



GASB 74/75 ACTUARIAL VALUATION

Fiscal Year Ending June 30, 2022

NOVATO FIRE PROTECTION DISTRICT

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April 29, 2022

Mr. Joe Valenti
Novato Fire Protection District
95 Rowland Way
Novato, CA 94945

This report summarizes the GASB actuarial valuation for the Novato Fire Protection District 2021/22 fiscal year. To the best of our knowledge, the report presents a fair position of the funded status of the plan in accordance with GASB Statement No. 74 (Financial Reporting for Post-Employment Benefit Plans Other Than Pension Plans) and GASB Statement No. 75 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions). This report may not be appropriate for other purposes. Please contact Nyhart prior to disclosing this report to any other party or relying on its content for any purpose other than that explained above. Failure to do so may result in misrepresentation or misinterpretation of this report.

The information presented herein is based on the actuarial assumptions and substantive plan provisions summarized in this report and participant information furnished to us by the Plan Sponsor. We have reviewed the employee census provided by the Plan Sponsor for reasonableness when compared to the prior information provided but have not audited the information at the source, and therefore do not accept responsibility for the accuracy or the completeness of the data on which the information is based. When relevant data may be missing, we may have made assumptions we feel are neutral or conservative to the purpose of the measurement. We are not aware of any significant issues with and have relied on the data provided.

The discount rate, other economic assumptions, and demographic assumptions have been selected by the Plan Sponsor with the concurrence of Nyhart. In our opinion, the actuarial assumptions are individually reasonable and in combination represent our estimate of anticipated experience of the Plan. All calculations have been made in accordance with generally accepted actuarial principles and practice.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- plan experience differing from that anticipated by the economic or demographic assumptions;
- changes in economic or demographic assumptions;
- increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and
- changes in plan provisions or applicable law.

We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement.

To our knowledge, there have been no significant events prior to the current year's measurement date or as of the date of this report that could materially affect the results contained herein.



Neither Nyhart nor any of its employees has any relationship with the plan or its sponsor that could impair or appear to impair the objectivity of this report. Our professional work is in full compliance with the American Academy of Actuaries "Code of Professional Conduct" Precept 7 regarding conflict of interest. The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Should you have any questions please do not hesitate to contact us.

A handwritten signature in black ink that reads "Sandy DeKalb".

Sandy DeKalb ASA, EA, MAAA
Actuary

A handwritten signature in black ink that reads "John Mallows".

John Mallows, FSA, MAAA
Actuary

Executive Summary

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Summary of Results

Presented below is the summary of GASB 75 results for the fiscal year ending June 30, 2022 compared to the prior fiscal year as shown in the District's Notes to Financial Statement.

	As of June 30, 2021	As of June 30, 2022
Total OPEB Liability	\$ 18,607,379	\$ 20,402,727
Actuarial Value of Assets	\$ (12,517,655)	\$ (17,225,472)
Net OPEB Liability	\$ 6,089,724	\$ 3,177,255
Funded Ratio	67.3%	84.4%

	FY 2020/21	FY 2021/22
OPEB Expense	\$ 498,265	\$ 103,973
Annual Employer Contributions	\$ 2,215,863	\$ 2,303,743
Actuarially Determined Contribution	\$ 1,194,970	\$ 1,232,285

	As of June 30, 2021	As of June 30, 2022
Discount Rate	7.00%	7.00%
Expected Return on Assets	7.00%	7.00%

	As of June 30, 2022
Total Active Participants	77
Total Retiree Participants	98

The active participants' number above may include active employees who currently have no health care coverage. Refer to Summary of Participants section for an accurate breakdown of active employees with and without coverage.

Executive Summary

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Summary of Results

Below is a breakdown of total GASB 75 liabilities allocated to past and current service compared to the prior year. The table below also provides a breakdown of the Total OPEB Liability allocated to pre- and post- Medicare eligibility. The liability shown below includes explicit (if any) and implicit subsidies. Refer to the Substantive Plan Provisions section for complete information on the Plan Sponsor's GASB subsidies.

Present Value of Future Benefits	As of June 30, 2021	As of June 30, 2022
Active Employees	\$ 8,949,413	\$ 7,693,564
Retired Employees	11,590,579	14,283,662
Total Present Value of Future Benefits	\$ 20,539,992	\$ 21,977,226

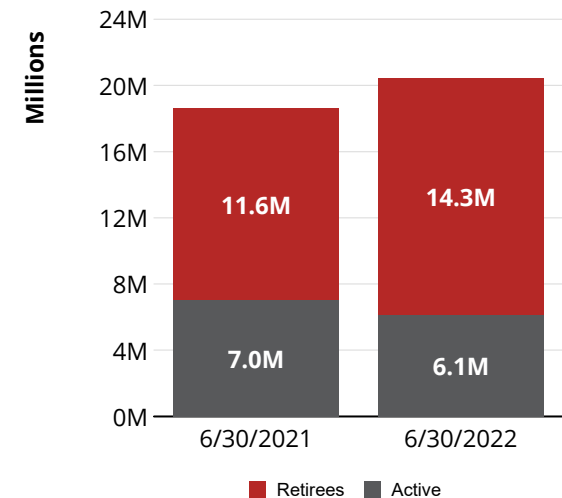
Total OPEB Liability	As of June 30, 2021	As of June 30, 2022
Active Pre-Medicare	\$ 5,055,178	\$ 4,583,084
Active Post-Medicare	1,961,622	1,535,981
Active Liability	\$ 7,016,800	\$ 6,119,065

Retiree Pre-Medicare	\$ 3,482,718	\$ 5,784,397
Retiree Post-Medicare	8,107,861	8,499,265
Retiree Liability	\$ 11,590,579	\$ 14,283,662

Total OPEB Liability	\$ 18,607,379	\$ 20,402,727
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	As of June 30, 2021	As of June 30, 2022
Discount Rate	7.00%	7.00%

Changes In Total OPEB Liability



Present Value of Future Benefits (PVFB) is the amount needed as of June 30, 2022 and June 30, 2021, to fully fund the District's retiree health care subsidies for existing and future retirees and their dependents assuming all actuarial assumptions are met.

Total OPEB Liability is the portion of PVFB considered to be accrued or earned as of June 30, 2022 and June 30, 2021. This amount is a required disclosure in the Required Supplementary Information section.

GASB Disclosures

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Schedule of Changes in Net OPEB Liability and Related Ratios

OPEB Liability	FY 2021/22	FY 2020/21	FY 2019/20	FY 2018/19	FY 2017/18
Total OPEB Liability					
Total OPEB Liability - beginning of year	\$ 18,607,379	\$ 18,317,588	\$ 18,560,623	\$ 17,969,570	\$ 17,465,760
Service cost	278,126	267,143	334,209	312,345	291,911
Interest	1,283,835	1,264,414	1,287,788	1,245,883	1,208,168
Change of benefit terms	0	0	0	0	0
Changes in assumptions	523,216	0	292,501	0	0
Differences between expected and actual experience	818,944	(180,464)	(1,161,809)	0	0
Benefit payments	(1,108,773)	(1,061,302)	(995,724)	(967,175)	(996,269)
Net change in total OPEB liability	\$ 1,795,348	\$ 289,791	\$ (243,035)	\$ 591,053	\$ 503,810
Total OPEB Liability - end of year	\$ 20,402,727	\$ 18,607,379	\$ 18,317,588	\$ 18,560,623	\$ 17,969,570
Plan Fiduciary Net Position					
Plan fiduciary net position - beginning of year	\$ 12,517,654	\$ 10,713,304	\$ 8,578,388	\$ 6,561,838	\$ 4,998,651
Contributions - employer	2,303,743	2,215,863	2,543,521	2,469,891	1,989,494
Contributions - active employees	0	0	0	0	0
Net investment income	3,517,690	655,206	594,812	526,229	572,838
Benefit payments	(1,108,773)	(1,061,302)	(995,724)	(967,175)	(996,269)
Trust administrative expenses	(4,842)	(5,416)	(7,693)	(12,395)	(2,876)
Net change in plan fiduciary net position	\$ 4,707,818	\$ 1,804,351	\$ 2,134,916	\$ 2,016,550	\$ 1,563,187
Plan fiduciary net position - end of year	\$ 17,225,472	\$ 12,517,655	\$ 10,713,304	\$ 8,578,388	\$ 6,561,838
Net OPEB Liability - end of year	\$ 3,177,255	\$ 6,089,724	\$ 7,604,284	\$ 9,982,235	\$ 11,407,732
Plan fiduciary net position as % of total OPEB liability	84.4%	67.3%	58.5%	46.2%	36.5%
Covered employee payroll	\$ 9,769,209	\$ 9,258,400	\$ 8,945,314	\$ 8,684,771	\$ 8,684,771
Net OPEB liability as % of covered payroll	32.5%	65.8%	85.0%	114.9%	131.4%

GASB Disclosures

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Schedule of Employer Contributions

The Actuarially Determined Contributions (ADC) shown below are based on the Annual Required Contribution (ARC) calculated in prior GASB 45 actuarial valuations as shown in the District's financial statements.

	FY 2021/22	FY 2020/21	FY 2019/20	FY 2018/19	FY 2017/18
Actuarially Determined Contribution (ADC)	\$ 1,232,285	\$ 1,194,970	\$ 1,154,560	\$ 1,502,716	\$ 1,664,462
Contributions in relation to the ADC	2,303,743	2,215,863	2,543,521	2,469,891	1,989,494
Contribution deficiency/(excess)	\$ (1,071,458)	\$ (1,020,893)	\$ (1,388,961)	\$ (967,175)	\$ (325,032)
Covered employee payroll	\$ 9,769,209	\$ 9,258,400	\$ 8,945,314	\$ 8,684,771	\$ 8,684,771
Contribution as a % of covered payroll	23.6%	23.9%	28.4%	28.4%	22.9%

GASB Disclosures

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

OPEB Expense

OPEB Expense	FY 2021/22	FY 2020/21
Discount Rate		
Beginning of year	7.00%	7.00%
End of year	7.00%	7.00%
Service cost	\$ 278,126	\$ 267,143
Interest	1,283,835	1,264,414
Change of benefit terms	0	0
Projected earnings on OPEB plan investments	(917,186)	(789,471)
Reduction for contributions from active employees	0	0
OPEB plan administrative expenses	4,842	5,416
Current period recognition of deferred outflows / (inflows) of resources		
Differences between expected and actual experience	\$ (184,038)	\$ (320,529)
Changes in assumptions	160,328	73,125
Net difference between projected and actual earnings on OPEB plan investments	(521,934)	(1,833)
Total current period recognition	\$ (545,644)	\$ (249,237)
Total OPEB expense	\$ 103,973	\$ 498,265

GASB Disclosures

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Deferred Outflows / (Inflows) of Resources

Deferred Outflows / (Inflows) of Resources represents the following items that have not been recognized in the OPEB Expense:

1. Differences between expected and actual experience of the OPEB plan
2. Changes of assumptions
3. Differences between projected and actual earnings in OPEB plan investments (for funded plans only)

The initial amortization period for the first two items noted above is based on expected future service lives while the difference between the projected and actual earnings in OPEB plan investment is amortized over five years. All balances are amortized linearly on a principal only basis and new bases will be created annually for each of the items above.

Differences between expected and actual experience for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2022
June 30, 2018	\$ 0	N/A	\$ 0	\$ 0
June 30, 2019	\$ 0	N/A	\$ 0	\$ 0
June 30, 2020	\$ (1,161,809)	4	\$ (290,452)	\$ (290,453)
June 30, 2021	\$ (180,464)	6	\$ (30,077)	\$ (120,310)
June 30, 2022	\$ 818,944	6	\$ 136,491	\$ 682,453

Changes in assumptions for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2022
June 30, 2018	\$ 0	N/A	\$ 0	\$ 0
June 30, 2019	\$ 0	N/A	\$ 0	\$ 0
June 30, 2020	\$ 292,501	4	\$ 73,125	\$ 73,126
June 30, 2021	\$ 0	N/A	\$ 0	\$ 0
June 30, 2022	\$ 523,216	6	\$ 87,203	\$ 436,013

GASB Disclosures

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Deferred Outflows / (Inflows) of Resources (Continued)

Net Difference between projected and actual earnings in OPEB plan investments for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2022
June 30, 2018	\$ (188,270)	5	\$ (37,654)	\$ 0
June 30, 2019	\$ (14,739)	5	\$ (2,948)	\$ (2,947)
June 30, 2020	\$ 59,579	5	\$ 11,916	\$ 23,831
June 30, 2021	\$ 134,265	5	\$ 26,853	\$ 80,559
June 30, 2022	\$ (2,600,504)	5	\$ (520,101)	\$ (2,080,403)

As of fiscal year ending June 30, 2022	Deferred Outflows	Deferred Inflows
Differences between expected and actual experience	\$ 682,453	\$ (410,763)
Changes in assumptions	509,139	0
Net difference between projected and actual earnings in OPEB plan investments	0	(1,978,960)
Contributions subsequent to the measurement date	1,232,285	N/A
Total	\$ 2,423,877	\$ (2,389,723)

Annual Amortization of Deferred Outflows / (Inflows)

The balances as of fiscal year ending June 30, 2022 of the deferred outflows / (inflows) of resources will be recognized in OPEB expense in the future fiscal years as noted below. Balances shown below do not include the recognition of any deferred outflows for contributions subsequent to the measurement date.

FYE	Balance
2023	\$ (507,989)
2024	\$ (287,716)
2025	\$ (299,631)
2026	\$ (326,485)
2027	\$ 223,690
Thereafter	\$ 0

* Contributions subsequent to the measurement date are consistent with the FYE 2021/22 ADC of \$1,232,285.

GASB Disclosures

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Sensitivity Results

The following presents the Net OPEB Liability as of June 30, 2022, calculated using the discount rate assumed and what it would be using a 1% higher and 1% lower discount rate.

- The current discount rate is 7.00%.
- The 1% decrease in discount rate would be 6.00%.
- The 1% increase in discount rate would be 8.00%.

As of June 30, 2022	Net OPEB Liability
1% Decrease	\$ 5,368,784
Current Discount Rate	\$ 3,177,255
1% Increase	\$ 1,326,225

The following presents the Net OPEB Liability as of June 30, 2022, using the health care trend rates assumed and what it would be using 1% higher and 1% lower health care trend rates.

- The current health care trend rate starts at an initial rate of 6.50%, decreasing to an ultimate rate of 4.50%.
- The 1% decrease in health care trend rates would assume an initial rate of 5.50%, decreasing to an ultimate rate of 3.50%.
- The 1% increase in health care trend rates would assume an initial rate of 7.50%, decreasing to an ultimate rate of 5.50%.

As of June 30, 2022	Net OPEB Liability
1% Decrease	\$ 1,225,299
Current Trend Rates	\$ 3,177,255
1% Increase	\$ 5,485,248

GASB Disclosures

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Asset Information

Asset Breakdown	FY 2020/21	FY 2021/22
Assets		
Cash and deposits	\$ 0	\$ 0
Securities lending cash collateral	0	0
Total cash	\$ 0	\$ 0
Receivables		
Contributions	\$ 0	\$ 0
Accrued interest	0	0
Total receivables	\$ 0	\$ 0
Investments		
Fixed income	\$ 0	\$ 0
Equities	0	0
Mutual Funds	12,517,654	17,225,472
Total investments	\$ 12,517,654	\$ 17,225,472
Total Assets	\$ 12,517,654	\$ 17,225,472
Liabilities		
Payables		
Investment management fees	\$ 0	\$ 0
Securities lending expense	0	0
Total liabilities	\$ 0	\$ 0
Net Position Restricted to OPEB	\$ 12,517,655	\$ 17,225,472

GASB Disclosures

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Asset Information (Continued)

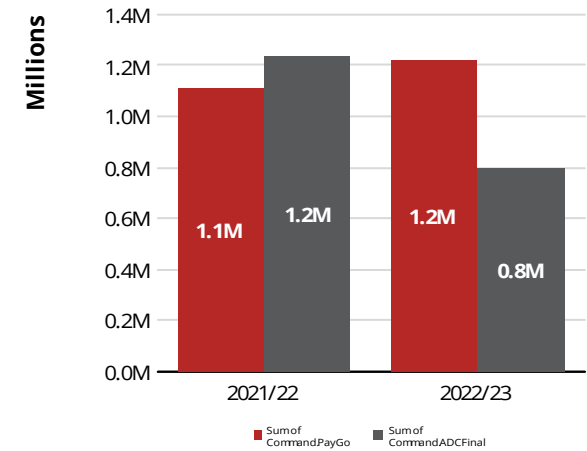
Asset Reconciliation	FY 2020/21	FY 2021/22
Additions		
Contributions Received		
Employer	\$ 2,215,863	\$ 2,303,743
Active employees	0	0
Total contributions	\$ 2,215,862	\$ 2,303,743
Investment Income		
Net increase in fair value of investments	\$ 655,205	\$ 3,517,690
Interest and dividends	0	0
Investment expense, other than from securities lending	0	0
Securities lending income	0	0
Securities lending expense	0	0
Net investment income	\$ 655,205	\$ 3,517,690
Total additions	\$ 2,871,067	\$ 5,821,433
Deductions		
Benefit payments	\$ 1,061,301	\$ 1,108,773
Administrative expenses	5,416	4,842
Other	0	0
Total deductions	\$ 1,066,717	\$ 1,113,615
Net increase in net position	\$ 1,804,350	\$ 4,707,818
Net position restricted to OPEB		
Beginning of year	\$ 10,713,304	\$ 12,517,654
End of year	\$ 12,517,655	\$ 17,225,472

Actuarially Determined Contributions

Novato Fire Protection District GASB 74/75 Valuation For Fiscal Year Ending June 30, 2022

	FY 2021/22	FY 2022/23
Discount rate (Funding)	7.00%	7.00%
Payroll growth factor used for amortization	3.50%	3.50%
Actuarial cost method	Entry Age Normal Level % of Salary	Entry Age Normal Level % of Salary
Amortization type	Level Dollar	Level Dollar
Amortization period (years)	9	9
Actuarial Accrued Liability (AAL) - beginning of year	\$ 18,607,379	\$ 20,402,727
Actuarial Value of Assets (AVA) - beginning of year	(12,517,654)	(17,225,472)
Unfunded AAL - beginning of year	\$ 6,089,725	\$ 3,177,255
Normal Cost	\$ 278,126	\$ 287,860
Amortization of Unfunded AAL	873,542	455,762
Total normal cost plus amortization	\$ 1,151,668	\$ 743,622
Interest to end of year	80,617	52,054
Actuarially Determined Contribution - Preliminary	\$ 1,232,285	\$ 795,676
Expected Benefit Payments	1,108,773	1,220,227
Actuarially Determined Contribution - Final	\$ 1,232,285	\$ 795,676

Cash Vs Accrual Accounting



Actuarially Determined Contribution (ADC) is the target or recommended contribution to a defined benefit OPEB plan, which if paid on an ongoing basis, will provide sufficient resources to fund future costs for services to be earned and liabilities attributed to past services. This is typically higher than the pay-as-you-go cost because it includes recognition of employer costs expected to be paid in future accounting periods.

Projection of GASB Disclosures

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

The Total OPEB Liability (TOL) is expected to change on an annual basis as a result of expected and unexpected events. Under normal circumstances, it is generally expected to have a net increase each year. Below is a list of the most common events affecting the total OPEB liability and whether they increase or decrease the liability.

Expected Events

- Increases in TOL due to additional benefit accruals as employees continue to earn service each year
- Increases in TOL due to interest as the employees and retirees age
- Decreases in TOL due to benefit payments

Unexpected Events

- Increases in TOL when actual health care costs increase more than expected. A liability decrease occurs when the reverse happens.
- Increases in TOL when more new retirements occur than expected or fewer terminations occur than anticipated. Liability decreases occur when the opposite outcomes happen.
- Increases or decreases in TOL depending on whether benefits are improved or reduced.

Projection of Total OPEB Liability (TOL)	FY 2021/22	FY 2022/23
TOL as of beginning of year	\$ 18,607,379	\$ 20,402,727
Normal cost as of beginning of year	278,126	257,417
Exp. benefit payments during the year	(1,108,773)	(1,220,227)
Interest adjustment to end of year	1,283,835	1,404,224
Exp. TOL as of end of year	\$ 19,060,567	\$ 20,844,141
Actuarial Loss / (Gain)	1,342,160	TBD
Actual TOL as of end of year	\$ 20,402,727	\$ TBD

Discount rate as of beginning of year	7.00%	7.00%
Discount rate as of end of year	7.00%	TBD

Projection of Actuarial Value of Assets (AVA)	FY 2021/22	FY 2022/23
AVA as of beginning of year	\$ 12,517,654	\$ 17,225,472
Exp. employer contributions during the year	1,108,773	1,220,227
Exp. benefit payments during the year	(1,108,773)	(1,220,227)
Expected investment income	876,069	1,205,616
Exp. Trust administrative expenses	(4,842)	(4,842)
Exp. AVA as of end of year	\$ 13,388,881	\$ 18,426,246
Differences between expected and actual experience	3,836,591	TBD

AVA as of end of year	\$ 17,225,472	\$ TBD
Expected asset return as of beginning of year	7.00%	7.00%
Expected asset return as of end of year	7.00%	TBD

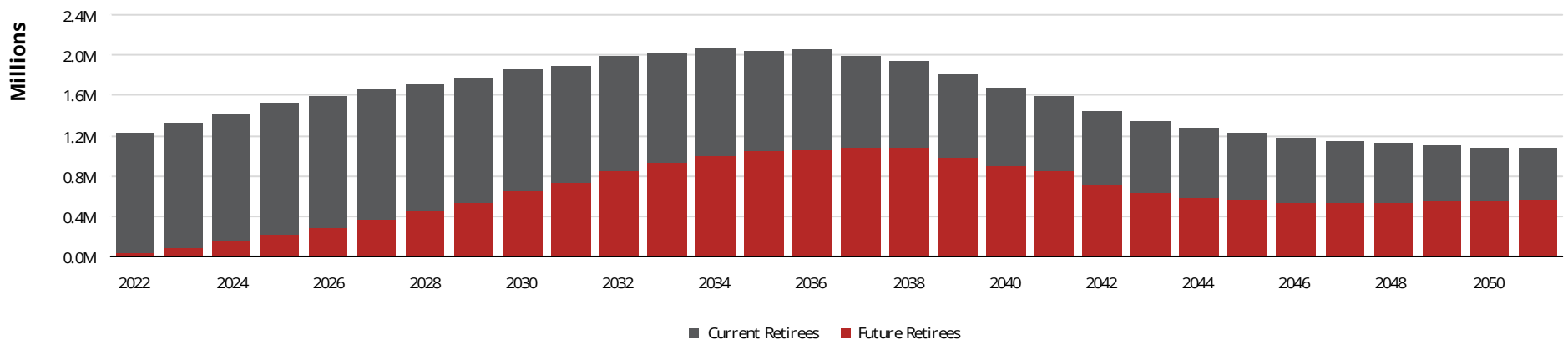
Cash Flow Projections

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next thirty years. Results are shown separately for a closed group of current/future retirees. These projections include explicit and implicit subsidies.

FYE	Current Retirees	Future Retirees*	Total	FYE	Current Retirees	Future Retirees*	Total	FYE	Current Retirees	Future Retirees*	Total
2022	\$ 1,178,988	\$ 41,239	\$ 1,220,227	2032	\$ 1,148,315	\$ 836,698	\$ 1,985,013	2042	\$ 724,625	\$ 709,216	\$ 1,433,841
2023	\$ 1,230,388	\$ 87,445	\$ 1,317,833	2033	\$ 1,105,355	\$ 919,249	\$ 2,024,604	2043	\$ 704,530	\$ 634,052	\$ 1,338,582
2024	\$ 1,263,181	\$ 148,765	\$ 1,411,946	2034	\$ 1,079,077	\$ 996,285	\$ 2,075,362	2044	\$ 683,033	\$ 584,380	\$ 1,267,413
2025	\$ 1,299,265	\$ 218,822	\$ 1,518,087	2035	\$ 996,472	\$ 1,038,882	\$ 2,035,354	2045	\$ 660,343	\$ 560,459	\$ 1,220,802
2026	\$ 1,309,957	\$ 283,322	\$ 1,593,279	2036	\$ 997,748	\$ 1,051,306	\$ 2,049,054	2046	\$ 636,677	\$ 534,060	\$ 1,170,737
2027	\$ 1,295,282	\$ 363,119	\$ 1,658,401	2037	\$ 906,058	\$ 1,073,064	\$ 1,979,122	2047	\$ 612,236	\$ 525,839	\$ 1,138,075
2028	\$ 1,268,589	\$ 441,819	\$ 1,710,408	2038	\$ 856,267	\$ 1,075,219	\$ 1,931,486	2048	\$ 587,222	\$ 533,231	\$ 1,120,453
2029	\$ 1,241,545	\$ 535,282	\$ 1,776,827	2039	\$ 823,549	\$ 972,966	\$ 1,796,515	2049	\$ 561,807	\$ 551,826	\$ 1,113,633
2030	\$ 1,211,722	\$ 639,126	\$ 1,850,848	2040	\$ 777,054	\$ 899,126	\$ 1,676,180	2050	\$ 536,141	\$ 545,449	\$ 1,081,590
2031	\$ 1,165,968	\$ 727,303	\$ 1,893,271	2041	\$ 760,978	\$ 836,154	\$ 1,597,132	2051	\$ 510,347	\$ 561,901	\$ 1,072,248

Projected Employer Pay-go Cost



* Projections for future retirees do not take into account future new hires.

Discussion of Discount Rates

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Under GASB 74, the discount rate used in valuing OPEB liabilities for funded plans as of the Measurement Date must be based on the long-term expected rate of return on OPEB plan investments that are expected to be used to finance future benefit payments to the extent that (a) they are sufficient to pay for the projected benefit payments and (b) the OPEB plan assets are invested using a strategy that will achieve that return. When the OPEB plan investments are insufficient to cover future benefit payments, a yield for 20-year tax-exempt general obligation municipal bonds with an average rating of AA /Aa or higher (or equivalent quality on another rating scale) must be used.

For the current valuation:

1. The long-term expected rate of return on OPEB plan investment is assumed to be 7.00%. This was determined using a building block method in which expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These expected future real rates of return are then combined to produce the long-term expected rate of return by weighting them based on the target asset allocation percentage and adding in expected inflation (2.75%). The best estimates of arithmetic real rates of return for each major asset class included in the OPEB Plan's target asset allocation as of June 30, 2021 are summarized in the following table.
2. The discount rate used when the OPEB plan investments are insufficient to pay for future benefit payments are selected from the range of indices as shown in the table below, where the range is given as the spread between the lowest and highest rate shown.

Asset Class - CERBT Strategy 1	Target Allocation ¹	L/T Expected Real ROR
Global Equity	59.0%	N/A
Fixed Income	25.0%	N/A
Treasury Inflation-Protected Securities (TIPS)	5.0%	N/A
Real Estate Investment Trusts (REITS)	8.0%	N/A
Commodities	3.0%	N/A
Cash	0.0%	N/A
Total	100.00%	7.00%

Yield as of	July 1, 2020	June 30, 2021
Bond Buyer Go 20-Bond Municipal Bond Index	2.21%	2.16%
S&P Municipal Bond 20-Year High Grade Rate Index	2.66%	2.19%
Fidelity 20-Year Go Municipal Bond Index	2.45%	1.94%
Bond Index Range	2.21% - 2.66%	1.94% - 2.19%

1. The final equivalent single discount rate used for this year's valuation is 7.00%. This discount rate assumes the District continues to fully fund for its retiree health benefits through the California Employers' Retiree Benefit Trust (CERBT) under its investment allocation strategy 1.

¹ Target allocation is from CERBT as of January 2022.

Summary of Plan Participants

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Active Employees

Actives with coverage	Total	Avg. Age	Avg. Svc	Salary
Total actives with coverage	59	44.2	13.3	\$ 7,567,505

Actives without coverage	Total	Avg. Age	Avg. Svc	Salary
Total actives without coverage	18	45.1	12.5	\$ 2,201,704

Active employees who currently have waived medical coverage are assumed to elect the Blue Shield Access+ Plan at retirement.

Summary of Plan Participants

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Active Age-Service Distribution

Age	Years of Service										Total	
	< 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up		
Under 25	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	1	1	1	0	0	0	0	0	0	0	0	3
30 to 34	3	5	3	0	0	0	0	0	0	0	0	11
35 to 39	1	5	0	1	0	0	0	0	0	0	0	7
40 to 44	0	2	1	0	5	3	0	0	0	0	0	11
45 to 49	0	2	1	5	14	4	0	0	0	0	0	26
50 to 54	0	1	0	1	4	6	2	0	0	0	0	14
55 to 59	0	0	2	0	0	1	1	0	0	0	0	4
60 to 64	0	0	0	0	0	1	0	0	0	0	0	1
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	16	8	7	23	15	3	0	0	0	0	77

Summary of Plan Participants

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Retirees

Retirees with coverage	Single	Non-Single	Total	Avg. Age
Total retirees with coverage	28	70	98	69.6

Retiree Age Distribution

Age	Retirees
< 45	0
45 to 49	2
50 to 54	6
55 to 59	12
60 to 64	5
65 to 69	19
70 to 74	21
75 to 79	27
80 to 84	6
85 to 89	2
90 & up	0
Total	98

Substantive Plan Provisions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

This study analyzes the retiree health benefits of the District. The retiree health benefits provided to retirees are basically a continuation of the medical plans for active employees.

Active employees are offered a choice of medical (including prescription drug coverage) plans through the CalPERS Health Program under the Public Employees' Medical and Hospital Care Act (PEMHCA). The District offers the same medical plans to eligible retirees except once a retiree is eligible for Medicare, the retiree must join a Medicare HMO or Supplement Plan with Medicare being the primary payer. Eligibility for continuation of coverage and a District contribution at retirement varies by employee group and date of hire and date of retirement.

Management and Administrative Support Staff

Retirement and Disability Requirements

Management and administrative support staff employees are categorized under the Miscellaneous CalPERS group. In order to be eligible for retirement benefits, these employees must attain age 55 with ten years of service. For eligibility to receive disability benefits, there is no minimum age requirement, but Miscellaneous employees must have worked at least five years for the District.

Tier 1

Eligibility for tier 1 retiree medical benefits requires an employee to have been hired prior to July 1, 2009 and to be enrolled in the healthcare plan upon retirement or disability. For employees retiring prior to April 1, 2015, the District will pay 100% of the premium for single coverage or 83.29% of the premium for two-person or family coverage.

For employee retiring on or after April 1, 2015, the District will provide the Supplemental Retiree Benefit Allowance based on vesting service earned prior to June 1, 2015:

Years of Service prior to June 1, 2015	Base Percentage
0 - 5	55%
5 - 10	60%
10 - 15	65%
15 - 20	70%
20 - 25	75%
25 - 30	80%

The employee will earn an additional 0.75% of benefit coverage for the number of total years of service. The sum of the base percentage from the table plus the additional piece will be the total percentage paid by the District for single/two-party/family coverage of the Kaiser HMO Premium. The maximum percentage paid by the District is 80% on January 1, 2011, 75% on April 1, 2023, and 70% on April 1, 2028.

Substantive Plan Provisions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Management and Administrative Support Staff Continued

Tier 2 Eligibility for tier 2 retiree medical benefits requires an employee to have been hired after January 1, 2015 and to be enrolled in the healthcare plan upon retirement or disability. The District will pay the PEMHCA minimum after the retiree buys medical insurance through the District.

Dental and vision benefits All Management and Administrative Support Staff members must pay 100% of the premiums for dental and vision coverage.

Chief Officers Association

Retirement and Disability Requirements Chief Officer Association employees are categorized under the Safety CalPERS group. These employees can become eligible for retirement benefits by attaining age 50 with ten years of service, with no age requirement by attaining twenty years of service, or by continuing to work for the District until or beyond age 70. There are no age or service requirements for Safety group employees to be eligible to receive disability benefits.

Tier 1 Eligibility for tier 1 retiree health benefits requires an employee to have retired prior to January 1, 2011 and to have been enrolled in the healthcare plan upon retirement or disability. The District will pay benefits as described in the following table:

	Medical Coverage	Dental Coverage	Vision Coverage
Fire Chief or Deputy Fire Chief (retired 1992 or later)	100% for retired member and dependents until the death of both parties	100% for retired member and spouse	100% for retired member and spouse
Fire Chief or Deputy Fire Chief (retired 1991 or earlier)	100% for retired member and dependents until the death of both parties	100% for retired member and spouse	0% of premium
Division Chief or Battalion Chief (retired 1992 or later)	100% of Kaiser-Family rate or 83.29% of higher premium	100% for retired member and spouse	100% for retired member and spouse
Division Chief or Battalion Chief (retired 1992 or later)	100% of Kaiser-Family rate or 83.29% of higher premium	100% for retired member and spouse	0% of premium

Substantive Plan Provisions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Chief Officers Association Continued

Tier 2

Eligibility for tier 2 retiree medical benefits requires an employee to have been hired prior to July 1, 2009, retire after December 31, 2010 and to be enrolled in the healthcare plan upon retirement or disability. Beginning on January 1, 2012, the Supplemental Retirement Benefit Allowance the District provides will decrease by 2% per year until reaching 82% on January 1, 2020:

Year Beginning	% Paid by District
January 1, 2010	100%
January 1, 2011	100%
January 1, 2012	98%
January 1, 2013	96%
January 1, 2014	94%
January 1, 2015	92%
January 1, 2016	90%
January 1, 2017	88%
January 1, 2018	86%
January 1, 2019	84%
January 1, 2020	82%

The portion the District will pay for single/two-party/family coverage is determined by the fixed rate in effect the year the member retires. The retired member will be responsible for paying the difference between the premium and the District's portion.

Tier 3

Eligibility for tier 3 retiree health benefits requires an employee to have been hired after June 30, 2009 and to be enrolled in the healthcare plan upon retirement or disability. The District will pay the PEMHCA minimum after the retiree buys medical insurance through the District.

Dental and vision benefits

All members in tier 2 or tier 3 must pay 100% of the premiums for dental and vision coverage.

Substantive Plan Provisions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Firefighters

Retirement and Disability Requirements

Firefighter employees are categorized under the Safety CalPERS group. These employees can become eligible for retirement benefits by attaining age 50 with ten years of service, with no age requirement by attaining twenty years of service, or by continuing to work for the District until or beyond age 70. There are no age or service requirements for Safety group employees to be eligible to receive disability benefits.

Tier 1

Eligibility for tier 1 retiree medical benefits requires an employee to have retired on or prior to December 31, 2010 and to have been enrolled in the healthcare plan upon retirement or disability. The District will pay 100% of the premium for single coverage or 83.29% of the premium for two-person or family coverage.

Tier 2

Eligibility for tier 2 retiree medical benefits requires an employee to have been hired prior to July 1, 2009, retire after December 31, 2010, and to be enrolled in the healthcare plan upon retirement or disability. The District provides the Supplemental Retiree Benefit Allowance based on vesting service as of July 1, 2010:

Years of Service prior to July 1, 2010	Base Percentage
0 – 5	55%
5 – 10	60%
10 – 15	65%
15 – 20	70%
20 – 25	75%
25 – 30	80%

The employee will earn an additional 0.75% of benefit coverage for the number of total years of service. The sum of the base percentage from the table plus the additional piece will be the total percentage paid by the District for single/two-party/family coverage of the Kaiser HMO Premium. The maximum percentage paid by the District is 80% on January 1, 2011, 75% on April 1, 2023, and 70% on April 1, 2028.

Tier 3

Eligibility for tier 3 retiree health benefits requires an employee to have been hired after June 30, 2009 and to be enrolled in the healthcare plan upon retirement or disability. The District will pay the PEMHCA minimum after the retiree buys medical insurance through the District.

Dental and vision benefits

All Firefighter members must pay 100% of the premiums for dental and vision coverage.

Substantive Plan Provisions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Firefighters Continued

Surviving spouses or domestic partner

A surviving spouse or domestic partner will be eligible to receive the same percentage of the medical premiums paid for by the District as the retiree was receiving at the time of death.

A surviving spouse or domestic partner of an active employee will be eligible to receive medical coverage paid for by the District only if the active employee had attained ten years of service and age 55 (if a Miscellaneous employee) or age 50 (if a Safety employee). The amount surviving spouse or domestic partner may receive equals the percentage that the active employee could have received if he or she had retired at the time of death.

PEMHCA Minimum Contribution

All employees who were hired after June 30, 2009 are only entitled to the PEMHCA minimum upon retirement regardless of coverage elected. For the calendar year 2021, the PEMHCA minimum is \$143 per month and for 2022 the PEMHCA minimum is \$149 per month.

Premium Rates

The District participates in the CalPERS Health Program, a community-rated program, for its medical coverage. The tables below summarize the 2021 and 2022 monthly medical premiums for the primary medical plans in which the retirees are enrolled and used in this valuation.

2021 CalPERS Premiums - Region 1	Kaiser	BS Access+	BS Trio	PERS Care	PERS Choice	PERS Select
Retiree Only	\$ 813.64	\$ 1,170.08	\$ 880.50	\$ 1,294.69	\$ 935.84	\$ 566.67
Retiree plus Spouse	\$ 1,627.28	\$ 2,340.16	\$ 1,761.00	\$ 2,589.38	\$ 1,871.68	\$ 1,133.34
Retiree Only – Medicare	\$ 324.48	N/A	N/A	\$ 381.25	\$ 349.97	\$ 349.97

2021 CalPERS Premiums - Region 1	UHC HMO	Anthem HMO Select	Anthem HMO Traditional	Health Net SmartCare	PORAC
Retiree Only	\$ 941.17	\$ 925.60	\$ 1,307.86	\$ 1,120.21	\$ 799.00
Retiree plus Spouse	\$ 1,882.34	\$ 1,851.20	\$ 2,615.72	\$ 2,240.42	\$ 1,725.00
Retiree Only – Medicare	\$ 311.56	\$ 383.37	\$ 383.37	N/A	N/A

Substantive Plan Provisions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Premium Rates Continued

2022 CalPERS Premiums - Region 1	Kaiser	BS Access+	BS Trio	PERS Gold	PERS Platinum	Western Health
Retiree Only	\$ 857.06	\$ 1,116.01	\$ 898.54	\$ 701.23	\$ 1,057.01	\$ 741.26
Retiree plus Spouse	\$ 1,714.12	\$ 2,232.02	\$ 1,797.08	\$ 1,402.46	\$ 2,114.02	\$ 1,482.52
Retiree Only - Medicare	\$ 302.53	N/A	N/A	\$ 377.41	\$ 381.94	\$ 314.94

2022 CalPERS Premiums - Region 1	UHC Alliance	Anthem HMO Select	Anthem HMO Traditional	Health Net SmartCare	PORAC
Retiree Only	\$ 1,020.28	\$ 1,015.81	\$ 1,304.00	\$ 1,153.21	\$ 799.00
Retiree plus Spouse	\$ 2,040.56	\$ 2,031.62	\$ 2,608.00	\$ 2,306.00	\$ 1,725.00
Retiree Only - Medicare	\$ 294.65	\$ 360.90	\$ 360.90	N/A	N/A

Actuarial Methods and Assumptions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

The actuarial assumptions used in this report represent a reasonable long-term expectation of future OPEB outcomes. As national economic and District experience change over time, the assumptions will be tested for ongoing reasonableness and, if necessary, updated.

There are changes to the actuarial methods and assumptions since the last full GASB valuation, which was for the fiscal year ending June 30, 2020. Refer to Actuary's Notes section for complete information on these changes. For the current year GASB valuation, we have also updated the per capita costs. We expect to update discount rate, health care trend rates, mortality table, and per capita costs again in the next full GASB valuation, which will be for the fiscal year ending June 30, 2024.

Measurement Date	For fiscal year ending June 30, 2022, June 30, 2021 measurement date was used.
Actuarial Valuation Date	June 30, 2021 with no adjustments to get to the June 30, 2021 measurement date. Liabilities as of July 1, 2020 are based on an actuarial valuation date of June 30, 2019 projected to June 30, 2020 on a "no loss / no gain" basis.
Benefit Payments	OPEB plan benefit payments made subsequent the measurement date of June 30, 2021 are recognized as a deferred outflow of resources in the fiscal year ending June 30, 2022 financial reporting period. An offsetting cash credit adjustment for benefits paid during the fiscal year is made in the Plan Sponsor's journal entries. This adjustment is not explicitly shown in the GASB 75 report. The OPEB benefit payments subsequent the measurement date of June 30, 2022 will be reflected in the Plan Sponsor's Schedule of Changes in Net OPEB Liability disclosure in the FY 2022/23 reporting period.
Discount Rate	7.00% as of June 30, 2021 and 7.00% as of July 1, 2020 for accounting disclosure purposes. Refer to the Discussion of Discount Rates section for more information on selection of the discount rate.
Payroll Growth	3.50% per annum.
Inflation Rate	3.00% per annum, in aggregate.
Cost Method	Allocation of Actuarial Present Value of Future Benefits for services prior and after the Measurement Date was determined using Entry Age Normal Level % of Salary method where: <ul style="list-style-type: none">• Service Cost for each individual participant, payable from date of employment to date of retirement, is sufficient to pay for the participant's benefit at retirement; and• Annual Service Cost is a constant percentage of the participant's salary that is assumed to increase according to the Payroll Growth.

Actuarial Methods and Assumptions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Employer Funding Policy	Fund a recommended actuarially determined contribution (ADC) to fully fund the benefits over a reasonable period of time through an amortization of the net (unfunded) OPEB liability.
Census Data	Census information was provided by the District as of Jun 30, 2021. We have reviewed it for reasonableness and no material modifications were made to the census data.
Participation Rates	The probability of electing coverage at retirement is assumed to be the same as the percentage of premium provided by the District, with a 35% minimum participation rate for those only eligible for the PEMHCA minimum contribution.
Spousal Coverage	65% of those electing coverage are assumed to elect coverage for themselves and their spouse. Female spouses are assumed to be three years younger than male spouses. Spouse coverage and spouse age for current retirees is based on actual coverage and actual spouse age.
Dependent Coverage	Not explicitly valued.
Plan Election	Of those who elect coverage, Tier 1 Administrators, Tier 1 and Tier 2 Chief Officers are assumed to elect coverage under the PERSCare plan. All other active members are assumed to elect the Blue Shield Access+ Plan. Retiree members are assumed to continue their current plan election.
Mortality	Employees and retirees: SOA Pub-2010 General Headcount Weighted Mortality Table fully generational using Scale MP-2020. Surviving Spouses: SOA Pub-2010 Continuing Survivor Headcount Weighted Mortality Table fully generational using Scale MP-2020.

Actuarial Methods and Assumptions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Industrial Disability

Sample disabilities per 1,000 employees are as follows:

Age	Miscellaneous		Safety	
	Male	Female	Male	Female
25	0.8	0.8	1.7	1.7
30	1.3	1.3	4.0	4.0
35	1.6	1.6	6.1	6.1
40	2.1	2.1	13.0	13.0
45	2.6	2.6	12.5	12.5
50	3.1	3.1	14.1	14.1
55	3.3	3.3	42.9	42.9

Non-Industrial Disability

Sample disabilities per 1,000 employees are as follows:

Age	Miscellaneous		Safety	
	Male	Female	Male	Female
25	0.1	0.1	0.3	0.3
30	0.1	0.1	0.5	0.5
35	0.2	0.2	0.7	0.7
40	0.3	0.3	1.6	1.6
45	0.5	0.5	2.6	2.6
50	0.9	0.9	3.6	3.6
55	1.6	1.6	4.6	4.6

Turnover Rate

Sample rates for Miscellaneous employees are as follows:

Age	Years of Service							
	0	1	2	3	4	5-9	10-14	15-19
20	15.0%	9.0%	7.0%	7.0%	7.0%	7.0%	5.3%	3.0%
25	15.0%	9.0%	7.0%	7.0%	7.0%	7.0%	5.3%	3.0%
30	15.0%	9.0%	7.0%	7.0%	7.0%	7.0%	5.3%	3.0%
35	15.0%	9.0%	7.0%	7.0%	7.0%	6.8%	4.5%	2.5%
40	15.0%	9.0%	7.0%	7.0%	7.0%	4.8%	3.2%	2.0%
45	15.0%	9.0%	7.0%	7.0%	7.0%	3.8%	2.5%	1.7%
50	15.0%	9.0%	7.0%	7.0%	7.0%	2.1%	0.0%	0.0%
55	15.0%	9.0%	7.0%	7.0%	7.0%	1.2%	0.0%	0.0%
60	15.0%	9.0%	7.0%	7.0%	7.0%	1.2%	0.0%	0.0%

Actuarial Methods and Assumptions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Turnover Rate Continued

Sample rates for Safety employees are as follows:

Age	Years of Service					
	0	1	2	3	4	5-19
20	8.0%	5.0%	4.0%	4.0%	4.0%	2.1%
30	8.0%	5.0%	4.0%	4.0%	4.0%	3.5%
40	8.0%	5.0%	4.0%	4.0%	4.0%	1.1%

Retirement Rate

Sample retirement rates for Miscellaneous employees are as follows:

Age	Years of Service		
	<20	20-29	30+
50-54	4.0%	4.0%	4.0%
55	8.0%	10.0%	25.0%
56	4.0%	4.0%	25.0%
57	4.0%	6.0%	25.0%
58	4.0%	8.0%	25.0%
59	8.0%	10.0%	25.0%
60-61	8.0%	10.0%	35.0%
62-74	20.0%	20.0%	35.0%
75-79	25.0%	25.0%	35.0%
80+	100.0%	100.0%	100.0%

Sample retirement rates for Safety employees are as follows:

Age	3% at 50			3% at 55		
	Service at Retirement					
	<20	20-29	30+	<20	20-29	30+
40-49	0.0%	3.0%	3.0%	0.0%	1.0%	1.0%
50	25.0%	25.0%	50.0%	5.0%	5.0%	30.0%
51-53	10.0%	10.0%	20.0%	5.0%	5.0%	30.0%
54	10.0%	10.0%	20.0%	5.0%	15.0%	30.0%
55	25.0%	25.0%	50.0%	20.0%	40.0%	50.0%
56	25.0%	25.0%	50.0%	10.0%	30.0%	50.0%
57-59	25.0%	25.0%	50.0%	10.0%	20.0%	50.0%
60-64	50.0%	50.0%	50.0%	30.0%	30.0%	50.0%
65+	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Actuarial Methods and Assumptions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Retirement Rate Continued

For new Safety employees subject to PEPRA, the retirement rates under the most recent CalPERS pension plan valuation. According to the retirement table:

Health Care Trend Rates

FYE	Medical/Rx	FYE	Medical/Rx
2023	6.50%	2028	5.25%
2024	6.25%	2029	5.00%
2025	6.00%	2030	4.75%
2026	5.75%	2031+	4.50%
2027	5.50%		

The initial trend rate was based on a combination of employer history, national trend surveys, and professional judgment.

The ultimate trend rate was selected based on historical medical CPI information.

PEMHCA Minimum Contribution

The PEMHCA minimum contribution is assumed to increase 4% per year.

Per Capita Costs

Annual per capita costs were calculated based on the 2021 funding rates, actuarially increased using health index factors and current enrollment. The costs are assumed to increase with health care trend rates.

Annual per capita costs for the plans retirees are enrolled in are as shown below:

Age	PERS Choice	PERS Select	PERSCare	Anthem HMO	Kaiser	UHC
<45	\$ 7,700	\$ 5,400	\$ 10,000	\$ 11,000	\$ 7,100	\$ 8,300
45 - 49	\$ 9,600	\$ 6,700	\$ 12,500	\$ 13,800	\$ 8,900	\$ 10,400
50 - 54	\$ 11,600	\$ 8,100	\$ 15,000	\$ 16,700	\$ 10,700	\$ 12,500
55 - 59	\$ 14,100	\$ 9,900	\$ 18,300	\$ 20,300	\$ 13,000	\$ 15,200
60 - 64	\$ 17,500	\$ 12,200	\$ 22,600	\$ 25,100	\$ 16,100	\$ 18,900

The per capita costs represent the cost of coverage for a retiree-only population.

Actuarial standards require the recognition of higher inherent costs for a retired population versus an active population.

Explicit Subsidy

The difference between (a) the premium rate and (b) the retiree contribution. Below is an example of the monthly explicit subsidies for a tier 1 management retiree age 60 with spouse of the same age in Kaiser.

	Premium Rate	Retiree Contribution	Explicit Subsidy
	A	B	C = A - B
Retiree	\$ 813.64	\$ 0.00	\$ 813.00
Spouse	\$ 813.64	\$ 271.92	\$ 541.72

All employers that utilize premium rates based on blended active/retiree claims experience will have an implicit subsidy. There is an exception for Medicare plans using a true community-rated premium rate.

Actuarial Methods and Assumptions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Implicit Subsidy

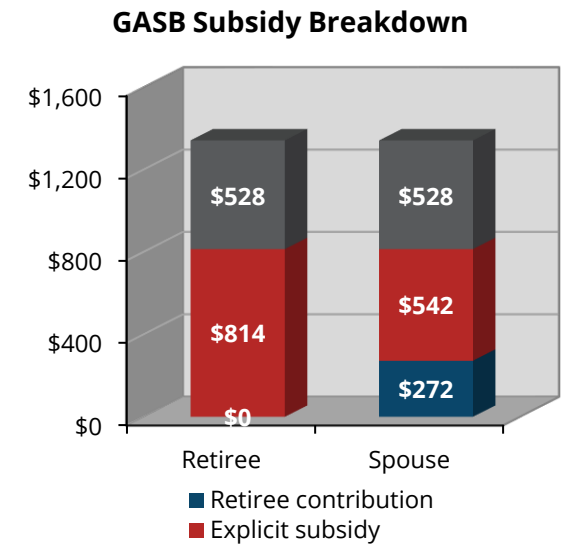
The difference between (a) the per capita cost and (b) the premium rate. Below is an example of the monthly implicit subsidies for a tier 1 management retiree age 60 with spouse of the same age enrolled in Kaiser.

	Per Capita Cost	Premium Rate	Implicit Subsidy
	A	B	C = A - B
Retiree	\$ 1,341.67	\$ 813.64	\$ 528.03
Spouse	\$ 1,341.67	\$ 813.64	\$ 528.03

GASB Subsidy Breakdown

Below is a breakdown of the GASB 75 monthly total cost for a tier 1 management retiree age 60 with spouse of the same age enrolled in Kaiser.

	Retiree	Spouse
Retiree contribution	\$ 0.00	\$ 271.92
Explicit subsidy	\$ 813.64	\$ 541.72
Implicit subsidy	\$ 528.03	\$ 528.03
Total monthly cost	\$ 1,341.67	\$ 1,341.67



APPENDIX

The background features a complex geometric design. The top half is a solid dark gray. The bottom half is composed of several overlapping, semi-transparent shapes. On the left, there are white and light gray shapes. On the right, there are large, vibrant red shapes that overlap with the lighter tones. The overall effect is a modern, minimalist aesthetic.

Appendix

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Comparison of Participant Demographic Information

The active participants' number below may include active employees who currently have no health care coverage. Refer to Summary of Participants section for an accurate breakdown of active employees with and without coverage.

	As of June 30, 2019	As of June 30, 2021
Active Participants	73	77
Retired Participants	92	98
Averages for Active		
Age	44.6	44.4
Service	14.1	13.1
Averages for Inactive		
Age	68.9	69.6

Appendix

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Detailed Actuary's Notes

There have been no substantive plan provision changes since the last full valuation, which was for the fiscal year ending June 30, 2020.

The following assumptions have been updated in accordance with GASB 75:

1. The mortality table has been updated from the RPH-2014 Total Dataset Mortality Tables fully generational using scale MP-2018 to the following:
 - a. Employees and retirees: SOA Pub-2010 General Headcount Weighted Mortality Table fully generational using Scale MP-2020
 - b. Surviving Spouses: SOA Pub-2010 Continuing Survivor Headcount Weighted Mortality Table fully generational using Scale MP-2020This change caused a decrease in liabilities.
2. Health care trend rates have been updated to an initial rate of 6.50% decreasing 0.50% annually to an ultimate rate of 4.50% as shown below. This change caused an increase in liabilities.

<u>FYE</u>	<u>Prior</u>	<u>Current</u>	<u>FYE</u>	<u>Prior</u>	<u>Current</u>
2023	5.00%	6.50%	2028	5.00%	5.25%
2024	5.00%	6.25%	2029	5.00%	5.00%
2025	5.00%	6.00%	2030	5.00%	4.75%
2026	5.00%	5.75%	2031+	5.00%	4.50%
2027	5.00%	5.50%			

Appendix

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

Valuation Results Summary

Below is the summary of the GASB results for fiscal year ending June 30, 2022 based on the Entry Age Normal Level % of Pay cost method with a discount rate of 7.00%.

Present Value of Employer Contributions	Explicit	Implicit	Total
Active	\$ 5,608,734	\$ 2,084,830	\$ 7,693,564
Retirees	\$ 12,686,987	\$ 1,596,675	\$ 14,283,662
Total	\$ 18,295,721	\$ 3,681,505	\$ 21,977,226

Total (Accrued) OPEB Liability	Explicit	Implicit	Total
Active	\$ 4,475,800	\$ 1,643,265	\$ 6,119,065
Retirees	\$ 12,686,987	\$ 1,596,675	\$ 14,283,662
Total	\$ 17,162,787	\$ 3,239,940	\$ 20,402,727

Projected Employer Contributions	Explicit	Implicit	Total
2022	\$ 1,044,293	\$ 175,934	\$ 1,220,227
2023	\$ 1,118,984	\$ 198,849	\$ 1,317,833
2024	\$ 1,198,022	\$ 213,924	\$ 1,411,946
2025	\$ 1,276,609	\$ 241,478	\$ 1,518,087
2026	\$ 1,343,758	\$ 249,521	\$ 1,593,279
2027	\$ 1,389,626	\$ 268,775	\$ 1,658,401
2028	\$ 1,430,674	\$ 279,733	\$ 1,710,407
2029	\$ 1,469,274	\$ 307,554	\$ 1,776,828
2030	\$ 1,507,226	\$ 343,622	\$ 1,850,848
2031	\$ 1,532,252	\$ 361,018	\$ 1,893,270

GLOSSARY

The background features a complex geometric design. The top half is a solid dark gray. Below this, several overlapping triangles in various shades of gray and white create a layered, three-dimensional effect. A prominent bright red triangle is located in the bottom right corner, overlapping the other shapes.

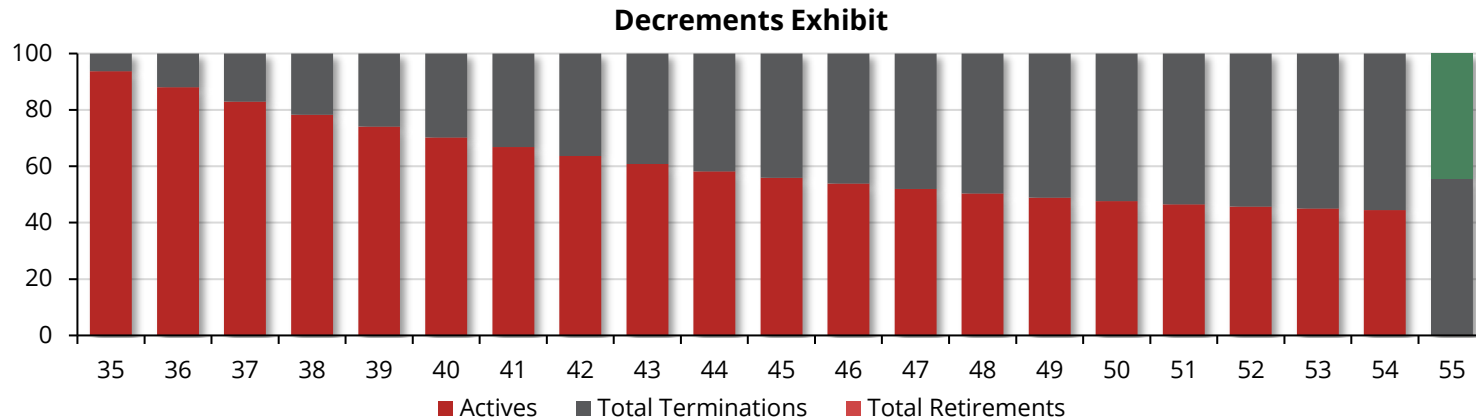
Glossary – Decrements Exhibit

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. Starting with 100 employees at age 35, the illustrated actuarial assumptions show that 44.43 employees out of the original 100 are expected to retire and could elect retiree health benefits at age 55.

Age	# Remaining Employees	# of Terminations per Year ²	# of Retirements per Year	Total Decrements
35	100.000	6.276	0.000	6.276
36	93.724	5.677	0.000	5.677
37	88.047	5.136	0.000	5.136
38	82.911	4.648	0.000	4.648
39	78.262	4.209	0.000	4.209
40	74.053	3.814	0.000	3.814
41	70.239	3.456	0.000	3.456
42	66.783	3.131	0.000	3.131
43	63.652	2.835	0.000	2.835
44	60.817	2.564	0.000	2.564
45	58.253	2.316	0.000	2.316

Age	# Remaining Employees	# of Terminations per Year	# of Retirements per Year	Total Decrements
46	55.938	2.085	0.000	2.085
47	53.853	1.866	0.000	1.866
48	51.987	1.656	0.000	1.656
49	50.331	1.452	0.000	1.452
50	48.880	1.253	0.000	1.253
51	47.627	1.060	0.000	1.060
52	46.567	0.877	0.000	0.877
53	45.690	0.707	0.000	0.707
54	44.983	0.553	0.000	0.553
55	44.430	0.000	44.430	44.430



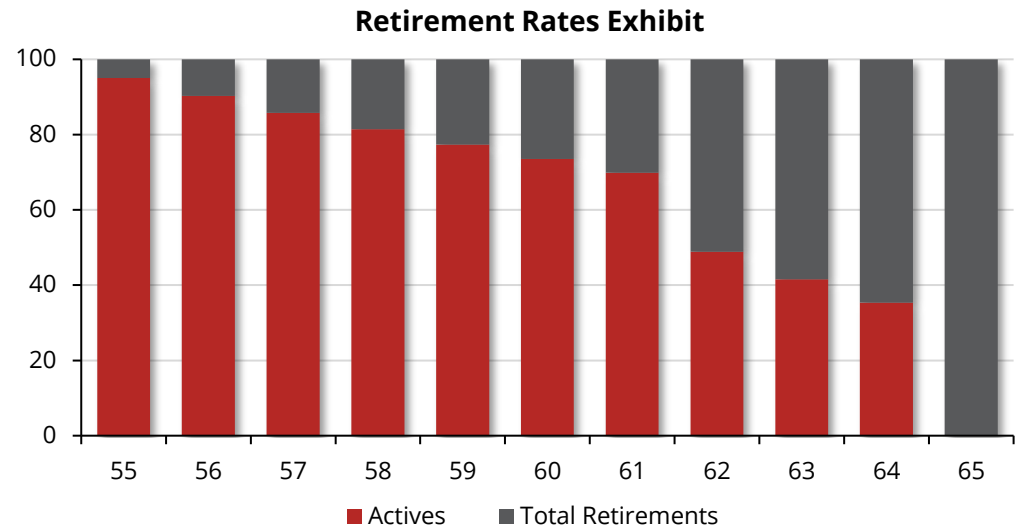
² The above rates are illustrative rates and are not used in our GASB calculations.

Glossary – Retirement Rates Exhibit

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. The illustrated retirement rates show the number of employees who are assumed to retire annually based on 100 employees age 55 who are eligible for retiree health care coverage. The average age at retirement is 62.0.

Age	Active Employees BOY	Annual Retirement Rates*	# Retirements per Year	Active Employees EOY
55	100.000	5.0%	5.000	95.000
56	95.000	5.0%	4.750	90.250
57	90.250	5.0%	4.513	85.738
58	85.738	5.0%	4.287	81.451
59	81.451	5.0%	4.073	77.378
60	77.378	5.0%	3.869	73.509
61	73.509	5.0%	3.675	69.834
62	69.834	30.0%	20.950	48.884
63	48.884	15.0%	7.333	41.551
64	41.551	15.0%	6.233	35.318
65	35.318	100.0%	35.318	0.000



* The above rates are illustrative rates and are not used in our GASB calculations.

Glossary – Definitions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

GASB 75 defines several unique terms not commonly employed in the funding of pension and retiree health plans. The definitions of the terms used in the GASB actuarial valuations are noted below.

1. **Actuarial Assumptions** – Assumptions as to the occurrence of future events affecting health care costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided health care benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.
2. **Actuarial Cost Method** – A procedure for determining the Actuarial Present Value of Future Benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Service Cost and a Total OPEB Liability.
3. **Actuarially Determined Contribution** - A target or recommended contribution to a defined benefit OPEB plan for the reporting period, determined in accordance with the parameters and in conformity with Actuarial Standards of Practice.
4. **Actuarial Present Value** – The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:
 - a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, Social Security, marital status, etc.);
 - b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned; and
 - c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.
5. **Deferred Outflow / (Inflow) of Resources** – represents the following items that have not been recognized in the OPEB Expense:
 - a. Differences between expected and actual experience of the OPEB plan
 - b. Changes in assumptions
 - c. Differences between projected and actual earnings in OPEB plan investments (for funded plans only)
6. **Explicit Subsidy** – The difference between (a) the amounts required to be contributed by the retirees based on the premium rates and (b) actual cash contribution made by the employer.
7. **Funded Ratio** – The actuarial value of assets expressed as a percentage of the Total OPEB Liability.

Glossary – Definitions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

8. **Healthcare Cost Trend Rate** – The rate of change in the per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.
9. **Implicit Subsidy** – In an experience-rated healthcare plan that includes both active employees and retirees with blended premium rates for all plan members, the difference between (a) the age-adjusted premiums approximating claim costs for retirees in the group (which, because of the effect of age on claim costs, generally will be higher than the blended premium rates for all group members) and (b) the amounts required to be contributed by the retirees.
10. **OPEB** – Benefits (such as death benefits, life insurance, disability, and long-term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.
11. **OPEB Expense** – Changes in the Net OPEB Liability in the current reporting period, which includes Service Cost, interest cost, changes of benefit terms, expected earnings on OPEB Plan investments, reduction of active employees' contributions, OPEB plan administrative expenses, and current period recognition of Deferred Outflows / (Inflows) of Resources.
12. **Pay-as-you-go** – A method of financing a benefit plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.
13. **Per Capita Costs** – The current cost of providing postretirement health care benefits for one year at each age from the youngest age to the oldest age at which plan participants are expected to receive benefits under the plan.
14. **Present Value of Future Benefits** – Total projected benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Expressed another way, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay total projected benefits when due.
15. **Real Rate of Return** – the rate of return on an investment after adjustment to eliminate inflation.

Glossary – Definitions

Novato Fire Protection District GASB 74/75 Valuation for Fiscal Year Ending June 30, 2022

16. **Select and Ultimate Rates** – Actuarial assumptions that contemplate different rates for successive years. Instead of a single assumed rate with respect to, for example, the investment return assumption, the actuary may apply different rates for the early years of a projection and a single rate for all subsequent years. For example, if an actuary applies an assumed investment return of 8% for year 20W0, then 7.5% for 20W1, and 7% for 20W2 and thereafter, then 8% and 7.5% select rates, and 7% is the ultimate rate.
17. **Service Cost** – The portion of the Actuarial Present Value of projected benefit payments that are attributed to a valuation year by the Actuarial Cost Method.
18. **Substantive Plan** – The terms of an OPEB plan as understood by the employer(s) and plan members.
19. **Total OPEB Liability** – That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Benefits which is attributed to past periods of employee service (or not provided for by the future Service Costs).