studies.</li> <li>■ Participation and coverage assumptions based in part on Plan experience</li> <li>■ Medical trends were based on expectations over the short term blended into long term medical trends developed using the Society of Actuaries Getzen Model of Long-Run Medical Cost Trends.</li> </ul>



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## EXHIBITS - DEFINITIONS

<ul style="list-style-type: none"> <li>■ OPEB Actuarial Valuation</li> </ul>	<ul style="list-style-type: none"> <li>■ Project future employer-provided benefit cash flows for current active employees and current retirees</li> <li>■ Discount projected cash flow to valuation date using discount rate (assumed return on assets used to pay benefits) and other actuarial assumptions to determine present value of projected future benefits (PVB)</li> <li>■ Allocate PVB to past, current, and future periods using the actuarial cost method</li> <li>■ Actuarial cost method used for this valuation is the Entry Age Normal Cost method which determines Normal Cost as a level percentage of payroll (same method used by CalPERS)</li> <li>■ Normal Cost is amount allocated to current fiscal year</li> <li>■ Actuarial Accrued Liability (AAL) is amount allocated to prior service with employer</li> <li>■ Unfunded AAL (UAAL) is AAL less plan assets pre-funded in a segregated and restricted trust</li> </ul>
<ul style="list-style-type: none"> <li>■ PayGo Cost</li> </ul>	<ul style="list-style-type: none"> <li>■ Cash subsidy is the pay-as-you-go employer benefit payments for retirees</li> <li>■ Implied subsidy is the difference between the actual cost of retiree benefits and retiree premiums subsidized by active employee premiums</li> </ul>



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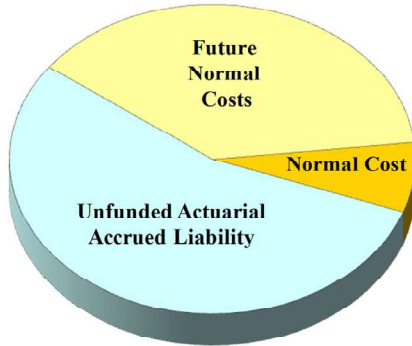
E-24



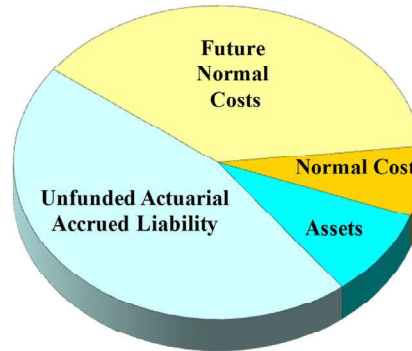
## EXHIBITS - DEFINITIONS

### Present Value of Benefits

**Present Value of Benefits  
(Without Plan Assets)**



**Present Value of Benefits  
(With Plan Assets)**



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## EXHIBITS - DEFINITIONS

■ **Acronyms  
Used in  
Report**

- AAL - Actuarial Accrued Liability
- ADC - Actuarially Determined Contribution
- AVA - Actuarial Value of Assets
- BP - Benefit Payments
- EAN - Entry Age Normal Cost Method
- GASBS 75 - Governmental Accounting Standards Board Statement No. 75
- NC - Normal cost
- OPEB - Other (than pensions) Post Employment Benefits
- SFL -Side Fund Liability
- PVB - Present Value of Projected Benefits
- UAAL - Unfunded Actuarial Accrued Liability



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