

ALAMEDA COUNTY FIRE DEPARTMENT RETIREE HEALTHCARE PLAN

FOSTER & FOSTER

June 30, 2023 Actuarial Valuation

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February 27, 2024

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BENEFIT SUMMARY

■ Eligibility ■ Service or disability retirement under CalPERS

Medical Benefit

■ Full monthly premium up to cap¹:

OPEB Tier	Retirement Date ²	Hire Date	Cap	Vesting Schedule
1		< 4/1/09	100% of Kaiser	No
2	< 6/30/22	4/1/09- 12/31/14	Region 1 Premium – Single, 2-Party, or Family	
3		> 1/1/15	90% of Kaiser Region 1 Premium – Single or 2-Party	Yes
4	> 6/30/22	All	90% of Kaiser Region 1 Premium – Single, 2-Party, or Family (2-Party Post-Medicare)	Yes

■ Kaiser cap varies by medical coverage and Medicare eligibility

November 3, 2022 for unrepresented employees.



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BENEFIT SUMMARY

Grand-
Fathered
Eligibility
for Tier 4

■ Grandfathered eligibility:

- Hired before 4/1/09 with 14 years ACFD service on 6/30/22 vesting schedule does not apply
- Hired 4/1/09 to 6/30/22 years of service for vesting schedule is based on total CalPERS service

Vesting Schedule

■ Vesting % based on service, minimum of 5 years ACFD service:

<u>Service</u>	Vesting %	<u>Service</u>	Vesting %
<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%

- Based on CalPERS service for retirees before 6/30/22 and grandfathered participants hired 4/1/09 to 6/30/22
- Based on ACFD service for hires after 6/30/22³
- 100% vesting with disability retirement

³ Includes prior service with an agency that has contracted with ACFD.





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

Exhibit 6

BENEFIT SUMMARY

■ Employee Contrib.	 1/1/21 through 6/20/22: 5.25% of base pay 6/30/22 and later: 4% of Firefighter annual top step base pay⁴
Surviving Spouse	■ 100% of retiree benefit continues to surviving spouse if retiree elects survivor annuity under CalPERS retirement plan
■ Other	■ No dental, vision, life, or Medicare Part B reimbursements.

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

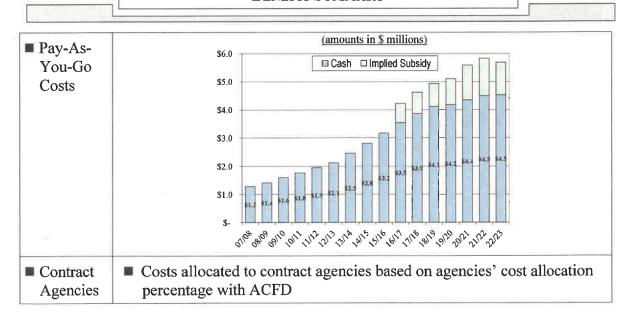


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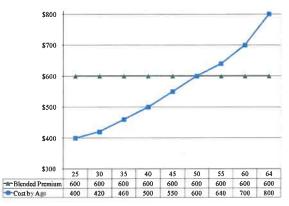
BENEFIT SUMMARY



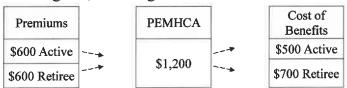


IMPLIED SUBSIDY

- 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.



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					1
o Service	54.4	54.6	54.6	54.8	55.0
o 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
June 30, 2021 Valuation	426	206	100	25	757
New Hires	22	-	-	ı, -	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		
■ June 30, 2023 Valuation	415	210	103	23	751



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%	<u> 17%</u>	<u>14%</u>
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





ACTUARIAL ASSUMPTIONS HIGHLIGHTS

	June 30, 2021 Valuation	June 30, 2023 Valuation		
■ Valuation	June 30, 2021	■ June 30, 2023		
Date	■ 2022/23 and 2023/24 ADC	■ 2024/25 and 2025/26 ADC		
■ General	2.50%	■ Same		
Inflation	■ Used for economic assumptions			
■ Payroll	■ Aggregate Increases – 2.75%	■ Same		
Increases	■ Merit Increases – CalPERS 2000-2019 Experience Study			
■ Mortality, Termination,	CalPERS 2000-2019 Experience Study	■ Same		
Disability,				
Retirement	Mortality projected with Scale MP-2021			



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ACTUARIAL ASSUMPTIONS HIGHLIGHTS

- Discount.
 Rate
- 4.87% approx. blended rate determined by allocating liabilities to agencies based on estimated pre-funding policies:
 - 6.25% full pre-funding rate used for Dispatch, City of Dublin, and LLNL
 - 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
 - 4.00% employee contributions only (20% of ADC less paygo) for City of San Leandro
- 6.25% side fund calculations, CERBT Strategy #1

- 6.25% CERBT Strategy #1
- Based on GASBS 75 crossover test methodology for the plan as a whole





ACTUARIAL ASSUMPTIONS HIGHLIGHTS

	June 30, 2021 Valuation				Jun	e 30, 202	3 Valua	tion
= 3.6. P 1	Increase from Prior Year					Increas	se from Pric	or Year
Medical			Post-	Post-			Post-	Post-
Trend	Calendar	Pre-	Medicare	Medicare	Calendar	Pre-	Medicare	Medicare
	Year	Medicare	Kaiser	<u>Other</u>	Year	<u>Medicare</u>	<u>Kaiser</u>	<u>Other</u>
	2021	Actua	d 2021 Pren	niums	2021		n/a	
	2022	Actua	al 2022 Pren	niums*	2022		n/a	
	2023	6.50%	4.60%	5.65%	2023	Actua	d 2023 Pren	niums
	2024	6.25%	4.45%	5.45%	2024	Actua	d 2024 Prer	niums
	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%
	*Medical p	remiums after	2022 and estin		2048-50	4.15%	4.15%	4.15%
	after 2021	do not take int	o account buy- of premium ra	downs	2076+	↓ 3.45%	↓ 3.45%	↓ 3.45%



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ACTUARIAL ASSUMPTIONS HIGHLIGHTS

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



ACTUARIAL METHODS

	June 30, 2021 Valuation	June 30, 2023 Valuation
Cost Method	Entry Age Normal	• Same
	Normal Cost is a level percent of payroll	
Funding Policy	Partial pre-funding, varies by agencyEmployees also contribute	• Same
Amortization Method	Level percent of payroll	• Same
Amortization Periods	20-year, 25-year, and 28-year UAAL amortization shown for	20-year UAAL amortization for ADCs
	unfunded side fund liabilities	• 18-year, 23-year, and 26-year UAAL amortization shown for unfunded side fund liabilities



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ACTUARIAL METHODS

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ASSETS

Market Value of Plan Assets (MVA)⁵ (Amounts in \$000's)

	2021/22	2022/23	Projected 2023/24
Market Value (Beginning of Year)	\$46,847	\$44,963	\$51,317
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	(6,595)	3,037	3,320
Market Value (End of Year)	44,963	51,317	58,297
Approximate Annual Return	(13.5%)	6.6%	6.25%

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
Actuarial Value (Beginning of Year)	\$41,895	\$48,488	\$54,195
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
Expected AVA (End of Year)	49,369	54,915	61,355
MVA (End of Year)	44,963	51,317	58,297
1/5 of (MVA - Expected AVA)	(881)	(720)	(612)
Preliminary AVA	48,488	54,195	60,743
 Minimum AVA (80% of MVA) 	35,971	41,053	46,637
 Maximum AVA (120% of MVA) 	53,956	61,580	69,956
Actuarial Value (End of Year)	48,488	54,195	60,743
Approximate AVA Return	4.2%	4.8%	5.2%

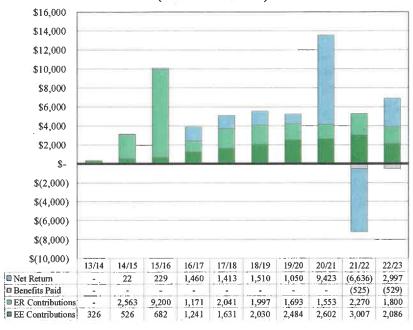




ASSETS

Historical Asset Changes

(Amounts in \$000's)



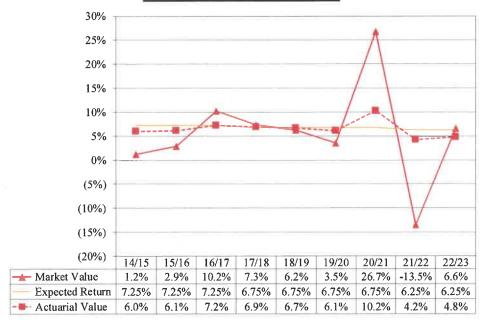


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ASSETS

Annualized Asset Returns







Actuarial Obligations (Amounts in \$000's)

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



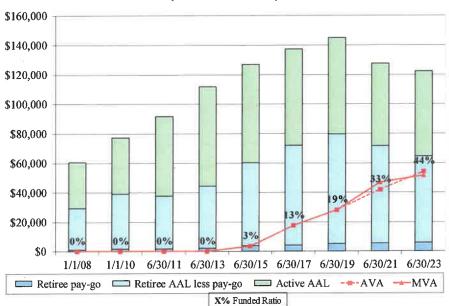
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Historical Actuarial Accrued Liability

(Amounts in \$000's)







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

	AAL
■ 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%)	(21,750)
■ Total Changes	(16,603)
■ 6/30/23 Actual	122,315



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

1111111	2024/25	2025/26
■ ADC - \$		
Normal Cost	\$4,715	\$4,848
 UAAL Amortization⁶ 	4,869	<u>5,003</u>
Total ADC	9,584	9,851
 Employee Contributions⁷ 	(2,246)	(2,308)
Employer ADC	7,338	7,544
■ Projected Payroll	68,010	69,880
■ ADC - %Pay		
Normal Cost	6.9%	6.9%
 UAAL Amortization 	7.2%	<u>7.2%</u>
Total ADC	14.1%	14.1%
 Employee Contributions 	(3.3%)	(3.3%)
Employer ADC	10.8%	10.8%

Based on 20-year amortization periods.

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





Actuarial Obligations by Pre/Post Medicare (Amounts in \$000's)

	6/3	6/30/23 Valuation			
	Pre	Post			
	Medicare	Medicare			
	Results	Results	Total		
■ Present Value of Benefits					
•Actives	\$73,109	\$27,788	\$100,897		
•Retirees	28,719	35,837	64,555		
•Total	101,828	63,625	165,452		
Actuarial Accrued Liability					
•Actives	41,219	16,541	57,760		
•Retirees	<u>28,719</u>	<u>35,837</u>	64,555		
•Total	69,938	52,378	122,315		
■ Actuarial Value of Assets ⁸	(30,988)	(23,208)	(54,195)		
Unfunded AAL	38,950	29,170	68,120		
■ Funded Ratio	44.3%	44.3%	44.3%		

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	Actua Valu Asso (a	e of ets	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	3,5	528	126,879	123,351	2.8%	50,186	245.8%
6/30/17	17,4	34	137,238	119,804	12.7%	52,057	230.1%
6/30/19	28,0	91	145,153	117,062	19.4%	55,516	210.9%
6/30/21	41,8	95	127,551	85,656	32.8%	59,923	142.9%
6/30/23	54,1	95	122,315	68,120	44.3%	64,418	105.7%





Actuarial Obligations by Cash/Implied Subsidy

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

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

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



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Actuarially Determined Contribution (ADC) by Cash/Implied Subsidy 2024/25 Fiscal Year (Amounts in \$000's)

= H	Cash Subsidy	Implied Subsidy	Total
■ ADC - \$			
 Normal Cost 	\$4,055	\$660	\$4,715
 UAAL Amortization¹⁰ 	4,219	<u>650</u>	4,869
 Total ADC 	8,274	1,310	9,584
 Employee Contributions 	(2,246)		(2,246)
 Employer ADC 	6,028	1,310	7,338
Projected Payroll	68,010	68,010	68,010
ADC - %Pay			
 Normal Cost 	6.0%	1.0%	6.9%
 UAAL Amortization 	6.2%	1.0%	7.2%
Total ADC	12.2%	1.9%	14.1%
 Employee Contributions 	(3.3%)	(0.0%)	(3.3%)
 Employer ADC 	8.9%	1.9%	10.8%

¹⁰ Based on 20-year amortization periods.





Actuarial Obligations by Group

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

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

Actual Dispatch assets, with Safety/Misc assets allocated on AAL.



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Actuarially Determined Contribution (ADC) by Group

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

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

¹² Based on 20-year amortization periods.





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

Fiscal Year	Cash Subsidy	Implied Subsidy	Total
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



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RESULTS

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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 prefunding 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





SIDE FUND CALCULATIONS

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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)





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			
	Prior Calculation of 6/30/22 Side Funds without Adjustment												
■ SFL	\$1.9	\$52.3	\$29.6	\$12.8	\$1.6	\$0.1	\$5.2	\$6.6	\$2.9	\$113.1			
■ Assets	3.0	17.0	3.3	14.8	0.9	1.6	4.2	2.5	1.2	48.5			
Unfunded	(1.1)	35.3	26.3	(2.0)	0.7	(1.5)	1.0	4.1	1.7	64.6			
New	Calculatio	n of 6/30/	22 Side F	unds bas	ed on Ad	justment t	o Initial A	gencies' S	ide Funds ¹³				
■ 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> </u>	(3.2)	(1.8)	(0.8)	(0.1)	6.0							
Revised SFL	1.9	49.1	27.7	12.0	1.5	6.1	5.2	6.6	2.9	113.1			
■ Assets	3.0	<u>17.0</u>	3.3	14.8	0.9	<u>1.6</u>	4.2	2.5	1.2	<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			

¹³ 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.





Actuarial Obligations for Side Fund Calculations

Full Funding Discount Rate

(Amounts in \$000's)

	6/30/21 V	aluation	6/30/23 V	aluation
		Projected		Projected
	6/30/21	6/30/22	6/30/23	6/30/24
■ Full Funding Discount Rate	6.2	5%	6.25	5%
■ 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	1,710	1,913	2.008	2,246
• Total	108,261	113,065	122,315	128,667
■ Actuarial Value of Assets	(41,895)	(48,488)	(54,195)	(60,743)
■ 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 V	aluation	6/30/23 V	aluation	
	2022/23	2023/24	2024/25	2025/26	
2.	6.2	5%	6.25	5%	
■ ADC - \$		*:			
 Normal Cost 	\$4,190	\$4,308	\$4,715	\$4,848	
 UAAL Amortization¹⁴ 	4,628	<u>4,755</u>	<u>4,869</u>	<u>5,003</u>	
Total ADC	8,818	9,063	9,584	9,851	
 Employee Contributions¹⁵ 	(2,088)	(2,146)	(2,246)	(2,308)	
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 	7.3%	7.3%	7.2%	7.2%	
Total ADC	13.9%	13.9%	14.1%	14.1%	
 Employee Contributions 	(3.3%)	(3.3%)	(3.3%)	(3.3%)	
Employer ADC	10.6%	10.6%	10.8%	10.8%	

¹⁴ Based on 20-year amortization periods.

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





CERBT Sub-Accounts and AVA Calculation

Fiscal Year 2022/23 (Amounts in \$000's)

	Dis-		San					Union	Emery-	
	patch	ALCO	Leandro	Dublin	LBNL	LLNL	Newark	City	ville	Total
■ MVA 6/30/22	\$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	-	11 -	-	-	- 1	-	-	1,800
Disbursements	-	-	-	(529)	- 1	- 1		-	-	(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)
■ MVA 6/30/23	3,122	19,194	3,707	14,341	1,000	1,764	4,280	2,626	1,284	51,317
AVA Ratio 16	4				105.	61%				
■ AVA 6/30/23	3,297	20,270	3,915	15,145	1,056	1,863	4,520	2,773	1,356	54,195

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-		San					Union	Emery-	
	patch	ALCO	Leandro	Dublin	LBNL	LLNL	Newark	City	ville	Total
■ MVA 6/30/23	\$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	-	-	-	-	- 1	-	-	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.	<u></u> -									·
■ MVA 6/30/24	3,454	23,088	4,372	14,963	1,145	2,081	4,731	2,975	1,488	58,297
AVA Ratio 17	*				104.	.20% —			5 5	-
■ AVA 6/30/24	3,599	24,058	4,555	15,590	1,193	2,168	4,930	3,100	1,550	60,743

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





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-		San					Union	Emery-	
	patch	ALCO	Leandro	Dublin	LBNL	LLNL	Newark	City	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 NC¹⁸ 	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	128	3,090	1,743	<u>758</u>	<u>95</u>	<u> 387</u>	_329	420	<u> 186</u>	7,136
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 ¹⁹	(135)	1,245	818	<u>471</u>	<u>154</u>	<u>385</u>	<u>356</u>	356	_240	3,890
■ 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	(3,297)	(20,270)	(3,915)	(15,145)	(1,056)	(1,863)	(4,520)	(2,773)	(1,356)	(54,195)
■ 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

Allocated based on FTE first, and then allocation % of shared positions, except for Dispatch which is based on actual Dispatch valuation results. 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-		San	Induits ii				Union	Emery-	
	patch	ALCO	Leandro	Dublin	LBNL	LLNL	Newark	City	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 NC²⁰ 	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	134	3,336	1,883	823	<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 ²¹										
■ 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	(3,599)	(24,058)	(4,555)	(15,590)	(1,193)	(2,168)	(4,930)	(3,100)	(1,550)	(60,743
■ 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

Allocated based on FTE first, and then allocation % of shared positions, except for Dispatch which is based on actual Dispatch valuation results. No (gains)/losses since estimated 6/30/24 SFL is calculated based on expected (not actual) benefit payments and investment return.



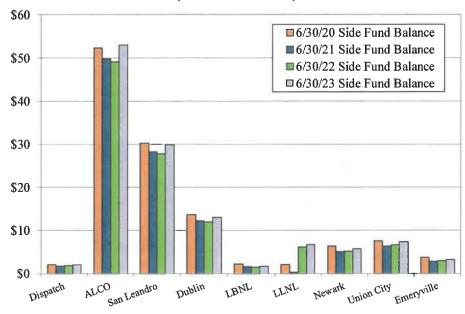


Exhibit 6

SIDE FUND CALCULATIONS

Side Fund Liability Balances

(Amounts in millions)





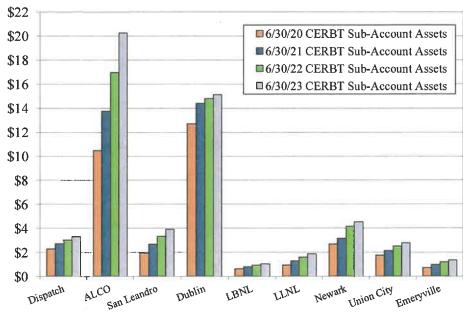


SIDE FUND CALCULATIONS

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CERBT Sub-Account Assets (AVA)

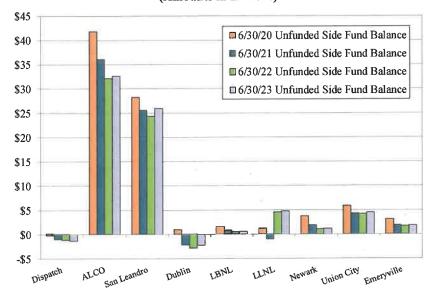
(Amounts in millions)







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







SIDE FUND CALCULATIONS

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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	
				18-Ye	ar UAAL	Amortiz	ation				
■ 2024/25 ADC											
 Normal Cost 	\$167	\$1,437	\$910	\$529	\$170	\$423	\$402	\$402	\$275	\$4,715	
 UAAL Amort 	(105)	2,457	2,076	(149)	_38	<u>369</u>	<u>78</u>	<u>346</u>	<u>140</u>	5,250	
Total ADC	62	3,894	2,986	380	208	792	480	748	415	9,965	
		23-Year UAAL Amortization									
■ 2024/25 ADC											
 Normal Cost 	\$167	\$1,437	\$910	\$529	\$170	\$423	\$402	\$402	\$275	\$4,715	
 UAAL Amort 	(88)	2,071	<u>1,750</u>	(126)	_32	<u>311</u>	_66	<u>291</u>	<u>118</u>	4,425	
 Total ADC 	79	3,508	2,660	403	202	734	468	693	393	9,140	
	7/1		***************************************	26-Ye	ar UAAL	Amortiz	ation				
■ 2024/25 ADC											
 Normal Cost 	\$167	\$1,437	\$910	\$529	\$170	\$423	\$402	\$402	\$275	\$4,715	
 UAAL Amort 	(81)	1,914	1,617	(116)	_30	<u>287</u>	<u>61</u>	<u>269</u>	<u>109</u>	4,090	
Total ADC	86	3,351	2,527	413	200	710	463	671	384	8,805	





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

	Dis-		San					Union	Emery-	
	patch	ALCO	Leandro	Dublin	LBNL	LLNL	Newark	City	ville	Total
				18-Ye	ar UAAL	Amortiz	ation			
■ 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. 	(224)	_(712)	(468)	<u>(267)</u>	(89)	(223)	(200)	(200)	(134)	(2,517)
Trust Contrib.	(188)	1,301	1,245	(614)	(123)	(37)	(266)	2	(83)	1,237
				23-Ye	ar UAAL	Amortiz	ation			
■ 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. 	(224)	(712)	(468)	(267)	(89)	(223)	(200)	(200)	(134)	(2,517)
• Trust Contrib.	(171)	915	919	(591)	(129)	(95)	(278)	(53)	(105)	412
				26-Ye	ar UAAL	Amortiz	ation			
■ 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.	(224)	(712)	(468)	(267)	(89)	(223)	(200)	(200)	(134)	(2,517)
Trust Contrib.	(164)	758	786	(581)	(131)	(119)	(283)	(75)	(114)	77

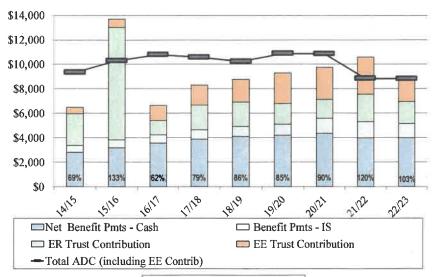


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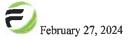
SIDE FUND CALCULATIONS

Historical Contributions and Full Pre-Funding ADCs²² (Amounts in \$000's)



Percentage of ADC Contributed

²⁰⁻year UAAL amortization.





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,

Daug Byn

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

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

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

	Non-N	Medicare E	ligible	Me	edicare Eli	Family \$1,240.77 1,240.77 1,085.70 1,085.70 n/a 849.75 1,008.87 n/a 899.04	
Medical Plan	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

	Non-N	Medicare E	ligible	Medicare Eligible			
Medical Plan	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	





EXHIBITS – PARTICIPANT STATISTICS

Participant Statistics June 30, 2023

	Miscel		neous	
	Safety	Non-Dispatch	Dispatch	Total
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 ²³
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

Includes 23 retirees who waive medical coverage.



February 27, 2024

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EXHIBITS - PARTICIPANT STATISTICS

Participant Statistics June 30, 2021

		Miscellaneous		
	Safety	Non-Dispatch	Dispatch	Total
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^{24}
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

²⁴ Includes 23 retirees who waive medical coverage.





EXHIBITS – PARTICIPANT STATISTICS

Medical Plan Participation

			Retirees				
Medical Plan	Actives	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%			
Total	100%	100%	100%	100%			



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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
Total	87	54	247	27	415





EXHIBITS - PARTICIPANT STATISTICS

Retiree Medical Plan Coverage - Pre 65

Medical Plan	Single	2-Party	Family	Waived	Total
Anthem Select	_	1	3	-	4
Blue Shield Access+	-	5	2	- p	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
Total	17	77	54	11	159



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EXHIBITS - PARTICIPANT STATISTICS

Retiree Medical Plan Coverage - Post 65

Medical Plan	Single	2-Party	Family	Waived	Total
Anthem Medicare	1	4	-	100	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
Total	62	95	8	12	177



EXHIBITS – PARTICIPANT STATISTICS

Retirees Medical Plan Coverage by Age

	Medical Coverage								
Age	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	111	3	53				
75-79	10	29	1	2	42				
80-84	8	2	1	1	12				
85 & Over	_	-	_	_					
Total	79	172	62	23	336				
Average Age	70.3	67.0	59.8	64.4	66.3				



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EXHIBITS – PARTICIPANT STATISTICS

Actives by Age and Service - Safety

	ACFD Service										
Age	<1	1-4	5-9	10-14	15-19	20-24	≥ 25	Total			
< 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			
45-4 9	_	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			
Total	_	49	88	88	64	39	9	337			





EXHIBITS - PARTICIPANT STATISTICS

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

	ACFD Service									
Age	<1	1-4	5-9	10-14	15-19	20-24	≥ 25	Total		
< 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		
Total	7	8	20	4	4	1	2	46		



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EXHIBITS – PARTICIPANT STATISTICS

Actives by Age and Service - Miscellaneous (Dispatch)

	ACFD Service									
Age	<1	1-4	5-9	10-14	15-19	20-24	≥ 25	Total		
< 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	_	-	-	-	_	-	-	-		
Total	1	13	8	3	7	-	_	32		



EXHIBITS - PARTICIPANT STATISTICS

Actives by Age and Service - Total

	ACFD Service										
Age	<1	1-4	5-9	10-14	15-19	20-24	≥ 25	Total			
< 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			
Total	8	70	116	95	75	40	11	415			



February 27, 2024

E-13



	June 30, 2021 Valuation	June 30, 2023 Valuation
■ Valuation Date	June 30, 20212022/23 and 2023/24 ADC	June 30, 20232024/25 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	Year PEMHCA Min 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





	June 30, 2021 Valuation	June 30, 2023 Valuation
■ Discount Rate	 4.87% - approx. blended rate determined by allocating liabilities to agencies based on estimated pre-funding policies: 6.25% - full pre-funding rate used for Dispatch, City of Dublin, and LLNL 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 4.00% - employee contributions only (20% of ADC less paygo) for City of San Leandro 6.25% - side fund calculations, CERBT Strategy #1 	 6.25% - CERBT Strategy #1 Based on GASBS 75 crossover test methodology for the plan as a whole



E-15



	Jun	e 30, 202	1 Valua	Jun	e 30, 202	3 Valua	tion		
X 6 . 12 1		Increas	se from Pric	r Year	Increase from Prior Year				
Medical			Post-	Post-			Post-	Post-	
Trend	Calendar	Pre-	Medicare	Medicare	Calendar	Pre-	Medicare	Medicare	
	Year	Medicare	<u>Kaiser</u>	Other	<u>Year</u>	Medicare	<u>Kaiser</u>	<u>Other</u>	
	2021	Actua	12021 Pren	niums	2021		n/a		
	2022	Actua	1 2022 Pren	niums*	2022		n/a		
	2023	6.50%	4.60%	5.65%	2023 Actual 2023 Pr			emiums	
	2024	6.25%	4.45%	5.45%	2024	Actua	l 2024 Prer	niums	
	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%	
	*Medical prem 2021 do not tal	ce into account	buy-downs (C	alPERS	2048-50	4.15% ↓	4.15% ↓	4.15% ↓	
	subsidizations	of premium rate	es from reserve	es).	2076+	3.45%	3.45%	3.45%	





	June 30, 2021 Valuation	June 30, 2023 Valuation
■ 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	 CalPERS 2000-2019 Experience Study Mortality projected with Scale MP-2021 	 CalPERS 2000-2019 Experience Study Mortality projected with Scale MP-2021
■ Waived Retirees	■ Pre 65: 10% re-elect at age 65■ Post 65: 0% re-elect	■ Same



E-17



	June 30, 2021 Valuation	June 30, 2023 Valuation
Medical Plan at Retirement	Currently covered: same as current medical planCurrently waived: Kaiser Region 1	Same
Participation at Retirement	 ■ Hired before 4/1/09: • Currently covered - 100% • Currently waived - 90% ■ Hired on or after 4/1/09: Service Participation < 10 60% 10-14 90% 15-19 95% ≥ 20 100% 	■ Same



	June 30, 2021 Valuation	June 30, 2023 Valuation
Medicare Eligibility	 Actives and pre-65 retirees: 100% Post-65 retirees: Current Medicare status 	■ Same
	Everyone eligible for Medicare will elect Part B coverage	
Marital Status at Retirement	 Actives: Currently covered - current marital status Currently waived - 80% married Retirees - current marital status 	■ Same
■ Spouse Age	 Actives: Males 3 years older than females Retirees: Males 3 years older than females if spouse birth date not available 	■ Same



E-19



	June 30, 2021 Valuation	June 30, 2023 Valuation				
Dependents at Retirement	 % electing family coverage at retirement Misc: 10% Safety: 30% No family coverage ≥ 65 	■ Same				
Actuarial Models	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.					
■ Data Quality	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					
COVID-19	No adjustments to the assumptions since there is not yet enough data t					



	June 30, 2023 Valuation										
■ HMO	■ Sample estimated monthly claims costs:										
Medical					Regio	on 1 - H	MO				
Claims Cost									Unit	ed	
2024		Anth	iem	Anthem		Blue Shield				Health	
2024		<u>Select</u>		Traditional		Access+		<u>Kaiser</u>		<u>Alliance</u>	
	Age	<u>M</u>	$\underline{\mathbf{F}}$	M	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	$\underline{\mathbf{M}}$	<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



E-21



			Jı	ine 30, :	2023 Va	luation			
■ PPO	■ Sample estimated monthly claims costs:								
Medical	Region 1 – Medicare Eligible								
Claims Cost			PERS Pla	atinum	PERS (Gold	POR A	AC	
2024		<u>Age</u>	$\underline{\mathbf{M}}$	<u>F</u>	<u>M</u>	\mathbf{F}	<u>M</u>	<u>F</u>	
2024		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	





June 30, 2023 Valuation ■ CalPERS 2021 experience study based on 2000 to 2019 demographic Basis for Assumptions experience Mortality improvement based on Society of Actuaries table ■ Inflation based on our estimate for the Plan's long time horizon ■ Capital market assumptions based on 2021 Foster & Foster stochastic analysis, taking into account capital market assumptions of investment advisory firms Age-based claims were based on demographic data provided by CalPERS and Society of Actuaries studies. ■ Participation and coverage assumptions based in part on Plan experience ■ 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.



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EXHIBITS - DEFINITIONS

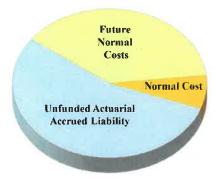
OPEB Actuarial	■ Project future employer-provided benefit cash flows for current active employees and current retirees
Valuation	■ Discount projected cash flow to valuation date using discount rate (assumed return on assets used to pay benefits) and other actuarial assumptions to determine present value of projected future benefits (PVB)
	■ Allocate PVB to past, current, and future periods using the actuarial cost method
	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)
	■ Normal Cost is amount allocated to current fiscal year
	Actuarial Accrued Liability (AAL) is amount allocated to prior service with employer
	■ Unfunded AAL (UAAL) is AAL less plan assets pre-funded in a segregated and restricted trust
■ PayGo Cost	 Cash subsidy is the pay-as-you-go employer benefit payments for retirees Implied subsidy is the difference between the actual cost of retiree benefits and retiree premiums subsidized by active employee premiums



EXHIBITS - DEFINITIONS

Present Value of Benefits

Present Value of Benefits (Without Plan Assets)



Present Value of Benefits (With Plan Assets)





February 27, 2024

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EXHIBITS - DEFINITIONS

- AcronymsUsed inReport
- 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



