# THE SUPERIOR COURT OF CALIFORNIA COUNTY OF LOS ANGELES

Actuarial Valuation of Other Postemployment Benefits (OPEB) Under GASB Statement No. 75 For Fiscal Year Ending June 30, 2019

January 17, 2019

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Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

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Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

### Introduction and Certification

### Purposes of the valuation

This report includes OPEB financial reporting information determined under Governmental Accounting Standards Board Statement No. 75 (GASB 75) for Los Angeles Superior Court (the Court). GASB 75 standardizes OPEB disclosure requirements and requires plans and employers to provide additional details about their OPEB obligations. The information to be disclosed includes:

- Obligations and funded status of the plan,
- The annual GASB 75 accounting expense, and
- Other disclosure information.

The Court has elected to use the GASB 75 "lookback" method where assets and liabilities are measured as of the prior fiscal year-end, but applied to the current fiscal year. The valuation, measurement and reporting dates are:

Valuation date (census)	June 30, 2017
Measurement date (assets and liabilities)	June 30, 2018
Reporting date (fiscal year end)	June 30, 2019

This report has been prepared solely for the Court. The purpose of this valuation is to provide the Court's GASB 75 accounting information. It is important to recognize that calculations performed for other purposes may yield significantly different results. Other considerations are summarized in the Important Notices and Accounting Requirements and Valuation Considerations sections of this report.

This report may not be used for any other purpose, and Van Iwaarden Associates is not responsible for the consequences of any unauthorized use. Its content may not be modified, incorporated into or used in other material, or otherwise provided, in whole or in part, to any other person or entity, without the Judicial Council's permission.

The language of this report includes a number of technical terms which have special meanings. The glossary at the end of the report is provided to enhance understanding of these terms; many of them are defined there.

### Changes from the prior valuation

Changes to the plan provisions and actuarial assumptions reflected in this valuation are described at the end of each of those sections in this report. The Court has confirmed that there have been no significant changes in the plan provisions or census since the fiscal 2018 valuation report.

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

### Introduction and Certification (continued)

### Actuarial certification

To the best of our knowledge, this report is complete and accurate and all costs and liabilities under the plan were determined in accordance with generally accepted actuarial principles and practices. Upon receipt of the valuation report, the Court should notify us if you disagree with any information contained in the report or if you are aware of any information that would affect the results that has not been communicated to us. The report will be deemed final and acceptable to the Court unless you notify us otherwise.

The actuarial assumptions and methods are the responsibility of the employer. We have reviewed the assumptions and believe that they are reasonable estimates of future plan experience, both individually and in the aggregate. The calculations reported herein are consistent with our understanding of the provisions of GASB Statement No. 75.

The undersigned credentialed actuaries are Members of the American Academy of Actuaries and meet the Qualification Standards of the Academy to render the actuarial opinion contained herein. We are available to answer questions on the material contained in the report or to provide explanations or further detail, as may be appropriate. We are not aware of any material direct or indirect financial interest or relationship that could create a conflict of interest or impair the objectivity of our work.

Menle Alutto

Mark W. Schulte, FSA, EA, MAAA Consulting Actuary

Jaura Pitatuik

Laura K. Pistotnik, ASA, MAAA Consulting Actuary

January 17, 2019 L/D/C/R/P: 4/cl/lp/ms/jvi v.12/18/2018

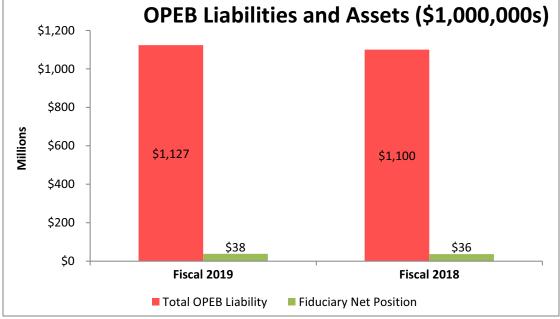
Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Summary of Results

	Valuation Date 6/30/2017
A. Participants eligible for OPEB	
1. Active employees electing coverage	4,431
2. Vested terminated	611
3. Retirees electing coverage	2,143
4. Total	7,185

	Fiscal Year End					
		6/30/2019	6/30/2018			
B. Funded Status						
1. Total OPEB Liability	\$	1,123,377,835	\$	1,100,415,412		
2. Plan Fiduciary Net Position (assets)		38,148,167		36,347,094		
3. Net OPEB Liability (1 2.)		1,085,229,668		1,064,068,318		
4. Funded Percent (2./1.)		3.4%		3.3%		
5. Liability Discount Rate		3.70%		3.62%		
C. Accounting Expense (see page 12)	\$	55,978,945	\$	62,728,394		
D. Actuarially Determined Contribution (ADC)		N/A²		N/A²		





<sup>1</sup> The Court has elected to use the GASB 75 "lookback" method where assets and liabilities are measured as of the prior fiscal yearend, but applied to the current fiscal year.

<sup>2</sup> The Court does not currently calculate an ADC.



Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Statement of Fiduciary Net Position (Assets)

	Fiscal Yea	Year Ending <sup>1</sup>		
	6/30/2019	6/30/2018		
Assets <sup>2</sup>				
Cash and deposits	\$ 4,272,595	\$	4,070,875	
Money market funds and interest-bearing cash	 -		-	
Total cash	4,272,595		4,070,875	
Cash position of investments	-		-	
Receivables				
Contributions	-		-	
Investment income	-		-	
Other	 -		-	
Total receivables	 -		-	
Investments				
Domestic equity	16,792,823		15,999,991	
International equity	14,305,562		13,630,160	
Fixed income	2,777,187		2,646,068	
Real estate and alternatives	 -		-	
Total investments	33,875,572		32,276,219	
Total assets	38,148,167		36,347,094	
Short term liabilities				
Payables				
Investment management fees	-		-	
Reimbursement to employer for benefit payments	-		-	
Reimbursement to employer for administrative expenses	 -		-	
Total liabilities	 -		-	
Net position restricted for OPEB	\$ 38,148,167	\$	36,347,094	

<sup>1</sup> The Court has elected to use the GASB 75 "lookback" method where assets and liabilities are measured as of the prior fiscal yearend, but applied to the current fiscal year.

 $^{\rm 2}$  Asset allocation is estimated based on the target allocation for LACERA as of June 30, 2017.



Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Statement of Changes in Fiduciary Net Position

	Fiscal Yea	ır Endi	ng¹
	6/30/2019		6/30/2018
Additions			
Contributions			
Employee	-		-
Employer			
Cash contributions to OPEB trust	2,015,711		26,612,105
Net Benefits paid from employer assets <sup>2</sup>	 19,782,933		22,030,391
Total	 21,798,644		48,642,496
Investment income			
Net appreciation in fair value of investments	722,638		1,962,939
Interest and dividends	2,864,336		83,056
Less investment expense	 (21,628)		(9,398)
Net investment income	 3,565,346		2,036,597
Other additions	-		-
Total additions	 25,363,990		50,679,093
Deductions			
Benefit payments <sup>2</sup>			
Direct subsidy	(23,517,933)		(22,030,391)
Implicit subsidy	-		-
Total	(23,517,933)		(22,030,391)
Administrative expense	(44,984)		(201,608)
Other deductions	 -		-
Total deductions	(23,562,917)		(22,231,999)
Net increase in net position	1,801,073		28,447,094
Net position restricted for OPEB			
Beginning of year	36,347,094		7,900,000
End of year	\$ 38,148,167	\$	36,347,094
Investment return for the measurement year			
a. Net investment income	\$ 3,565,346	\$	2,036,597
b. Beginning balance	36,347,094		7,900,000
c. Time-weighted cash flows	(847,869)		7,775,172
d. Investment return: a. / (b. + c.)	10.04%		12.99%

<sup>1</sup> The Court has elected to use the GASB 75 "lookback" method where assets and liabilities are measured as of the prior fiscal yearend, but applied to the current fiscal year.

<sup>2</sup> The contribution labeled "benefits paid from employer assets" shown above are equal to the annual plan benefit payments paid from employer assets minus a \$3,735,000 reimbursement received from the trust in FY2018. The FY2018 OPEB payments were paid from the employer's general assets rather than from the trust assets. GASB 74 Q&A 4.52 specifies that this arrangement should be recognized as an offsetting contribution and benefit payment in the reconciliation of the plan's Fiduciary Net Position.



	Changes	Changes in Net OPEB Liability				
			Increa	Increase (Decrease)		
	Tota	Total OPEB Liability (a)	Plan Fidu	Plan Fiduciary Net Position (b)	z	Net OPEB Liability (c) = (a) - (b)
Balance for fiscal year ending 6/30/20181	ŝ	1,100,415,412	Ŷ	36,347,094	ŝ	1,064,068,318
Changes for the year:						
Service cost		38,224,498				38,224,498
Interest		40,793,090				40,793,090
Differences between expected and actual experience						
Changes of assumptions		(32,537,232)				(32,537,232)
Changes of benefit terms				ı		
Employee contributions				ı		
Employer contributions <sup>2</sup>				21,798,644		(21,798,644)
Net investment income				3,565,346		(3,565,346)
Other additions				·		
Benefit payments <sup>2</sup>		(23,517,933)		(23,517,933)		
Administrative expense				(44,984)		44,984
Other deductions				ı		
Net changes		22,962,423		1,801,073		21,161,350
Balance for fiscal year ending 6/30/20191	ŝ	1,123,377,835	s	38,148,167	ŝ	1,085,229,668

<sup>1</sup> The Court has elected to use the GASB 75 "lookback" method where assets and liabilities are measured as of the prior fiscal year-end, but applied to the current fiscal year. <sup>2</sup> Benefit payments to retirees during the measurement period ending 6/30/2018.

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Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

	Total OPEB Liability (a)	Plan	Fiduciary Net Position (b)	Net OPEB Liability (c) = (a) - (b)	
1% decrease in Discount Rate (2.7%)	\$ 1,327,921,673	\$	38,148,167	\$ 1,289,773,506	
Current Discount Rate (3.7%)	1,123,377,835		38,148,167	1,085,229,668	
1% increase in Discount Rate (4.7%)	958,800,010		38,148,167	920,651,843	

## Sensitivity of the Net OPEB Liability to Changes in the Trend Rates

	Total OPEB Liability (a)	Plan	Fiduciary Net Position (b)	Net OPEB Liability (c) = (a) - (b)
1% decrease in Trend Rates	\$ 923,326,825	\$ 38,148,16		\$ 885,178,658
Current Trend Rates	1,123,377,835		38,148,167	1,085,229,668
1% increase in Trend Rates	1,386,539,266		38,148,167	1,348,391,099

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Summary of Deferred Outflows and Deferred Inflows

	Οι	ıtflows	Inflows
Summary of Deferred Outflows/Inflows			
A. Difference between expected and actual liability	\$	-	\$ -
B. Change of assumptions		-	121,404,226
C. Net difference between projected and actual investment earnings		-	1,556,457
D. Contributions between measurement date and reporting date <sup>1</sup>		TBD	N/A
E. Total	\$	-	\$ 122,960,683

See page 14 for amortization schedules and development of deferred outflows/inflows.

# Amounts reported as deferred (inflows) outflows of resources related to OPEBs will be recognized in OPEB expense as follows:

Year ended	Future recognition
2020	(20,719,379)
2021	(20,719,379)
2022	(20,719,380)
2023	(20,520,851)
2024	(20,280,633)
Thereafter	(20,001,061)
	\$ (122,960,683)

<sup>1</sup> Under GASB 75 paragraph 44, employer contributions made after the June 30, 2018 Measurement Date and on or before the June 30, 2019 Reporting Date must be disclosed as Deferred Outflows of Resources. If the contribution amount is not available at the time of this report, "TBD" is shown temporarily. The final amount should include employer trust contributions plus any unreimbursed benefits paid from general assets.



Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Significant Assumptions Used to Measure the Total OPEB Liability

Discount rate	3.70%
Expected return on plan assets	6.66%
Inflation rate	2.75%
Healthy Mortality	The base RP-2014 headcount-weighted white collar table adjusted to 2006. Generational projection using scale MP-2017 was applied to these base rates after 2006.
Disabled Mortality	The base RP-2014 headcount-weighted disabled mortality table adjusted to 2006. Generational projection using scale MP-2017 was applied to these base rates after 2006.
Health care cost trend rate	Actual premium increase rates for FY2018 and 6.90% for FY2019, gradually decreasing over several decades to an ultimate rate of 4.40% in FY2075 and later years.
	In addition, the medical trend rates above were increased to reflect the projected effect of the Affordable Care Act's Excise Tax on high- cost health insurance plans. The additional trend rate adjustments vary by year, but average 0.35% beginning calendar year 2022 for plans other than Medicare plans.

See pages 15 to 24 for more details on actuarial assumptions and methods.

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Schedule of Changes in Net OPEB Liability and Related Ratios<sup>1</sup>

	Fiscal Year Ending <sup>2</sup>					
Total OPEB Liability		6/30/2019		6/30/2018		
Service cost	\$	38,224,498	\$	44,081,221		
Interest		40,793,090		35,786,527		
Differences between expected and actual experience		-		-		
Changes of assumptions		(32,537,232)		(125,246,097)		
Changes of benefit terms		-		-		
Benefit payments		(23,517,933)		(22,030,391)		
Net change in total OPEB liability		22,962,423		(67,408,740)		
Total OPEB Liability - beginning of year		1,100,415,412		1,167,824,152		
Total OPEB Liability - end of year						
Plan Fiduciary Net Position (FNP, assets)						
Employee contributions	\$	-	\$	-		
Employer contributions		21,798,644		48,642,496		
Net investment income		3,565,346		2,036,597		
Other additions		-		-		
Benefit payments		(23,517,933)		(22,030,391)		
Administrative expense		(44,984)		(201,608)		
Other deductions		-		-		
Net change in plan fiduciary net position		1,801,073		28,447,094		
Plan Fiduciary Net Position - beginning of year		36,347,094		7,900,000		
Plan Fiduciary Net Position - end of year	\$	38,148,167	\$	36,347,094		
Net OPEB Liability - end of year	\$	1,085,229,668	\$	1,064,068,318		
FNP as a percentage of the Total OPEB Liability		3.4%		3.3%		
OPEB-eligible payroll for the measurement period	\$	322,320,444	\$	314,553,063		
Net OPEB Liability as a % of eligible payroll		336.7%		338.3%		

<sup>1</sup> The employer must eventually disclose a 10-year history of the schedule of changes in Net OPEB Liability and related ratios.

<sup>2</sup> The Court has elected to use the GASB 75 "lookback" method where assets and liabilities are measured as of the prior fiscal yearend, but applied to the current fiscal year.



Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Schedule of Contributions<sup>1</sup>

	Fiscal Year	Ending
	6/30/2019	6/30/2018
Actuarially determined contribution (ADC) <sup>2</sup>	N/A	N/A
Contributions in relation to the ADC	N/A	N/A
Contribution deficiency (excess)	N/A	N/A
OPEB-eligible payroll for reporting period (fiscal year)	N/A	N/A
Contributions as a percent of payroll	N/A	N/A

### Schedule of Investment Returns<sup>1</sup>

	Fiscal Year	Ending
	6/30/2019	6/30/2018
Annual money-weighted rate of return, net of investment expense	10.04%	12.99%

<sup>1</sup> The employer must eventually disclose a 10-year history of the contribution, investment return, and payroll schedules.

<sup>&</sup>lt;sup>2</sup> Per GASB 75 paragraph 57c., these disclosures are only required if the employer calculates an Actuarially Determined Contribution (ADC). The Court does not currently calculate an ADC.



Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Calculation of OPEB Expense

		Fiscal Year Ending <sup>1</sup>			
			6/30/2019		6/30/2018
Α.	Service cost	\$	38,224,498	\$	44,081,221
В.	Interest cost		40,793,090		35,786,527
С.	Current period benefit changes		-		-
D.	Employee contributions		-		-
Ε.	Projected earnings on OPEB plan investments		(2,364,248)		(1,043,966)
F.	Administrative expenses paid from the trust		44,984		201,608
G.	Other changes in fiduciary net position		-		-
н.	Recognition of expected vs. actual experience		-		-
١.	Recognition of assumption changes		(20,280,633)		(16,098,470)
J.	Recognition of net difference between projected and		(438,746)		(198,526)
	actual investment earnings				
К.	Total OPEB expense (sum of A. through J.)	\$	55,978,945	\$	62,728,394

<sup>1</sup> The Court has elected to use the GASB 75 "lookback" method where assets and liabilities are measured as of the prior fiscal yearend, but applied to the current fiscal year.



Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Calculation of Interest Cost and Projected Plan Earnings for OPEB Expense

	Fiscal Yea	ar Ending <sup>1</sup>		
Interest cost calculation	6/30/2019		6/30/2018	
A. Total OPEB Liability at beginning of measurement year	\$ 1,100,415,412	\$	1,167,824,152	
B. Service cost	38,224,498		44,081,221	
C. Benefit payments	(23,517,933)		(22,030,391)	
D. Discount rate at beginning of measurement year	3.62%		2.98%	
E. Interest cost ((A. + B. + 1/2 x C.) x D.)	\$ 40,793,090	\$	35,786,527	
Projected plan earnings calculation				
A. Fiduciary Net Position at beginning of measurement year	\$ 36,347,094	\$	7,900,000	
B. Time-weighted cash flows	(847,869)		7,775,172	
C. Expected return on assets at beginning of measurement year	6.66%		6.66%	
D. Projected plan earnings ((A. + B.) x C.)	\$ 2,364,248	\$	1,043,966	
Investment (gain) or loss				
A. Projected plan earnings	\$ 2,364,248	\$	1,043,966	
B. Actual plan investment earnings	3,565,346		2,036,597	
C. Investment (gain) or loss (A B.)	\$ (1,201,098)	\$	(992,631)	

<sup>1</sup> The Court has elected to use the GASB 75 "lookback" method where assets and liabilities are measured as of the prior fiscal yearend, but applied to the current fiscal year.

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

		Schedule d	of Amortizations: L	LIADILITY E	xperience (		
Fiscal Year		Deferred )/Outflow	Initial Amortization Period		cognized nount	Remaining Amortization Period	 ent Year tization
2018	\$	-	N/A	\$	-	N/A	\$ -
2019	\$	-	N/A	\$	-	N/A	\$ -
Subtotal liability experience amortizations \$ - \$ -							

## Schedule of Amortizations: Assumption Changes

Fiscal Year	•••	itial Deferred flow)/Outflow	Initial Amortization Period	ι	Jnrecognized Amount	Remaining Amortization Period	Current Year Amortization
2018	\$	(125,246,097)	7.78	\$	(93,049,157)	5.78	\$ (16,098,470)
2019	\$	(32,537,232)	7.78	\$	(28,355,069)	6.78	\$ (4,182,163)
Subtotal a amortizat		nption change		\$	(121,404,226)		\$ (20,280,633)

## Schedule of Amortizations: Investment (Gains) and Losses

Fiscal Year	 ial Deferred low)/Outflow	Initial Amortization Period	Ur	nrecognized Amount	Remaining Amortization Period	 rrent Year nortization
2018	\$ (992,631)	5.00	\$	(595,579)	3.00	\$ (198,526)
2019	\$ (1,201,098)	5.00	\$	(960,878)	4.00	\$ (240,220)
Subtotal i experienc	 		\$	(1,556,457)		\$ (438,746)

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

### Summary of Actuarial Methods

A. Liability Measurement Method
GASB 75 requires that "The total OPEB liability should be determined by (a) an actuarial valuation as of the measurement date or (b) the use of update procedures to roll forward to the measurement date amounts from an actuarial valuation as of a date no more than 30 months and 1 day earlier than the employer's most recent fiscal year-end."

Liabilities in this report were calculated as of the valuation date and rolled forward to the measurement date using standard actuarial roll-forward techniques per GASB 75 option (b) above.

Valuation date (census)	June 30, 2017
Measurement date (assets and liabilities)	June 30, 2018
Reporting date (fiscal year end)	June 30, 2019

- **B. Actuarial Cost Method** Liabilities are based on the Entry Age Normal level percent of pay cost method. In this method, the actuarial Present Value of Benefits (PVB) for each individual is allocated as a level percent of pay from entry age (hire age, for most employees) to age at which retirement rates become 100%. The portion of the PVB allocated to the valuation year is called the Normal Cost (NC). The portion of the PVB allocated to past years is called the Actuarial Accrued Liability (AAL) or the Total OPEB Liability (TOL).
- C. Amortization Method Investment Gains and Losses: Straight-line amortization over a closed 5-year period.

Effects of Assumption Changes and Experience Gains and Losses: Straight-line amortization over a closed period equal to the average of the expected remaining service lives of all members (i.e., active employees and terminated/retired members) that are provided with OPEB through the plan.

**D. Funding Policy** The Court has assets designated for OPEB. These assets are in a qualified irrevocable trust, administered and invested through LACERA. Additional trust contributions will be made on an ad-hoc basis as funds are available.

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Summary of Actuarial Methods (continued)

E. Data Methods	The census data used in this report is the same data used in the fiscal 2018 GASB 75 actuarial valuation report dated May 22, 2018.
	To the extent that census data was collected as of a date later than June 30, 2017, we have assumed that it is reasonably representative of the plan census on the valuation date and used it with only minor adjustments.
	As instructed by the Court, participants terminating employment or retiring before January 1, 2001 are included in the valuation because the Court is financing these retirees' medical, dental, vision and life insurance benefits.
F. Covered Payroll	Covered OPEB-eligible payroll information for the fiscal year ending June 30, 2018 was provided by the Court.

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

### Summary of Actuarial Assumptions

The benefits, actuarial assumptions and methods valued in this report are based on the same plan provisions, assumptions and methods described in the fiscal 2018 GASB 75 actuarial valuation report dated May 22, 2018, with the exception of the changes listed below.

#### A. Economic Assumptions

-	June 30, 2018	June 30, 2017		
Discount Rate	3.70%	3.62%		
Expected long-term rate of return on assets	6.66%	6.66%		
Index rate for 20-year, tax-exempt municipal bonds <sup>1</sup> (Fidelity 20-Year Municipal GO AA Index) used in discount rate determination	3.62%	3.56%		

discount rate determination

### Healthcare Trend Rates

Annual increases in per capita claims costs and plan premiums are as follows:

	Medical Coverage				
Fiscal Year	Not Medicare	Medicare			
Beginning	Eligible	Eligible			
2017	Actual <sup>2</sup>	Actual <sup>2</sup>			
2018	6.90%	5.60%			
2019	6.30%	5.40%			
2020	5.80%	5.30%			
2021-2054	5.20%	5.20%			
2055-2073	Transition to	Transition to			
2055-2075	ultimate rate	ultimate rate			
2074+	4.40%	4.40%			

Measurement Date

- Actual Medicare Part B premiums increased 1.12% from 2018 to 2019 and are assumed to increase 5.0% annually through fiscal year beginning 2065 and 4.0% annually thereafter.
- Dental and vision premiums are assumed to increase 4.0% and 3.0% annually, respectively.
- In addition, the medical trend rates above were increased to reflect the projected effect of the Affordable Care Act's Excise Tax on high-cost health insurance plans. The additional trend rate adjustments vary by year, but average 0.35% beginning calendar year 2022 for plans other than Medicare plans.

<sup>&</sup>lt;sup>1</sup> The municipal bond index rate was updated to reflect rates as of the June 30, 2018 measurement date.

<sup>&</sup>lt;sup>2</sup> Average premium increase rates from 2018 to 2019 were 6.58% for the non-Medicare plans and 6.20% for the Medicare plans. Actual premium rates for the dental and vision plans did not change.

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

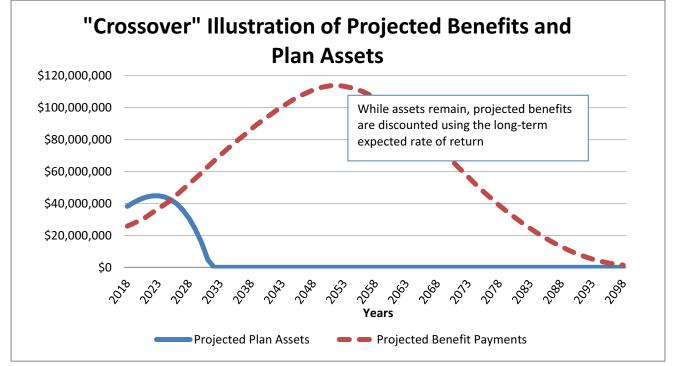
### Discount Rate Development

GASB 75 requires that the liability discount rate be the single rate that reflects the following:

- A. The long-term expected rate of return on OPEB plan investments that are expected to be used to finance the payment of benefits, to the extent that (1) the OPEB plan's fiduciary net position is projected to be sufficient to make projected benefit payments and (2) OPEB plan assets are expected to be invested using a strategy to achieve that return; and
- B. A 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), to the extent that the conditions in A. are not met.

GASB 75 has very specific rules regarding the the projection of benefit payments, contributions, and Fiduciary Net Position used to determine the discount rate. Regardless of an employer's actual funding policy, we must assume that (1) benefits are paid out of the OPEB trust until assets are depleted, and (2) projected employer contributions are first applied to employee service costs in each period (including future employees) before paying for current accrued benefit costs.

Below is an illustration of the GASB 75 "crossover" discount rate projections for your plan. A detailed summary of the calculations is presented on the following pages.



- Projected plan assets include projected funding policy contributions, investment earnings, and benefit payments. They do not include anticipated future ad-hoc contributions.
- Projected benefit payments include only current members (i.e., no new lives) per GASB rules.

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Discount Rate Development: Projected Contributions for Current Participants

	OPE	OPEB-Eligible Projected Payroll			Projected Contributions			
	Payroll	Payroll for		Total	Employer Contributions	Employer		
	for Current	Future		Employer	Related to Payroll of	Contributions for		
	Employees	Employees	Total Payroll	Contributions <sup>1</sup>	Future Employees	Current Participants		
Year	(a)	(b) = (c) - (a)	(C)	(d)	(e) = (b) x 4.92% <sup>2</sup>	(f) = (d) - (e)		
1	329,079,243	2,910,814	331,990,057	25,790,873	143,212	25,647,661		
2	327,993,491	13,956,268	341,949,759	27,486,024	686,648	26,799,376		
3	325,506,344	26,701,908	352,208,252	29,388,376	1,313,734	28,074,642		
4	322,387,090	40,387,410	362,774,500	31,400,952	1,987,061	29,413,891		
5	318,074,370	55,583,365	373,657,735	34,151,239	2,734,702	31,416,537		
6	313,002,486	71,864,981	384,867,467	36,599,263	3,535,757	33,063,506		
7	307,040,850	89,372,641	396,413,491	39,272,695	4,397,134	34,875,561		
8	300,092,015	108,213,881	408,305,896	42,062,848	5,324,123	36,738,725		
9	292,072,065	128,483,008	420,555,073	45,495,149	6,321,364	39,173,785		
10	283,316,434	149,855,291	433,171,725	48,873,666	7,372,880	41,500,786		
11	273,297,967	172,868,910	446,166,877	52,235,905	8,505,150	43,730,755		
12	262,763,213	196,788,670	459,551,883	55,704,720	9,682,003	46,022,717		
13	251,489,604	221,848,835	473,338,439	59,297,965	10,914,963	48,383,002		
14	239,590,067	247,948,525	487,538,592	62,986,159	12,199,067	50,787,092		
15	227,308,565	274,856,185	502,164,750	66,579,647	13,522,924	53,056,723		
16	214,783,879	302,445,814	517,229,693	70,224,286	14,880,334	55,343,952		
17	202,336,397	330,410,187	532,746,584	73,565,383	16,256,181	57,309,202		
18	189,863,889	358,865,093	548,728,982	76,884,087	17,656,163	59,227,924		
19	177,197,187	387,993,664	565,190,851	80,092,835	19,089,288	61,003,547		
20	165,275,742	416,870,835	582,146,577	83,181,813	20,510,045	62,671,768		
21	153,568,764	446,042,210	599,610,974	86,478,281	21,945,277	64,533,004		
22	142,200,418	475,398,885	617,599,303	89,646,668	23,389,625	66,257,043		
23	131,708,224	504,419,058	636,127,282	92,504,132	24,817,418	67,686,714		
24	121,446,041	533,765,059	655,211,100	95,213,731	26,261,241	68,952,490		
25	111,645,231	563,222,202	674,867,433	97,966,355	27,710,532	70,255,823		
26	102,264,119	592,849,337	695,113,456	100,530,924	29,168,187	71,362,737		
27	93,401,743	622,565,117	715,966,860	102,986,073	30,630,204	72,355,869		
28	84,967,725	652,478,141	737,445,866	105,467,367	32,101,925	73,365,442		
29	77,106,874	682,462,368	759,569,242	107,506,030	33,577,149	73,928,881		
30	69,590,362	712,765,957	782,356,319	109,193,062	35,068,085	74,124,977		
31	62,517,116	743,309,893	805,827,009	111,008,684	36,570,847	74,437,837		
32	55,920,166	774,081,653	830,001,819	112,188,822	38,084,817	74,104,005		
33	49,649,050	805,252,824	854,901,874	113,111,164	39,618,439	73,492,725		
34	43,704,489	836,844,441	880,548,930	113,667,449	41,172,746	72,494,703		
35	37,969,904	868,995,494	906,965,398	113,746,453	42,754,578	70,991,875		
36	32,662,530	901,511,830	934,174,360	113,213,696	44,354,382	68,859,314		
37	27,695,190	934,504,401	962,199,591	112,454,434	45,977,617	66,476,817		
38	23,200,114	967,865,465	991,065,579	111,342,130	47,618,981	63,723,149		
39	19,370,405	1,001,427,141	1,020,797,546	109,926,179	49,270,215	60,655,964		
40	15,801,259	1,035,620,213	1,051,421,472	108,033,274	50,952,514	57,080,760		
41	12,678,094	1,070,286,022	1,082,964,116	106,328,288	52,658,072	53,670,216		
42	10,198,663	1,105,254,376	1,115,453,039	104,199,332	54,378,515	49,820,817		
43	7,931,657	1,140,984,973	1,148,916,630	102,001,305	56,136,461	45,864,844		
44	6,140,020	1,177,244,109	1,183,384,129	99,480,216	57,920,410	41,559,806		
45	4,676,811	1,214,208,842	1,218,885,653	96,723,424	59,739,075	36,984,349		
46	3,384,315	1,252,067,908	1,255,452,223	93,761,648	61,601,741	32,159,907		
47	2,343,286	1,290,772,504	1,293,115,790	90,593,321	63,506,007	27,087,314		

<sup>1</sup> Total employer contributions are equal to expected benefit payments.

<sup>2</sup> Service cost based on the OPEB trust's expected long-term rate of return.

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Discount Rate Development: Projected Contributions for Current Participants (continued)

	OPEB-Eligible Projected Payroll			Projected Contributions			
	Payroll	Payroll for		Total	Employer Contributions	Employer	
	for Current	Future		Employer	Related to Payroll of	Contributions for	
	Employees	Employees	Total Payroll	Contributions <sup>1</sup>	Future Employees	Current Participants	
Year	(a)	(b) = (c) - (a)	(C)	(d)	(e) = (b) x 4.92% <sup>2</sup>	(f) = (d) - (e)	
48	1,569,670	1,330,339,594	1,331,909,264	87,250,840	65,452,708	21,798,132	
49	997,113	1,370,869,429	1,371,866,542	83,763,470	67,446,776	16,316,694	
50	606,099	1,412,416,439	1,413,022,538	79,945,637	69,490,889	10,454,748	
51	267,631	1,455,145,583	1,455,413,214	76,049,128	71,593,163	4,455,965	
52	150,244	1,498,925,366	1,499,075,610	72,097,905	73,747,128	-	
53	40,874	1,544,007,004	1,544,047,878	68,105,420	75,965,145	-	
54	19,336	1,590,349,978	1,590,369,314	64,163,959	78,245,219	-	
55	8,821	1,638,071,572	1,638,080,393	60,254,632	80,593,121	-	
56	-	1,687,222,805	1,687,222,805	56,436,501	83,011,362	-	
57	-	1,737,839,489	1,737,839,489	52,687,991	85,501,703	-	
58	-	1,789,974,674	1,789,974,674	49,023,133	88,066,754	-	
59	-	1,843,673,914	1,843,673,914	45,487,574	90,708,757	-	
60	-	1,898,984,131	1,898,984,131	42,083,584	93,430,019	-	
61	-	1,955,953,655	1,955,953,655	38,810,416	96,232,920	-	
62	-	2,014,632,265	2,014,632,265	35,666,469	99,119,907	-	
63	-	2,075,071,233	2,075,071,233	32,649,221	102,093,505	-	
64	-	2,137,323,370	2,137,323,370	29,755,803	105,156,310	-	
65	-	2,201,443,071	2,201,443,071	26,984,116	108,310,999	-	
66	-	2,267,486,363	2,267,486,363	24,332,705	111,560,329	-	
67	-	2,335,510,954	2,335,510,954	21,801,122	114,907,139	-	
68	-	2,405,576,283	2,405,576,283	19,391,215	118,354,353	-	
69	-	2,477,743,571	2,477,743,571	17,107,014	121,904,984	-	
70	-	2,552,075,878	2,552,075,878	14,954,101	125,562,133	-	
71	-	2,628,638,154	2,628,638,154	12,939,378	129,328,997	-	
72	-	2,707,497,299	2,707,497,299	11,070,786	133,208,867	-	
73	-	2,788,722,218	2,788,722,218	9,356,021	137,205,133	-	
74	-	2,872,383,885	2,872,383,885	7,801,737	141,321,287	-	
75	-	2,958,555,402	2,958,555,402	6,412,734	145,560,926	-	
76	-	3,047,312,064	3,047,312,064	5,190,441	149,927,754	-	
77	-	3,138,731,426	3,138,731,426	4,132,633	154,425,586	-	
78	-	3,232,893,369	3,232,893,369	3,233,558	159,058,354	-	
79	-	3,329,880,170	3,329,880,170	2,484,066	163,830,104	-	
80	-	3,429,776,575	3,429,776,575	1,871,726	168,745,007	-	
81	-	3,532,669,872	3,532,669,872	1,382,002	173,807,358	-	
82	-	3,638,649,968	3,638,649,968	999,012	179,021,578	-	
83	-	3,747,809,467	3,747,809,467	706,385	184,392,226	-	
84	-	3,860,243,751	3,860,243,751	488,072	189,923,993	-	
85	-	3,976,051,064	3,976,051,064	329,258	195,621,712	_	
86	-	4,095,332,596	4,095,332,596	216,695	201,490,364	_	
87	-	4,218,192,574	4,218,192,574	139,009	207,535,075	-	
88	-	4,344,738,351	4,344,738,351	86,839	213,761,127	-	
89	-	4,475,080,502	4,475,080,502	52,810	220,173,961	-	
90	-	4,609,332,917	4,609,332,917	31,243	226,779,180	-	
90 91	-	4,747,612,905	4,747,612,905	17,965	233,582,555	-	
91 92	-			10,029	240,590,032	-	
92 93	-	4,890,041,292 5,036,742,531	4,890,041,292 5,036,742,531	5,440	240,590,032 247,807,733	-	

<sup>1</sup> Total employer contributions are equal to expected benefit payments.

<sup>2</sup> Service cost based on the OPEB trust's expected long-term rate of return.



Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

Year	Projected Beginning FNP (a)	Employer Contributions for Current Participants (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings @ 6.66% (e)	Projected Ending FNP (a)+(b)-(c)-(d)+(e)
1	38,148,167	25,647,661	25,790,873	45,600	2,534,381	40,493,736
2	40,493,736	26,799,376	27,486,024	45,635	2,672,497	42,433,950
3	42,433,950	28,074,642	29,388,376	46,330	2,780,811	43,854,697
4	43,854,697	29,413,891	31,400,952	47,065	2,852,987	44,673,558
5	44,673,558	31,416,537	34,151,239	47,829	2,882,601	44,773,628
6	44,773,628	33,063,506	36,599,263	48,600	2,862,566	44,051,837
7	44,051,837	34,875,561	39,272,695	49,375	2,785,783	42,391,111
8	42,391,111	36,738,725	42,062,848	50,146	2,644,285	39,661,127
9	39,661,127	39,173,785	45,495,149	50,922	2,429,234	35,718,075
10	35,718,075	41,500,786	48,873,666	51,687	2,131,586	30,425,094
11	30,425,094	43,730,755	52,235,905	52,447	1,741,343	23,608,840
12	23,608,840	46,022,717	55,704,720	53,185	1,248,167	15,121,819
13	15,121,819	48,383,002	59,297,965	53,899	641,850	4,794,807
14	4,794,807	50,787,092	62,986,159	54,583	-	-
15	-	53,056,723	66,579,647	-	-	-
16	_	55,343,952	70,224,286	<u>-</u>	<u>-</u>	<u>-</u>
17	-	57,309,202	73,565,383		_	<u> </u>
18	-	59,227,924	76,884,087		_	<u> </u>
19	-	61,003,547	80,092,835		_	<u> </u>
20	-	62,671,768	83,181,813		_	<u> </u>
20	-	64,533,004	86,478,281		_	<u> </u>
22	_	66,257,043	89,646,668	<u>-</u>	<u>-</u>	<u>-</u>
23	_	67,686,714	92,504,132	<u>-</u>	<u>-</u>	<u>-</u>
24	_	68,952,490	95,213,731	<u>-</u>	<u>-</u>	<u>-</u>
25	-	70,255,823	97,966,355	-	-	-
26	-	71,362,737	100,530,924	-	-	-
27	-	72,355,869	102,986,073	-	-	-
28	-	73,365,442	105,467,367	-	-	-
29	-	73,928,881	107,506,030	-	-	-
30	-	74,124,977	109,193,062	-	-	-
31	-	74,437,837	111,008,684	-	-	-
32	-	74,104,005	112,188,822	-	-	-
33	-	73,492,725	113,111,164	-	-	-
34	-	72,494,703	113,667,449	-	-	-
35	-	70,991,875	113,746,453	-	-	-
36	-	68,859,314	113,213,696	-	-	-
37	-	66,476,817	112,454,434	-	-	-
38	-	63,723,149	111,342,130	-	-	-
39	<u>-</u>	60,655,964	109,926,179	<u>-</u>	<u>-</u>	<u>-</u>
40	-	57,080,760	108,033,274	-	-	-
41	-	53,670,216	106,328,288	-	-	-
42	-	49,820,817	104,199,332	-	-	-
43	-	45,864,844	102,001,305	-	-	-
44	-	41,559,806	99,480,216	-	-	-
45	-	36,984,349	96,723,424	-	-	-
46	-	32,159,907	93,761,648	-	-	-
40 47	_	27,087,314	90,593,321	-	_	-

Discount Rate Development: Projection of Fiduciary Net Position (FNP)

Note: Projected contributions, benefit payments, and administrative expenses are assumed to occur mid-year.

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Discount Rate Development: Projection of Fiduciary Net Position (FNP) (continued)

Year	Projected Beginning FNP (a)	Employer Contributions for Current Participants (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings @ 6.66%	Projected Ending FNP (a)+(b)-(c)-(d)+(e)
48	(a) -	21,798,132	87,250,840	(u)	(e)	(a)+(b)+(c)+(d)+(e)
48 49	-	16,316,694	83,763,470	-	-	-
50		10,454,748	79,945,637			
50	_	4,455,965	76,049,128	_		
52		-	72,097,905			
52			68,105,420			
53 54			64,163,959			
55			60,254,632	_		
56	_		56,436,501	_		
57			52,687,991			
58	_		49,023,133	_		
59			45,487,574			
60			42,083,584			
61	_		38,810,416	_		
62			35,666,469	_		
63			32,649,221	_		
64			29,755,803	_		
65	_		26,984,116	_		
66	-	_	24,332,705	-	-	-
67			21,801,122	_	_	
68	-	_	19,391,215	-	-	-
69	-	-	17,107,014	-	-	-
70	-	_	14,954,101	-	-	-
71	-	_	12,939,378	-	-	-
72	-	-	11,070,786	-	-	-
73	-	-	9,356,021	-	-	-
74	-	-	7,801,737	-	-	-
75	-	-	6,412,734	-	-	-
76	-	-	5,190,441	-	-	-
77	-	-	4,132,633	-	-	-
78	-	-	3,233,558	-	-	-
79	-	-	2,484,066	-	-	-
80	-	-	1,871,726	-	-	-
81	-	-	1,382,002	-	-	-
82	-	-	999,012	-	-	-
83	-	-	706,385	-	-	-
84	-	-	488,072	-	-	-
85	-	-	329,258	-	-	-
86	-	-	216,695	-	-	-
87	-	-	139,009	-	-	-
88	-		86,839	-	-	-
89	-		52,810	-	-	-
90	-		31,243	-	-	-
91	-		17,965	-	-	-
92	-		10,029	-	-	-
93	-		5,440	-	-	-
			5,110			

Note: Projected contributions, benefit payments, and administrative expenses are assumed to occur mid-year.

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Discount Rate Development: Present Value of Projected Benefit Payments

Veer	Projected Beginning	Total Projected Benefit	"Funded" Portion of Benefit	"Unfunded" Portion of Benefit	Present Value of "Funded" Benefit	Present Value of "Unfunded" Benefit	Present Value of Benefit Payments Using Single
Year 1	<b>FNP</b> 38,148,167	Payments 25,790,873	Payments 25,790,873	Payments	Payments <sup>1</sup> 24,972,686	Payments <sup>2</sup>	Discount Rate 25,326,388
2	40,493,736	27,486,024	27,486,024	_	24,972,000		26,027,567
3	42,433,950	29,388,376	29,388,376		25,013,337		26,835,623
4	43,854,697	31,400,952	31,400,952		25,015,557		27,649,886
5	44,673,558	34,151,239	34,151,239	-	25,550,497	-	28,998,226
6	44,773,628	36,599,263	36,599,263	<u>-</u>	25,672,233	-	29,967,584
7	44,051,837	39,272,695	39,272,695	-	25,827,385	-	31,008,770
8	42,391,111	42,062,848	42,062,848	-	25,935,034	-	32,026,313
9	39,661,127	45,495,149	6,321,364	39,173,785	3,654,243	28,955,098	33,403,178
10	35,718,075	48,873,666	7,372,880	41,500,786	3,995,969	29,603,444	34,602,865
11	30,425,094	52,235,905	8,505,150	43,730,755	4,321,807	30,104,353	35,663,232
12	23,608,840	55,704,720	9,682,003	46,022,717	4,612,613	30,575,319	36,673,977
13	15,121,819	59,297,965	10,914,963	48,383,002	4,875,313	31,020,441	37,646,121
14	4,794,807	62,986,159	4,740,224	58,245,935	1,985,078	36,039,369	38,560,265
15	-	66,579,647		66,579,647	-	39,756,621	39,305,272
16	-	70,224,286	-	70,224,286	-	40,467,998	39,977,081
17	-	73,565,383	-	73,565,383	-	40,912,338	40,384,219
18	-	76,884,087	-	76,884,087	-	41,264,223	40,699,501
19	-	80,092,835	-	80,092,835	-	41,484,637	40,884,691
20	-	83,181,813	-	83,181,813	-	41,579,419	40,945,849
21	-	86,478,281	-	86,478,281	-	41,717,041	41,049,037
22	-	89,646,668	-	89,646,668	-	41,734,673	41,034,063
23	-	92,504,132	-	92,504,132	-	41,560,466	40,830,616
24	-	95,213,731	-	95,213,731	-	41,283,382	40,526,474
25	-	97,966,355	-	97,966,355	-	40,992,938	40,209,680
26	-	100,530,924	-	100,530,924	-	40,596,462	39,789,436
27	-	102,986,073	-	102,986,073	-	40,135,014	39,306,198
28	-	105,467,367	-	105,467,367	-	39,666,094	38,816,385
29	-	107,506,030	-	107,506,030	-	39,020,297	38,154,366
30	-	109,193,062	-	109,193,062	-	38,248,041	37,369,810
31	-	111,008,684	-	111,008,684	-	37,525,589	36,635,088
32	-	112,188,822	-	112,188,822	-	36,599,619	35,702,967
33	-	113,111,164	-	113,111,164	-	35,611,385	34,711,600
34	-	113,667,449	-	113,667,449	-	34,536,309	33,637,190
35	-	113,746,453	-	113,746,453	-	33,352,937	32,459,056
36	-	113,213,696	-	113,213,696	-	32,036,982	31,153,829
37	-	112,454,434	-	112,454,434	-	30,710,411	29,840,320
38	-	111,342,130	-	111,342,130	-	29,344,383	28,490,552
39	-	109,926,179	-	109,926,179	-	27,959,088	27,124,198
40	-	108,033,274	-	108,033,274	-	26,517,698	25,705,600
41	-	106,328,288	-	106,328,288	-	25,187,410	24,396,833
42	-	104,199,332	-	104,199,332	-	23,820,783	23,054,941
43	-	102,001,305	-	102,001,305	-	22,503,664	21,763,024
44	-	99,480,216	-	99,480,216	-	21,180,716	20,467,494
45	-	96,723,424	-	96,723,424	-	19,874,307	19,189,959
46	-	93,761,648	-	93,761,648	-	18,592,679	17,938,332
47	-	90,593,321	-	90,593,321	-	17,336,816	16,713,501

<sup>1</sup> Funded benefit payments discounted using the assumed 6.66% long-term investment return.

<sup>2</sup> Unfunded benefit payments discounted using the assumed 3.62% municipal bond index rate.

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Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

## Discount Rate Development: Present Value of Projected Benefit Payments (continued)

	Projected Beginning	Total Projected Benefit	"Funded" Portion of Benefit	"Unfunded" Portion of Benefit	Present Value of "Funded" Benefit	Present Value of "Unfunded" Benefit	Present Value of Benefit Payments Using Single
Year	FNP	Payments	Payments	Payments	Payments <sup>1</sup>	Payments <sup>2</sup>	Discount Rate
48	-	87,250,840	-	87,250,840	-	16,113,845	15,522,273
49	-	83,763,470	-	83,763,470	-	14,929,341	14,369,934
50	-	79,945,637	-	79,945,637	-	13,751,091	13,225,416
51	-	76,049,128	-	76,049,128	-	12,623,886	12,131,744
52	-	72,097,905	-	72,097,905	-	11,549,890	11,090,882
53	-	68,105,420	-	68,105,420	-	10,529,150	10,102,749
54	-	64,163,959	-	64,163,959	-	9,573,246	9,178,326
55	-	60,254,632	-	60,254,632	-	8,675,907	8,311,457
56	-	56,436,501	-	56,436,501	-	7,842,255	7,506,911
57	-	52,687,991	-	52,687,991	-	7,065,598	6,758,141
58	-	49,023,133	-	49,023,133	-	6,344,461	6,063,608
59	-	45,487,574	-	45,487,574	-	5,681,237	5,425,469
60	-	42,083,584	-	42,083,584	-	5,072,467	4,840,293
61	-	38,810,416	-	38,810,416	-	4,514,516	4,304,489
62	-	35,666,469	-	35,666,469	-	4,003,865	3,814,590
63	-	32,649,221	-	32,649,221	-	3,537,110	3,367,248
64	-	29,755,803	-	29,755,803	-	3,111,027	2,959,296
65	-	26,984,116	-	26,984,116	-	2,722,681	2,587,851
66	-	24,332,705	-	24,332,705	-	2,369,384	2,250,277
67	-	21,801,122	-	21,801,122	-	2,048,709	1,944,190
68	-	19,391,215	-	19,391,215	-	1,758,583	1,667,552
69	-	17,107,014	-	17,107,014	-	1,497,230	1,418,610
70	-	14,954,101	-	14,954,101	-	1,263,080	1,195,814
71	-	12,939,378	-	12,939,378	-	1,054,728	997,772
72	-	11,070,786	-	11,070,786	-	870,887	823,210
73	-	9,356,021	-	9,356,021	-	710,282	670,869
74	-	7,801,737	-	7,801,737	-	571,594	539,451
75	-	6,412,734	-	6,412,734	-	453,415	427,581
76	-	5,190,441	-	5,190,441	-	354,171	333,729
77	-	4,132,633	-	4,132,633	-	272,140	256,231
78	-	3,233,558	-	3,233,558	-	205,496	193,330
79	-	2,484,066	-	2,484,066	-	152,350	143,218
80	-	1,871,726	-	1,871,726	-	110,784	104,061
81	-	1,382,002	-	1,382,002	-	78,940	74,092
82	-	999,012	-	999,012	-	55,070	51,647
83	-	706,385	-	706,385	-	37,579	35,215
84	-	488,072	-	488,072	-	25,058	23,463
85	-	329,258	-	329,258	-	16,314	15,264
86	-	216,695	-	216,695	-	10,361	9,687
87	-	139,009	-	139,009	_	6,415	5,992
88	-	86,839	-	86,839	-	3,867	3,610
89	-	52,810	-	52,810	-	2,270	2,117
90	-	31,243	-	31,243	-	1,296	1,208
90 91	-	17,965	-	17,965	-	719	670
91 92	-	10,029	-	10,029	-	387	360
92 93	-	5,440	-	5,440	-	203	189
/5	-	5,440	-	J, <del>44</del> 0	\$ 226,425,910	\$ 1,470,981,333	\$ 1,697,407,243

<sup>1</sup> Funded benefit payments discounted using the assumed 6.66% long-term investment return.

<sup>2</sup> Unfunded benefit payments discounted using the assumed 3.62% municipal bond index rate.

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

### Important Notices

### Purpose and Scope of the Valuation

This valuation has been prepared exclusively for the Court and solely to provide GASB 75 accounting information. It is important to recognize that calculations performed for other purposes (such as benefit design, investment policy, or plan funding) may yield significantly different results.

A valuation report is only a snapshot of a plan's estimated financial condition at a single point in time. A plan's total cost will depend on many factors and variables that are uncertain and unknowable at the current valuation date.

Actuarial valuations are extremely complex and it's possible that data, computer coding, and mathematical errors could occur during the valuation process. Errors in a valuation discovered after its preparation may be corrected by revising the current valuation or in a subsequent year's valuation.

### **Assumptions and Methods**

Since modeling all possible future outcomes is not possible or practical, the valuation is based on a single set of data, assumptions, methods, and plan provisions which satisfy current GASB 75 accounting requirements. We may also use estimates or simplifications to model future events in an efficient and cost-effective manner, so long as we believe that these simplifying techniques do not affect the reasonableness of the valuation results.

The Court is responsible for the assumptions, methods, and funding policies used to prepare the valuation. The assumptions used in this report are among a wide range of possibilities (each of which may be considered reasonable), but have been chosen as a single "best estimate". If the Court is interested in analyzing the effect of different assumption sets on the valuation results, then we suggest a sensitivity analysis to be performed at a later date.

Per direction of the Judicial Council of California, the actuarial methods and assumptions used are in accordance with the submission requirements of CalPERS Employer's Retiree Benefit Trust (CERBT), where applicable. We have not validated each individual assumption since it is beyond the scope of this project, but we have no reason to doubt their overall reasonableness. If the Court would prefer an assumption set tailored specifically to its unique plan, then we suggest an experience study to be completed at a later date.

To the extent that actual plan experience differs from the valuation assumptions, actuarial gains and losses will occur and be amortized over future periods. A summary of the actuarial assumptions and methods used in this valuation are summarized in the Actuarial Basis section of the report.

### Accuracy of Substantive Plan Information and Census Data

For purposes of this valuation, we have assumed that the Court has validated our summary of the substantive plan provisions and has provided us with any relevant information regarding interpretation of the plan provisions and changes to the plan terms since the prior valuation.

The Court is solely responsible for the validity, accuracy and comprehensiveness of this information. If any data or plan provisions supplied are not accurate and complete, the valuation results may differ significantly. Moreover, different interpretations of the substantive plan may produce substantially different valuation results.



Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

### Accounting Requirements and Valuation Considerations

This section summarizes the applicable accounting requirements for the plan and describes important considerations and methods used to complete the valuation.

### Accounting Information under GASB 74 and GASB 75

The Governmental Accounting Standards Board (GASB) issued Statements No. 74 (GASB 74 for funded OPEB plans) and 75 (GASB 75 for employers). The statements' objectives are to establish uniform standards of financial reporting by state and local governmental entities for postemployment benefit plans other than pension benefits (OPEB plans). This includes benefits such as postemployment medical, dental, vision and life insurance benefits.

For OPEB plans sponsored by governmental entities, these GASB Statements require certain standards and disclosures of plan and fund information including financial reporting of plan assets, liabilities of plan, changes in net assets, funded status and funding progress of the plan, and contributions to the plan in comparison to the accounting expense.

#### Valuing Postretirement Health Benefits

Determining the value of future healthcare benefits is challenged by the fact that assumptions must be made about many future events that are especially hard to predict. Future increases in healthcare costs are affected by many factors, including:

- OPEB inflation
- Utilization
- Technological advances
- · Cost shifting between private and public healthcare plans
- Cost leveraging (i.e., erosion of fixed deductibles and out-of-pocket maximums)

OPEB obligations are also heavily influenced by demographic assumptions such as:

- Withdrawal rates (i.e., employees terminating before receiving benefits)
- Retirement rates (i.e., employees retiring at various ages and subsidy levels)
- Mortality rates (i.e., how long employees and spouses will receive benefits)
- Election rates (i.e., retirees electing to participate, electing which plan, and electing spouse coverage or not)

The Summary of Actuarial Assumptions and Methods section outlines the assumptions used in this valuation.

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

### Accounting Requirements and Valuation Considerations (continued)

### Estimating Healthcare Costs and Implicit Subsidy

Estimating future healthcare costs involves calculating a starting claims plus administrative cost on a percovered-individual basis, as well as developing an assumption regarding future increases in healthcare costs.

For insured plans, the premiums usually represent a blended average cost of both active and retired individuals. Since older, pre-65 retirees generally incur higher claims than younger active employees, GASB requires employers to value retiree liability based on retirees' estimated true costs rather than anticipated premium costs. Age-adjusted claims are developed and used to value the OPEB liability.

### Impact of Legislative Changes

The legislative and regulatory environments have many implications for OPEB plans. Changes to current rules and implementation of new legislation are difficult to predict but could have a dramatic impact on the value of future plan benefits. These include changes to government medical programs, such as Medicare and the Affordable Care Act. Future changes to these programs will be reflected if/when they become law.

Actuarial Valuation of Other Postemployment Benefits (OPEB) for Fiscal 2019

### **Glossary of Selected Terms**

This section provides the definitions of applicable terminology in the actuarial valuation, with references to the Governmental Accounting Standards (GASB) No. 75.

Actuarial Cost Method - the method used to allocate OPEB liability costs between past, current, and future years.

Actuarial Present Value of Benefits - the amount of money needed today to cover the promised benefits for the current participant group, if all actuarial assumptions are exactly met.

Direct Subsidy - OPEB explicitly provided by employer.

Discount Rate - the interest rate used to adjust liabilities and obligations for the time value of money.

Fiduciary Net Position - The value of assets reported by the plan/employer.

GASB Statement No. 75 - the Governmental Accounting Standards Board Statement Number 75 Accounting and Financial Reporting for OPEB Plans.

**Implicit Subsidy or Implicit Rate Subsidy** - the difference between the actual and apparent cost of OPEB coverage. The actual cost for early retirees is higher than the average per-person premium for the active/retiree group. Plans in which retirees pay the average active/retiree rate (the apparent cost) give rise to an implicit rate subsidy: the employer pays the difference between the actual and apparent cost.

**Long-Term Expected Investment Return** - the assumed long-term asset return expected to be earned by the OPEB investments.

**Measurement Date** - the date as of which the Total OPEB Liability and Fiduciary Net Position (assets) are measured.

**Net OPEB Liability** - the difference between the actuarial accrued liability (Total OPEB Liability) and OPEB assets (Fiduciary Net Position).

**Net Position Restricted for OPEB** - accounting terminology for OPEB plan assets.

**Reporting Date** - the plan's or employer's fiscal year end.

**Service Cost** - the portion of the actuarial present value which is allocated to the current year by the actuarial cost method.

**Total OPEB Liability** - the portion of the actuarial present value which is not attributable to future service costs, determined under the actuarial cost method.

**Valuation Date** - the date as of which liabilities are calculated. Liabilities may be "rolled forward" from the Valuation Date to the Measurement Date.

