

# MacLeod Watts

January 23, 2023

Chief Scott Lindgren  
Fire Chief  
Tahoe Douglas Fire Protection District  
PO Box 919  
Zephyr Cove, NV 89448

Re: GASB 75 Actuarial Report for the Fiscal Year Ending June 30, 2022  
Other Postemployment Benefits of the **Tahoe Douglas Fire Protection District**

Dear Chief Lindgren:

Enclosed is our actuarial report providing information relating to the other post-employment benefit (OPEB) liabilities for Tahoe Douglas Fire Protection District. **This report relates only to liabilities for current retirees and current employees projected to retiree with benefits from the Tahoe Douglas Fire Protection District Retiree Healthcare Plan (District RHP).**

The primary purposes of this report are to:

1. Recalculate liabilities for each plan as of December 31, 2021, in accordance with GASB 75's biennial valuation requirement.
2. 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.
3. Develop Actuarially Determined Contributions levels for prefunding plan benefits. The exhibits presented in this report reflect the assumption that the District will continue prefunding this OPEB liability by contributing 100% or more of the Actuarially Determined Contribution on average over a rolling five-year period.

The valuation results are based on the employee data and details on plan benefits provided to us by the District. As with any analysis, the soundness of the report is dependent on the inputs. We encourage you to review the information shown in the report to be comfortable that it matches your records.

We appreciate the opportunity to work on this analysis and acknowledge the efforts of District staff 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*

Enclosure



*Tahoe Douglas Fire Protection District*  
Retiree Healthcare Plan

Actuarial Valuation of Other  
Post-Employment Benefit Programs  
As of December 31, 2021

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

Submitted January 2023

MacLeod Watts

## Table of Contents

A.	Executive Summary .....	1
	OPEB Obligations of the District .....	1
	OPEB Funding Policy .....	2
	Actuarial Assumptions .....	2
	Important Dates Used in the Valuation .....	2
	Significant Results and Differences from the Prior Valuation .....	3
	Impact on Statement of Net Position and OPEB Expense for Fiscal Year Ending 2022 .....	3
	Important Notices .....	3
B.	Valuation Process .....	4
C.	Valuation Results as of December 31, 2021 .....	6
D.	Accounting Information (GASB 75) .....	9
	Components of Net Position and Expense .....	9
	Change in Net Position During the Fiscal Year .....	10
	Recognition Period or Deferred Resources .....	13
	Deferred Resources as of Fiscal Year End and Expected Future Recognition .....	13
	Sensitivity of Liabilities to Changes in the Discount Rate and Healthcare Cost Trend Rate .....	14
	Schedule of Changes in the District's Net OPEB Liability and Related Ratios .....	15
	Schedule of Contributions .....	16
	Detail of Changes to Net Position .....	17
	Schedule of Deferred Outflows and Inflows of Resources .....	18
	District Contributions to the Plan .....	19
	Projected Benefit Payments (15-year projection) .....	20
	Sample Journal Entries .....	21
E.	Funding Information .....	22
F.	Certification .....	25
G.	Supporting Information .....	26
	Section 1 - Summary of Employee Data .....	26
	Section 2 - Summary of Retiree Benefit Provisions .....	28
	Section 3 - Actuarial Methods and Assumptions .....	30
	Addendum 1: Important Background Information .....	38
	Addendum 2: MacLeod Watts Age Rating Methodology .....	42
	Addendum 3: MacLeod Watts Mortality Projection Methodology .....	43
	Glossary .....	44



## A. Executive Summary

This report presents the results of our December 31, 2021, actuarial valuation and other post-employment benefit (OPEB) information relating to the **Tahoe Douglas Fire Protection District Retiree Healthcare Plan (District RHP)**. The purpose of this valuation is to assess the OPEB liabilities of this program and provide disclosure information as required by Statement No. 75 of the Governmental Accounting Standards Board (GASB 75) for the District's fiscal year ending June 30, 2022. A separate GASB 75 report has been prepared for the District's OPEB liability under the Nevada Public Employees' Benefit Plan (PEBP).

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 discuss the valuation results in detail and present various exhibits appropriate for disclosures under GASB 75.

Absent material changes to this program, the results of the December 31, 2021, valuation will be applied to prepare the District's RHP GASB 75 report for the fiscal year ending June 30, 2023. If there are any significant changes before then, a new valuation might be required or appropriate.

### OPEB Obligations of the District

The District provides continuation of health and life insurance coverage to its retiring employees. Access to this coverage 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 pays 100% of the retiree-only medical premiums for a limited period for those retirees who qualify for and enroll in the Early Retirement Incentive Program. After the expiration of these benefits and for all others, the retiree must pay 100% of the premiums to continue coverage. These benefits are described in Supporting Information, 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 District's program, the claims experience of active employees and retirees is co-mingled in setting premium rates for the plans in which District employees and retirees participate.

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

We assumed no implicit liability exists with respect to dental or vision coverage available to retirees, or that it is insignificant.



## Executive Summary (Continued)

### OPEB Funding Policy

The District's 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 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.

District has been and continues to prefund this liability, maintaining a rolling 5-year average contribution greater than 100% of the Actuarially Determined Contributions each year for the District Retiree Healthcare Plan and Trust. With District's approval, the assumed trust rate and discount rate applied in this report is 6.5%, reflecting District's expectation of future return as of the measurement date. For more information, see Expected Return on Trust Assets on page 11.

### 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 the valuation.

### Important Dates Used in the Valuation

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	December 31, 2021
Measurement Period	June 30, 2020, to December 31, 2021
Valuation Date	December 31, 2021



## Executive Summary

(Continued)

### Significant Results and Differences from the Prior Valuation

No were reported to MacLeod Watts since the December 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 the prior valuation were also reflected (referred to as "plan experience"). Investment experience was also reflected, with higher than expected return on trust assets.

The Net OPEB Liability on the current measurement date is lower than that reported one year ago. Section C provides additional information on the impact of the new assumptions and plan experience. Assumption changes are described at the end of Section 3. See *Recognition Period for Deferred Resources* on page 13 for details on how these changes are recognized.

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

The accounting impact of the plan as of the District's fiscal year end June 30, 2022, is shown below.

Items	For Reporting At Fiscal Year Ending June 30, 2022
Total OPEB Liability	\$ 12,713,319
Fiduciary Net Position	15,381,140
<b>Net OPEB Liability</b>	<b>(2,667,821)</b>
Deferred Outflows of Resources	1,765,897
Deferred Inflows of Resources	2,681,763
<b>Impact on Statement of Net Position</b>	<b>\$ (1,751,955)</b>
<i>Net OPEB Liability less Outflows plus Inflows</i>	
<b>OPEB Expense, FYE 6/30/2022</b>	<b>\$ (412,030)</b>

### Important Notices

This report is intended to be used only to present the actuarial information relating to other postemployment benefit liabilities 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.

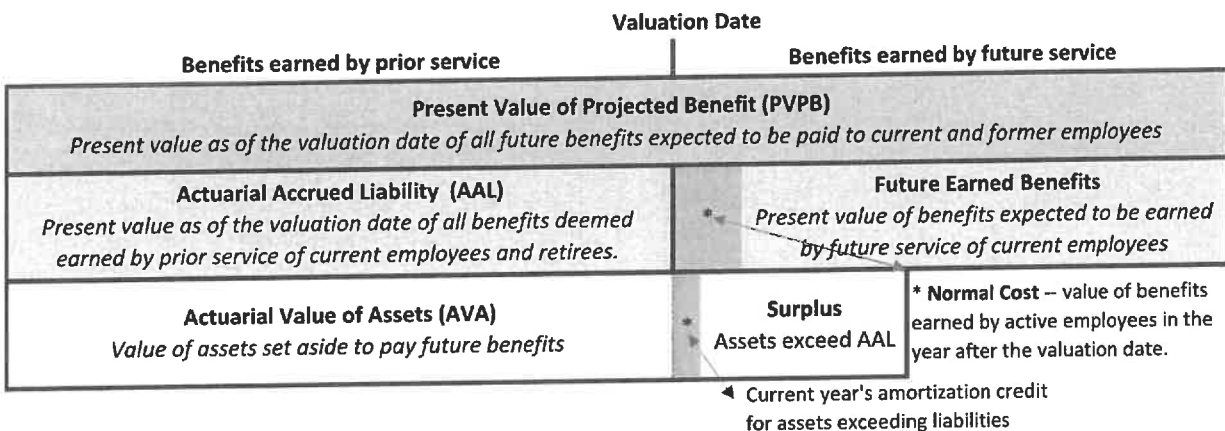


## B. Valuation Process

The December 2021 District RHP valuation has been based on employee census data and benefits initially submitted to us by District in March 2022 and clarified in various related communications. A summary of the employee data is provided in Supporting Information, 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 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.

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. Assumptions regarding the probability that each employee will remain in service to receive benefits and the likelihood the employee will elect coverage for themselves and their dependents are also applied.

We then calculate a present value of these future benefit streams by discounting the value of each future expected employer payment back to the valuation date using the valuation 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 method is the most common used for government funding purposes and the only attribution method allowed for financial reporting under GASB 75.

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



## Valuation Process (Concluded)

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.,  $PVPB = AAL + PVFNC$ ).

### 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 District RHP trust account.

District has and continues to make regular contributions to the trust in order to prefund plan benefits. Trust contributions and earnings accumulate so that the trust can make benefit payments to retirees (or reimburse District for making those payments directly). The difference between the value of trust assets (i.e., the Market Value of Assets), or a smoothed asset value (i.e., the Actuarial Value of Assets), and the Actuarial Accrued Liability yields the **Unfunded Actuarial Accrued Liability (UAAL)**. The UAAL represents the past service portion of the present value of benefits which remains unfunded as of the valuation date. 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.

The UAAL is currently in a surplus position because current assets exceed the liability for benefits earned by prior service. The surplus portion of the assets is also projected to cover all of future benefit costs, i.e., future normal costs, of the current active employees. Actuarial standards of practice recommend that any such surplus be recognized gradually, not immediately, in future years. Section E. provides additional discussion.

### 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 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.

Certain actuarial terms and GASB 75 terms may be used interchangeably; some are shown below.

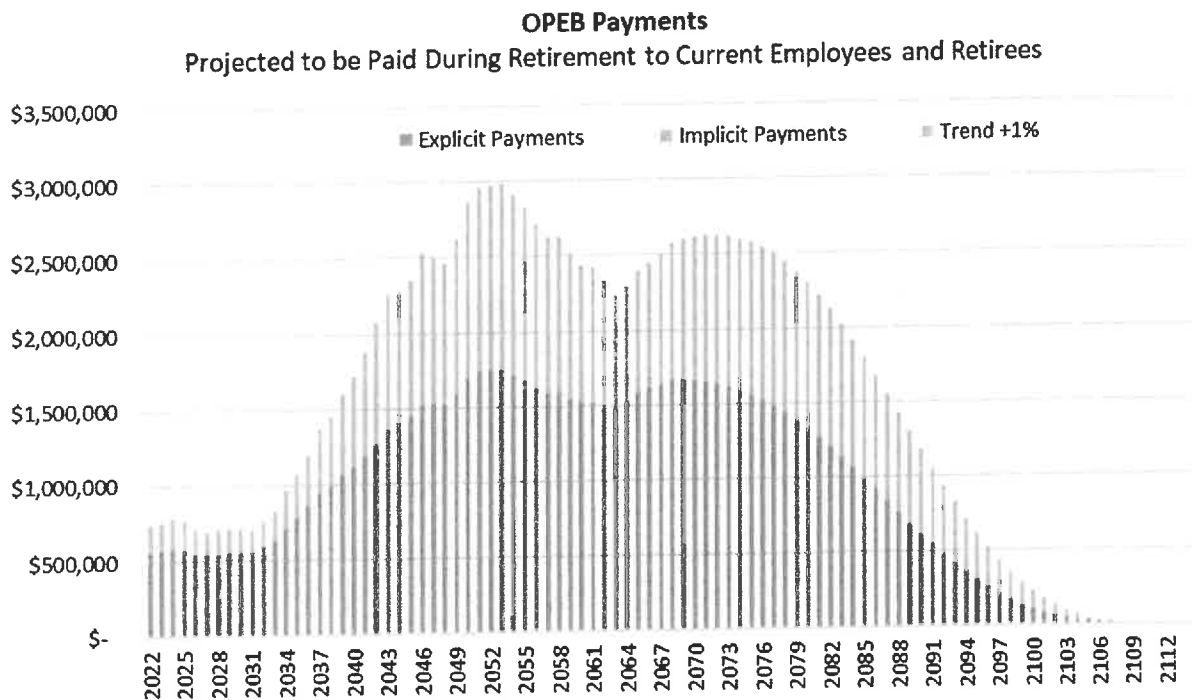
Actuarial Terminology	GASB 75 Terminology
Present Value of Projected Benefits (PVPB)	<i>No equivalent term</i>
Actuarial Accrued Liability (AAL)	Total OPEB Liability (TOL)
Market Value of Assets (MVA)	Fiduciary Net Position
Actuarial Value of Assets (AVA)	<i>No equivalent term</i>
Unfunded Actuarial Accrued Liability (UAAL)	Net OPEB Liability
Normal Cost	Service Cost



### C. Valuation Results as of December 31, 2021

This section presents the basic results of our recalculation of the OPEB liability using updated employee data, plan provisions, and claims and premium information provided to us. 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, and plan benefits described in Supporting Information, Section 2.

The following graph illustrates the annual other post-employment benefits projected to be provided on behalf of current retirees and future retiring active employees covered by this plan.



The amounts shown in green reflect 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 assuming healthcare trend is 1% higher in all future years. The first 15 years of retiree benefits from the graph above are shown in tabular form on page 20.

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



# **Valuation Results as of December 31, 2021** (Continued)

This chart compares the valuation results measured as of December 31, 2020, based on the December 31, 2019, valuation, with the results measured as of December 31, 2021, based on the December 31, 2021, valuation.

Valuation Date	12/31/2019		12/31/2021	
Fiscal Year Ending	6/30/2021		6/30/2022	
Measurement Date	12/31/2020		12/31/2021	
Discount rate	6.70%		6.50%	
<b>Number of Covered Employees</b>				
Actives	56		65	
Retirees	46		51	
Total Participants	102		116	
OPEB Subsidy Type	Explicit	Implicit	Explicit	Implicit
<b>Actuarial Present Value of Projected Benefits</b>		Total	Total	
Actives	\$ 5,956,641	\$ 1,465,282	\$ 7,421,923	\$ 9,568,276
Retirees	6,674,790	761,576	7,436,366	7,843,214
Total APVPB	12,631,431	2,226,858	14,858,289	17,411,490
<b>Total OPEB Liability (TOL)</b>				
Actives	3,371,046	816,445	4,187,491	4,870,105
Retirees	6,674,790	761,576	7,436,366	7,843,214
TOL	10,045,836	1,578,021	11,623,857	12,713,319
Fiduciary Net Position			13,703,303	15,381,140
<b>Net OPEB Liability</b>			(2,079,446)	(2,667,821)
<b>Service Cost</b>	224,610	61,255	285,865	403,062
For the period following the measurement date			310,056	93,006

The Net OPEB Liability (NOL) has decreased by \$588,375 from that reported one year ago. Some of the change was expected and some was unexpected. The NOL was expected to increase by \$78,979, reflecting additional service and interest costs for the period, and reduced by contributions and expected trust earnings. Unexpected changes are discussed on the following page.



**Valuation Results as of December 31, 2021**  
(Continued)

**Unexpected NOL changes** decreased the NOL by \$667,353 and fall into one of these categories:

- *Plan experience* increased the NOL by \$369,351 and reflects differences from expected and current results based on the prior valuation data and assumptions.
- *Assumption changes* collectively increased the NOL by \$327,380. These changes are listed below, with additional information provided on the last page in Supporting Information, Section 3.
- *Investment experience*: Trust asset return exceeded the expected earnings by \$1,364,084.

This chart reconciles results measured December 31, 2020, to results measured December 31, 2021.

Reconciliation of Changes During Measurement Period	Total OPEB Liability (a)	Fiduciary Net Position (b)	Net OPEB Liability (c) = (a) - (b)
<b>Balance at Fiscal Year Ending 6/30/2021</b> <i>Measurement Date 12/31/2020</i>	\$ 11,623,856	\$ 13,703,303	\$ (2,079,447)
<b>Expected Changes During the Period:</b>			
Service Cost	305,865		305,865
Interest Cost	776,199		776,199
Expected Investment Income		898,531	(898,531)
Employer Contributions		142,253	(142,253)
Retiree premium co-pay into trust		30,896	(30,896)
Retiree premium co-pay from trust to insurers		(30,896)	30,896
Admin/Operating Expenses		(37,699)	37,699
Benefit Payments	(689,332)	(689,332)	-
<b>Total Expected Changes During the Period</b>	392,732	313,753	78,979
<b>Expected at Fiscal Year Ending 6/30/2022</b> <i>Measurement Date 12/31/2021</i>	\$ 12,016,588	\$ 14,017,056	\$ (2,000,468)
<b>Unexpected Changes During the Period:</b>			
Change Due to Investment Experience		1,364,084	(1,364,084)
<i>Plan Experience:</i>			
Premiums and estimated claims other than expected	586,074		
Other plan experience	(216,723)		
Change Due to Plan Experience			369,351
<i>Assumption Changes:</i>			
Change in assumed trust return/discount rate	315,282		
Change in healthcare trend	219,835		
Updated demographics assumptions to 2021 NV PERS experience study	(207,737)		
Change Due to Assumption Changes			327,380
<b>Total Unexpected Changes During the Period</b>	696,731	1,364,084	(667,353)
<b>Balance at Fiscal Year Ending 6/30/2022</b> <i>Measurement Date 12/31/2021</i>	\$ 12,713,319	\$ 15,381,140	\$ (2,667,821)

### D. Accounting Information (GASB 75)

The following exhibits are designed to satisfy the reporting and disclosure requirements of GASB 75 and to facilitate an audit of plan changes.

#### 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**  
*Measurement Date is December 31, 2021*

**Tahoe Douglas  
FPD**

**Items Impacting Net Position:**

Total OPEB Liability	\$ 12,713,319
Fiduciary Net Position	<u>15,381,140</u>
Net OPEB Liability (Asset)	(2,667,821)

**Deferred Outflows Due to:**

Assumption Changes	1,088,461
Plan Experience	334,507
Investment Experience	267,174
Deferred Contributions	75,755

**Deferred Inflows Due to:**

Assumption Changes	-
Plan Experience	408,464
Investment Experience	<u>2,273,299</u>

<b>Impact on Statement of Net Position, FYE 6/30/2022</b>	<b>\$ (1,751,955)</b>
<i>Net OPEB Liability less Outflows plus Inflows</i>	

**Items Impacting OPEB Expense:**

Service Cost	\$ 305,865
Cost of Plan Changes	-
Interest Cost	776,199
Expected Earnings on Assets	(898,531)
Retiree premium co-pay into trust	(30,896)
Retiree premium co-pay from trust to insurers	30,896
Admin/Operating Expenses	37,699

**Recognition of Deferred Outflows:**

Assumption Changes	174,097
Plan Experience	34,844
Investment Experience	267,172

**Recognition of Deferred Inflows:**

Assumption Changes	-
Plan Experience	(73,863)
Investment Experience	<u>(1,035,512)</u>

<b>OPEB Expense, FYE 6/30/2022</b>	<b>\$ (412,030)</b>
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**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 Measurement Date	6/30/2021 12/31/2020	6/30/2022 12/31/2021	Change During Period
Total OPEB Liability	\$ 11,623,856	\$ 12,713,319	\$ 1,089,463
Fiduciary Net Position	<u>13,703,303</u>	<u>15,381,140</u>	<u>1,677,837</u>
Net OPEB Liability (Asset)	(2,079,447)	(2,667,821)	(588,374)
<i>Deferred Outflows Due to:</i>			
Assumption Changes	935,178	1,088,461	153,283
Plan Experience	-	334,507	334,507
Investment Experience	534,346	267,174	(267,172)
Deferred Contributions	71,127	75,755	4,628
<i>Deferred Inflows Due to:</i>			
Assumption Changes	-	-	-
Plan Experience	482,327	408,464	(73,863)
Investment Experience	<u>1,944,727</u>	<u>2,273,299</u>	<u>328,572</u>
Impact on Statement of Net Position	<u>\$ (1,193,044)</u>	<u>\$ (1,751,955)</u>	<u>\$ (558,911)</u>
<i>Net OPEB Liability less Outflows plus Inflows</i>			

**Change in Net Position During the Fiscal Year**

Impact on Statement of Net Position, FYE 6/30/2021	\$ (1,193,044)
Plus OPEB Expense (Income)	(412,030)
Less Employer Contributions During Fiscal Year	<u>(146,881)</u>
Impact on Statement of Net Position, FYE 6/30/2022	<u>\$ (1,751,955)</u>

**OPEB Expense**

Employer Contributions During Fiscal Year	\$ 146,881
Deterioration (Improvement) in Net Position	<u>(558,911)</u>
OPEB Expense (Income), FYE 6/30/2022	<u>\$ (412,030)</u>



**Accounting Information**  
(Continued)

**Change in Fiduciary Net Position During the Measurement Period**

	RBIF	Wells Fargo	Total
12/31/2020 Account Statement Balances	\$ 13,574,141	\$ 205,651	\$ 13,779,792
Net Accrued/prepaid adjustments	-	25,097	25,097
Uncleared Transactions	-	(101,586)	(101,586)
Change to net accrued/prepaid adjustments	-	-	-
<b>Adjusted 12/31/2020 Balance</b>	<b>13,574,141</b>	<b>129,162</b>	<b>13,703,303</b>
Transfer Funds between RBIF and WF Checking	(600,000)	600,000	-
Retiree health co-payments in		30,896	30,896
Implicit subsidy contribution in		142,253	142,253
Benefit payments ( <i>excludes retiree co-pays</i> )		(547,079)	(547,079)
Retiree health co-payments out to insurers		(30,896)	(30,896)
Implicit subsidy benefits out		(142,253)	(142,253)
Administrative/Operating fees (incl audit)		(37,699)	(37,699)
Investment income (net of related fees)	2,262,616	-	2,262,616
Accrued 2021 fees and HRA payments	-	-	-
Change in accruals	\$ -	\$ -	\$ -
Cleared accruals from prior period	-	-	-
<b>Total changes</b>	<b>1,662,616</b>	<b>15,222</b>	<b>1,677,838</b>
12/31/2021 Account Statement Balances	15,236,757	199,459	15,436,216
Net Accrued/prepaid adjustments	-	(52,184)	(52,184)
Uncleared Transactions	-	(2,891)	(2,891)
<b>Adjusted 12/31/2021 Balance</b>	<b>15,236,757</b>	<b>144,384</b>	<b>15,381,140</b>



## Accounting Information (Continued)

### Expected Long-term Return on Trust Assets

The District maintains a single employer irrevocable OPEB trust through the Retirement Benefits Investment Fund (RBIF). RBIF publishes Investment Objective & Policies and issues publicly available financial statements. Note 7 (Net Pension Liability & Actuarial Assumptions) of the June 30, 2021, RBIF audited financial statements stated that the long-term trust return assumption is 7.25%. This Note 7 (along with information from Note 5 – Deposit and Investment Disclosures) also states:

The System's policies which determine the investment portfolio target asset allocation are established by the Board. The asset allocation is reviewed annually and is designed to meet the future risk and return needs of the System.

The following was the Board adopted policy target asset allocation as of June 30, 2021:

Asset Class	Target Allocation	Long-Term Geometric Expected Real Rate of Return*
U.S. stocks	42%	5.50%
International stocks	18%	5.50%
U.S. bonds	28%	0.75%
Private markets	12%	6.65%

\* As of June 30, 2021, PERS' long term inflation assumption was 2.5%.

The long-term inflation assumption used in this valuation was 2.5%, which matches the PERS assumption imbedded in the RBIF long term return assumption. The District is less optimistic about the future expected returns and approved a 0.75% margin for adverse investment returns. Accordingly, with the District's approval, the assumed long term trust return applied in this valuation is 6.5%.



## Accounting Information (Continued)

### Recognition Period or Deferred Resources

Liability changes due to plan experience which differs from what was assumed in the prior year and/or from assumption changes during the year are recognized over the plan's Expected Average Remaining Service Life ("EARSL"). The EARSL period is 10.60 years for deferred resources arising in this fiscal year.

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 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.

Tahoe Douglas FPD	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of Assumptions	\$ 1,088,461	\$ -
Differences Between Expected and Actual Experience	334,507	408,464
Net Difference Between Projected and Actual Earnings on Investments	-	2,006,125
Deferred Contributions	75,755	-
<b>Total</b>	<b>\$ 1,498,723</b>	<b>\$ 2,414,589</b>

The District will recognize the Contributions Made Subsequent to the Measurement Date 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	\$ (364,422)
2024	(631,594)
2025	(332,059)
2026	(137,738)
2027	135,078
Thereafter	339,114



**Accounting Information**  
(Continued)

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

The discount rate used for the fiscal year end 2022 is 6.5%. Healthcare cost trend rate was assumed to start at 5.8% (effective January 1, 2023) and grade down to 3.9% for by 2076. 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% 5.50%	Current 6.50%	Current + 1% 7.50%
<b>Total OPEB Liability</b>	14,499,559	12,713,319	11,254,691
Increase (Decrease)	1,786,240		(1,458,628)
% Increase (Decrease)	14.1%		-11.5%
<b>Net OPEB Liability (Asset)</b>	(881,581)	(2,667,821)	(4,126,449)
Increase (Decrease)	1,786,240		(1,458,628)
% Increase (Decrease)	67.0%		-54.7%
Change in Healthcare Cost Trend Rate	Current Trend - 1%	Current Trend	Current Trend + 1%
<b>Total OPEB Liability</b>	11,110,657	12,713,319	14,724,442
Increase (Decrease)	(1,602,662)		2,011,123
% Increase (Decrease)	-12.6%		15.8%
<b>Net OPEB Liability (Asset)</b>	(4,270,483)	(2,667,821)	(656,698)
Increase (Decrease)	(1,602,662)		2,011,123
% Increase (Decrease)	-60.1%		75.4%

**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. Results for fiscal years since GASB 75 was implemented are shown in the following table.

<b>Fiscal Year Ending</b>	<b>6/30/2022</b>	<b>6/30/2021</b>	<b>6/30/2020</b>	<b>6/30/2019</b>	<b>6/30/2018</b>
Measurement Date	12/31/2021	12/31/2020	12/31/2019	12/31/2018	12/31/2017
Discount Rate on Measurement Date	6.50%	6.70%	6.70%	7.50%	7.50%
<b>Total OPEB liability</b>					
Service Cost	\$ 305,865	\$ 296,956	\$ 277,767	\$ 267,084	\$ 256,812
Interest	776,199	751,172	772,148	753,894	736,660
Changes of benefit terms	-	-	-	-	-
Differences between expected and actual experience	369,351	-	(630,053)	-	-
Changes of assumptions	327,380	-	1,221,602	-	-
Benefit payments	(689,332)	(677,688)	(811,181)	(765,360)	(782,565)
<b>Net change in total OPEB liability</b>	<b>1,089,463</b>	<b>370,440</b>	<b>830,283</b>	<b>255,618</b>	<b>210,907</b>
<b>Total OPEB liability - beginning</b>	<b>11,623,856</b>	<b>11,253,416</b>	<b>10,423,133</b>	<b>10,167,515</b>	<b>9,956,608</b>
<b>Total OPEB liability - ending (a)</b>	<b>\$ 12,713,319</b>	<b>\$ 11,623,856</b>	<b>\$ 11,253,416</b>	<b>\$ 10,423,133</b>	<b>\$ 10,167,515</b>
<b>Plan fiduciary net position</b>					
Contributions - employer	\$ 142,253	\$ 152,825	\$ 851,748	\$ 825,845	\$ 1,304,783
Net investment income	2,262,615	1,788,974	2,263,955	(514,662)	1,987,307
Benefit payments	(689,332)	(677,688)	(811,181)	(765,360)	(782,565)
Retiree premium co-pay into trust	30,896	26,683	23,500	23,811	-
Retiree premium co-pay transferred from trust to insurers	(30,896)	(26,683)	(23,500)	(23,811)	-
Admin/Operating Expenses	(37,699)	(45,821)	(32,246)	(26,859)	(16,445)
<b>Net change in plan fiduciary net position</b>	<b>1,677,837</b>	<b>1,218,290</b>	<b>2,272,276</b>	<b>(481,036)</b>	<b>2,493,080</b>
<b>Plan fiduciary net position - beginning</b>	<b>13,703,303</b>	<b>12,485,013</b>	<b>10,212,737</b>	<b>10,693,773</b>	<b>8,200,693</b>
<b>Plan fiduciary net position - ending (b)</b>	<b>\$ 15,381,140</b>	<b>\$ 13,703,303</b>	<b>\$ 12,485,013</b>	<b>\$ 10,212,737</b>	<b>\$ 10,693,773</b>
<b>Net OPEB liability - ending (a) - (b)</b>	<b>\$ (2,667,821)</b>	<b>\$ (2,079,447)</b>	<b>\$ (1,231,597)</b>	<b>\$ 210,396</b>	<b>\$ (526,258)</b>
Covered-employee payroll	\$ 5,605,012	\$ 5,053,642	\$ 4,235,995	\$ 3,867,910	\$ 4,118,877
Net OPEB liability as a % of covered-employee payroll	-47.60%	-41.15%	-29.07%	5.44%	-12.78%



## Accounting Information (Continued)

### Schedule of Contributions

Since establishing the OPEB trust, District has, on average, contributed 100% or more of the Actuarially Determined Contribution (ADC) for the District RHP each year and confirmed its intention to continue doing so. This chart shows the contributions for the years since GASB 75 was implemented.

Fiscal Year Ending	2022	2021	2020	2019	2018
Actuarially Determined Contribution	\$ 272,446	\$ 243,043	\$ 239,197	\$ 450,350	\$ 432,127
Contributions relative to the actuarially determined contribution	146,881	147,539	502,211	950,635	775,697
Contribution deficiency (excess)	\$ 125,565	\$ 95,504	\$ (263,014)	\$ (500,285)	\$ (343,570)
Covered employee payroll	\$ 5,272,486	\$ 5,118,918	\$ 4,669,347	\$ 3,967,157	\$ 4,118,877
Contributions as a percentage of covered employee payroll	2.79%	2.88%	10.76%	23.96%	18.83%
Percent of ADC contributed	53.91%	60.70%	209.96%	211.09%	179.51%

### Notes to Schedule

Valuation Date for determining ADCs

Actuarial cost method

Amortization method

Amortization period

Asset valuation method

Inflation

Healthcare cost trend rates

Salary increases

Investment rate of return

Retirement age

Mortality

Mortality Improvement

12/31/2019	12/31/2017
Entry Age Normal	Entry Age Normal
Level % of pay	Level % of pay
Level % of Pay	Level % of Pay
30 yr open (surplus)	30 yr closed
30 years	21 yrs remain   22 yrs remain
Market Value	Market Value
2.50%	2.75%
5.4% in 2021, fluctuating down to 4.0% in 2076	6.25% in 2019, step down 0.25% per year to 5% in 2024
3.00%	4.00%
6.70%	7.50%
From 45 to 75 (Regular) and 40 to 70 (Safety)	From 45 to 75 (Regular) and 40 to 70 (Safety)
2019 Nevada PERS Experience Study	2016 Nevada PERS Experience Study
MacLeod Watts Scale 2020	MacLeod Watts Scale 2017

### Accounting Information (Continued)

#### Detail of Changes to Net Position

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

Tahoe Douglas FPD	Total OPEB Liability (a)	Fiduciary Net Position (b)	Net OPEB Liability (c) = (a) - (b)	(d) Deferred Outflows:				(e) Deferred Inflows:			Statement of Net Position (f) = (c) - (d) + (e)
				Assumption Changes	Plan Experience	Investment Experience	Deferred Contributions	Assumption Changes	Plan Experience	Investment Experience	
Balance at Fiscal Year Ending 6/30/2021 <i>Measurement Date 12/31/2020</i>	\$ 11,623,856	\$ 13,703,303	\$ (2,079,447)	\$ 935,178	\$ -	\$ 534,346	\$ 71,127	\$ -	\$ 482,327	\$ 1,944,727	\$ (1,193,044)
<b>Changes During the Period:</b>											
Service Cost	305,865		305,865								305,865
Interest Cost	776,199		776,199								776,199
Expected Investment Income		898,531	(898,531)								(898,531)
Employer Contributions		142,253	(142,253)								(142,253)
Changes of Benefit Terms	-		-								-
Retiree premium co-pay into trust		30,896	(30,896)								(30,896)
Retiree premium co-pay from trust to insurers		(30,896)	30,896								30,896
Admin/Operating Expenses		(37,699)	37,699								37,699
Benefit Payments	(689,332)	(689,332)	-								-
Assumption Changes	327,380		327,380	327,380							-
Plan Experience	369,351		369,351		369,351						-
Investment Experience		1,364,084	(1,364,084)		(34,844)	(267,172)	(142,253)	-	(73,863)	1,364,084 (1,035,512)	(491,009)
Recognized Deferred Resources				(174,097)			146,881				(146,881)
Employer Contributions in Fiscal Year											
<b>Net Changes in Fiscal Year 2021-2022</b>	1,089,463	1,677,837	(588,374)	153,283	334,507	(267,172)	4,628	-	(73,863)	328,572	(558,911)
Balance at Fiscal Year Ending 6/30/2022 <i>Measurement Date 12/31/2021</i>	\$ 12,713,319	\$ 15,381,140	\$ (2,667,821)	\$ 1,088,461	\$ 334,507	\$ 267,174	\$ 75,755	\$ -	\$ 408,464	\$ 2,273,299	\$ (1,751,955)



**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 Pension Expense is shown below. Contributions subsequent to the measurement date are not shown.

Measurement Date: December 31, 2021

Date Created	Deferred Resource			Period (Yrs)	Initial Amount	Annual Recognition	Balance as of Dec 31, 2021	Recognition of Deferred Outflow or Deferred (Inflow) in Measurement Period:						
	Created Due To	Greater than Expected	Less than Expected					2021 (FYE 2022)	2022 (FYE 2023)	2023 (FYE 2024)	2024 (FYE 2025)	2025 (FYE 2026)	2026 (FYE 2027)	Thereafter
12/31/2017	Investment Earnings	Greater than Expected		5.00	\$ (1,344,194)	\$ (268,839)	\$ -	\$ (268,838)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12/31/2018	Investment Earnings	Less than Expected		5.00	1,335,862	267,172	267,174	267,172	267,174	-	-	-	-	-
12/31/2019	Experience Assumption	Decreased Liability		8.53	(630,053)	(73,863)	(408,464)	(73,863)	(73,863)	(73,863)	(73,863)	(73,863)	(73,863)	(39,149)
12/31/2019	Changes	Increased Liability		8.53	1,221,602	143,212	791,966	143,212	143,212	143,212	143,212	143,212	143,212	75,906
12/31/2019	Investment Earnings	Greater than Expected		5.00	(1,497,688)	(299,538)	(599,074)	(299,538)	(299,538)	(299,536)	-	-	-	-
12/31/2020	Investment Earnings	Greater than Expected		5.00	(971,596)	(194,319)	(582,958)	(194,319)	(194,319)	(194,319)	(194,320)	-	-	-
12/31/2021	Experience Assumption	Increased Liability		10.60	369,351	34,844	334,507	34,844	34,844	34,844	34,844	34,844	34,844	160,287
12/31/2021	Changes	Increased Liability		10.60	327,380	30,885	296,495	30,885	30,885	30,885	30,885	30,885	30,885	142,070
12/31/2021	Investment Earnings	Greater than Expected		5.00	(1,364,084)	(272,817)	(1,091,267)	(272,817)	(272,817)	(272,817)	(272,817)	(272,817)	-	-



**Accounting Information**  
(Continued)

**District Contributions to the Plan**

District contributions to this plan occur as benefits are paid to retirees and/or to the OPEB trust. Benefit payments may occur in the form of direct payments for premiums and taxes ("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 reclassification of a portion of active healthcare cost to be treated as a retiree healthcare expense.

Retiree benefits paid during the current measurement period are shown below.

<b>Benefit Payments During the Measurement Period, Jan 1, 2021 thru Dec 31, 2021</b>	<b>Tahoe Douglas FPD</b>
Benefits Paid by Trust	\$ 547,079
Benefits Paid by Employer (not reimbursed by trust)	-
Implicit benefit payments	142,253
<b>Total Benefit Payments During the Measurement Period</b>	<b>\$ 689,332</b>

The District's OPEB contributions during the current measurement period and current fiscal year are shown below:

<b>District OPEB Contributions During:</b>	<b>Measurement period: 1/1/21 - 12/31/21</b>	<b>Fiscal Year: 7/1/21 - 6/30/22</b>
Employer Contributions to the Trust	\$ -	\$ -
Employer Contributions in the Form of Direct Benefit Payments (not reimbursed by trust)	-	-
Implicit contributions	142,253	146,881
<b>Total Employer Contributions During the Period</b>	<b>\$ 142,253</b>	<b>\$ 146,881</b>



**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. The 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							
Calendar (Plan) Year Ending Dec 31	Explicit Subsidy			Implicit Subsidy			Total
	Current Retirees	Future Retirees	Total	Current Retirees	Future Retirees	Total	
2022	\$ 552,133	\$ 8,294	\$ 560,427	\$ 186,378	\$ 1,154	\$ 187,532	\$ 747,959
2023	555,426	15,482	570,908	181,643	2,753	184,396	755,304
2024	562,008	21,755	583,763	182,916	4,728	187,644	771,407
2025	549,763	27,461	577,224	165,464	7,066	172,530	749,754
2026	519,962	32,613	552,575	124,774	9,702	134,476	687,051
2027	508,124	37,173	545,297	103,834	12,617	116,451	661,748
2028	508,859	44,499	553,358	98,869	19,019	117,888	671,246
2029	508,175	51,787	559,962	90,943	26,738	117,681	677,643
2030	490,955	70,039	560,994	60,808	36,988	97,796	658,790
2031	467,611	98,605	566,216	24,840	55,451	80,291	646,507
2032	468,295	130,481	598,776	16,795	76,861	93,656	692,432
2033	476,937	157,164	634,101	19,012	95,213	114,225	748,326
2034	484,352	230,092	714,444	21,482	129,529	151,011	865,455
2035	479,891	308,082	787,973	10,510	149,114	159,624	947,597
2036	483,955	378,203	862,158	11,836	175,934	187,770	1,049,928

The amounts shown in the Explicit Subsidy 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 section reflect the expected excess of retiree medical and prescription drug claims over the premiums expected to be charged during the year for retirees' coverage for those currently retired and those expected to retire in the future. The District is expected to provide these pre-Medicare implicit subsidy benefits to retirees in the form of higher active employee premiums than would be charged if no retirees were pooled with the active members.



## Accounting Information (Concluded)

### Sample Journal Entries

Description	OPEB Accounts at Beginning of Fiscal Year	If tracking by source		If not tracking by source	
		Debit	Credit	Debit	Credit
<i>These entries represent the assumed status of accounts at the beginning of the year. To the extent that account values were different, then adjusting entries would be required.</i>	Net OPEB Liability	2,079,447		2,079,447	
	Deferred Outflow:				
	Assumption Changes	935,178			
	Plan Experience	-			
	Investment Experience	534,346			
	Contribution Subsequent to MD	71,127			
	Deferred Outflows			1,540,651	
	Deferred Inflow:				
	Assumption Changes		-		
	Plan Experience		482,327		
	Investment Experience		1,944,727		
	Deferred Inflows				2,427,054

Description	Record Implicit Subsidy Payment	Debit	Credit
<i>This entry assumes active employee premium payments are recorded to "Premium Expense".</i>	Net OPEB Liability	146,881	
	Premium Expense		146,881

Description	OPEB Accounts Updated to End of Fiscal Year	If tracking by source		If not tracking by source	
		Debit	Credit	Debit	Credit
<i>Entries needed to update accounts to the end of the fiscal year.</i>	Net OPEB Liability	441,493		441,493	
	Deferred Outflow:				
	Assumption Changes	153,283			
	Plan Experience	334,507			
	Investment Experience		267,172		
	Contribution Subsequent to MD	4,628			
	Deferred Outflows			225,246	
	Deferred Inflow:				
	Assumption Changes	-			
	Plan Experience	73,863			
	Investment Experience		328,572		
	Deferred Inflows				254,709
	OPEB Expense		412,030		412,030



## **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 UAAL<sup>1</sup>). 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 is usually 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.

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



## Funding Information (Continued)

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.

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)<sup>2</sup> over an open 30-year period with level dollar payments.

Actuarially Determined Contributions, developed as described above for the District's fiscal years ending June 30, 2023, and 2024 are shown the exhibit on the next page. These ADCs incorporate both explicit (cash benefit) and implicit subsidy benefit liabilities. District contributions credited toward meeting the ADC will be comprised of:

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

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<sup>2</sup> See recommendations in "Actuarial Funding Policies and Practices for Public Pension and OPEB Plans", November 2015, California Actuarial Advisory Panel.



**Funding Information**  
(Continued)

We develop the Actuarially Determined Contributions (ADCs) for fiscal years ending June 30, 2023, and June 30, 2024, from the results of this valuation. The ADC for fiscal year end June 30, 2022, was developed from the prior (December 2019) valuation and we have included this for reference as well.

Valuation date	6/30/2019	12/31/2021	
Discount rate	6.70%	6.50%	
<b>Number of Covered Employees</b>			
Actives	53	65	
Retirees	49	51	
Total Participants	102	116	
For fiscal year ending	6/30/2022	6/30/2023	6/30/2024
<b>Actuarial Present Value of Projected Benefits</b>	\$ 17,752,344	\$ 18,170,348	\$ 18,571,569
<b>Actuarial Accrued Liability (AAL)</b>			
Actives	6,253,008	5,395,992	6,170,042
Retirees	7,135,904	7,984,845	7,742,836
Total AAL	13,388,912	13,380,837	13,912,878
Actuarial Value of Assets	13,525,224	16,380,914	17,466,430
<b>Unfunded AAL (UAAL)</b>	(136,312)	(3,000,077)	(3,553,552)
UAAL Amortization method	Level % of Pay	Level Dollar	Level Dollar
Remaining amortization period (years)	30	30	30
Amortization Factor	18.8345	13.9075	13.9075
<b>Actuarially Determined Contribution (ADC)</b>			
Normal Cost	\$ 315,245	\$ 415,153	\$ 427,608
Amortization of UAAL	(51,492)	(215,717)	(255,514)
Interest to fiscal year end	8,693	5,716	5,816
<b>Total ADC</b>	<b>272,446</b>	<b>205,152</b>	<b>177,910</b>

As described on the prior page, OPEB funding consists of 3 different sources. The chart below illustrates how these 3 contribution sources apply toward satisfying the ADC for each of these years. Actual contributions, as reported to us, are shown for fiscal year end 2022.

1 Implicit subsidy contribution	\$ 146,881	\$ 184,396	\$ 187,644
Additional payments needed to meet ADC	125,565	20,756	(9,734)
2 Estimated agency paid premiums for retirees	-	-	-
3 Estimated agency contribution to OPEB trust	-	20,756	(9,734)
<b>Total Expected Employer Contributions (1+2+3)</b>	<b>146,881</b>	<b>\$ 205,152</b>	<b>\$ 177,910</b>

If the intent is to contribute 100% or more of the ADC each year, should retiree benefit payments for these years be lower than our projection, the contribution to the trust should be increased to balance so that total contributions equal or exceed the ADC each year.



## F. Certification

The purpose of this report is to provide actuarial information in compliance with Statement 75 of the Governmental Accounting Standards Board (GASB 75) for other postemployment benefits provided by the Tahoe Douglas Fire Protection District Retiree Healthcare Plan (District RHP).

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 summarized the benefits in this report and our calculations were based on our understanding of the benefits as described herein. A limited review of this data was performed, and we 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, and the assumptions on which they depend, 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. Plan 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.

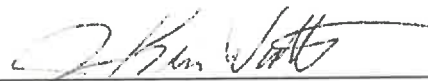
This report is prepared solely for the use and benefit of the District and may not be provided to third parties without prior written consent of MacLeod Watts. Exceptions are: The District may provide copies of this report to their professional accounting and legal advisors who are subject to a duty 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 actuaries 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. Both actuaries are members of the American Academy of Actuaries and meet the qualification standards for rendering this opinion.

Signed: January 23, 2023



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 65 active members in the data provided to us for the December 2021 valuation. All 65 active employees were enrolled in a healthcare plan offered by the District on the valuation date.

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		3					3	5%
25 to 29	5	8					13	20%
30 to 34	2	3	8	1			14	22%
35 to 39	1	1	6				8	12%
40 to 44	1		6	6	4		17	26%
45 to 49			1	1	2		4	6%
50 to 54	1			3		2	6	9%
55 to 59							0	0%
60 to 64							0	0%
65 to 69							0	0%
70 & Up							0	0%
<b>Total</b>	10	15	21	11	6	2	<b>65</b>	<b>100%</b>
<b>Percent</b>	15%	23%	32%	17%	9%	3%	<b>100%</b>	

Valuation	December 2019	December 2021
Average Attained Age for Actives	38.9	37.2
Average Years of Service	10.3	8.0

**Retirees:** The District reported 51 retirees participating in the District's Retiree Healthcare Plan and receiving benefits on the valuation date. Information on these individuals is summarized in the chart below.

Retirees by Age				
Current Age	Misc	Fire	Total	Percent
Below 50	0	0	0	0%
50 to 54	0	1	1	2%
55 to 59	1	5	6	12%
60 to 64	0	16	16	31%
65 to 69	0	15	15	29%
70 to 74	0	10	10	20%
75 to 79	0	3	3	6%
80 & up	0	0	0	0%
<b>Total</b>	<b>1</b>	<b>50</b>	<b>51</b>	<b>100%</b>
<b>Average Age:</b>				
On 12/31/2021	58.4	65.9	65.7	
At retirement	56.2	54.7	54.7	



## Supporting Information

(Continued)

### Section 1 - Summary of Employee Data

(Continued)

**Reconciliation of plan members:** The charts below reconcile the number of actives and retirees included in the December 2019 valuation with those included in the December 2021 valuation.

Reconciliation of District Plan Members Between Valuation Dates			
Status	Covered Actives	Covered Retirees	Total
Number reported as of June 30, 2019	53	49	102
New employees	16		16
Separated employees	(4)		(4)
New retiree, elected coverage	(2)	2	0
New retiree, waiving coverage			0
Previously ineligible, now eligible	2		2
<b>Number reported as of June 30, 2021</b>	<b>65</b>	<b>51</b>	<b>116</b>

Overall, the number of plan members has increased from 102 to 116. The number of active employees has increased by 12, from 53 to 65, over the past two years, representing a 23% increase. The number of retirees increased from 49 to 51, a 4% increase.

**Summary of Plan Member Counts:** GASB 75 requires the employer to report specific plan member counts. The chart below shows these counts as of the December 31, 2021, valuation date.

Summary of Plan Member Counts	
Number of active plan members	65
Number of inactive plan members currently receiving benefits	51
Number of inactive plan members entitled to but not receiving benefits	0



## Supporting Information (Continued)

### Section 2 - Summary of Retiree Benefit Provisions

**OPEB provided:** Employees who retire from the District are eligible to continue their coverage under the medical (including vision) and dental plans offered by the District to its active employees or, if they retired prior to September 1, 2008, could elect to participate in the Public Employees' Benefit Plan (PEBP).

**Access to District plan coverage and benefits paid:** Retirees and their spouses under age 65 may elect to continue their medical, dental, vision coverage under the programs made available to the District's active employees. The District currently contributes toward the cost of retiree healthcare coverage as follows:

- Employees hired prior to June 1, 2003 retiring from the District after June 30, 1999 at age 50 or older with at least 15 years of service who elect to remain in the District's plans receive a percentage of the employee and spouse premiums paid by the District for their lifetimes. The percentage is based on the following service schedule:

Years of District Service	% of Employee Premium Paid	% of Spouse Premium Paid
Less than 15	0%	0%
15	50%	50%
16	60%	60%
17	70%	70%
18	80%	80%
19	90%	90%
20 or more	100%	100%

- Employees hired on or after June 1, 2003 and retiring from the District at age 55 or older with at least 20 years of service who elect to remain in the District's plans receive a percentage of the employee and spouse premiums paid by the District until they become eligible for Medicare benefits after which the District contribution ceases. The percentage is based on the following service schedule:

Years of District Service	% of Employee Premium Paid	% of Spouse Premium Paid
Less than 20	0%	0%
20	100%	0%
21	100%	20%
22	100%	40%
23	100%	60%
24	100%	80%
25 or More	100%	100%

If an employee completes the minimum service requirement (as determined based on his or her employment date) but terminates employment with the District prior to reaching the minimum required age, the employee *may* remain qualified for future postemployment healthcare benefits from the District. If, after leaving District employment, the employee retains District coverage and pays the entire premium, once the employee reaches the minimum required benefit age, the District will provide the postemployment healthcare benefits to which the employee would have been entitled had he or she terminated employment after meeting the minimum age requirement.



## Supporting Information

(Continued)

### Section 2 - Summary of Retiree Benefit Provisions

Retirees are no longer permitted to remain on the District's plans after age 65.

- Upon eligibility for Medicare, the District's monthly allowance (HRA) toward health insurance for a retired employee is equal to \$299 multiplied by his or her vested percentage (see tables above). Eligible spouses also receive a monthly health insurance allowance equal to \$299 multiplied by their applicable vested percentage (the percentage may be different from the retiree).
- The District will also pay the same vested percentage of Medicare Part A premiums for retired employees and their spouses who are not Part A Medicare premium qualified. The premium is \$499 in 2022.

The only plan currently available to employees before Medicare eligibility is a high-deductible PPO plan. In addition to the applicable percent of premium (described above based on the employee's employment date and retirement date), the District also makes contributions to a Health Savings Account (HSA) for pre-65 retirees who elect a high deductible PPO. The amount of the District's subsidy to the HSA is the applicable *vested percent* of the applicable amount shown below:

Plan	80/20 HDHP
Retiree Only	\$185
Retiree & Spouse	\$370

**Current premiums rates:** The 2022 monthly healthcare plan rates are shown in the table below.

2022 Tahoe Douglas FPD Monthly Health Premium Rates			
Plan	Medical	Dental	Vision
	HDHP	The Standard	VSP
Employee	\$ 553.98	\$ 46.76	\$ 5.58
Employee & Spouse	1,107.95	104.32	8.93
Employee & Child(ren)	969.46	119.32	9.12
Family	1,661.93	172.32	14.70



## 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. 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 (December 31, 2021)
Valuation Date	December 31, 2021

#### Valuation Methods

Funding Method	Entry Age Normal Cost, level percent of pay
Asset Valuation Method	Not applicable (\$0; no OPEB trust has been established)
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

Medical claims by age and gender were estimated based on data provided in the 2013 paper "Health Care Costs – From Birth to Death", prepared by Dale H. Yamamoto, and sponsored by the Society of Actuaries. A description of MacLeod Watts's Age Rating Methodology is provided in Addendum 2 to this report.

The premium costs used to develop expected retiree claims by age and gender were the fully burdened premium rates shown on the last page of Section 2. Sample age-based expected claims are shown in the chart below.

Expected Monthly Claims by Medical Plan for Selected Ages								
Medical Plan	Male				Female			
	48	53	58	63	48	53	58	63
HSA	\$ 525	\$ 693	\$ 883	\$ 1,095	\$ 679	\$ 800	\$ 905	\$ 1,063



## Supporting Information (Continued)

### Section 3 - Actuarial Methods and Assumptions

#### Economic Assumptions

Long Term Return on Assets/ Discount Rate	6.50% as of December 31, 2021, and 6.70% as of December 31, 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	Actual	2044-2049	4.7%
2023	5.8%	2050-2059	4.6%
2024	5.6%	2060-2066	4.5%
2025	5.4%	2067-2068	4.4%
2026-2027	5.2%	2069-2070	4.3%
2028-2029	5.1%	2071	4.2%
2030-2038	5.0%	2072-2073	4.1%
2039	4.9%	2074-2075	4.0%
2040-2043	4.8%	2076 & later	3.9%

The healthcare trend shown above was developed using the Getzen Model 2022\_b published by the Society of Actuaries using the following settings: CPI 2.5%; Real GDP Growth 1.4%; Excess Medical Growth 1.0%; Expected Health Share of GDP in 2028 20.0%; Resistance Point 22.5%; Year after which medical growth is limited to growth in GDP 2075.

Dental premiums were assumed to increase 3.5% per year and vision premiums were assumed to increase 2.5% per year.

#### Other Employer Cost-Sharing in the District plan

The District's HRA contribution for retirees covered by Medicare (HRA contribution) is assumed to increase by 5% annually.



## Supporting Information (Continued)

### Section 3 - Actuarial Methods and Assumptions

#### Participant Election Assumptions

##### Participation Rate

*Active employees:* (a) 100% who qualify for a subsidy in retirement assumed to elect coverage in retirement; employees with high-deductible PPO coverage are assumed to elect 80/20 HDHP PPO coverage in retirement. (b) Those who do not qualify for a subsidy are assumed *not* to elect coverage. (c) Those who separate from the District after meeting the minimum service requirement but prior to the minimum retirement age and who will be eligible for a District subsidy upon reaching the minimum age if they pay their own premiums until such age are assumed to elect the District healthcare coverage at the following rates:

Years Before Subsidy Starts	5	4	3	2	1
% Assumed to elect to continue District health coverage until minimum benefit age	5%	10%	20%	40%	80%

*Current retirees:* All are assumed to retain their existing election until death.

##### Spouse Coverage

*Active employees:* 90% of those assumed to elect coverage in retirement are assumed to be married participants eligible for coverage or HRA contributions for their spouse until their death. Male employees are assumed to be 3 years older than their wives, and female employees are assumed to be 3 years younger than their husbands.

*Retired employees:* Existing elections for spouse coverage are assumed to continue until age 65 and HRA contributions are assumed to apply until the spouse's death. Actual spouse information is used where available; otherwise the assumptions for spouses of active employees are applied.

##### Medicare Eligibility

Absent contrary data, all individuals are assumed to be eligible for Medicare Parts A and B at 65. Retirees over age 65 who are not eligible for Medicare are assumed to remain ineligible.

#### Demographic Assumptions

*The demographic actuarial assumptions used in this valuation are based on the September 2021 Experience Study report of the Nevada Public Employees Retirement System which covers the employees in this valuation. We applied a different basis to project future mortality improvement.*

##### Mortality

The rates described below were described in the September 2021 Experience Study report of the Nevada PERS program as being reasonably representative of mortality experience as of that measurement date.



## Supporting Information (Continued)

### Section 3 - Actuarial Methods and Assumptions

Mortality (continued)	<p><u>Non-disabled life rates for Regular employees &amp; future survivors:</u></p> <p><i>Males:</i> Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table with rates increased by 30%</p> <p><i>Females:</i> Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table with rates increased by 15%</p> <p><u>Non-disabled life rates for Safety employees &amp; future survivors:</u></p> <p><i>Males:</i> Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table with rates increased by 30%</p> <p><i>Females:</i> Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table with rates increased by 5%</p> <p><u>Life rates for current surviving spouses</u></p> <p><i>Males:</i> Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Table with rates increased by 15%</p> <p><i>Females:</i> Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Table with rates increased by 30%</p> <p><u>Pre-retirement life rates for Regular employees:</u></p> <p><i>Males &amp; Females:</i> Pub-2010 General Employee Amount-Weighted Above-Median Mortality Table</p> <p><u>Pre-retirement life rates for Safety employees:</u></p> <p><i>Males &amp; Females:</i> Pub-2010 Safety Employee Amount-Weighted Above-Median Mortality Table</p>
Mortality Improvement	<p>The mortality rates described above were adjusted to anticipate future mortality improvement by applying MacLeod Watts Scale 2022 on a generational basis from 2010 forward (see Addendum 3 for details).</p>



**Supporting Information**  
(Continued)

**Section 3 - Actuarial Methods and Assumptions**

Termination Rates

Years of Service	Regular Employees	Years of Service	Regular Employees
0	15.75%	13	2.75%
1	12.75%	14	2.25%
2	10.25%	15	2.25%
3	8.25%	16	2.25%
4	7.50%	17	2.00%
5	6.50%	18	1.75%
6	5.75%	19	1.75%
7	5.25%	20	1.75%
8	4.75%	21	1.75%
9	4.50%	22	1.75%
10	4.25%	23	1.75%
11	3.25%	24	1.50%
12	3.00%	& Over	1.50%

Years of Service	Safety Employees	Years of Service	Safety Employees
0	14.50%	10	1.40%
1	8.25%	11	1.25%
2	6.50%	12	1.00%
3	5.50%	13	0.90%
4	4.50%	14	0.80%
5	4.25%	15	0.70%
6	3.25%	16	0.60%
7	2.50%	17	0.50%
8	2.50%	18	0.40%
9	1.90%	19 & Over	0.30%



## Supporting Information

(Continued)

### Section 3 - Actuarial Methods and Assumptions

#### Retirement Rates

Regular Employees Hired before January 1, 2010						
Age	Years of Service					
	5-9	10-19	20-24	25-27	28-29	30 or more
45	0%	0%	0%	1%	20%	20%
50	0.2%	0.6%	0.7%	2.0%	20%	20%
55	0.8%	1.5%	3%	3%	20%	20%
60	5.0%	11%	18%	25%	21%	21%
65	18%	19%	22%	22%	25%	25%
70	20%	20%	25%	30%	30%	30%
75 & Over	100%	100%	100%	100%	100%	100%

Regular Employees Hired before July 1, 2015 but on or after January 1, 2010						
Age	Years of Service					
	5-9	10-19	20-24	25-27	28-29	30 or more
45	0%	0%	0%	0%	20%	20%
50	0.0%	0.0%	0.0%	0.0%	20%	20%
55	0.2%	1.0%	2%	2%	20%	20%
60	2.0%	4%	6%	10%	21%	21%
65	17%	18%	21%	21%	25%	25%
70	19%	19%	23%	28%	30%	30%
75 & Over	100%	100%	100%	100%	100%	100%

Regular Employees Hired on or after July 1, 2015						
Age	Years of Service					
	5-9	10-19	20-24	25-29	30-33	33 or more
45	0%	0%	0%	0%	7%	20%
50	0.0%	0.0%	0.0%	0.0%	13%	20%
55	0.2%	0.9%	2%	2%	18%	20%
60	1.8%	4%	5%	9%	19%	21%
65	15%	16%	19%	19%	23%	25%
70	17%	17%	21%	25%	27%	30%
75 & Over	100%	100%	100%	100%	100%	100%



## Supporting Information

(Continued)

### Section 3 - Actuarial Methods and Assumptions

#### Retirement Rates (continued)

Safety Employees Hired before January 1, 2010						
Age	Years of Service					
	5-9	10-19	20-22	23-24	25-29	30 or more
45	0%	1%	4%	20%	20%	20%
50	1.5%	4.5%	16.0%	23.0%	23%	23%
55	4.5%	11.0%	18%	25%	25%	25%
60	5.0%	18%	26%	35%	35%	35%
65	20%	25%	40%	50%	50%	50%
70 & Over	100%	100%	100%	100%	100%	100%

Safety Employees Hired before July 1, 2015 but on or after January 1, 2010						
Age	Years of Service					
	5-9	10-19	20-24	25-27	28-29	30 or more
45	0%	0%	3%	13%	20%	20%
50	0.0%	2.1%	15.0%	21.5%	23%	23%
55	2.8%	7.2%	17%	23%	25%	25%
60	4.1%	17%	24%	33%	35%	35%
65	19%	23%	38%	47%	50%	50%
70 & Over	100%	100%	100%	100%	100%	100%

Safety Employees Hired on or after July 1, 2015					
Age	Years of Service				
	5-9	10-19	20-24	25-29	30 & Over
45	0%	0%	3%	13%	20%
50	0.0%	2.1%	15.0%	21.5%	23%
55	2.8%	7.2%	17%	23%	25%
60	4.1%	17%	24%	33%	35%
65	19%	23%	38%	47%	50%
70 & Over	100%	100%	100%	100%	100%



## Supporting Information (Continued)

### Section 3 - Actuarial Methods and Assumptions

#### Software and Models Used in the Valuation

**ProVal** - MacLeod Watts utilizes ProVal, a licensed actuarial valuation software product from Winklevoss Technologies (WinTech) to project future retiree benefit payments and develop the OPEB liabilities presented in this report. ProVal is widely used by the actuarial community. We review results at the plan level and for individual sample lives and find them to be reasonable and consistent with the results we expect. We are not aware of any material inconsistencies or limitations in the software that would affect this actuarial valuation.

**Age-based premiums model** – developed internally and reviewed by an external consultant at the time it was developed. See discussion on Development of Age-Related Medical Premiums and Addendum 3.

**Getzen model** – published by the Society of Actuaries; used to derive medical trend assumptions described earlier in this section.

#### Changes in assumptions or methods as of the Measurement Date

Assumed trust return and  
discount rate

The assumed trust rate of return and discount rate was decreased from 6.7% to 6.5% reflecting a change in the District's expectation of the long-term asset returns.

Demographic assumptions

Updated assumed rates of mortality, retirement and other separation (termination) of service to reflect the assumptions applied in the NV PERS June 30, 2021, Valuation report

The mortality improvement scale was updated from MacLeod Watts Scale 2020 to MacLeod Watts Scale 2022, reflecting continued updates in available information (see Addendum 3).

Medical trend

Updated to the Getzen Model 2022\_b which was published by the Society of Actuaries



## 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		Covered by higher active premiums
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 implicit subsidy is not affected by how much or little of the premium might be paid by the District.*

### 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 2A. 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.



## Important Background Information (Continued)

### Valuation Process (Continued)

- 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.

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 60 years or more.

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 medical premium rates;
- A change in the subsidy provided by the District toward retiree medical 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;
- Establishment of and recurring the District contributions to an irrevocable OPEB trust; and
- Changes in the discount rate used to value the OPEB liability

### 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 Background Information (Continued)

### Requirements of GASB 75 (Continued)

#### 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.

#### 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.



## Important Background Information (Continued)

### Implicit Subsidy Plan Contributions (Continued)

The following hypothetical example illustrates this treatment:

Hypothetical Illustration of Implicit Subsidy Recognition	For Active Employees	For Retired Employees
<b>Prior to Implicit Subsidy Adjustment</b>		
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
<b>After Implicit Subsidy Adjustment</b>		
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.

### 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 percent of pay.



## 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 2022** was developed from a blending of data and methodologies found in two published sources: (1) the Society of Actuaries Mortality Improvement Scale MP-2021 Report, published in October 2021 and (2) the demographic assumptions used in the 2021 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, published August 2021.

MacLeod Watts Scale 2022 is a two-dimensional mortality improvement scale reflecting both age and year of mortality improvement. The underlying base scale is Scale MP-2021 which has two segments – (1) historical improvement rates for the period 1951-2017 and (2) an estimate of future mortality improvement for years 2018-2020 using the Scale MP-2021 methodology but utilizing the assumptions used in generating Scale MP-2015. The MacLeod Watts scale then transitions from the 2020 improvement rate to the Social Security Administration (SSA) Intermediate Scale linearly over the 10-year period 2021-2030. After this transition period, the MacLeod Watts Scale uses the constant mortality improvement rate from the SSA Intermediate Scale from 2030-2044. The SSA's Intermediate Scale has a final step in 2045 which is reflected in the MacLeod Watts scale for years 2045 and thereafter. Over the ages 95 to 117, the age 95 improvement rate is graded to zero.

Scale MP-2021 can be found at the SOA website and the projection scales used in the 2021 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.

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

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.

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.



## **Glossary**

**(Continued)**

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

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

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

