

MacLeod Watts

June 8, 2022

Robert Housley
Director of Finance and Human Resources
Midway City Sanitary District
14451 Cedarwood Avenue
Westminster, CA 92683

Re: Midway City Sanitary District Other Post-Employment Benefits
Actuarial Valuation and GASB 75 Report for Fiscal Year Ending June 30, 2022

Dear Mr. Housley:

We are pleased to enclose our actuarial report providing financial information about the other post-employment benefit (OPEB) liabilities of the Midway City Sanitary District (the District). This updated report reflects (a) the audited value of trust assets on the measurement date and (b) actual District OPEB contributions made during the current fiscal year.

The primary purposes of this report are to:

- 1) Remeasure plan liabilities as of June 30, 2021, in accordance with GASB 75's biennial valuation requirement,
- 2) Develop Actuarially Determined Contributions levels for prefunding plan benefits,
- 3) Provide information to be submitted to the California Employers' Retiree Benefit Trust (CERBT) to satisfy filing requirements for the trust, and
- 4) Provide information required by GASB 75 ("Accounting and Financial Reporting for Postemployment Benefits Other Than Pension") to be reported in the District's financial statements for the fiscal year ending June 30, 2022.

The information included in this report reflects our understanding that the District will contribute 100% or more of the Actuarially Determined Contributions each year and that trust assets will remain invested in CERBT Asset Allocation Strategy 1. We based the valuation on the employee data, details on plan benefits and retiree benefit payments reported to us by the District. As with any analysis, the soundness of the report is dependent on the inputs. Please review our summary of this information to be comfortable that it matches your records.

We appreciate the opportunity to work on this analysis and acknowledge the efforts of District employees who provided valuable time and information to enable us to prepare this report. Please let us know if we can be of further assistance.

Sincerely,



Catherine L. MacLeod, FSA, FCA, EA, MAAA
Principal & Consulting Actuary



Midway City Sanitary District

Actuarial Valuation of Other
Post-Employment Benefit Programs
As of June 30, 2021

Development of OPEB Prefunding Levels
& GASB 75 Report for the FYE June 30, 2022

Updated June 2022

MacLeod Watts

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A. Executive Summary

This report presents the results of the June 30, 2021, actuarial valuation and accounting information regarding the other post-employment benefit (OPEB) program of the Midway City Sanitary District (the District). The purposes of this report are to: 1) summarize the results of the valuation; 2) develop Actuarially Determined Contribution (ADC) levels for prefunding plan benefits; 3) provide information required by the California Employers' Retiree Benefit Trust (CERBT); and 4) assess the OPEB liabilities and provide disclosure information as required by Statement No. 75 of the Governmental Accounting Standards Board (GASB 75) for the fiscal year ending June 30, 2022.

Important background information regarding the valuation process can be found in Addendum 1. We recommend users of the report read this information to familiarize themselves with the process and context of actuarial valuations, including the requirements of GASB 75. The pages following this executive summary present exhibits and other information relevant for disclosures under GASB 75.

Absent material changes to this plan, the results of the June 30, 2021, valuation will also be applied to prepare the District's GASB 75 report for the fiscal year ending June 30, 2023. If there are any significant changes in the employee population, plan benefits or eligibility, or to the District's funding policy, an earlier valuation might be required or appropriate.

OPEB Obligations of the District

The District offers continuation of medical coverage to retiring employees. This benefit may create one or more of the following types of OPEB liabilities:

- **Explicit subsidy liabilities:** An "explicit subsidy" exists when the employer contributes directly toward the cost of retiree healthcare. In this program, the District contributes a portion of retiree medical premiums for qualifying retirees. These benefits are described in Section 2.
- **Implicit subsidy liabilities:** An "implicit subsidy" exists when the premiums charged for retiree coverage are lower than the expected retiree claims for that coverage. In the CalPERS medical program, the same monthly premiums are charged for active employees and for pre-Medicare retirees. CalPERS has confirmed that the claims experience of these members is considered together in setting premium rates. Separate premium rates are charged for retirees and dependents covered by Medicare, based on the claims experience of these members only.

As is the nature of group premium rate structures, at some ages, retirees will likely experience higher claims than the premiums they pay, where at other ages, the reverse may be true. We determine the implicit rate subsidy for retirees as the projected difference between (a) retiree medical claim costs by age and (b) premiums charged for retiree coverage. For more information on this process see Section 3 and Addendum 2: MacLeod Watts Age Rating Methodology.

OPEB Funding Policy

The District's OPEB funding policy affects the calculation of liabilities by impacting the discount rate that is used to develop the plan liability and expense. "Prefunding" is the term used when an agency consistently contributes an amount based on an actuarially determined contribution (ADC) each year. GASB 75 allows prefunded plans to use a discount rate that reflects the expected earnings on trust



Executive Summary

(Continued)

assets. Pay-as-you-go, or “PAYGO”, is the term used when an agency only contributes the required retiree benefits when due. When an agency finances retiree benefits on a pay-as-you-go basis, GASB 75 requires the use of a discount rate equal to a 20-year high grade municipal bond rate.

The District continues to prefund its OPEB liability, consistently contributing 100% or more of the Actuarially Determined Contributions each year. With the District’s approval, the discount rate used for accounting purposes is 6.75%, reflecting the District’s expectation of the long term return on trust assets. For more information, see Expected Return on Trust Assets on page 11. Actuarially Determined Contributions for plan funding purposes were developed using a 6.75% discount rate.

Actuarial Assumptions

The actuarial “demographic” assumptions (i.e., rates of retirement, death, disability or other termination of employment) used in this report were chosen, for the most part, to be the same as the actuarial demographic assumptions used for the most recent valuation of the retirement plan(s) covering District employees. Other assumptions, such as age-related healthcare claims, healthcare trend, retiree participation rates and spouse coverage, were selected based on demonstrated plan experience and/or our best estimate of expected future experience. All these assumptions, and more, impact expected future benefits. Please note that this valuation has been prepared on a closed group basis. This means that only employees and retirees present as of the valuation date are considered. We do not consider replacement employees for those we project to leave the current population of plan participants until the valuation date following their employment.

We emphasize that this actuarial valuation provides a projection of future results based on many assumptions. Actual results are likely to vary to some extent and we will continue to monitor these assumptions in future valuations. See Section 3 for a description of assumptions used in this valuation.

Important Dates for GASB 75 in this Report

GASB 75 allows reporting liabilities as of any fiscal year end based on: (1) a *valuation date* no more than 30 months plus 1 day prior to the close of the fiscal year end; and (2) a *measurement date* up to one year prior to the close of the fiscal year. The following dates were used for this report:

Fiscal Year End	June 30, 2022
Measurement Date	June 30, 2021
Measurement Period	June 30, 2020, to June 30, 2021
Valuation Date	June 30, 2021



Executive Summary

(Concluded)

Significant Results and Differences from the Prior Valuation

No benefit changes were reported to MacLeod Watts relative to those in place at the time the June 2019 valuation was prepared. We reviewed and updated certain assumptions used to project the OPEB liability. Differences between actual and expected results based on updated census and premium data since June 2019 were also reflected (referred to as “plan experience”). Overall, the Total OPEB Liability on the current measurement date is slightly lower than that reported one year ago.

Section C. presents the new valuation results and provides additional information on the impact of the new assumptions and plan experience. See *Recognition Period for Deferred Resources* on page 12 for details on how these changes are recognized.

Impact on Statement of Net Position and OPEB Expense for Fiscal Year Ending 2022

The plan’s impact to Net Position will be the sum of difference between assets and liabilities as of the measurement date plus the unrecognized net outflows and inflows of resources. Different recognition periods apply to deferred resources depending on their origin. The plan’s impact on Net Position on the measurement date can be summarized as follows:

Items	For Reporting At Fiscal Year Ending June 30, 2022
Total OPEB Liability	\$ 4,849,797
Fiduciary Net Position	7,142,408
Net OPEB Liability (Asset)	(2,292,611)
Deferred (Outflows) of Resources	(220,451)
Deferred Inflows of Resources	1,755,522
Impact on Statement of Net Position	<u>\$ (757,540)</u>
OPEB Expense, FYE 6/30/2022	<u>\$ (280,705)</u>

Important Notices

This report is intended to be used only to present the actuarial information relating to other postemployment benefits for the District’s financial statements. The results of this report may not be appropriate for other purposes, where other assumptions, methodology and/or actuarial standards of practice may be required or more suitable. We note that various issues in this report may involve legal analysis of applicable law or regulations. The District should consult counsel on these matters; MacLeod Watts does not practice law and does not intend anything in this report to constitute legal advice. In addition, we recommend the District consult with their internal accounting staff or external auditor or accounting firm about the accounting treatment of OPEB liabilities.



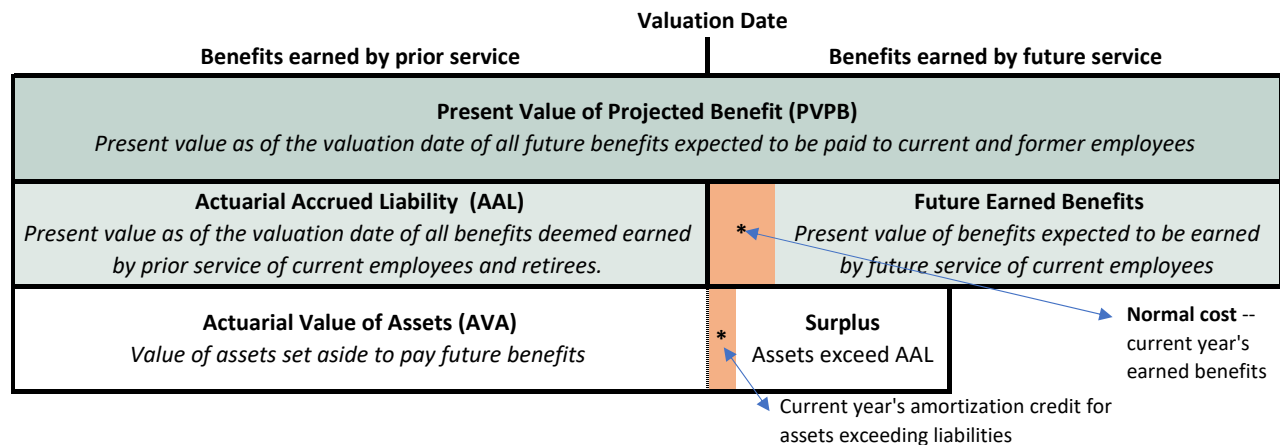
B. Valuation Process

The June 30, 2021, valuation has been based on employee census data and benefits initially submitted to us by the District and clarified in various related communications. A summary of the employee data is provided in Section 1 and a summary of the benefits provided under the Plan is provided in Section 2. While individual employee records have been reviewed to verify that they are reasonable in various respects, the data has not been audited and we have otherwise relied on the District as to its accuracy. The valuation described below has been performed in accordance with the actuarial methods and assumptions described in Section 3 and is consistent with our understanding of Actuarial Standards of Practice.

Projecting Plan Benefits and Liabilities

In projecting benefit values and liabilities, we first determine an expected premium or benefit stream over each current retiree's or active employee's future retirement. Benefits may include both direct employer payments (explicit subsidies) and any implicit subsidies arising when retiree premiums are expected to be partially subsidized by premiums paid for active employees. The projected benefit streams reflect assumed trends in the cost of those benefits and assumptions as to the expected dates when benefits will end. We also apply important assumptions regarding the probability that each employee will remain in service to receive benefits, if so, when they will begin, and the likelihood the employee will elect coverage for themselves and their dependents.

We then calculate a present value of these future benefit streams by discounting the value of each future expected employer payment, multiplied by the probability of payment, back to the valuation date using the discount rate. This present value is called the **Present Value of Projected Benefits (PVPB)** and represents the current value of all expected future plan payments to current retirees and current active employees. Note that this long-term projection does not anticipate entry of future employees.



The next step in the valuation process splits the Present Value of Projected Benefits into 1) the value of benefits already earned by *prior service* of current employees and retirees and 2) the value of benefits expected to be earned by *future service* of current employees. Actuaries employ an "attribution method" to divide the PVPB into prior service liabilities and future service liabilities. For this valuation we used the **Entry Age Normal** attribution method. This is the most common method used by public agencies for plan funding and is the only attribution method allowed for financial reporting under GASB 75.



Valuation Process

(Concluded)

We call the value of benefits deemed earned by prior service the **Actuarial Accrued Liability (AAL)**. Benefits deemed earned by service of active employees in a single year is called the **Normal Cost** of benefits. The present value of all future normal costs (PVFNC) plus the Actuarial Accrued Liability will equal the Present Value of Projected Benefits (i.e. $PVPB = AAL + PVFNC$).

Certain actuarial terms and GASB 75 terms may be used interchangeably. Some are compared below.

Actuarial Funding Terminology

Present Value of Projected Benefits (PVPB)
Actuarially Accrued Liability (AAL)
Market Value of Assets
Unfunded Actuarially Accrued Liability (UAAL)
Normal Cost

GASB 75 Terminology

N/A; typically not reported for accounting purposes
Total OPEB Liability (TOL)
Fiduciary Net Position
Net OPEB Liability
Service Cost

Incorporating Plan Assets

Funds set aside for future benefits may be considered contributions to an OPEB plan only if the account established for holding the accumulated assets are separate from and independent of the control of the employer and legally protected from its creditors. Furthermore, the sole purpose of the account should be to provide benefits and/or pay expenses of the plan. These conditions generally require the establishment of a legal trust, such as the District's trust account with CERBT.

Trust assets and earnings accumulate so that the trust can make benefit payments to retirees or reimburse the employer for making those payments directly. The portion of the AAL (or TOL) not covered by assets is referred to as the **unfunded actuarial accrued liability** (or UAAL in actuarial terminology), or **Net OPEB Liability** (in GASB terminology). A plan is generally considered "fully funded" when the UAAL is zero, i.e., when the accumulated prior service costs and plan assets are in equilibrium. *In this plan, trust assets exceed the plan liability, resulting in a Net OPEB Asset.*

Variation in Future Results

Please note that projections of future benefits over such long periods (frequently 60 or more years) which are dependent on numerous assumptions regarding future economic and demographic variables are subject to revision as future events unfold. While we believe that the assumptions and methods used in this valuation are reasonable for the purposes of this report, the costs to the District reflected in this report may change in the future, perhaps materially. Demonstrating the range of potential future plan costs was beyond the scope of our assignment.

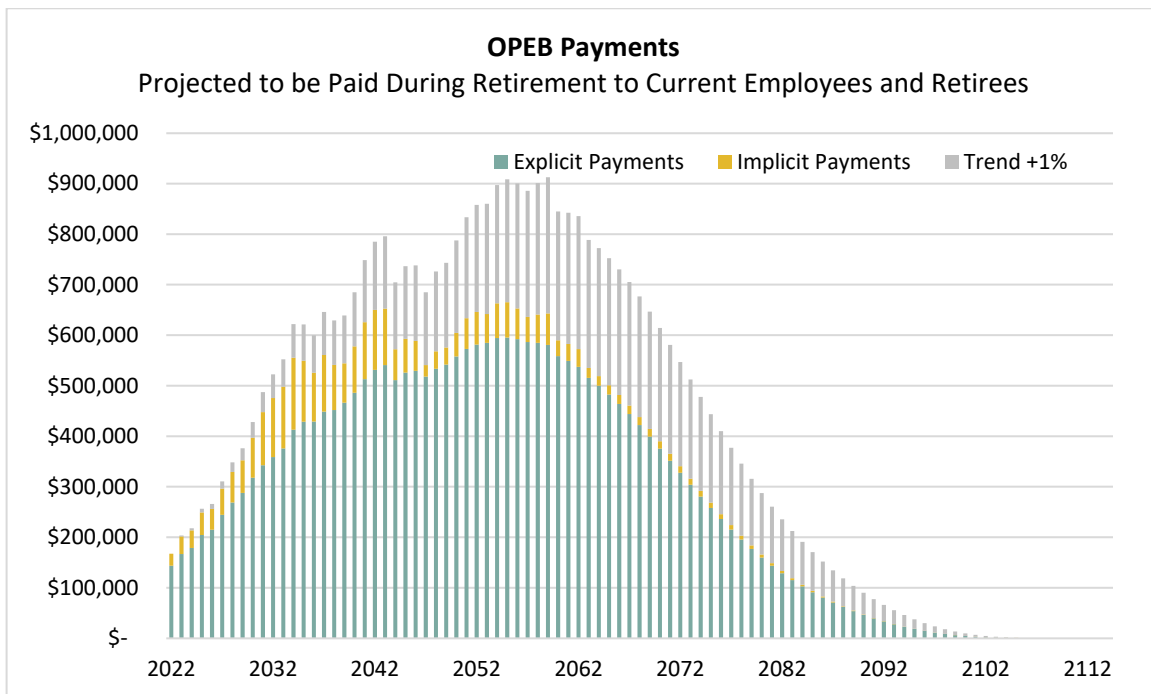


C. Valuation Results as of June 30, 2021

This section presents the basic results of our recalculation of the OPEB liability using the updated employee data, plan provisions and asset information provided to us for the June 30, 2021, valuation. We described the general process for projecting all future benefits to be paid to retirees and current employees in the preceding Section. Expected annual benefits have been projected on the basis of the actuarial assumptions outlined in Supporting Information, Section 3.

Lifetime healthcare benefits are paid for qualifying District retirees. Please see Supporting Information, Section 2 for details.

The following graph illustrates the annual other post-employment benefits projected to be paid on behalf of current retirees and current employees expected to retire from the District.



The amounts shown in green reflect the expected payment by the District toward retiree medical and prescription drug premiums while those in gold reflect the implicit subsidy benefits (i.e., the excess of retiree medical and prescription drug claims over the premiums expected to be charged during the year for retirees' coverage). The projections (in gray) reflect increases in benefit levels if healthcare trend were 1% higher.

The first 15 years of benefit payments from the graph above are shown in tabular form on page 19.

Liabilities relating to these projected benefits are shown beginning on the following page.



Valuation Results as of June 30, 2021

(Continued)

This chart compares the results measured as of June 30, 2020, based on the June 2019, valuation, with the results measured as of June 30, 2022, based on the June 2021 actuarial valuation.

Valuation Date	6/30/2019			6/30/2021		
Fiscal Year Ending	6/30/2021			6/30/2022		
Measurement Date	6/30/2020			6/30/2021		
	Explicit	Implicit	Total	Explicit	Implicit	Total
Subsidy						
Discount rate	6.75%			6.75%		
Number of Covered Employees						
Actives		28			27	
Retirees		19			19	
Total Participants		47			46	
Actuarial Present Value of Projected Benefits						
Actives	\$ 3,834,279	\$ 845,243	\$ 4,679,522	\$ 3,703,986	\$ 875,512	\$ 4,579,498
Retirees	1,556,393	85,421	1,641,813	1,582,606	118,096	1,700,702
Total APVPB	5,390,672	930,664	6,321,335	5,286,592	993,608	6,280,200
Total OPEB Liability (TOL)						
Actives	2,704,715	590,636	3,295,350	2,547,781	601,314	3,149,095
Retirees	1,556,393	85,421	1,641,813	1,582,606	118,096	1,700,702
TOL	4,261,107	676,056	4,937,163	4,130,387	719,410	4,849,797
Fiduciary Net Position			5,720,745			7,142,408
Net OPEB Liability			(783,582)			(2,292,611)
Service Cost						
For the period following the measurement date	148,332	33,318	181,650	139,740	31,880	171,620

The Total OPEB Liability has decreased by \$87,366 from that reported one year ago. Part of the change was expected and some of this change was unexpected. Reasons for the change in the Total OPEB Liability (TOL) are discussed on the following page.



Valuation Results as of June 30, 2021

(Concluded)

Expected changes: Through normal plan operation, the TOL was expected to increase by \$346,019 from additional service and interest costs accruing for the period and reduced by benefits paid to retirees.

Unexpected changes collectively decreased the TOL by \$433,385. These changes generally fall into one of the following categories:

- *Plan experience* recognizes results which are different than expected based on the prior valuation data and assumptions. Plan experience decreased the TOL by \$577,952 over the past two years relative to what we projected. The largest portion of the liability decrease is from lower than expected medical premiums and claims, followed by liability released from two retirees who voluntarily discontinued coverage under the plan.
- *Assumption changes* collectively increased the TOL by \$144,567. The largest change relates to updates to assumed future healthcare trend (i.e., increases on medical premiums and claims). Details for all changes are provided on the last page in Supporting Information, Section 3.
- *Benefit changes:* There were no changes reported since the prior valuation was completed.

This chart reconciles the TOL reported for fiscal year end June 30, 2021, to the TOL to be reported as of June 30, 2022.

Reported Total OPEB Liability at June 30, 2021 Measurement Date June 30, 2020	\$ 4,937,163
Expected Changes:	
Service Cost	181,650
Benefit Payments	(175,237)
Interest Cost	339,606
Total Expected Change	346,019
Expected Total OPEB Liability at June 30, 2022 Measurement Date June 30, 2021	\$ 5,283,182
Unexpected Changes:	
<i>Plan experience different than assumed</i>	
Premiums and claims other than expected	\$ (291,014)
Retirees voluntarily dropping coverage	\$ (112,263)
Other plan experience	(174,675)
<i>Assumption changes</i>	
Change in healthcare trend model	134,895
Change in projected benefit cap increases	(10,761)
Added implicit for Medicare retirees	17,927
Change in economic assumptions and mortality improvement scale	2,506
Total Unexpected Change	(433,385)
Actual Total OPEB Liability at June 30, 2022 Measurement Date June 30, 2021	\$ 4,849,797



D. Accounting Information (GASB 75)

The following exhibits are designed to satisfy the reporting and disclosure requirements of GASB 75 for the fiscal year end June 30, 2022.

Components of Net Position and Expense

The exhibit below shows the development of Net Position and Expense as of the Measurement Date.

Plan Summary Information for FYE June 30, 2022 <i>Measurement Date is June 30, 2021</i>	MCS D
<i>Items Impacting Net Position:</i>	
Total OPEB Liability	\$ 4,849,797
Fiduciary Net Position	7,142,408
Net OPEB Liability (Asset)	(2,292,611)
 <i>Deferred (Outflows) Inflows of Resources Due to:</i>	
Assumption Changes	(93,114)
Plan Experience	898,242
Investment Experience	827,501
Deferred Contributions	(97,558)
Net Deferred (Outflows) Inflows of Resources	1,535,071
 Impact on Statement of Net Position, FYE 6/30/2022	\$ (757,540)
 <i>Items Impacting OPEB Expense:</i>	
Service Cost	\$ 181,650
Cost of Plan Changes	-
Interest Cost	339,606
Expected Earnings on Assets	(381,465)
Administrative expenses	2,145
 <i>Recognized Deferred Resource items:</i>	
Assumption Changes	12,539
Plan Experience	(211,477)
Investment Experience	(223,703)
 OPEB Expense, FYE 6/30/2022	\$ (280,705)



Accounting Information

(Continued)

Change in Net Position During the Fiscal Year

The exhibit below shows the year-to-year changes in the components of Net Position.

For Reporting at Fiscal Year End <i>Measurement Date</i>	6/30/2021 <i>6/30/2020</i>	6/30/2022 <i>6/30/2021</i>	Change During Period
Total OPEB Liability	\$ 4,937,163	\$ 4,849,797	\$ (87,366)
Fiduciary Net Position	5,720,745	7,142,408	1,421,663
Net OPEB Liability (Asset)	(783,582)	(2,292,611)	(1,509,029)
<i>Deferred Resource (Outflows) Inflows Due to:</i>			
Assumption Changes	38,914	(93,114)	(132,028)
Plan Experience	531,767	898,242	366,475
Investment Experience	(127,809)	827,501	955,310
Deferred Contributions	(38,567)	(97,558)	(58,991)
Net Deferred (Outflows) Inflows	404,305	1,535,071	1,130,766
Impact on Statement of Net Position	\$ (379,277)	\$ (757,540)	\$ (378,263)

Change in Net Position During the Fiscal Year

Impact on Statement of Net Position, FYE 6/30/2021	\$ (379,277)
OPEB Expense (Income)	(280,705)
Employer Contributions During Fiscal Year	(97,558)
Impact on Statement of Net Position, FYE 6/30/2022	<u>\$ (757,540)</u>

OPEB Expense

Employer Contributions During Fiscal Year	\$ 97,558
Deterioration (Improvement) in Net Position	(378,263)
OPEB Expense (Income), FYE 6/30/2022	<u>\$ (280,705)</u>



Accounting Information

(Continued)

Change in Fiduciary Net Position During the Measurement Period

	MCS D
Fiduciary Net Position at Fiscal Year Ending 6/30/2021 <i>Measurement Date 6/30/2020</i>	\$ 5,720,745
Changes During the Period:	
Investment Income	1,560,478
Employer Contributions	38,567
Administrative expenses	(2,145)
Benefit Payments	(175,237)
Net Changes During the Period	1,421,663
Fiduciary Net Position at Fiscal Year Ending 6/30/2022 <i>Measurement Date 6/30/2021</i>	\$ 7,142,408

Expected Long-term Return on Trust Assets

The expected long-term return on trust assets was derived from information published by CalPERS for CERBT Strategy 1. CalPERS determined its returns using a building-block method and best-estimate ranges of expected future real rates of return for each major asset class (expected returns, net of OPEB plan investment expense and inflation). The target allocation and best estimates of geometric real rates of return published by CalPERS for each major class are split for years 1-10 and years 11 and thereafter.

CERBT Strategy 1		Years 1-10			Years 11+		
Major Asset Classification	Target Allocation	General Inflation Rate Assumption	1-10 Year Expected Real Rate of Return*	Compound Return Yrs 1-10	General Inflation Rate Assumption	11+ Year Expected Real Rate of Return*	Compound Return Years 11+
Global Equity	59%	2.00%	4.80%	6.80%	2.92%	5.98%	8.90%
Fixed Income	25%	2.00%	1.10%	3.10%	2.92%	2.62%	5.54%
Global Real Estate(REITs)	8%	2.00%	3.20%	5.50%	2.92%	5.00%	7.92%
Treasury Inflation Protected Securities	5%	2.00%	0.25%	2.25%	2.92%	1.46%	4.38%
Commodities	3%	2.00%	1.50%	3.50%	2.92%	2.87%	5.79%
Volatility	11.83%		weighted	5.85%		weighted	8.07%

*Real rates of return come from a geometric representation of returns that assume a general inflation rate of 2.00%.

To derive the expected return specifically for the District, we projected plan benefits in each future year. Then applying the plan specific benefit payments to CalPERS' bifurcated return expectations, we determined the single equivalent long-term rate of return to be 6.95%. The District is less optimistic about future returns and has requested the use of a lower discount rate. With the District's approval, a rate of 6.75% was used as the assumed asset return and discount rate for accounting (GASB 75) purposes and to develop the Actuarially Determined contributions for prefunding the plan.



Accounting Information

(Continued)

Recognition Period for Deferred Resources

Liability changes due to plan experience which differs from what was assumed in the prior measurement period and/or from assumption changes during the period are recognized over the plan's Expected Average Remaining Service Life ("EARSL"). The EARSL of 6.67 years is the period used to recognize such changes in the OPEB Liability arising during the current measurement period.

When applicable, changes in the Fiduciary Net Position due to investment performance different from the assumed earnings rate are always recognized over 5 years.

Liability changes attributable to benefit changes occurring during the period, if any, are recognized immediately.

Deferred Resources as of Fiscal Year End and Expected Future Recognition

The exhibit below shows deferred resources as of the fiscal year end June 30, 2022.

Midway City Sanitary District	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of Assumptions	\$ 122,893	\$ 29,779
Differences Between Expected and Actual Experience	-	898,242
Net Difference Between Projected and Actual Earnings on Investments	-	827,501
Deferred Contributions	97,558	-
Total	\$ 220,451	\$ 1,755,522

The District will recognize the Deferred Contributions in the next fiscal year. In addition, future recognition of these deferred resources is shown below.

For the Fiscal Year Ending June 30	Recognized Net Deferred Outflows (Inflows) of Resources
2023	\$ (396,156)
2024	(393,168)
2025	(399,190)
2026	(335,605)
2027	(64,975)
Thereafter	(43,535)



Accounting Information

(Continued)

Sensitivity of Liabilities to Changes in the Discount Rate and Healthcare Cost Trend Rate

The discount rate used for accounting purposes for the fiscal year end 2022 is 6.75%. Healthcare Cost Trend Rate was assumed to start at 5.7% (increase effective January 1, 2022) and grade down to 4% for years 2076 and later. The impact of a 1% increase or decrease in these assumptions is shown in the chart below.

Sensitivity to:			
Change in Discount Rate	Current - 1% 5.75%	Current 6.75%	Current + 1% 7.75%
Total OPEB Liability	5,520,058	4,849,797	4,296,777
Increase (Decrease)	670,261		(553,020)
% Increase (Decrease)	13.8%		-11.4%
Net OPEB Liability (Asset)	(1,622,350)	(2,292,611)	(2,845,631)
Increase (Decrease)	670,261		(553,020)
% Increase (Decrease)	29.2%		-24.1%
Change in Healthcare Cost Trend Rate	Current Trend - 1%	Current Trend	Current Trend + 1%
Total OPEB Liability	4,222,699	4,849,797	5,624,349
Increase (Decrease)	(627,098)		774,552
% Increase (Decrease)	-12.9%		16.0%
Net OPEB Liability (Asset)	(2,919,709)	(2,292,611)	(1,518,059)
Increase (Decrease)	(627,098)		774,552
% Increase (Decrease)	-27.4%		33.8%



Accounting Information

(Continued)

Schedule of Changes in the District's Net OPEB Liability and Related Ratios

GASB 75 requires presentation of the 10-year history of changes in the Net OPEB Liability. Only results for years since GASB 75 was implemented (fiscal years 2018 through 2022) are shown in the table.

Fiscal Year Ending	2022	2021	2020	2019	2018
<i>Measurement Date</i>	6/30/2021	6/30/2020	6/30/2019	6/30/2018	6/30/2017
<i>Discount Rate on Measurement Date</i>	6.75%	6.75%	6.75%	6.75%	6.75%
Total OPEB liability					
Service Cost	\$ 181,650	\$ 175,932	\$ 167,394	\$ 162,126	\$ 157,023
Interest	339,606	317,915	351,202	329,262	307,649
Changes of benefit terms	-	-	-	-	-
Differences between expected and actual experience	(577,952)	-	(781,423)	-	-
Changes of assumptions	144,567	-	(57,184)	-	-
Benefit payments	(175,237)	(181,215)	(182,104)	(161,138)	(138,039)
Net change in total OPEB liability	(87,366)	312,632	(502,115)	330,250	326,633
Total OPEB liability - beginning	4,937,163	4,624,531	5,126,646	4,796,396	4,469,763
Total OPEB liability - ending (a)	\$ 4,849,797	\$ 4,937,163	\$ 4,624,531	\$ 5,126,646	\$ 4,796,396
Plan fiduciary net position					
Contributions - employer	\$ 38,567	\$ 181,215	\$ 182,104	\$ 182,104	\$ 6,972
Net investment income	1,560,478	195,303	321,380	321,380	350,153
Benefit payments	(175,237)	(181,215)	(182,104)	(182,104)	(138,039)
Administrative Expenses	(2,145)	(2,700)	(1,116)	(6,703)	(1,771)
Net change in plan fiduciary net position	1,421,663	192,603	320,264	1,698,452	217,315
Plan fiduciary net position - beginning	5,720,745	5,528,142	5,207,878	3,509,426	3,292,111
Plan fiduciary net position - ending (b)	\$ 7,142,408	\$ 5,720,745	\$ 5,528,142	\$ 5,207,878	\$ 3,509,426
Net OPEB liability - ending (a) - (b)	\$ (2,292,611)	\$ (783,582)	\$ (903,611)	\$ (81,232)	\$ 1,286,970
Covered-employee payroll	\$ 2,265,018	\$ 2,219,965	\$ 2,004,990	\$ 1,707,287	\$ 1,610,995
Net OPEB liability as a % of covered-employee payroll	-101.22%	-35.30%	-45.07%	-4.76%	79.89%



Accounting Information

(Continued)

Schedule of Contributions

Since establishing the OPEB trust, the District has made regular contributions toward funding the Actuarially Determined Contribution (ADC) and confirmed its intention to continue doing so. This chart shows the contributions for the years since GASB 75 was implemented. *Note that the payroll for the fiscal year ending 2022 is an estimate and should be updated when known.*

Fiscal Year Ending	2022	2021	2020	2019	2018
Actuarially Determined Contribution	\$ 52,539	\$ 138,060	\$ 136,307	\$ 176,711	\$ 256,997
Contributions in relation to the actuarially determined contribution	97,558	38,567	181,215	182,104	1,579,105
Contribution deficiency (excess)	\$ (45,019)	\$ 99,493	\$ (44,908)	\$ (5,393)	\$ (1,322,108)
Covered employee payroll	\$ 2,300,000	\$ 2,265,018	\$ 2,219,965	\$ 2,004,990	\$ 1,610,995
Contributions as a % of covered employee payroll	4.24%	1.70%	8.16%	9.08%	98.02%
Percent of ADC contributed	185.69%	27.93%	132.95%	103.05%	614.44%

Notes to Schedule - assumptions used to develop Actuarially Determined Contributions

Valuation Date	6/30/2021	6/30/2019	6/30/2017
Actuarial cost method	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization method	Level % of Pay	Level % of Pay	Level % of Pay
Amortization period	20 years	21 years 22 years	23 years 24 years
Asset valuation method	Market Value of Assets	Market Value of Assets	Market Value of Assets
Inflation	2.50%	2.75%	2.75%
Healthcare cost trend rates	5.7% in 2022 grading down to 4.0% in 2076 and later	6.5% in 2021 to 5% in 0.5% steps	7.5% in 2019 to 5% in 0.5% steps
Salary increases	3.00%	3.25%	3.25%
Investment rate of return	6.75%	6.75%	6.75%
Retirement age	50 to 75	50 to 75	50 to 75
Mortality	CalPERS 2017 Study	CalPERS 2017 Study	CalPERS 2014 Study
Mortality Improvement	MacLeod Watts 2020 generationally	MacLeod Watts 2018 generationally	MacLeod Watts 2017 generationally



Accounting Information
(Continued)

Detail of Changes to Net Position

The chart below details changes to all components of Net Position.

Midway City Sanitary District	Total OPEB Liability (a)	Fiduciary Net Position (b)	Net OPEB Liability (c) = (a) - (b)	(d) Deferred Outflows (Inflows) Due to:				Impact on Statement of Net Position (e) = (c) - (d)
				Assumption Changes	Plan Experience	Investment Experience	Deferred Contributions	
Balance at Fiscal Year Ending 6/30/2021 <i>Measurement Date 6/30/2020</i>	\$ 4,937,163	\$ 5,720,745	\$ (783,582)	\$ (38,914)	\$ (531,767)	\$ 127,809	\$ 38,567	\$ (379,277)
Changes During the Period:								
Service Cost	181,650		181,650					181,650
Interest Cost	339,606		339,606					339,606
Expected Investment Income		381,465	(381,465)					(381,465)
Employer Contributions		38,567	(38,567)					(38,567)
Changes of Benefit Terms	-		-					-
Administrative expenses		(2,145)	2,145					2,145
Benefit Payments	(175,237)	(175,237)	-					-
Assumption Changes	144,567		144,567	144,567				-
Plan Experience	(577,952)		(577,952)		(577,952)			-
Investment Experience		1,179,013	(1,179,013)			(1,179,013)		-
Recognized Deferred Resources				(12,539)	211,477	223,703	(38,567)	(384,074)
Employer Contributions in Fiscal Year							97,558	(97,558)
Net Changes in Fiscal Year 2021-2022	(87,366)	1,421,663	(1,509,029)	132,028	(366,475)	(955,310)	58,991	(378,263)
Balance at Fiscal Year Ending 6/30/2022 <i>Measurement Date 6/30/2021</i>	\$ 4,849,797	\$ 7,142,408	\$ (2,292,611)	\$ 93,114	\$ (898,242)	\$ (827,501)	\$ 97,558	\$ (757,540)



Accounting Information
(Continued)

Schedule of Deferred Outflows and Inflows of Resources

A listing of all deferred resource bases used to develop the Net Position and OPEB Expense is shown below. Deferred Contributions are not shown.

Measurement Date: June 30, 2021

Deferred Resource					Balance as of Jun 30, 2021	Recognition of Deferred Outflow or Deferred (Inflow) in Measurement Period:							
Date Created	Created Due To	Initial Amount	Period (Yrs)	Annual Recognition		2020-21 (FYE 2022)	2021-22 (FYE 2023)	2022-23 (FYE 2024)	2023-24 (FYE 2025)	2024-25 (FYE 2026)	2025-26 (FYE 2027)	Thereafter	
6/30/2017	Investment Earnings	Greater than Expected	\$ (132,419)	5.00	\$ (26,484)	\$ -	\$ (26,483)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6/30/2018	Investment Earnings	Greater than Expected	(14,953)	5.00	(2,991)	(2,989)	(2,991)	(2,989)	-	-	-	-	-
6/30/2019	Plan Experience	Decreased Liability	(781,423)	6.26	(124,828)	(406,939)	(124,828)	(124,828)	(124,828)	(124,828)	(32,455)	-	-
6/30/2019	Assumption Changes	Decreased Liability	(57,184)	6.26	(9,135)	(29,779)	(9,135)	(9,135)	(9,135)	(9,135)	(2,374)	-	-
6/30/2019	Investment Earnings	Less than Expected	30,114	5.00	6,023	12,045	6,023	6,023	6,022	-	-	-	-
6/30/2020	Investment Earnings	Less than Expected	177,755	5.00	35,551	106,653	35,551	35,551	35,551	35,551	-	-	-
6/30/2021	Plan Experience	Decreased Liability	(577,952)	6.67	(86,649)	(491,303)	(86,649)	(86,649)	(86,649)	(86,649)	(86,649)	(86,649)	(58,058)
6/30/2021	Assumption Changes	Increased Liability	144,567	6.67	21,674	122,893	21,674	21,674	21,674	21,674	21,674	21,674	14,523
6/30/2021	Investment Earnings	Greater than Expected	(1,179,013)	5.00	(235,803)	(943,210)	(235,803)	(235,803)	(235,803)	(235,803)	(235,801)	-	-



Accounting Information

(Continued)

District Contributions to the Plan

District contributions to the Plan occur as benefits are paid to or on behalf of retirees. Benefit payments may occur in the form of direct payments for premiums (“explicit subsidies”) and/or indirect payments to retirees in the form of higher premiums for active employees (“implicit subsidies”). Note that the implicit subsidy contribution does not represent cash payments to retirees, but rather the reclassification of a portion of active healthcare expense to be recognized as a retiree healthcare cost. For details, see Addendum 1 – Important Background Information.

Benefits and other contributions paid by the District during the measurement period are shown below.

Benefit Payments During the Measurement Period, Jul 1, 2020 thru Jun 30, 2021	MCS D
Benefits Paid by Trust	\$ 136,670
Benefits Paid by Employer (not reimbursed by trust)	-
Implicit benefit payments	38,567
Total Benefit Payments During the Measurement Period	\$ 175,237

Employer Contributions During the Measurement Period, Jul 1, 2020 thru Jun 30, 2021	MCS D
Employer Contributions to the Trust	\$ -
Employer Contributions in the Form of Direct Benefit Payments (not reimbursed by trust)	-
Implicit contributions	38,567
Total Employer Contributions During the Measurement Period	\$ 38,567

OPEB contribution made by the District in the year following the measurement period but prior to the end of the fiscal year are shown below.

Employer Contributions During the Fiscal Year, Jul 1, 2021 thru Jun 30, 2022	MCS D
Employer Contributions to the Trust	\$ -
Employer Contributions in the Form of Direct Benefit Payments (not reimbursed by trust)	74,071
Implicit contributions	23,487
Total Employer Contributions During the Fiscal Year	\$ 97,558



Accounting Information

(Continued)

Projected Benefit Payments (15-year projection)

The following is an estimate of other post-employment benefits to be paid on behalf of current retirees and current employees expected to retire from the District. Expected annual benefits have been projected on the basis of the actuarial assumptions outlined in Section 3.

These projections do not include any benefits expected to be paid on behalf of current active employees *prior to* retirement, nor do they include any benefits for potential *future employees* (i.e., those who might be hired in future years).

Projected Annual Benefit Payments							
Fiscal Year Ending June 30	Explicit Subsidy			Implicit Subsidy			Total
	Current Retirees	Future Retirees	Total	Current Retirees	Future Retirees	Total	
2022	\$ 140,191	\$ -	\$ 140,191	\$ 23,487	\$ -	\$ 23,487	\$ 163,678
2023	139,288	27,379	166,667	24,468	10,557	35,025	201,692
2024	136,568	42,242	178,810	19,220	15,740	34,960	213,770
2025	139,397	65,055	204,452	23,440	21,334	44,774	249,226
2026	122,414	92,434	214,848	6,896	34,483	41,379	256,227
2027	123,925	120,363	244,288	9,048	43,128	52,176	296,464
2028	119,541	149,209	268,750	(99)	60,558	60,459	329,209
2029	120,343	167,404	287,747	979	63,566	64,545	352,292
2030	120,881	197,130	318,011	1,981	77,172	79,153	397,164
2031	121,144	221,436	342,580	2,888	102,205	105,093	447,673
2032	121,150	237,458	358,608	3,701	113,165	116,866	475,474
2033	120,884	254,983	375,867	4,406	117,687	122,093	497,960
2034	120,305	292,679	412,984	4,994	137,530	142,524	555,508
2035	119,367	309,498	428,865	5,452	115,166	120,618	549,483
2036	118,045	311,104	429,149	5,774	90,758	96,532	525,681

The amounts shown in the Explicit Subsidy section of the table reflect the expected payment by the District toward retiree medical premiums in each of the years shown. The amounts are shown separately, and in total, for those retired on the valuation date (“current retirees”) and those expected to retire after the valuation date (“future retirees”).

The amounts shown in the Implicit Subsidy table reflect the expected excess of retiree medical and prescription drug claims over the premiums expected to be charged during the year for retirees’ coverage. These amounts are also shown separately and in total for those currently retired on the valuation date and for those expected to retire in the future.



Accounting Information
(Concluded)

Sample Journal Entries

Beginning Account Balances

As of the fiscal year beginning 7/1/2021

	Debit	Credit
Net OPEB Liability	783,582	
Deferred Resource -- Assumption Changes		38,914
Deferred Resource -- Plan experience		531,767
Deferred Resource -- Investment Experience	127,809	
Deferred Resource -- Contributions	38,567	
Net Position		379,277

* The entries above assume nothing is on the books at the beginning of the year. So to the extent that values already exist in, for example, the Net OPEB Liability account, then only the difference should be adjusted. The entries above represent the values assumed to exist at the start of the fiscal year.

Journal entry to recharacterize retiree benefit payments as OPEB

Expense.

	Debit	Credit
OPEB Expense	74,071	
Premium Expense		74,071

* This entry assumes a prior journal entry was made to record the payment for retiree premiums. This entry assumes the prior entry debited an account called "Premium Expense" and credited Cash. This entry reverses the prior debit to "Premium Expense" and recharacterizes that entry as an "OPEB Expense".

Journal entries to record implicit subsidies during the fiscal year

	Debit	Credit
OPEB Expense	23,487	
Premium Expense		23,487

* This entry assumes that premiums for active employees were recorded to an account called "Premium Expense". This entry reverses the portion of premium payments that represent implicit subsidies and assigns that value to OPEB Expense.

Journal entries to record account activity during the fiscal year

	Debit	Credit
Net OPEB Liability	1,509,029	
Deferred Resource -- Assumption Changes	132,028	
Deferred Resource -- Plan experience		366,475
Deferred Resource -- Investment Experience		955,310
Deferred Resource -- Contributions	58,991	
OPEB Expense		378,263



E. Funding Information

The employer's OPEB funding policy and level of contributions to an irrevocable OPEB trust directly affects the discount rate which is used to calculate the OPEB liability to be reported in the employer's financial statements. Prefunding (setting aside funds to accumulate in an irrevocable OPEB trust) has certain advantages, one of which is the ability to (potentially) use a higher discount rate in the determination of liabilities for GASB 75 reporting purposes. Prefunding also improves the security of benefits for current and potential future recipients and contributes to intergenerational taxpayer equity by better matching the cost of the benefits to the service years in which they are "earned" and which correspond to years in which taxpayers benefit from those services.

Paying Down the UAAL

Once an employer decides to prefund, a decision must be made about how to pay for benefits related to accumulated prior service that have not yet been funded (the UAAL¹). This is most often, though not always, handled through structured amortization payments. The period and method chosen for amortizing this unfunded liability can significantly affect the Actuarially Determined Contribution (ADC) or other basis selected for funding the OPEB program.

Much like paying off a mortgage, when the AAL exceeds plan assets, choosing a longer amortization period to pay off the UAAL means smaller payments, but the payments will be required for more years; plan investments will have less time to work toward helping reduce required contribution levels. *When the plan is in a surplus position, the reverse is true, and a longer amortization period may be preferable.*

There are several ways the amortization payment can be determined. The most common methods are calculating the amortization payment as a level dollar amount or as a level percentage of payroll. The employer might also choose to apply a shorter period when the UAAL only when it is positive, i.e., when trust assets are lower than the AAL, but opt for a longer period or to exclude amortization of a negative UAAL, when assets exceed the AAL. The entire UAAL may be amortized as one single component or may be broken into multiple components reflecting the timing and source of each change, such as those arising from assumption changes, benefit changes and/or liability or investment experience.

The amortization period(s) should not exceed the number of years which would allow current trust assets plus future contributions and earnings to be sufficient to pay all future benefits and trust expenses each year. Prefunding of OPEB is optional and contributions at any level are permitted. However, if trust sufficiency is not expected, a discount rate other than the assumed trust return will likely be required for accounting purposes.

Funding and Prefunding of the Implicit Subsidy

An implicit subsidy liability is created when retiree medical claims are expected to exceed the premiums charged for retiree coverage. Recognition of the estimated implicit subsidy each year is handled by an accounting entry, reducing the amount paid for active employees and shifting that amount to be treated as a retiree healthcare expense/contribution (see Sample Journal Entries). The implicit subsidy is a true benefit to the retiree but can be difficult to see when medical premiums are set as a flat rate for both actives and pre-Medicare retirees. This might lead some employers to believe the benefit is not real or is merely an accounting construct, and thus to forgo prefunding of retiree implicit benefits.

¹ We use actuarial, rather than accounting, terminology to describe the components used to develop the ADCs.



OPEB Funding Information

(Continued)

Consider what would happen if the retiree premiums were based only on expected retiree claims experience. Almost certainly, retiree premiums would increase while premiums for active employees would go down if the active premiums no longer had to help support the higher retiree claims. *Who would pay the increases in retiree premiums?* Current plan documents and bargaining agreements would have to be consulted. Depending on circumstances, the increase in retiree premiums might remain the responsibility of the employer, pass entirely to the retirees, or some blending of the two. The answer would determine whether separate retiree-only premium rates would result in a higher or lower employer OPEB liability. In the current premium structure, with blended active and pre-Medicare retiree premiums, the employer is clearly, though indirectly, paying the implicit retiree cost.

The prefunding decision is complex. OPEB materiality, budgetary concerns, desire to use the full trust rate in developing the liability for GASB 75, and other factors must be weighed by each employer. Since prefunding OPEB benefits is not required, each employer's OPEB prefunding strategy will depend on how they balance these competing perspectives.

Development of the Actuarially Determined Contributions

The District has approved development of ADCs based on the following two components, which are then adjusted with interest to each fiscal year end:

- The amounts attributed to service performed in the current fiscal year (the normal cost) and
- Amortization of the *negative* unfunded actuarial accrued liability (a surplus) over an open 30-year period with level percent of payroll payments.

Actuarially Determined Contributions, developed as described above for the District's fiscal years ending June 30, 2022 and 2023 are shown the exhibit on the next page. These ADCs incorporate both explicit (cash benefit) and implicit subsidy benefit liabilities. Contributions credited toward meeting the ADC will be comprised of:

- 1) direct payments to insurers toward retiree premiums, to the extent not reimbursed to the District by the trust; plus
- 2) each year's implicit subsidy payment; and
- 3) contributions to the OPEB trust.

ADCs determined on this basis should provide for trust sufficiency, based on the current plan provisions and census data, *provided all assumptions are exactly realized and if the District contributes 100% or more of the ADC each year*. When an agency commits to funding the trust at or above the ADC, the expected long-term trust return may be used as the discount rate in determining the plan liability for accounting purposes. Trust sufficiency cannot be guaranteed to a certainty, however, because of the non-trivial risk that the assumptions used to project future benefit liabilities may not be realized.

This section is continued on the following page.



OPEB Funding Information

(Continued)

Actuarially Determined Contributions for fiscal years ending June 30, 2022, 2023 and 2024 are below.

Funding Policy	Prefunding Basis		
Valuation Date	6/30/2021		
For fiscal year ending	6/30/2022	6/30/2023	6/30/2024
Expected long-term return on assets	6.75%	6.75%	6.75%
Discount rate	6.75%	6.75%	6.75%
Number of Covered Employees			
Actives	27	27	27
Retirees	19	19	19
Total Participants	46	46	46
Actuarial Present Value of Projected Benefits			
Actives	\$ 4,579,498	\$ 4,872,074	\$ 5,161,723
Retirees	1,700,702	1,659,072	1,601,777
Total APVPB	6,280,200	6,531,146	6,763,500
Actuarial Accrued Liability (AAL)			
Actives	3,149,095	3,528,324	3,915,970
Retirees	1,700,702	1,659,072	1,601,777
Total AAL	4,849,797	5,187,396	5,517,747
Actuarial Value of Assets	7,142,408	7,479,598	7,812,179
Unfunded AAL (UAAL)	(2,292,611)	(2,292,202)	(2,294,432)
UAAL Amortization method	Level % of Pay	Level % of Pay	Level % of Pay
Remaining amortization period (years)	30	30	30
Amortization Factor	18.7299	18.7299	18.7299
Actuarially Determined Contribution (ADC)			
Normal Cost	\$ 171,620	\$ 176,768	\$ 182,071
Amortization of UAAL	(122,404)	(122,382)	(122,502)
Interest to fiscal year end	3,323	3,671	4,021
Total ADC	52,539	58,057	63,590

Funding of the ADC

1 Implicit subsidy contribution	\$ 23,487	\$ 35,025	\$ 34,960
Additional payments needed to meet ADC	29,052	23,032	28,630
2 Projected agency paid premiums for retirees	140,191	166,667	178,810
3 Expected agency contribution (refund) to/from OPEB trust*	(66,120)	(166,667)	(178,810)
Total Expected Employer Contributions (1+2+3)	\$ 97,558	\$ 35,025	\$ 34,960

*The District intends to seek reimbursement for some or all of the District-paid premiums for retirees for each of the 3 years shown above. No reimbursements for the implicit subsidy are expected. Actual reimbursement for FYE 2022 is shown



F. Certification

The primary purposes of this report are: (1) to provide actuarial information of the other postemployment benefits (OPEB) provided by the Midway City Sanitary District (the District) in compliance with Statement 75 of the Governmental Accounting Standards Board (GASB 75); and (2) to provide Actuarially Determined Contributions for prefunding of this program in conformity with the District's OPEB funding policy. The District is not required to contribute the ADC shown in this report and we make no representation that it will, in fact, fund the OPEB trust at any particular level).

In preparing this report we relied without audit on information provided by the District. This information includes, but is not limited to, plan provisions, census data, and financial information. We performed a limited review of this data and found the information to be reasonably consistent. The accuracy of this report is dependent on this information and if any of the information we relied on is incomplete or inaccurate, then the results reported herein will be different from any report relying on more accurate information.

We consider the actuarial assumptions and methods used in this report to be individually reasonable under the requirements imposed by GASB 75 and taking into consideration reasonable expectations of plan experience. The results provide an estimate of the plan's financial condition at one point in time. Future actuarial results may be significantly different due to a variety of reasons including, but not limited to, demographic and economic assumptions differing from future plan experience, changes in plan provisions, changes in applicable law, or changes in the value of plan benefits relative to other alternatives available to plan members.

Alternative assumptions may also be reasonable; however, demonstrating the range of potential plan results based on alternative assumptions was beyond the scope of our assignment except to the limited extent required by GASB 75 and in accordance with the District's stated OPEB funding policy. Results for accounting purposes may be materially different than results obtained for other purposes such as plan termination, liability settlement, or underlying economic value of the promises made by the plan.


This report is prepared solely for the use and benefit of the District and may not be provided to third parties without prior written consent of MacLeod Watts. Exceptions: The District may provide copies of this report to their professional accounting and legal advisors who are subject to a duty of confidentiality, and the District may provide this work to any party if required by law or court order. No part of this report should be used as the basis for any representations or warranties in any contract or agreement without the written consent of MacLeod Watts.

The undersigned are unaware of any relationship that might impair the objectivity of this work. Nothing within this report is intended to be a substitute for qualified legal or accounting counsel. The signing actuary is a member of the American Academy of Actuaries and meets the qualification standards for rendering this opinion.

Signed: June 8, 2022



Catherine L. MacLeod, FSA, FCA, EA, MAAA



J. Kevin Watts, FSA, FCA, MAAA



G. Supporting Information

Section 1 - Summary of Employee Data

Active employees: The District reported 27 active employees (excluding active Board members) in the data provided to us for the June 2021 valuation. Of these, 26 were reported as currently enrolled in the medical program while 1 employee was waiving coverage. Their age and service information is below.

Distribution of Benefits-Eligible Active Employees								
Current Age	Years of Service						Total	Percent
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 & Up		
Under 25							0	0%
25 to 29		2					2	7%
30 to 34	1	1					2	7%
35 to 39		1					1	4%
40 to 44		1	1		3		5	19%
45 to 49		1	2				3	11%
50 to 54			1	2	3	3	9	33%
55 to 59				1	1	1	3	11%
60 to 64				2			2	7%
65 to 69							0	0%
70 & Up							0	0%
Total	1	6	4	5	7	4	27	100%
Percent	4%	22%	15%	19%	26%	15%	100%	

Valuation	July 2019	June 2021
Average Attained Age for Actives	47.2	47.8
Average Years of Service	11.7	12.6

Retirees: There are also 15 retirees and 4 survivors currently receiving benefits under this program. Their current ages are summarized in the chart below, as well as the average age at retirement.

Retirees by Age		
Current Age	Number	Percent
Below 50	0	0%
50 to 54	0	0%
55 to 59	0	0%
60 to 64	4	21%
65 to 69	4	21%
70 to 74	3	16%
75 to 79	3	16%
80 & up	5	26%
Total	19	100%
Average Age:		
On 6/30/2021	74.0	
At retirement	57.1	

Summary of Plan Member Counts: The numbers of those members currently or potentially eligible to receive benefits under the OPEB plan are required to be reported in the notes to the financial statements.

Summary of Plan Member Counts	
Number of active plan members	27
Number of inactive plan members currently receiving benefits	19
Number of inactive plan members entitled to but not receiving benefits	7*

* Retirees eligible to return to the District for PEMHCA coverage



Supporting Information

(Continued)

Section 1 - Summary of Employee Data

(continued)

The chart below reconciles the number of actives and retirees included in the June 2019 valuation of the District plan with those included in the June 2021 valuation:

Reconciliation of District Plan Members Between Valuation Dates						
Status	Covered Actives	Waiving Actives	Covered Retirees	Covered Disabled Retirees	Covered Surviving Spouses	Total
Number reported as of June 30, 2019	27	1	13	2	4	47
New employees	2	-	-	-	-	2
Separated employees	(1)	-	-	-	-	(1)
New retiree, elected coverage	(2)	-	2	-	-	0
New retiree, waiving coverage	-	-	-	-	-	0
Previously covered, now waiving	-	-	(2)	-	-	(2)
Number reported as of June 30, 2021	26	1	13	2	4	46

Overall, the number of active plan members decreased by 1, from 28 to 27, representing a 3.6% decrease in active employees included in the valuation. One employee left the District during these two years. The number of covered retirees remained unchanged at 19.

The particular medical plan chosen and the level of coverage selected (e.g., single, two-party) both impact the District's OPEB liability. The following exhibit summarizes the enrollment elections for all current active and retired members:

Enrollment by Plan, Status, and Coverage Level	Actives			Retirees				Grand Total
	Single	Two-Party	Family	Pre-65		Post-65		
				Single	Two-Party	Single	Two-Party	
Anthem Select Region 2		1	2					3
Anthem Traditional Region 2	1							1
Blue Shield Access Region 2		1		1				2
Blue Shield Access Region 3	1	1	1	1				4
Health Net Salud y Mas Region 2			1					1
Health Net SmartCare Region 3		1						1
Kaiser Region 2		3	8		1	2	1	15
Kaiser Region 3			1					1
PERS Choice OOS						1	1	2
PERS Choice Region 2						1		1
PERS Choice Region 3						1	1	2
PERSCare Region 1				1				1
PERSCare Region 2							1	1
PERSCare Region 3						1		1
UHC Region 2		2	2			2	2	8
UHC Region 3						1		1
Waived Coverage	1							1
Total	3	9	15	3	1	9	6	46



Supporting Information

(Continued)

Section 2 - Summary of Retiree Benefit Provisions

OPEB provided: The District reported to us that the only OPEB provided is medical coverage.

Access to coverage: Medical coverage is currently provided through CalPERS as permitted under the Public Employees' Medical and Hospital Care Act (PEMHCA). This coverage requires the employee to satisfy the requirements for retirement under CalPERS: either (a) attainment of age 50 (age 52, for miscellaneous PEPRA employees) with 5 years of State or public agency service or (b) an approved disability retirement.

The employee must begin his or her **pension benefit** within 120 days of terminating employment with the District to be eligible to continue medical coverage through the District and be entitled to the benefits described below. If an eligible employee is not already enrolled in the medical plan, he or she may enroll within 60 days of retirement, during any future open enrollment period or with a qualifying life event. In other words, it is the timing of initiating pension benefits and not timing of enrollment in the medical program which determines whether the retiree qualifies for lifetime medical coverage and any benefits defined in the PEMHCA resolution. Once eligible, coverage may be continued at the retiree's option for his or her lifetime. A surviving spouse and other eligible dependents may also continue coverage.

Retiree medical benefits provided: The District maintains a PEMHCA resolution which currently provides for the agency to contribute 100% of medical premiums for the retiree, spouse and other eligible covered dependents up to a stated monthly maximum. Retirees pay the remainder of the premium, if any, in excess of this amount. The maximum monthly benefit amounts in effect during the term of the current MOU are:

Calendar Year	District-Paid Maximum
2020	\$ 1,875
2021	\$ 1,875
2022	\$ 1,875
2023	\$ 1,875

Premium rates: The 2021 CalPERS monthly medical plan rates in Region 2 are shown in the table below. If different rates apply where the member resides outside of this area, those rates are reflected in the valuation, but not listed here. The CalPERS administration fee is assumed to be expensed each year and has not been projected as an OPEB liability in this valuation.

Region 2 2021 Health Plan Rates						
Plan	Actives and Pre-Med Retirees			Medicare Eligible Retirees		
	Ee Only	Ee & 1	Ee & 2+	Ee Only	Ee & 1	Ee & 2+
Anthem Select HMO	\$ 674.69	\$ 1,349.38	\$ 1,754.19	\$ 383.37	\$ 766.74	\$ 1,171.55
Anthem Traditional HMO	1,046.04	2,092.08	2,719.70	383.37	766.74	1,394.36
Blue Shield Access+ HMO	938.96	1,877.92	2,441.30	<i>Not Available</i>		
Health Net Salud y Más HMO	458.66	917.32	1,192.52	<i>Not Available</i>		
Kaiser HMO	669.77	1,339.54	1,741.40	324.48	648.96	1,050.82
PERS Choice PPO	783.19	1,566.38	2,036.29	349.97	699.94	1,169.85
PERSCare PPO	1,115.68	2,231.36	2,900.77	381.25	762.50	1,431.91
UnitedHealthcare HMO	723.84	1,447.68	1,881.98	311.56	623.12	1,057.42



Supporting Information

(Continued)

Section 3 - Actuarial Methods and Assumptions

The ultimate real cost of an employee benefit plan is the value of all benefits and other expenses of the plan over its lifetime. These payments depend only on the terms of the plan and the administrative arrangements adopted. The actuarial assumptions are used to estimate the cost of these benefits; the funding method spreads the expected costs on a level basis over the life of the plan.

Important Dates

Fiscal Year End	June 30, 2022
GASB 75 Measurement Date	Last day of the current fiscal year (June 30, 2021)
Valuation Date	June 30, 2021

Valuation Methods

Funding Method	Entry Age Normal Cost, level percent of pay
Asset Valuation Method	Market value of assets
Participants Valued	Only current active employees and retired participants and covered dependents are valued. No future entrants are considered in this valuation.

Development of Age-related Medical Premiums

Actual premium rates for retirees and their spouses were adjusted to an age-related basis by applying medical claim cost factors developed from the data presented in the report, "Health Care Costs – From Birth to Death", sponsored by the Society of Actuaries. A description of the use of claims cost curves can be found in MacLeod Watts's Age Rating Methodology provided in Addendum 2 to this report.

Monthly baseline premium costs were set equal to the active single premiums shown in the rate chart in Section 2. Representative claims costs derived from the dataset provided by CalPERS are shown on the following page.



Supporting Information (Continued)

Section 3 - Actuarial Methods and Assumptions

Region	Medical Plan	Expected Monthly Claims by Medical Plan for Selected Ages - Male											
		Non-Medicare Retirees					Medicare Retirees						
		50	53	56	59	62	65	70	75	80	85	90	95
Region 1	PERSCare PPO	\$ 1,009	\$ 1,189	\$ 1,381	\$ 1,583	\$ 1,800	\$ 322	\$ 361	\$ 392	\$ 411	\$ 405	\$ 387	\$ 384
Region 2	Anthem Select HMO	724	854	992	1,137	1,293	327	367	398	418	412	393	390
	Anthem Traditional HMO	992	1,170	1,359	1,557	1,770	327	367	398	418	412	393	390
	Blue Shield Access+ HMO	861	1,015	1,179	1,351	1,536	<i>Plan not available to Medicare retirees</i>						
	Health Net Salud y Más HMO	556	656	762	873	992	<i>Plan not available to Medicare retirees</i>						
	Kaiser HMO	674	794	922	1,057	1,202	279	313	340	356	352	336	333
	PERS Choice PPO	679	801	930	1,066	1,212	299	335	364	381	376	359	356
	PERSCare PPO	876	1,032	1,199	1,374	1,562	322	361	392	411	405	387	384
	UnitedHealthcare HMO	751	886	1,029	1,180	1,341	268	300	326	342	337	322	320
Region 3	Blue Shield Access+ HMO	779	919	1,067	1,223	1,390	<i>Plan not available to Medicare retirees</i>						
	Health Net SmartCare HMO	720	849	986	1,130	1,285	<i>Plan not available to Medicare retirees</i>						
	Kaiser HMO	681	803	932	1,069	1,215	279	313	340	356	352	336	333
	PERS Choice PPO	676	797	926	1,061	1,206	299	335	364	381	376	359	356
	PERSCare PPO	863	1,017	1,181	1,354	1,539	322	361	392	411	405	387	384
	UnitedHealthcare HMO	724	854	991	1,136	1,292	268	300	326	342	337	322	320
Out of State	PERS Choice PPO	508	599	696	798	907	299	335	364	381	376	359	356

Region	Medical Plan	Expected Monthly Claims by Medical Plan for Selected Ages - Female											
		Non-Medicare Retirees					Medicare Retirees						
		50	53	56	59	62	65	70	75	80	85	90	95
Region 1	PERSCare PPO	\$ 1,250	\$ 1,373	\$ 1,477	\$ 1,596	\$ 1,760	\$ 309	\$ 349	\$ 378	\$ 395	\$ 398	\$ 390	\$ 384
Region 2	Anthem Select HMO	898	986	1,061	1,146	1,264	314	355	384	401	405	396	390
	Anthem Traditional HMO	1,229	1,350	1,453	1,570	1,731	314	355	384	401	405	396	390
	Blue Shield Access+ HMO	1,067	1,172	1,261	1,362	1,502	<i>Plan not available to Medicare retirees</i>						
	Health Net Salud y Más HMO	689	757	814	880	970	<i>Plan not available to Medicare retirees</i>						
	Kaiser HMO	835	917	986	1,066	1,175	268	303	328	342	345	338	333
	PERS Choice PPO	841	924	994	1,074	1,185	286	324	350	366	369	362	356
	PERSCare PPO	1,085	1,192	1,282	1,386	1,527	309	349	378	395	398	390	384
	UnitedHealthcare HMO	931	1,023	1,101	1,189	1,311	257	290	315	328	332	325	319
Region 3	Blue Shield Access+ HMO	965	1,060	1,141	1,233	1,359	<i>Plan not available to Medicare retirees</i>						
	Health Net SmartCare HMO	892	980	1,054	1,139	1,256	<i>Plan not available to Medicare retirees</i>						
	Kaiser HMO	844	927	997	1,077	1,188	268	303	328	342	345	338	333
	PERS Choice PPO	837	920	990	1,069	1,179	286	324	350	366	369	362	356
	PERSCare PPO	1,069	1,174	1,263	1,365	1,505	309	349	378	395	398	390	384
	UnitedHealthcare HMO	897	985	1,060	1,146	1,263	257	290	315	328	332	325	319
Out of State	PERS Choice PPO	630	692	744	804	886	286	324	350	366	369	362	356



Supporting Information
(Continued)

Section 3 - Actuarial Methods and Assumptions

Economic Assumptions

Long Term Return on Assets/
Discount Rate for Accounting
And for Plan Funding

6.75% as of June 30, 2021, and 6.75% as of June 30, 2020
net of plan investment expenses

General Inflation Rate

2.5% per year

Salary Increase

3.0% per year; since benefits do not depend on salary, this is used to allocate the cost of benefits between service years.

Healthcare Trend

Medical plan premiums and claims costs by age are assumed to increase once each year. Increases over the prior year's levels were derived using the Getzen model and are assumed to be effective on the dates shown below:

Effective January 1	Premium Increase	Effective January 1	Premium Increase
2022	5.7%	2061-2066	4.8%
2023	5.6%	2067	4.7%
2024	5.5%	2068	4.6%
2025-2026	5.4%	2069	4.5%
2027-2029	5.3%	2070-2071	4.4%
2030-2051	5.2%	2072	4.3%
2052	5.1%	2073-2074	4.2%
2053-2055	5.0%	2075	4.1%
2056-2060	4.9%	2076 & later	4.0%

The healthcare trend shown above was developed using the Getzen Model 2021_b published by the Society of Actuaries using the following settings: CPI 2.5%; Real GDP Growth 1.5%; Excess Medical Growth 1.2%; Expected Health Share of GDP in 2028 20.3%; Resistance Point 25%; Year after which medical growth is limited to growth in GDP 2075.

Employer Cost Sharing

Maximum District-paid benefits are assumed to remain fixed for 2022 and 2023, and then increase by 15% for 2024. Increases for years 2025 and later are assumed to increase at the Healthcare Trend rates shown above.

Medicare Eligibility

Absent contrary data, all individuals are assumed to be eligible for Medicare Parts A and B at age 65.



Supporting Information

(Continued)

Section 3 - Actuarial Methods and Assumptions

Participant Election Assumptions

Participation Rate	<p><i>Current actives:</i> 95% are assumed to continue their current plan election in retirement. If not currently enrolled, the employee is assumed to elect coverage in the Kaiser Region 2 plan.</p> <p><i>Retired participants:</i> Existing medical plan elections are assumed to be continued until retiree's death.</p>
Spouse Coverage	<p><i>Active employees:</i> 75% are assumed to be married and elect coverage for their spouse in retirement. Surviving spouses are assumed to retain coverage until their death. Husbands are assumed to be 3 years older than their wives.</p> <p><i>Retired participants:</i> Existing elections for spouse coverage are assumed to be continued until the spouse's death. Actual spouse ages are used, where known; if not, husbands are assumed to be 3 years older than their wives.</p> <p>Spouse gender is assumed to be the opposite of the employee.</p>
Dependent Coverage	<p>An existing election for coverage of dependent children for current active employees and current retirees is assumed to continue until the youngest child is age 26.</p>

Demographic Assumptions

Demographic actuarial assumptions used in this valuation are based on the 2017 experience study of the California Public Employees Retirement System using data from 1997 to 2015, except for a different basis used to project future mortality improvements. Rates for selected age and service are shown below and on the following pages. The representative mortality rates were the published CalPERS rates, adjusted to back out 15 years of Scale MP 2016 to central year 2015, then projected as described below.

Mortality Improvement MacLeod Watts Scale 2020 applied generationally from 2015
(see Addendum 3)

Mortality Before Retirement
(before improvement applied)

CalPERS Public Agency Miscellaneous Non- Industrial Deaths		
Age	Male	Female
15	0.00019	0.00004
20	0.00027	0.00008
30	0.00044	0.00018
40	0.00070	0.00040
50	0.00135	0.00090
60	0.00288	0.00182
70	0.00693	0.00438
80	0.01909	0.01080



Supporting Information
(Continued)

Section 3 - Actuarial Methods and Assumptions

Mortality After Retirement
(before improvement applied)

Healthy Lives			Disabled Miscellaneous		
CalPERS Public Agency Miscellaneous, Police & Fire Post Retirement Mortality			CalPERS Public Agency Disabled Miscellaneous Post-Retirement Mortality		
Age	Male	Female	Age	Male	Female
40	0.00070	0.00040	20	0.00027	0.00008
50	0.00431	0.00390	30	0.00044	0.00018
60	0.00758	0.00524	40	0.00070	0.00040
70	0.01490	0.01044	50	0.01371	0.01221
80	0.04577	0.03459	60	0.02447	0.01545
90	0.14801	0.11315	70	0.03737	0.02462
100	0.35053	0.30412	80	0.07218	0.05338
110	1.00000	1.00000	90	0.16585	0.14826

Termination Rates

These rates reflect the assumed probability that an employee will leave the District in the next 12 months for reasons other than a service or disability retirement or death.

Miscellaneous Employees: Sum of Vested Terminated & Refund Rates From CalPERS Experience Study Report Issued December 2017						
Attained Age	Years of Service					
	0	3	5	10	15	20
15	0.1812	0.0000	0.0000	0.0000	0.0000	0.0000
20	0.1742	0.1193	0.0654	0.0000	0.0000	0.0000
25	0.1674	0.1125	0.0634	0.0433	0.0000	0.0000
30	0.1606	0.1055	0.0615	0.0416	0.0262	0.0000
35	0.1537	0.0987	0.0567	0.0399	0.0252	0.0184
40	0.1468	0.0919	0.0519	0.0375	0.0243	0.0176
45	0.1400	0.0849	0.0480	0.0351	0.0216	0.0168

Service Retirement Rates

Each rate in these tables reflects the assumed probability that an employee with that age and service will take a service retirement from the District in the next 12 months.

The following miscellaneous retirement formulas apply:

If hired prior to 7/1/2009:

3% @ 60

Miscellaneous Employees: 3.0% at 60 formula From CalPERS Experience Study Report Issued December 2017						
Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0130	0.0190	0.0260	0.0420	0.0380	0.0640
55	0.0400	0.0520	0.0640	0.0850	0.0950	0.1200
60	0.0890	0.1060	0.1230	0.1800	0.2260	0.3160
65	0.2000	0.2420	0.2830	0.3300	0.3000	0.3420
70	0.2200	0.2550	0.2910	0.3260	0.3580	0.3880
75 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000



Supporting Information
(Continued)

Section 3 - Actuarial Methods and Assumptions

Service Retirement Rates
(continued)

If hired on or after 7/1/2009, with prior PERS Service: 2% @ 55

Miscellaneous Employees: 2% at 55 formula						
From CalPERS Experience Study Report Issued December 2017						
Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0080	0.0130	0.0180	0.0210	0.0220	0.0330
55	0.0400	0.0400	0.0560	0.0930	0.1090	0.1540
60	0.0580	0.0750	0.0930	0.1260	0.1430	0.1690
65	0.1450	0.1730	0.2010	0.2330	0.2660	0.2890
70	0.1500	0.1710	0.1920	0.2390	0.3040	0.3300
75 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

If hired on or after 1/1/2013, PEPR: 2% @ 62

Miscellaneous "PEPRA" Employees: 2% at 62 formula						
From CalPERS Experience Study Report Issued December 2017						
Current Age	Years of Service					
	5	10	15	20	25	30
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
55	0.0100	0.0190	0.0280	0.0360	0.0610	0.0960
60	0.0310	0.0510	0.0710	0.0910	0.1110	0.1380
65	0.1080	0.1410	0.1730	0.2060	0.2390	0.3000
70	0.1200	0.1560	0.1930	0.2290	0.2650	0.3330
75 & over	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Disability Retirement Rates

CalPERS Public Agency Miscellaneous Disability From Dec 2017 Experience Study Report		
Age	Male	Female
20	0.00017	0.00010
25	0.00017	0.00010
30	0.00019	0.00024
35	0.00039	0.00071
40	0.00102	0.00135
45	0.00151	0.00188
50	0.00158	0.00199
55	0.00158	0.00149
60	0.00153	0.00105



Supporting Information

(Continued)

Section 3 - Actuarial Methods and Assumptions

Changes in assumptions or methods since the prior Measurement Date

General inflation rate	Decreased from 2.75% to 2.5% per year
Salary increase	Decreased from 3.25% to 3.0% per year
Mortality improvement	Updated from MacLeod Watts Scale 2018 to MacLeod Watts Scale 2020. See Addendum 3 for details.
Medical trend	Updated to the Getzen model which was published by the Society of Actuaries
Increase in Maximum District Paid benefits	We reflected the terms of the current employment agreements which provide for no increase in maximum District paid benefits through June 30, 2024. At that time (July 1, 2024), we assumed the benefit cap would increase by 15% immediately; future years' increases are assumed to follow the healthcare trend assumption described above.
Implicit Subsidy for Medicare retirees	We applied age-based premiums and developed an implicit subsidy liability for retirees enrolled in Medicare plans, following updated guidance provided in Actuarial Standard of Practice #6.



Addendum 1: Important Background Information

General Types of Other Post-Employment Benefits (OPEB)

Post-employment benefits other than pensions (OPEB) comprise a part of compensation that employers offer for services received. The most common OPEB are medical, prescription drug, dental, vision, and/or life insurance coverage. Other OPEB may include outside group legal, long-term care, or disability benefits outside of a pension plan. OPEB does not generally include COBRA, vacation, sick leave (unless converted to defined benefit OPEB), or other direct retiree payments.

A direct employer payment toward the cost of OPEB benefits is referred to as an “explicit subsidy”. In addition, if claims experience of employees and retirees are pooled when determining premiums, retiree premiums are based on a pool of members which, on average, are younger and healthier. For certain types of coverage such as medical insurance, this results in an “implicit subsidy” of retiree premiums by active employee premiums since the retiree premiums are lower than they would have been if retirees were insured separately. GASB 75 and Actuarial Standards of Practice generally require that an implicit subsidy of retiree premium rates be valued as an OPEB liability.

Expected retiree claims		
Premium charged for retiree coverage		<i>Covered by higher active premiums</i>
Retiree portion of premium	Agency portion of premium Explicit subsidy	Implicit subsidy

This chart shows the sources of funds needed to cover expected medical claims for pre-Medicare retirees. The portion of the premium paid by the Agency does not impact the amount of the implicit subsidy.

Valuation Process

The valuation was based on employee census data and benefits provided by the District. A summary of the employee data is provided in Section 1 and a summary of the benefits provided under the Plan is provided in Section 2. While individual employee records have been reviewed to verify that they are reasonable in various respects, the data has not been audited and we have otherwise relied on the District as to its accuracy. The valuation was also based on the actuarial methods and assumptions described in Section 3.

In developing the projected benefit values and liabilities, we first determine an expected premium or benefit stream over the employee’s future retirement. Benefits may include both direct employer payments (explicit subsidies) and/or an implicit subsidy, arising when retiree premiums are expected to be subsidized by active employee premiums. The projected benefit streams reflect assumed trends in the cost of those benefits and assumptions as to the expected date(s) when benefits will end. We then apply assumptions regarding:

- The probability that each individual employee will or will not continue in service to receive benefits.
- The probability of when such retirement will occur for each retiree, based on current age, service and employee type; and
- The likelihood that future retirees will or will not elect retiree coverage (and benefits) for themselves and/or their dependents.



Important Background Information

(Continued)

We then calculate a present value of these benefits by discounting the value of each future expected benefit payment, multiplied by the assumed expectation that it will be paid, back to the valuation date using the discount rate. These benefit projections and liabilities have a very long time horizon. The final payments for currently active employees may not be made for many decades.

The resulting present value for each employee is allocated as a level percent of payroll each year over the employee's career using the entry age normal cost method and the amounts for each individual are then summed to get the results for the entire plan. This creates a cost expected to increase each year as payroll increases. Amounts attributed to prior fiscal years form the "Total OPEB Liability". The OPEB cost allocated for active employees in the current year is referred to as "Service Cost".

Where contributions have been made to an irrevocable OPEB trust, the accumulated value of trust assets ("Fiduciary Net Position") is applied to offset the "Total OPEB Liability", resulting in the "Net OPEB Liability". If a plan is not being funded, then the Net OPEB Liability is equal to the Total OPEB Liability.

It is important to remember that an actuarial valuation is, by its nature, a projection of one possible future outcome based on many assumptions. To the extent that actual experience is not what we assumed, future results will differ. Some possible sources of future differences may include:

- A significant change in the number of covered or eligible plan members
- A significant increase or decrease in the future premium rates
- A change in the subsidy provided by the Agency toward retiree premiums
- Longer life expectancies of retirees
- Significant changes in expected retiree healthcare claims by age, relative to healthcare claims for active employees and their dependents
- Higher or lower returns on plan assets or contribution levels other than were assumed, and/or
- Changes in the discount rate used to value the OPEB liability



Important Background Information

(Continued)

Requirements of GASB 75

The Governmental Accounting Standards Board (GASB) issued GASB Statement No. 75, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. This Statement establishes standards for the measurement, recognition, and disclosure of OPEB expense and related liabilities (assets), note disclosures, and, required supplementary information (RSI) in the financial reports of state and local governmental employers.

Important Dates

GASB 75 requires that the information used for financial reporting falls within prescribed timeframes. Actuarial valuations of the total OPEB liability are generally required at least every two years. If a valuation is not performed as of the Measurement Date, then liabilities are required to be based on roll forward procedures from a prior valuation performed no more than 30 months and 1 day prior to the most recent year-end. In addition, the net OPEB liability is required to be measured as of a date no earlier than the end of the prior fiscal year (the "Measurement Date").

Recognition of Plan Changes and Gains and Losses

Under GASB 75, gains and losses related to changes in Total OPEB Liability and Fiduciary Net Position are recognized in OPEB expense systematically over time.

- *Timing of recognition:* Changes in the Total OPEB Liability relating to changes in plan benefits are recognized immediately (fully expensed) in the year in which the change occurs. Gains and Losses are amortized, with the applicable period based on the type of gain or loss. The first amortized amounts are recognized in OPEB expense for the year the gain or loss occurs. The remaining amounts are categorized as deferred outflows and deferred inflows of resources related to OPEB and are to be recognized in future OPEB expense.
- *Deferred recognition periods:* These periods differ depending on the source of the gain or loss.

Difference between projected
and actual trust earnings:

5 year straight-line recognition

All other amounts:

Straight-line recognition over the expected average remaining service lifetime (EARSL) of all members that are provided with benefits, determined as of the beginning of the Measurement Period. In determining the EARSL, all active, retired and inactive (vested) members are counted, with the latter two groups having 0 remaining service years.



Important Background Information

(Continued)

Implicit Subsidy Plan Contributions

An implicit subsidy occurs when expected retiree claims exceed the premiums charged for retiree coverage. When this occurs, we expect part of the premiums paid for active employees to cover a portion of retiree claims. This transfer represents the current year's "implicit subsidy". Because GASB 75 treats payments to an irrevocable trust *or directly to the insurer* as employer contributions, each year's implicit subsidy is treated as a contribution toward the payment of retiree benefits.

The following hypothetical example illustrates this treatment:

Hypothetical Illustration of Implicit Subsidy Recognition	For Active Employees	For Retired Employees
<i>Prior to Implicit Subsidy Adjustment</i>		
Premiums Paid by Agency During Fiscal Year	\$ 411,000	\$ 48,000
Accounting Treatment	Compensation Cost for Active Employees	Contribution to Plan & Benefits Paid from Plan
<i>After Implicit Subsidy Adjustment</i>		
Premiums Paid by Agency During Fiscal Year	\$ 411,000	\$ 48,000
Implicit Subsidy Adjustment	(23,000)	23,000
Accounting Cost of Premiums Paid	\$ 388,000	\$ 71,000
Accounting Treatment Impact	Reduces Compensation Cost for Active Employees	Increases Contributions to Plan & Benefits Paid from Plan

The example above shows that total payments toward active and retired employee healthcare premiums is the same, but for accounting purposes part of the total is shifted from actives to retirees. This shifted amount is recognized as an OPEB contribution and reduces the current year's premium expense for active employees.



Important Background Information

(Continued)

Discount Rate

When the financing of OPEB liabilities is on a pay-as-you-go basis, GASB 75 requires that the discount rate used for valuing liabilities be based on the yield or index rate 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). When a plan sponsor makes regular, sufficient contributions to a trust in order to prefund the OPEB liabilities, GASB 75 allows use of a rate up to the expected rate of return of the trust. Therefore, prefunding has an advantage of potentially being able to report overall lower liabilities due to future expected benefits being discounted at a higher rate.

Actuarial Funding Method and Assumptions

The “ultimate real cost” of an employee benefit plan is the value of all benefits and other expenses of the plan over its lifetime. These expenditures are dependent only on the terms of the plan and the administrative arrangements adopted, and as such are not affected by the actuarial funding method.

The actuarial funding method attempts to spread recognition of these expected costs on a level basis over the life of the plan, and as such sets the “incidence of cost”. GASB 75 specifically requires that the actuarial present value of projected benefit payments be attributed to periods of employee service using the Entry Age Actuarial Cost Method, with each period’s service cost determined as a level percentage of pay.

The results of this report may not be appropriate for other purposes, where other assumptions, methodology and/or actuarial standards of practice may be required or more suitable.



Addendum 2: MacLeod Watts Age Rating Methodology

Both accounting standards (e.g. GASB 75) and actuarial standards (e.g. ASOP 6) require that expected retiree claims, not just premiums paid, be reflected in most situations where an actuary is calculating retiree healthcare liabilities. Unfortunately, the actuary is often required to perform these calculations without any underlying claims information. In most situations, the information is not available, but even when available, the information may not be credible due to the size of the group being considered.

Actuaries have developed methodologies to approximate healthcare claims from the premiums being paid by the plan sponsor. Any methodology requires adopting certain assumptions and using general studies of healthcare costs as substitutes when there is a lack of credible claims information for the specific plan being reviewed.

Premiums paid by sponsors are often uniform for all employee and retiree ages and genders, with a drop in premiums for those participants who are Medicare-eligible. While the total premiums are expected to pay for the total claims for the insured group, on average, the premiums charged would not be sufficient to pay for the claims of older insureds and would be expected to exceed the expected claims of younger insureds. An age-rating methodology takes the typically uniform premiums paid by plan sponsors and spreads the total premium dollars to each age and gender intended to better approximate what the insurer might be expecting in actual claims costs at each age and gender.

The process of translating premiums into expected claims by age and gender generally follows the steps below.

1. *Obtain or Develop Relative Medical Claims Costs by Age, Gender, or other categories that are deemed significant.* For example, a claims cost curve might show that, if a 50 year old male has \$1 in claims, then on average a 50 year old female has claims of \$1.25, a 30 year male has claims of \$0.40, and an 8 year old female has claims of \$0.20. The claims cost curve provides such relative costs for each age, gender, or any other significant factor the curve might have been developed to reflect. Section 3 provides the source of information used to develop such a curve and shows sample relative claims costs developed for the plan under consideration.
2. *Obtain a census of participants, their chosen medical coverage, and the premium charged for their coverage.* An attempt is made to find the group of participants that the insurer considered in setting the premiums they charge for coverage. That group includes the participant and any covered spouses and children. When information about dependents is unavailable, assumptions must be made about spouse age and the number and age of children represented in the population. These assumptions are provided in Section 3.
3. *Spread the total premium paid by the group to each covered participant or dependent based on expected claims.* The medical claims cost curve is used to spread the total premium dollars paid by the group to each participant reflecting their age, gender, or other relevant category. After this step, the actuary has a schedule of expected claims costs for each age and gender for the current premium year. It is these claims costs that are projected into the future by medical cost inflation assumptions when valuing expected future retiree claims.

The methodology described above is dependent on the data and methodologies used in whatever study might be used to develop claims cost curves for any given plan sponsor. These methodologies and assumptions can be found in the referenced paper cited as a source in the valuation report.



Addendum 3: MacLeod Watts Mortality Projection Methodology

Actuarial standards of practice (e.g., ASOP 35, Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations, and ASOP 6, Measuring Retiree Group Benefits Obligations) indicate that the actuary should reflect the effect of mortality improvement (i.e., longer life expectancies in the future), both before and after the measurement date. The development of credible mortality improvement rates requires the analysis of large quantities of data over long periods of time. Because it would be extremely difficult for an individual actuary or firm to acquire and process such extensive amounts of data, actuaries typically rely on large studies published periodically by organizations such as the Society of Actuaries or Social Security Administration.

As noted in a recent actuarial study on mortality improvement, key principles in developing a credible mortality improvement model would include the following:

- (1) Short-term mortality improvement rates should be based on recent experience.
- (2) Long-term mortality improvement rates should be based on expert opinion.
- (3) Short-term mortality improvement rates should blend smoothly into the assumed long-term rates over an appropriate transition period.

The **MacLeod Watts Scale 2020** was developed from a blending of data and methodologies found in two published sources: (1) the Society of Actuaries Mortality Improvement Scale MP-2019 Report, published in October 2019 and (2) the demographic assumptions used in the 2019 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, published April 2019.

MacLeod Watts Scale 2020 is a two-dimensional mortality improvement scale reflecting both age and year of mortality improvement. The underlying base scale is Scale MP-2019 which has two segments – (1) historical improvement rates for the period 1951-2015 and (2) an estimate of future mortality improvement for years 2016-2018 using the Scale MP-2019 methodology but utilizing the assumptions obtained from Scale MP-2015. The MacLeod Watts scale then transitions from the 2018 improvement rate to the Social Security Administration (SSA) Intermediate Scale linearly over the 10-year period 2019-2028. After this transition period, the MacLeod Watts Scale uses the constant mortality improvement rate from the SSA Intermediate Scale from 2028-2042. The SSA's Intermediate Scale has a final step down in 2043 which is reflected in the MacLeod Watts scale for years 2043 and thereafter. Over the ages 95 to 115, the SSA improvement rate is graded to zero.

Scale MP-2019 can be found at the SOA website and the projection scales used in the 2019 Social Security Administrations Trustees Report at the Social Security Administration website.



Glossary

Actuarial Funding Method – A procedure which calculates the actuarial present value of plan benefits and expenses, and allocates these expenses to time periods, typically as a normal cost and an actuarial accrued liability

Actuarial Present Value of Projected Benefits (APVPB) – The amount presently required to fund all projected plan benefits in the future. This value is determined by discounting the future payments by an appropriate interest rate and the probability of nonpayment.

CalPERS – Many state governments maintain a public employee retirement system; CalPERS is the California program, covering all eligible state government employees as well as other employees of other governments within California who have elected to join the system

Defined Benefit (DB) – A pension or OPEB plan which defines the monthly income or other benefit which the plan member receives at or after separation from employment

Deferred Contributions – When an employer makes contributions after the measurement date and prior to the fiscal year end, recognition of these contributions is deferred to a subsequent accounting period by creating a deferred resource. We refer to these contributions as Deferred Contributions.

Defined Contribution (DC) – A pension or OPEB plan which establishes an individual account for each member and specifies how contributions to each active member's account are determined and the terms of distribution of the account after separation from employment

Discount Rate - Interest rate used to discount future potential benefit payments to the valuation date. Under GASB 75, if a plan is prefunded, then the discount rate is equal to the expected trust return. If a plan is not prefunded (pay-as-you-go), then the rate of return is based on a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

Expected Average Remaining Service Lifetime (EARSL) – Average of the expected remaining service lives of all employees that are provided with benefits through the OPEB plan (active employees and inactive employees), beginning in the current period

Entry Age Actuarial Cost Method – An actuarial funding method where, for each individual, the actuarial present value of benefits is levelly spread over the individual's projected earnings or service from entry age to the last age at which benefits can be paid

Explicit Subsidy – The projected dollar value of future retiree healthcare costs expected to be paid directly by the Employer, e.g., the Employer's payment of all or a portion of the monthly retiree premium billed by the insurer for the retiree's coverage

Fiduciary Net Position – The value of trust assets used to offset the Total OPEB Liability to determine the Net OPEB Liability.

Government Accounting Standards Board (GASB) – A private, not-for-profit organization which develops generally accepted accounting principles (GAAP) for U.S. state and local governments; like FASB, it is part of the Financial Accounting Foundation (FAF), which funds each organization and selects the members of each board

Health Care Trend – The assumed rate(s) of increase in future dollar values of premiums or healthcare claims, attributable to increases in the cost of healthcare; contributing factors include medical inflation, frequency or extent of utilization of services and technological developments.



Glossary
(Continued)

Implicit Subsidy – The projected difference between future retiree claims and the premiums to be charged for retiree coverage; this difference results when the claims experience of active and retired employees are pooled together and a ‘blended’ group premium rate is charged for both actives and retirees; a portion of the active employee premiums subsidizes the retiree premiums.

Net OPEB Liability (NOL) – The liability to employees for benefits provided through a defined benefit OPEB. Only assets administered through a trust that meet certain criteria may be used to reduce the Total OPEB Liability.

Net Position – The Impact on Statement of Net Position is the Net OPEB Liability adjusted for deferred resource items

OPEB Expense – The OPEB expense reported in the Agency’s financial statement. OPEB expense is the annual cost of the plan recognized in the financial statements.

Other Post-Employment Benefits (OPEB) – Post-employment benefits other than pension benefits, most commonly healthcare benefits but also including life insurance if provided separately from a pension plan

Pay-As-You-Go (PAYGO) – Contributions to the plan are made at about the same time and in about the same amount as benefit payments and expenses coming due

Plan Assets – The value of cash and investments considered as ‘belonging’ to the plan and permitted to be used to offset the AAL for valuation purposes. To be considered a plan asset, GASB 75 requires (a) contributions to the OPEB plan be irrevocable, (b) OPEB assets to dedicated to providing OPEB benefit to plan members in accordance with the benefit terms of the plan, and (c) plan assets be legally protected from creditors, the OPEB plan administrator and the plan members.

Public Agency Miscellaneous (PAM) – Non-safety public employees.

Select and Ultimate – Actuarial assumptions which contemplate rates which differ by year initially (the select period) and then stabilize at a constant long-term rate (the ultimate rate)

Service Cost – Total dollar value of benefits expected to be earned by plan members in the current year, as assigned by the actuarial funding method; also called normal cost

Total OPEB Liability (TOL) – Total dollars required to fund all plan benefits attributable to service rendered as of the valuation date for current plan members and vested prior plan members; a subset of “Actuarial Present Value”

Vesting – As defined by the plan, requirements which when met make a plan benefit nonforfeitable on separation of service before retirement eligibility

