

# MacLeod Watts

September 21, 2018

Steven Smith  
Assistant County Administrative Officer  
Sutter County  
1160 Civic Center Blvd. Suite A  
Yuba City, CA 95993

Re: GASB 75 Actuarial Report for the Fiscal Year Ending June 30, 2018

Dear Mr. Smith:

We are pleased to enclose our report providing actuarial information of the other post-employment benefit (OPEB) liabilities of Sutter County (the County). 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 County's financial statements for the fiscal year ending June 30, 2018. The information presented reflects our understanding that the County continues to finance its OPEB liability on a pay-as-you-go basis. These results were developed from the results of the June 30, 2017 actuarial valuation, adjusted as needed to comply with GASB 75.

This report reflects employee data and details on plan provisions as well as benefit payments and covered-employee payroll provided to us by the County. 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.

We appreciate the opportunity to work on this analysis. Thank you for your help in providing information and assistance 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



## Sutter County

GASB 75 Actuarial Report  
Measured as of June 30, 2017  
For Fiscal Year End June 30, 2018 Financial Reporting

Submitted September 2018

MacLeod Watts

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## A. Executive Summary

This report presents actuarial information for the other post-employment benefit (OPEB) programs of Sutter County (the County). The purpose of this valuation is to assess the OPEB liabilities and provide disclosure information as required by Statement No. 75 of the Governmental Accounting Standards Board (GASB 75) for the fiscal year ending June 30, 2018.

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 various exhibits appropriate for disclosures under GASB 75. We anticipate that the next actuarial valuation will be dated June 30, 2019. If there are any significant changes in the employee population, benefits provided under the plan, or the OPEB funding policy, please contact us to discuss whether an earlier valuation might be required.

### OPEB Obligations of the County

The County provides continuation of medical, dental and vision coverage to its retiring employees. These benefits create 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 County contributes a portion of retiree healthcare premiums for qualifying retirees. These benefits are described in Section 2A.

The Patient Protection and Affordable Care Act (ACA) includes a 40% excise tax on high-cost employer-sponsored health coverage. Any portion of such future excise tax paid by the employer is also a form of explicit subsidy. See Supporting Information Section 2B and Section 3 for further description and assumptions about this potential excise tax.

- **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 County’s program, the claims experience of active employees and retirees not covered by Medicare is co-mingled in setting premium rates for some members and gives rise to an implicit subsidy. Where applicable, we determine the implicit rate subsidy as the projected difference between (a) retiree medical claim costs by age and (b) premiums charged for retiree coverage. For more information on this process see Section 3 and Addendum 2: MacLeod Watts Age Rating Methodology.

### County Funding Policy

The County’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.



## Executive Summary

(Continued)

The County has been and continues to finance its OPEB liability on a pay-as-you-go basis. With the County's approval, the discount rates used in this valuation are based on the S&P Municipal Bond 20 Year High Grade Index. As of the beginning and end of the Measurement Period, this index indicates discount rates of 2.68% as of June 30, 2016 and 3.13% as of June 30, 2017.

### 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 County employees. Other assumptions, such as age-related healthcare claims, healthcare trend, retiree participation rates and spouse coverage, were selected based on demonstrated plan experience and/or our best estimate of expected future experience. All these assumptions, and more, impact expected future benefits. Please note that this valuation has been prepared on a closed group basis. This means that only employees and retirees present as of the valuation date are considered. We do not consider replacement employees for those we project to leave the current population of plan participants until the valuation date following their employment.

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

### Important Dates Used in the Valuation

GASB75 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:

Valuation Date	June 30, 2017
Measurement Date	June 30, 2017
Measurement Period	June 30, 2016 to June 30, 2017
Fiscal Year End	June 30, 2018

### Significant Results and Differences from the Prior Valuation

This is the first report for the County reflecting the requirements of GASB 75. No benefit changes were reported to MacLeod Watts relative to those in place at the time the June 2017 valuation was prepared.

Because the valuation date occurred at the end of the Measurement Period, we rolled the valuation results back one year to develop the plan's liability on June 30, 2016. With this approach, no assumption changes occur, other than the required update to the discount rate, and no plan experience (difference between assumed and actual results) is recognized.



## Executive Summary

(Concluded)

### Impact on Statement of Net Position and OPEB Expense for Fiscal 2018

The accounting impact of the plan as of the County's fiscal year end June 30, 2018 is shown below.

Items	For Reporting At Fiscal Year Ending June 30, 2018
Total OPEB Liability	\$ 13,782,843
Fiduciary Net Position	-
Net OPEB Liability (Asset)	13,782,843
Deferred (Outflows) of Resources	(499,306)
Deferred Inflows of Resources	584,086
Impact on Statement of Net Position	<u>\$ 13,867,623</u>
 <b>OPEB Expense, FYE 2018</b>	 <u><u>\$ 1,252,022</u></u>

The Total OPEB Liability (TOL) shown above as of the June 30, 2017 Measurement Date is comprised of these three components:

Explicit	Excise Tax	Implicit	TOL
\$ 2,954,558	\$ 929,803	\$ 9,898,482	\$ 13,782,843
21%	7%	72%	100%

### Recognition Period for Deferred Resources

The plan's Expected Average Remaining Service Life ("EARSL") is 8.62 years for deferred resources arising in this fiscal year. 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 EARSL period. GASB 75 requires that 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.

### Important Notices

This report is intended to be used only to present the actuarial information relating to other postemployment benefits for the County'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 County 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 County 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 for the fiscal year end June 30, 2018. The County 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.

<b>Plan Summary Information</b> <i>Measurement Date is June 30, 2017</i>	<b>Sutter County</b>
<b>Items Impacting Net Position:</b>	
Total OPEB Liability	\$ 13,782,843
Fiduciary Net Position	-
Net OPEB Liability (Asset)	13,782,843
<i>Deferred (Outflows) Inflows of Resources Due to:</i>	
Assumption Changes	584,086
Plan Experience	-
Investment Experience	-
Contributions Subsequent to Measurement Date	(499,306)
Net Deferred (Outflows) Inflows of Resources	84,780
<b>Impact on Statement of Net Position, FYE 6/30/2018</b>	<b>\$ 13,867,623</b>
<b>Items Impacting OPEB Expense:</b>	
Service Cost	\$ 945,753
Cost of Plan Changes	-
Interest Cost	382,921
Expected Earnings on Assets	-
<i>Recognized Deferred Resource items:</i>	
Assumption Changes	(76,652)
Plan Experience	-
Investment Experience	-
<b>OPEB Expense, FYE 6/30/2018</b>	<b>\$ 1,252,022</b>



**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.

Sutter County					
For Reporting at Fiscal Year End	6/30/2017		6/30/2018		Change
Measurement Date	6/30/2016		6/30/2017		During
					Period
Total OPEB Liability	\$	13,569,767	\$	13,782,843	\$ 213,076
Fiduciary Net Position		-		-	-
Net OPEB Liability (Asset)		13,569,767		13,782,843	213,076
<i>Deferred Resource (Outflows) Inflows Due to:</i>					
Assumption Changes		-		584,086	584,086
Plan Experience		-		-	-
Investment Experience		-		-	-
Contributions Made Subsequent to the Measurement Date		(454,860)		(499,306)	(44,446)
Net Deferred (Outflows) Inflows		(454,860)		84,780	539,640
Impact on Statement of Net Position	\$	13,114,907	\$	13,867,623	\$ 752,716

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

Impact on Statement of Net Position, FYE 2017	\$	13,114,907
OPEB Expense (Income)		1,252,022
Employer Contributions During Fiscal Year		(499,306)
Impact on Statement of Net Position, FYE 2018	\$	<u>13,867,623</u>

**OPEB Expense**

Employer Contributions During Fiscal Year	\$	499,306
Deterioration (Improvement) in Net Position		752,716
OPEB Expense (Income), FYE 2018	\$	<u>1,252,022</u>





**Accounting Information**  
 (Continued)

**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, 2018.

Sutter County	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of Assumptions	\$ -	\$ 584,086
Differences Between Expected and Actual Experience	-	-
Net Difference Between Projected and Actual Earnings on Investments	-	-
Contributions Made Subsequent to the Measurement Date	499,306	-
<b>Total</b>	<b>\$ 499,306</b>	<b>\$ 584,086</b>

The County 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
2019	\$ (76,652)
2020	(76,652)
2021	(76,652)
2022	(76,652)
2023	(76,652)
Thereafter	(200,826)



**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 2018 is 3.13%. Healthcare Cost Trend Rate was assumed to start at 8.0% and grade down to 5.0% for years 2024 and thereafter. The impact of a 1% increase or decrease in these assumptions is shown in the chart below.

<b>Sensitivity to:</b>			
<b>Change in Discount Rate</b>	<b>Current - 1% 2.13%</b>	<b>Current 3.13%</b>	<b>Current + 1% 4.13%</b>
<b>Total OPEB Liability</b>	15,320,513	13,782,843	12,470,371
Increase (Decrease)	1,537,670		(1,312,472)
% Increase (Decrease)	11.2%		-9.5%
<b>Net OPEB Liability (Asset)</b>	15,320,513	13,782,843	12,470,371
Increase (Decrease)	1,537,670		(1,312,472)
% Increase (Decrease)	11.2%		-9.5%
<b>Change in Healthcare Cost Trend Rate</b>	<b>Current Trend - 1%</b>	<b>Current Trend</b>	<b>Current Trend + 1%</b>
<b>Total OPEB Liability</b>	11,867,094	13,782,843	17,312,782
Increase (Decrease)	(1,915,749)		3,529,939
% Increase (Decrease)	-13.9%		25.6%
<b>Net OPEB Liability (Asset)</b>	11,867,094	13,782,843	17,312,782
Increase (Decrease)	(1,915,749)		3,529,939
% Increase (Decrease)	-13.9%		25.6%



**Accounting Information**  
 (Continued)

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

GASB75 requires presentation of the 10-year history of changes in the Net OPEB Liability. However, since this is the initial year of implementation, only one year is currently available.

<b>Fiscal Year Ending 2018</b>	<b>Sutter County</b>
<b>Total OPEB liability</b>	
Service Cost	\$ 945,753
Interest	382,921
Changes of benefit terms	-
Differences between expected and actual experience	-
Changes of assumptions	(660,738)
Benefit payments	<u>(454,860)</u>
<b>Total OPEB liability - beginning</b>	<u>13,569,767</u>
<b>Total OPEB liability - ending (a)</b>	<u><u>\$ 13,782,843</u></u>
<b>Plan fiduciary net position</b>	
Contributions - employer	\$ 454,860
Net investment income	-
Benefit payments	(454,860)
<b>Net change in plan fiduciary net position</b>	-
<b>Plan fiduciary net position - beginning</b>	<u>-</u>
<b>Plan fiduciary net position - ending (b)</b>	<u><u>\$ -</u></u>
<b>Net OPEB liability - ending (a) - (b)</b>	<u><u>\$ 13,782,843</u></u>
<b>Covered-employee payroll</b>	\$ 53,626,420
<b>Net OPEB liability as a percentage of covered-employee payroll</b>	25.70%



**Accounting Information**  
 (Continued)

**Detail of Changes to Net Position**

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

Sutter County	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	Contributions Subsequent to Measurement Date	
<b>Balance at Fiscal Year Ending 6/30/2017</b> <i>Measurement Date 6/30/2016</i>	\$ 13,569,767	\$ -	\$ 13,569,767	\$ -	\$ -	\$ -	\$ 454,860	\$ 13,114,907
<b>Changes During the Period:</b>								
Service Cost	945,753		945,753					945,753
Interest Cost	382,921		382,921					382,921
Expected Investment Income		-	-					-
Employer Contributions		454,860	(454,860)					(454,860)
Changes of Benefit Terms	-		-					-
Benefit Payments	(454,860)	(454,860)	-					-
Assumption Changes	(660,738)		(660,738)	(660,738)				-
Plan Experience	-		-		-			-
Investment Experience		-	-			-		-
Recognized Deferred Resources				76,652	-	-	(454,860)	378,208
Employer Contributions Subsequent to Measurement date							499,306	(499,306)
<b>Net Changes in Fiscal Year 2017-2018</b>	213,076	-	213,076	(584,086)	-	-	44,446	752,716
<b>Balance at Fiscal Year Ending 6/30/2018</b> <i>Measurement Date 6/30/2017</i>	\$ 13,782,843	\$ -	\$ 13,782,843	\$ (584,086)	\$ -	\$ -	\$ 499,306	\$ 13,867,623



**Accounting Information**  
 (Continued)

**Schedule of Deferred Outflows and Inflows of Resources**

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

Measurement Date: June 30, 2017

Date Created	Cause of Deferred Resource	Initial Amount	Annual Recognition	Balance as of Jun 30, 2017	Recognition of Deferred Outflow or Deferred (Inflow) in Measurement Period:							
					2016-17 (FYE 2018)	2017-18 (FYE 2019)	2018-19 (FYE 2020)	2019-20 (FYE 2021)	2020-21 (FYE 2022)	2021-22 (FYE 2023)	Thereafter	
6/30/2017	Gain Due To Assumption Changes	\$ (660,738)	\$ (76,652)	\$ (584,086)	\$ (76,652)	\$ (76,652)	\$ (76,652)	\$ (76,652)	\$ (76,652)	\$ (76,652)	\$ (76,652)	\$ (200,826)

The Expected Average Remaining Service Life (“EARS”) was 8.62 years. This is the period used to recognize changes in the OPEB Liability arising in this Measurement Period *other than* those arising from investment gains and losses or relating to improvements in plan benefits.



**Accounting Information**

(Continued)

**County Contributions to the Plan**

County contributions to the Plan may occur as benefits are paid to retirees and/or to an irrevocable 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”). For details, see Addendum 1 – Important Background Information.

Benefits paid by the County during the measurement period and made in the year following the measurement period but prior to the end of the fiscal year are shown below.

<b>Employer Contributions During the Measurement Period, Jul 1, 2016 thru Jun 30, 2017</b>	<b>Sutter County</b>
Employer Contributions to the Trust	\$ -
Employer Contributions in the Form of Direct Benefit Payments (not reimbursed by trust)	97,218
Implicit contributions	357,642
<b><i>Total Employer Contributions During the Measurement Period</i></b>	<b>\$ 454,860</b>

<b>Employer Contributions Subsequent to the Measurement Date, Jul 1, 2017 thru Jun 30, 2018</b>	<b>Sutter County</b>
Employer Contributions to the Trust	\$ -
Employer Contributions in the Form of Direct Benefit Payments (not reimbursed by trust)	113,053
Implicit contributions	386,253
<b><i>Total Employer Contributions Subsequent to the Measurement Date</i></b>	<b>\$ 499,306</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 County. Expected annual benefits have been projected on the basis of the actuarial assumptions outlined in Section 3.

Projected Annual Benefit Payments							
Fiscal Year Ending June 30	Explicit Subsidy			Implicit Subsidy			Total
	Current Retirees	Future Retirees	Total	Current Retirees	Future Retirees	Total	
2017	\$ 97,218	\$ -	\$ 97,218	\$357,642	\$ -	\$357,642	\$ 454,860
2018	113,053	-	113,053	386,253	-	386,253	499,306
2019	96,541	52,909	149,450	239,611	141,359	380,970	530,420
2020	91,984	73,032	165,016	203,838	208,819	412,657	577,673
2021	85,585	89,630	175,215	159,270	282,569	441,839	617,054
2022	84,873	103,898	188,771	146,933	356,580	503,513	692,284
2023	79,914	116,350	196,264	144,434	419,796	564,230	760,494
2024	73,813	128,884	202,697	118,034	522,186	640,220	842,917
2025	69,843	137,246	207,089	97,117	580,700	677,817	884,906
2026	67,227	141,342	208,569	84,636	617,752	702,388	910,957
2027	65,027	147,657	212,684	76,588	692,928	769,516	982,200
2028	62,529	154,117	216,646	73,334	724,771	798,105	1,014,751
2029	61,127	156,405	217,532	76,997	769,419	846,416	1,063,948
2030	58,761	156,606	215,367	76,541	779,109	855,650	1,071,017
2031	54,536	157,579	212,115	39,216	806,076	845,292	1,057,407

The amounts shown in the Explicit Subsidy section reflect the expected payment by the County toward retiree medical, dental and/or vision 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. These amounts are also shown separately and in total for those currently retired on the valuation date and for those expected to retire in the future.

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



**Accounting Information**  
 (Concluded)

**Sample Journal Entries**

**Beginning Account Balances**

**As of the fiscal year beginning 7/1/2017**

	<b>Sutter County</b>	
	<b>Debit</b>	<b>Credit</b>
Net OPEB Liability		13,569,767
Deferred Resource -- Assumption Changes	-	
Deferred Resource -- Plan experience	-	
Deferred Resource -- Investment Experience	-	
Deferred Resource -- Contributions	454,860	
Net Position	13,114,907	

\* 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 entries to record retiree premium (or other benefit)**

**payments that were not reimbursed by a trust, and contributions to the trust during the fiscal year**

	<b>Sutter County</b>	
	<b>Debit</b>	<b>Credit</b>
OPEB Expense	113,053	
Employer Contributions for Retiree Benefits During Fiscal Year		113,053

\* This entry assumes that when cash is used to pay retiree premiums directly (and not reimbursed by a trust), or when cash is used to contribute to an OPEB trust, then an account called "Employer Contributions for Retiree Benefits During Fiscal Year" was debited (increased). This entry reassigns these premium payments to OPEB Expense. If OPEB Expense was originally debited, then this entry is unnecessary.

**Journal entries to record implicit subsidies during the fiscal year**

	<b>Sutter County</b>	
	<b>Debit</b>	<b>Credit</b>
OPEB Expense	386,253	
Premium Expense During Fiscal Year		386,253

\* This entry assumes that when premiums for active employees are paid, then an account called "Premium Expense During Fiscal Year" is debited (increased). This entry reverses the portion of premium payments that represent implicit subsidies and assigns that value to OPEB Expense.

**Journal entries to record other account activity during the fiscal year**

	<b>Sutter County</b>	
	<b>Debit</b>	<b>Credit</b>
Net OPEB Liability		213,076
Deferred Resource -- Assumption Changes		584,086
Deferred Resource -- Plan experience	-	
Deferred Resource -- Investment Experience	-	
Deferred Resource -- Contributions	44,446	
OPEB Expense	752,716	





### C. 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 Sutter County (the County). We summarized the benefits in this report and our calculations were based on our understanding of the benefits as described herein.

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

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

Alternative assumptions may also be reasonable; however, demonstrating the range of potential plan results based on alternative assumptions was beyond the scope of our assignment except to the limited extent required by GASB 75. 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 Agency and may not be provided to third parties without prior written consent of MacLeod Watts. Exceptions are: The Agency may provide copies of this report to their professional accounting and legal advisors who are subject to a duty of confidentiality, and the Agency 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 21, 2018



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



J. Kevin Watts, FSA, FCA, MAAA



## D. Supporting Information

### Section 1 - Summary of Employee Data

**Active members:** The County reported 865 active employees in the data provided to us for the June 2017 valuation. Of these, 824 were shown as currently participating in the County healthcare plans, while 41 employees were waiving coverage.

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	7	1					8	1%
25 to 29	28	60	2				90	10%
30 to 34	26	53	19	4			102	12%
35 to 39	18	46	26	28	6		124	14%
40 to 44	12	33	22	27	25	2	121	14%
45 to 49	12	19	16	24	33	16	120	14%
50 to 54	6	12	24	17	26	21	106	12%
55 to 59	6	11	9	20	26	28	100	12%
60 to 64	3	4	7	21	18	15	68	8%
65 to 69	1	3	3	5	4	6	22	3%
70 & Up		1	1			2	4	0%
Total	119	243	129	146	138	90	865	100%
Percent	14%	28%	15%	17%	16%	10%	100%	

Valuation	June 2015	June 2017
Annual Covered Payroll	\$47,660,457	\$55,207,878
Average Attained Age for Actives	46.3	47.7
Average Years of Service	10.5	10.7

**Retired members:**

There are also 126 retirees or their beneficiaries receiving benefits. This chart summarizes the ages of current retirees in the County plan.

Retirees by Age					
Current Age	Misc	Police	Fire	Total	Percent
Below 50	1			1	1%
50 to 54	3	5		8	6%
55 to 59	13			13	10%
60 to 64	36	8	1	45	36%
65 to 69	15			15	12%
70 to 74	18	2		20	16%
75 to 79	14			14	11%
80 & up	10			10	8%
Total	110	15	1	126	100%
Average Age:					
On 6/30/2017	67.7	60.3	60.6	66.8	
At retirement	59.5	54.8	44.9	58.8	



## Supporting Information

(Continued)

### Section 2 - Summary of Retiree Benefit Provisions

**OPEB provided:** The County confirmed that the only OPEB provided is retiree medical coverage.

**Access to coverage:** This coverage is available to employees and their dependents who satisfy the requirements for retirement under CalPERS (generally attained age of 50 or older and 5 years of State or public agency service or approved disability retirement) and are receiving a pension benefit from CalPERS.

**Benefits provided:** The County contributes a monthly subsidy for retirees who participate in the medical plan offered by the County. The amounts are determined based on date of retirement.

- Employees who retire before 12/24/2005 receive a monthly amount of \$16, regardless of age.
- Employees who retire on or after 12/24/2005 receive a monthly amount of:
  - \$55 as of 1/1/2018<sup>1</sup>, if they are 65 or older, and
  - Prior to age 65, an amount based on years of County service, as shown in the chart below.

Years of Service	Monthly Subsidy
5-9	\$16
10-14	56
15-19	96
20-24	136
25-29	176
30+	216

- Subsidies end with the death of the retiree, though a surviving spouse may continue coverage by paying the full monthly premiums. In addition, if the retiree reaches age 65 prior to his or her covered spouse, the spouse may continue coverage until age 65 by paying the full monthly premium, even if the retiree discontinues coverage on the County's plan.

**Current premium rates:** Pre-Medicare retirees and their dependents participate in the same medical plans available to active employees. The 2018 monthly premium rates are shown in this chart. Medicare eligible retirees may continue coverage through the County's United Healthcare Medicare plans. For 2018, the single-party premium for a Medicare retiree is \$431.38 per month.

CSAC-EIA 2018 Monthly Medical Premiums			
Plan	Employee Only	Employee Plus 1	Employee Plus Family
PPO 1500	\$ 609.50	\$ 1,217.50	\$ 1,723.50
PPO 1000	623.50	1,243.50	1,759.50
PPO 500	758.50	1,516.50	2,147.50
PPO 250	872.50	1,744.50	2,469.50
Kaiser High	718.50	1,437.50	2,033.50
Kaiser Low	675.50	1,352.50	1,912.50
PPO 3000 (HDHP)	433.50	865.50	1,222.50
UHC Medicare Advantage	431.38	862.76	n/a

<sup>1</sup> Prior to 1/1/2018, this benefit amount is \$16 per month.



## Supporting Information

(Continued)

### Section 2B - Excise Taxes for High Cost Retiree Coverage

The Patient Protection and Affordable Care Act (ACA) includes a 40% excise tax on high-cost employer-sponsored health coverage. The tax applies to the aggregate annual cost of an employee's applicable coverage that exceeds a dollar limit. Implementation of this tax has been delayed by subsequent legislation to 2022; while there are discussions in Congress of eliminating or again delaying the tax, this report assumes that it will take effect as current law provides.

For those current and future retirees assumed to retain coverage in the District's medical program, we determined the excess, if any, of projected annual plan premiums for the retiree and his or her covered dependents over the projected applicable excise tax threshold beginning in 2022. The excise tax burden will ultimately fall on the District alone, a combination of the District and plan participants, or be entirely borne by the affected retirees. The practicalities of how the tax will be recovered by insurers will likely affect the eventual cost-sharing result.

See Section 3 for assumptions about this excise tax in the valuation. Please note that any assumptions applied in this valuation are not intended to imply any legal obligation as to the District's current or future liability to absorb this potential tax.



**Supporting Information**  
 (Continued)

**Section 3 - Actuarial Methods and Assumptions**

Valuation Date	June 30, 2017
Funding Method	Entry Age Normal Cost, level percent of pay
Asset Valuation Method	Market value of assets (\$0; plan is not yet funded)
Discount Rates	3.13% on June 30, 2017 2.68% on June 30, 2016
Participants Valued	Only current active employees and retired participants and covered dependents are valued. No future entrants are considered in this valuation.
Salary Increase	3.25% per year, since benefits do not depend on salary, this is used only to allocate the cost of benefits between service years
Assumed Wage inflation	3.0% per year; used to determine amortization payments if developed on a level percent of pay basis
General Inflation Rate	2.75% per year

Demographic actuarial assumptions used in this valuation are based on the 2014 experience study of the California Public Employees Retirement System using data from 1997 to 2011, except for a different basis used to project future mortality improvements. Rates for selected age and service are shown below and on the following pages. Mortality rates used were those published by CalPERS, adjusted to back out 20 years of Scale BB to central year 2008, then projected as described below.

Mortality Improvement	MacLeod Watts Scale 2017 applied generationally.
Healthcare Trend	Medical plan premiums and claims costs by age are assumed to increase once each year. The increases over the prior year's levels are assumed to be effective on the dates shown below:

Effective January 1	Premium Increase	Effective January 1	Premium Increase
2018	Actual	2022	6.50%
2019	8.00%	2023	6.00%
2020	7.50%	2024	5.50%
2021	7.00%	2025 & later	5.00%

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

(Continued)

**Section 3 - Actuarial Methods and Assumptions**

(Continued)

Participation Rate

*Active employees currently covered by one of the medical plans offered through the County are assumed to continue their current plan election in retirement prior to age 65 at the percentages below,*

<b>Active Employee Currently Covered by the County's Medical Plan Assumed to Elect Medical Coverage in Retirement Until Age 65</b>				
Years of County Service	% assumed to Elect if Retired in 2013	% assumed to Elect if Retiring in 2017	Decrease in Percent Electing Coverage	Minimum Percent Electing
Less than 10	25%	25%	The % of new retirees assumed to elect coverage decreases by 2% each calendar year until it reaches the Minimum % (see next column)	25.0%
10 but less than 15	40%	32%		20.0%
15 but less than 20	55%	47%		27.5%
20 but less than 25	70%	62%		35.0%
25 but less than 30	85%	77%		42.5%
30 or more	100%	92%		50.0%

The percentages in the table above are multiplied by .25 to arrive at the applicable participation rates for active employees *not currently covered* by a County medical plan.

20% of future retirees are assumed to continue County coverage after age 65, regardless of their years of County service.

*Retired participants currently age 65 and older:* Existing medical plan elections are assumed to continue until death.

*Retired participants currently under age 65:* 30% are assumed to continue County medical coverage beyond age 65; the remaining 70% are assumed to find other coverage.

Spouse Coverage

*Active employees:* 40% are assumed to be married and to elect coverage for their spouse in retirement. Surviving spouses are assumed to continue coverage until their death. Husbands are assumed to be 3 years older than their wives.

*Retired participants:* Existing elections for spouse coverage are assumed to continue until the spouse's death. Actual spouse ages are used, where known; if not, husbands are assumed to be 3 years older than their wives.



**Supporting Information**

(Continued)

**Section 3 - Actuarial Methods and Assumptions**

(Continued)

**Excise tax on high-cost plans**

The expected value of excise taxes for high cost plan coverage for retirees, assumed to be effective in the year 2020, was included in this valuation. Annual threshold amounts for 2018 under the Affordable Care Act (ACA) were assumed to increase at the General Inflation Rate. A 40% excise tax rate was applied to the portion of premiums projected to exceed the threshold.

2018 Thresholds	Ages 55-64	All Other Ages
Single	11,850	10,200
Other than Single	30,950	27,500

*Note: Thresholds for disability retirements are assumed to be set at a level high enough to prevent taxation on disabled retiree benefits.*

Actual limits may be higher, depending on cost increases prior to the effective date. These thresholds are scheduled to increase by CPI plus 1% in 2019 and by CPI annually thereafter. This report assumes that 100% of any excise tax liability for high cost retiree coverage will be borne by the County.

**Development of Age-related Medical Premiums**

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

Please refer to Section 4 of the June 30, 2017 Actuarial Valuation Report For specific claim costs used in developing the liability.

**Changes in assumptions reflected in this Measurement Period:**

**Discount Rate**

The discount rate was changed from 2.68% as of June 30, 2016 to 3.13% as of June 30, 2017, 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”. Upcoming excise taxes under the Affordable Care Act for retirees covered by high cost plans is another potential source of explicit subsidies.

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

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

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

Under GASB 45, for actuarial valuations dated prior to March 31, 2015, an exception allowed plan employers with a very small membership in a large “community-rated” healthcare program to avoid reporting of implicit subsidy liability. Following a change in Actuarial Standards of Practice and in accordance with GASB 75 requirements, this exception is no longer available.

### Valuation Process

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





## Important Background Information

(Continued)

in the cost of those benefits and assumptions as to the expected date(s) when benefits will end. We then apply assumptions regarding:

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

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

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

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

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

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



## Important Background Information

(Continued)

### Requirements of GASB 75

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

#### *Important Dates*

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

#### *Recognition of Plan Changes and Gains and Losses*

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

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

Difference between projected  
and actual trust earnings:

5 year straight-line recognition

All other amounts:

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



## Important Background Information

(Continued)

### Implicit Subsidy Plan Contributions

An implicit subsidy liability is created when expected retiree claims exceed the premiums charged for retiree coverage. This typically occurs when the same premium rates are charged for active and retired members prior to coverage under Medicare. In practical terms, when premiums for active employees each year exceed active employee claims, their premiums include an amount expected to be transferred to cover a portion of the retirees' claims not covered by the premiums charged for retiree coverage. This transfer represents the current year's implicit subsidy. GASB 75 allows for recognition of payments to an irrevocable trust *or directly to the insurer* as an employer's contribution. Therefore, each year's implicit subsidy is a contribution toward the payment of retiree benefits.

The following hypothetical example illustrates this treatment:

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

In this example, while total contributions paid toward active and retired employee healthcare premiums is the same, by shifting the recognition of the current year's implicit subsidy from actives to retirees, this amount is recognized as an OPEB contribution and at the same time reduces 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.



**Important Background Information**  
(Continued)

**Actuarial Funding Method and Assumptions**

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

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

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



## Addendum 2: MacLeod Watts Age Rating Methodology

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

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

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

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

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

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



### **Addendum 3: MacLeod Watts Mortality Projection Methodology**

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

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

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

The **MacLeod Watts Scale 2017** was developed from a blending of data and methodologies found in two published sources: (1) the Society of Actuaries Mortality Improvement Scale MP-2016 Report, published in October 2016 and (2) the demographic assumptions used in the 2016 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, published June 2016.

MacLeod Watts Scale 2017 is a two-dimensional mortality improvement scale reflecting both age and year of mortality improvement. The underlying base scale is Scale MP-2016 which has two segments – (1) historical improvement rates for the period 1951-2012 and (2) an estimate of future mortality improvement for years 2013-2015 using the Scale MP-2016 methodology but utilizing the assumptions obtained from Scale MP-2015. The MacLeod Watts scale then transitions from the 2015 improvement rate to the Social Security Administration (SSA) Intermediate Scale linearly over the 10 year period 2016-2025. After this transition period, the MacLeod Watts Scale uses the constant mortality improvement rate from the SSA Intermediate Scale from 2025-2039. The SSA's Intermediate Scale has a final step down in 2040 which is reflected in the MacLeod Watts scale for years 2040 and thereafter. Over the ages 100 to 115, the SSA improvement rate is graded to zero.

Scale MP-2016 can be found at the SOA website and the projection scales used in the 2016 Social Security Administrations Trustees Report at the Social Security Administration website.



## Glossary

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

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

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

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

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

Excise Tax – The Affordable Care Act created an excise tax on the value of employer sponsored coverage which exceeds certain thresholds (“Cadillac Plans”). The tax is first effective in 2022.

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

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

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

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





## Glossary

(Continued)

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

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

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

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

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

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

PEMHCA – The Public Employees’ Medical and Hospital Care Act, established by the California legislature in 1961, provides community-rated medical benefits to participating public employers. Among its extensive regulations are the requirements that a contracting Agency contribute toward medical insurance premiums for retired annuitants and that a contracting Agency file a resolution, adopted by its governing body, with the CalPERS Board establishing any new contribution.

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

