

MacLeod Watts

September 24, 2021

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

Re: **PEBP** Other Postemployment Benefits of the Tahoe Douglas Fire Protection District
GASB 75 Actuarial Report for the Fiscal Year Ending June 30, 2021

Dear Chief Lindgren:

We are pleased to enclose our actuarial report providing financial information about the other post-employment benefit (OPEB) liabilities of the Tahoe Douglas Fire Protection District. **This report covers only former employees and retirees covered by the Nevada Public Employees' Benefit Plan (PEBP).** The report's text describes our analysis and assumptions in detail.

The primary purpose of this report is to 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, 2021 relating to District retirees covered by PEBP. Please note that information relating to the Tahoe Douglas Fire Protection District Retiree Healthcare Plan (the District Plan) is provided in a separate report.

The exhibits presented are based on the results of an actuarial valuation prepared as of December 31, 2019, and on the retiree data provided to us for that valuation. The District also provided information on retiree benefits paid for the current fiscal year. As with any analysis, the soundness of the report is dependent on the inputs. Please review the information shown in the report to be comfortable that it matches your records.

Our calculations reflect the assumption that the District will continue to finance this PEBP OPEB liability on a pay-as-you-go basis. The discount rate used has been updated, in keeping with the change in the applicable municipal bond index on which it is based.

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

Sincerely,



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

Enclosure



Tahoe Douglas Fire Protection District

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GASB 75 Actuarial Report
Measured as of December 31, 20&\$
For Fiscal Year End June 30, 20&%Financial Reporting

Submitted GYdhYa VYf'&\$&%

MacLeod Watts

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A. Executive Summary

This report presents actuarial information for the Tahoe Douglas Fire Protection District **relating to the other post-employment benefit liability for retirees covered by the Nevada Public Employees' Benefit Plan (PEBP)**. The purpose of this report is to provide information about this plan as required by Statement No. 75 of the Governmental Accounting Standards Board (GASB 75) for the District's fiscal year ending June 30, 2021. A separate GASB 75 report has been prepared for OPEB liabilities stemming from the Tahoe Douglas Fire Protection District Retiree Healthcare Plan (the District Plan).

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 and present exhibits appropriate for disclosures under GASB 75. These exhibits were prepared from a rollforward of the December 31, 2019 valuation.

A new biennial valuation of the PEBP liability will need to be completed as of December 31, 2021. The results of that valuation will first be applied to prepare the GASB 75 report for the District's fiscal year end June 30, 2022.

OPEB Obligations for District PEBP Retirees

Nevada has legislated certain unique rights to retiree medical coverage. Nevada Revised Statutes (NRS) 287.023 provide that, prior to December 1, 2008, (most) local agency retirees could elect to continue in their employer's health plan after retirement, or join PEBP, Nevada's health plan for non-State public agency employees (section 1).

For retirees and former employees covered by a medical plan offered through PEBP:

- **Explicit subsidy liabilities:** As noted above, the District is required to provide a monthly subsidy toward the cost of medical coverage for retirees and their dependents covered under PEBP. Liabilities relating to these projected benefits are included in this valuation.
- **Implicit subsidy liabilities:** It is MacLeod Watts's understanding that PEBP operates a separate pool from the State plan members for evaluating the claims and setting premiums for Nevada Public Agency PEBP participation. The Public Agency pool consists almost entirely of retired members. We assume that an insignificant subsidy, if any, exists of retiree premiums by active premiums under this program and therefore have not included any implicit subsidy liability relating to PEBP in this valuation.

OPEB Funding Policy

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



Executive Summary

(Continued)

Our understanding is that the District is continuing to finance this PEBP OPEB liability on a pay-as-you-go basis. With the District's approval, the discount rate used in this valuation is based on the Fidelity Municipal Bond AA 20 Year Maturity Yield Index. At the beginning and end of the Measurement Period, use of this index results in discount rates of 2.75% on December 31, 2019 and 2.00% on December 31, 2020.

Actuarial Assumptions

The basic mortality rates used in this report are the same as the rates used for the most recent valuation of the retirement plan(s) covering District employees, though a different table was applied to project future mortality improvement. Other assumptions, such as healthcare trend and retiree participation rates, were selected based on demonstrated plan experience and/or our best estimate of expected future experience. These assumptions, and more, impact expected future benefits. Please note that this valuation has been prepared on a closed group basis. This program is (essentially) closed to new District retirees and only the retirees covered by PEBP as of the valuation date are considered.

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, 2021
Measurement Date	December 31, 2020
Measurement Period	December 31, 2019 to December 31, 2020
Valuation Date	December 31, 2019

Significant Results and Differences from the Prior Valuation

This report is based on a roll forward of the December 31, 2019 valuation. No benefit changes or material changes in plan members were reported since that valuation was prepared. Accordingly, no plan or census data was gathered, and no plan experience was analyzed for this report. The discount rate was updated from 2.75% to 2.00% reflecting the change in the underlying municipal bond index on which it is based. No other assumption changes were made.



Executive Summary

(Concluded)

Impact on Statement of Net Position and OPEB Expense for Fiscal Year Ending 2021

The accounting impact of the PEBP retiree coverage as of the District's fiscal year end June 30, 2021 is shown below.

Items	For Reporting At Fiscal Year Ending June 30, 2021
Total OPEB Liability	\$ 149,483
Fiduciary Net Position	-
Net OPEB Liability (Asset)	149,483
Deferred (Outflows) of Resources	(6,551)
Deferred Inflows of Resources	-
Impact on Statement of Net Position	<u>\$ 142,932</u>
 OPEB Expense, FYE 6/30/2021	 <u><u>\$ 14,293</u></u>

Important Notices

This report is intended to be used only to present the actuarial information relating to other postemployment benefit liabilities for PEBP retirees 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. Accounting Information (GASB 75)

The following exhibits are designed to satisfy the reporting and disclosure requirements of GASB 75 relating to retiree PEBP coverage for the fiscal year end June 30, 2021, as well as facilitate an audit of plan changes. The District is classified for GASB 75 purposes as a single employer.

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, 2021

Measurement Date is December 31, 2020

PEBP

Items Impacting Net Position:

Total OPEB Liability	\$ 149,483
Fiduciary Net Position	-
Net OPEB Liability (Asset)	149,483

Deferred (Outflows) Inflows of Resources Due to:

Assumption Changes	-
Plan Experience	-
Investment Experience	-
Deferred Contributions	(6,551)
Net Deferred (Outflows) Inflows of Resources	(6,551)

Impact on Statement of Net Position, FYE 6/30/2021

\$ 142,932

Items Impacting OPEB Expense:

Service Cost	\$ -
Cost of Plan Changes	-
Interest Cost	3,913
Expected Earnings on Assets	-

Recognized Deferred Resource items:

Assumption Changes	10,380
Plan Experience	-
Investment Experience	-

OPEB Expense, FYE 6/30/2021

\$ 14,293



Accounting Information

(Continued)

Change in Net Position During the Fiscal Year

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

For Reporting at Fiscal Year End <i>Measurement Date</i>	6/30/2020 <i>12/31/2019</i>	6/30/2021 <i>12/31/2020</i>	Change During Period
Total OPEB Liability	\$ 149,421	\$ 149,483	\$ 62
Fiduciary Net Position	-	-	-
Net OPEB Liability (Asset)	149,421	149,483	62
<i>Deferred Resource (Outflows) Inflows Due to:</i>			
Assumption Changes	-	-	-
Plan Experience	-	-	-
Investment Experience	-	-	-
Deferred Contributions	(7,699)	(6,551)	1,148
Net Deferred (Outflows) Inflows	(7,699)	(6,551)	1,148
Impact on Statement of Net Position	\$ 141,722	\$ 142,932	\$ 1,210

Change in Net Position During the Fiscal Year

Impact on Statement of Net Position, FYE 6/30/2020	\$ 141,722
OPEB Expense (Income)	14,293
Employer Contributions During Fiscal Year	(13,083)
Impact on Statement of Net Position, FYE 6/30/2021	\$ 142,932

OPEB Expense

Employer Contributions During Fiscal Year	\$ 13,083
Deterioration (Improvement) in Net Position	1,210
OPEB Expense (Income), FYE 6/30/2021	\$ 14,293



Accounting Information

(Continued)

Deferred Resources as of Fiscal Year End and Expected Future Recognition

The period for recognizing changes in the Total OPEB Liability arising from assumptions changes and/or plan experience is the expected average remaining service lifetime (EARS�) of active members. Because there are no active employees in this program, all changes are recognized immediately in the current year.

The exhibit below shows deferred resources at fiscal year end June 30, 2021.

Tahoe Douglas FPD	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of Assumptions	\$ -	\$ -
Differences Between Expected and Actual Experience	-	-
Net Difference Between Projected and Actual Earnings on Investments	-	-
Deferred Contributions	6,551	-
Total	\$ 6,551	\$ -

Schedule of Deferred Outflows and Inflows of Resources

There are no deferred resource bases for pay-as-you-go plans in which all participants are retired and where the measurement date is the last day of the prior fiscal year.

Deferred Resource					Balance as of Dec 31, 2020	
Date Created	Cause	Initial Amount	Period (Yrs)	Recognized 2020-21 (FYE 2020)		
Loss Due To						
12/31/2020	Assumption Changes	\$ 10,380	1.00	\$ 10,380	\$	-



Accounting Information
 (Continued)

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

The discount rate used for fiscal year end 2021 is 2.00%. Healthcare cost trend rate prior to eligibility for Medicare was assumed to start at 5.40% and grade down to 4% for years 2076 and thereafter; medical cost inflation for those covered by Medicare is 4.5% per year. 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% 1.00%	Current 2.00%	Current + 1% 3.00%
Net OPEB Liability (Asset)	165,516	149,483	136,000
Increase (Decrease)	16,033		(13,483)
% Increase (Decrease)	10.7%		-9.0%
Change in Healthcare Cost Trend Rate	Current Trend - 1%	Current Trend	Current Trend + 1%
Net OPEB Liability (Asset)	137,434	149,483	163,502
Increase (Decrease)	(12,049)		14,019
% Increase (Decrease)	-8.1%		9.4%



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 are shown for years since GASB 75 was implemented (fiscal years 2018 through 2021).

Fiscal Year Ending	2021	2020	2019	2018
Measurement Date	12/31/2020	12/31/2019	12/31/2018	12/31/2017
Discount Rate on Measurement Date	2.00%	2.75%	3.71%	3.31%
Total OPEB liability				
Service Cost	\$ -	\$ -	\$ -	\$ -
Interest	3,913	4,109	4,120	4,829
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	-	7,604	-	-
Changes of assumptions	10,380	34,243	(4,024)	5,407
Benefit payments	(14,231)	(14,552)	(13,089)	(11,920)
Net change in total OPEB liability	62	31,404	(12,993)	(1,684)
Total OPEB liability - beginning	149,421	118,017	131,010	132,694
Total OPEB liability - ending (a)	\$ 149,483	\$ 149,421	\$ 118,017	\$ 131,010
Plan fiduciary net position - beginning	-	-	-	-
Plan fiduciary net position - ending (b)	\$ -	\$ -	\$ -	\$ -
Net OPEB liability - ending (a) - (b)	\$ 149,483	\$ 149,421	\$ 118,017	\$ 131,010

Notes to Schedule

Valuation Date	12/31/2019	12/31/2017
Actuarial cost method	Entry Age Normal Level % of Pay	Entry Age Normal Level % of Pay
Inflation	2.50%	2.75%
Healthcare cost trend rates	Pre-Medicare: 5.4% effective January 2021 fluctuating down to 4.0% by 2076. Post-Medicare: 4.5%	Pre-Medicare: 6.5% effective July 2018 grading down to 5.0% by 2024. Post-Medicare: 4.5%
Salary increases	N/A; All Retired	N/A; All Retired
Retirement age	N/A; All Retired	N/A; All Retired
Mortality	RPH-2014 Healthy Annuitant	RP-2000 Combined Healthy Annuitant
Mortality Improvement	MW Scale 2020 Generationally	MW Scale 2017 Generationally



Accounting Information
(Continued)

Schedule of Contributions

This schedule is not required to be provided for an unfunded OPEB plan.



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 (Inflows) Due to:				Impact on Statement of Net Position (e) = (c) - (d)
				Assumption Changes	Plan Experience	Investment Experience	Deferred Contributions	
Balance at Fiscal Year Ending 6/30/2020 <i>Measurement Date 12/31/2019</i>	\$ 149,421	\$ -	\$ 149,421	\$ -	\$ -	\$ -	\$ 7,699	\$ 141,722
Changes During the Period:								
Service Cost	-		-					-
Interest Cost	3,913		3,913					3,913
Expected Investment Income		-	-					-
Employer Contributions		14,231	(14,231)					(14,231)
Changes of Benefit Terms	-		-					-
Benefit Payments	(14,231)	(14,231)	-					-
Assumption Changes	10,380		10,380	10,380				-
Plan Experience	-		-		-			-
Investment Experience		-	-			-		-
Recognized Deferred Resources				(10,380)	-	-	(14,231)	24,611
Employer Contributions in Fiscal Year							13,083	(13,083)
Net Changes in Fiscal Year 2020-2021	62	-	62	-	-	-	(1,148)	1,210
Balance at Fiscal Year Ending 6/30/2021 <i>Measurement Date 12/31/2020</i>	\$ 149,483	\$ -	\$ 149,483	\$ -	\$ -	\$ -	\$ 6,551	\$ 142,932



Accounting Information

(Continued)

District Contributions to the Plan

District contributions to the 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 (“explicit subsidies”) and/or indirect payments to retirees in the form of higher premiums for active employees (“implicit subsidies”). For details, see Addendum 1 – Important Background Information.

Benefits paid during the measurement period (January 1 through December 31, 2020):	\$14,231
Benefits paid during the fiscal year (July 1, 2020 through June 30, 2021):	\$13,083
Deferred contributions (paid January 1, 2021 through June 30, 2021):	\$ 6,551



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 covered by PEBP. Expected annual benefits have been projected on the basis of the actuarial assumptions outlined in Section 3.

Projected Annual Benefit Payments	
Calendar Year	PEBP Retirees
2021	14,231
2022	7,921
2023	7,919
2024	7,947
2025	7,943
2026	7,906
2027	7,834
2028	7,721
2029	7,566
2030	7,372
2031	7,140
2032	6,872
2033	6,572
2034	6,247
2035	5,903



Accounting Information

(Concluded)

Sample Journal Entries

PEBP	
------	--

Beginning Account Balances

As of the fiscal year beginning 7/1/2020

	Debit	Credit
Net OPEB Liability		149,421
Deferred Resource -- Assumption Changes	-	
Deferred Resource -- Plan experience	-	
Deferred Resource -- Investment Experience	-	
Deferred Resource -- Contributions	7,699	
Net Position	141,722	

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

Journal entry to recharacterize retiree benefit payments not reimbursed by a trust, and record cash contributions to the trust during the fiscal year

	Debit	Credit
OPEB Expense	13,083	
Premium Expense		13,083
OPEB Expense	-	
Cash		-

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

Journal entries to record other account activity during the fiscal year

	Debit	Credit
Net OPEB Liability		62
Deferred Resource -- Assumption Changes	-	
Deferred Resource -- Plan experience	-	
Deferred Resource -- Investment Experience	-	
Deferred Resource -- Contributions		1,148
OPEB Expense	1,210	



C. Funding Information

Our understanding is that the District is currently financing its PEBP OPEB liability on a pay-as-you-go basis. 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.

Should the District wish to explore potential future prefunding for this plan we can prepare illustrations of various funding levels and, if appropriate, perform a formal funding valuation at that time. Results under a funding scenario may be materially different from the results presented in this report.



D. 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 for retired employees covered by PEBP.

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: September 24, 2021



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



J. Kevin Watts, FSA, FCA, MAAA



E. Supporting Information

Section 1 - Summary of Employee Data

Active members: There are no active District employees covered by or eligible for coverage under PEBP.

Retired members: As of the December 2019 valuation date, there were 5 former employees for whom the District pays a subsidy toward the cost of PEBP coverage.

PEBP Retirees		
Current Age	Number	Percent
Below 50	0	0%
50 to 54	0	0%
55 to 59	0	0%
60 to 64	2	40%
65 to 69	0	0%
70 to 74	1	20%
75 to 79	2	40%
80 & up	0	0%
Total	5	100%
Average Attained Age for Retirees:		70.7

While the plan is generally closed to District retirees after September 1, 2008, former employees covered by PEBP at the time of their retirement (through a subsequent employer) may join the plan and, if this occurs, the District is assessed a portion of their cost.

There have been no changes in District retirees covered by PEBP in the two years since the prior valuation was prepared, as shown below.

Reconciliation of PEBP Retiree Population	
Retirees as of December 2017	5
Deceased or dropped coverage	0
Added to PEBP invoice	0
Retirees as of December 2019	5



Supporting Information

(Continued)

Section 2 - Summary of Retiree Benefit Provisions

PEBP Eligibility: PEBP closed to non-State public agency retirees on September 1, 2008 unless the agency's active employees are participating in PEBP. However, the District is responsible for a portion of the PEBP subsidy for a former employee retiring after September 1, 2008 from the State or from a Non-State public agency whose active employees participate in PEBP.

For a retiree to participate in the PEBP program, the participant must be receiving a PERS benefit. PERS eligibility requirements vary by employee group and benefit type.

Benefits for PEBP retirees: Those retirees and former employees who were eligible and elected PEBP coverage are entitled to a subsidy toward their premium cost based on their years of covered employment under Nevada PERS. The subsidy is shared on a pro-rata basis by the employers for which the retiree has worked and earned PERS service credit. Thus, the District is obligated to subsidize health care premiums for former employees as well as those who retired directly from the District.

The Nevada Legislature changes the benefit subsidies from time to time. The monthly subsidy continues to be based on years of credited service under Nevada PERS, though the level differs for pre-Medicare and Medicare eligible retirees. The subsidy ends at the earlier of the retiree's death or the date he or she discontinues coverage.

There are exceptions to the amounts shown below:

- (a) Participants who retired before June 30, 1994 receive the 15 year subsidy, regardless of their years of covered service and
- (b) Participants do not receive a subsidy if they were hired by their last employer on or after June 30, 2010, retired with less than 15 years of service and were not disabled.

Agency Subsidy for PEBP Coverage for Non-State pre-Medicare retirees:

The subsidy provided to pre-Medicare retirees varies based on the type of plan selected (PPO or HMO) and by the level of coverage taken (e.g., single, two party, family, etc.). This chart shows the monthly amounts payable as of January 2020 for those with 15 years of PERS service. Actual pre-Medicare subsidies as of January 2020 invoiced to the District by individual, were used for the valuation. Some subsidy increases are expected pursuant to SB 552, to be phased in through 2022.

Coverage Level	PPO CDHP		Statewide EPO/HMO	
	Base Subsidy	SB 552 Subsidy	Base Subsidy	SB 552 Subsidy
<i>For 15 years of PERS service</i>				
Retiree Only	\$ 813.80	\$ 163.65	\$ 398.00	\$ (11.66)
Retiree + Spouse	1,389.86	419.51	630.93	(28.22)
Retiree + Children	1,212.52	384.79	527.69	(5.39)
Retiree + Family	1,788.58	640.65	760.62	(21.95)

HRA Contributions for non-State Medicare Retirees covered by the Exchange:

Amounts paid for Medicare eligible retirees covered by the Exchange do not vary by type of plan or coverage level; they vary only by years of PERS membership service.

On January 1, 2020, the monthly subsidy for retirees on the Medicare Exchange was \$13 per month per year of PERS service, with a maximum benefit payable of \$260 per month.



Supporting Information

(Continued)

Section 3 - Actuarial Methods and Assumptions

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

Important Dates

Fiscal Year End	June 30, 2021
GASB 75 Measurement Date	December 31, 2020
Valuation Date	December 31, 2019

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 PEBP retirees are valued.

Economic Assumptions

Municipal Bond Index	Fidelity Municipal Bond AA 20 Year Maturity Yield Index
Discount Rate	2.00% as of December 31, 2020 2.75% as of December 31, 2019
General Inflation Rate	2.5% per year
Salary Increase	Not applicable; there are no active employees in this plan.
Healthcare Trend	The District's subsidy toward the cost of PEBP retiree coverage prior to Medicare is assumed to increase at the following rates:

Effective January 1	Premium Increase	Effective January 1	Premium Increase
2021	5.40%	2067	4.70%
2022	5.30%	2068	4.60%
2023-26	5.20%	2069	4.50%
2027-46	5.30%	2070-71	4.40%
2047	5.20%	2072	4.30%
2048-49	5.10%	2073-74	4.20%
2050-53	5.00%	2075	4.10%
2054-59	4.90%	2076 & later	4.00%
2060-66	4.80%		

Continued on the following page.



Supporting Information

(Continued)

Section 3 - Actuarial Methods and Assumptions

Healthcare Trend (concluded)

The healthcare trend shown above was developed using the Getzen Model 2019_b published by the Society of Actuaries using the following settings: CPI 2.5%; Real GDP Growth 1.5%; Excess Medical Growth 1.2%; Expected Health Share of GDP in 2030 20.5%; Resistance Point 25%; Year after which medical growth is limited to growth in GDP 2075.

Post-Medicare healthcare cost increase trend is 4.5% per year.

Participant Election Assumptions

Participation Rate

Retirees: All retirees currently covered by PEBP are assumed to retain their existing election until death.

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

Mortality:

The basic mortality rates used in this valuation are based on the most recently published report of the Nevada Public Employees Retirement System, dated June 30, 2019, except for a different basis used to project future mortality improvements.

Non-disabled life rates for Regular & Safety employees:

Males and Females: Headcount-Weighted RP-2014 Healthy Annuitant Table

Disabled life rates for Regular & Safety employees:

Males and Females: Headcount-Weighted RP-2014 Disabled Retiree Table, set forward 4 years

Mortality Improvement

In the June 30, 2019 Nevada PERS Valuation, the mortality rates described above were stated to “reasonably reflect the projected mortality experience of the Plan as of the measurement date.” We then adjusted these rates to anticipate future mortality improvement by applying MacLeod Watts Scale 2020 on a generational basis from 2018 forward (see Addendum 2 for additional details).

Changes recognized in the current measurement period:

Discount rate

Changed from 2.75% as of December 31, 2019 to 2.00% as of December 31, 2020 based on the published change in return for the applicable municipal bond index.



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.

For virtually all Nevada public agencies with retirees in PEBP, these retirees are in a separate pool consisting almost exclusively of retirees. The claims experience of this pool is developed separately from that of other PEBP members; thus, no implicit subsidy liability exists or is insignificant for these retirees.

Valuation Process

The valuation was based on retiree census data and benefits provided by the District. A summary of this data is provided in Section 1 and a summary of the benefits provided under the Plan is provided in Section 2. While individual retiree 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.

We first determine an expected benefit stream over the retiree’s expected remaining lifetime. The projected benefits are projected Agency payments to PEBP and include assumed trends (increases) in the cost of those benefits and assumptions as to the expected date(s) when benefits will end.

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. Final payments for retirees may not be made for 25 years or more.



Important Background Information

(Continued)

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". *Note that there is no service cost in a closed plan with only retirees (such as PEBP) because there are no active employees.*

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 change in the subsidy provided by the District toward PEBP coverage
- Longer life expectancies of retirees
- 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 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").



Important Background Information

(Continued)

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 (EARSLS) of all members that are provided with benefits, determined as of the beginning of the Measurement Period. Because PEBP is closed and there are no active members, all differences between expected and actual experience and/or changes in assumptions are recognized immediately.

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.

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



Addendum 2: MacLeod Watts 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 2018** was developed from a blending of data and methodologies found in two published sources: (1) the Society of Actuaries Mortality Improvement Scale MP-2017 Report, published in October 2017 and (2) the demographic assumptions used in the 2017 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, published July 2017.

MacLeod Watts Scale 2018 is a two-dimensional mortality improvement scale reflecting both age and year of mortality improvement. The underlying base scale is Scale MP-2017 which has two segments: (1) historical improvement rates for the period 1951-2013 and (2) an estimate of future mortality improvement for years 2014-2016 using the Scale MP-2017 methodology but utilizing the assumptions obtained from Scale MP-2015. The MacLeod Watts scale then transitions from the 2016 improvement rate to the Social Security Administration (SSA) Intermediate Scale linearly over the 10-year period 2017-2026. After this transition period, the MacLeod Watts Scale uses the constant mortality improvement rate from the SSA Intermediate Scale from 2026-2040. The SSA's Intermediate Scale has a final step down in 2041 which is reflected in the MacLeod Watts scale for years 2041 and thereafter. Over the ages 95 to 115, the SSA improvement rate is graded to zero.

Scale MP-2017 can be found at the SOA website and the projection scales used in the 2017 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 (EARS�) – 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.



Glossary

(Continued)

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

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

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.

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

