



**County of Marin**  
**Retiree Healthcare Plan**

**BARTEL**  
ASSOCIATES, LLC

June 30, 2018 GASBS 75 Accounting Information  
As of Measurement Date June 30, 2017  
Based on the July 1, 2017 Actuarial Valuation

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**Bartel Associates, LLC**

July 27, 2018

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## Applicable Dates

### Applicable Dates and Periods

<b>Fiscal Year End</b>	<b>June 30, 2018</b>
■ Reporting Date*	June 30, 2018
■ Measurement Date	June 30, 2017
■ Measurement Period	July 1, 2016 to June 30, 2017
■ Actuarial valuation date	July 1, 2017

\* Employer's fiscal year end.

Update procedures were used to roll back the total OPEB liability from the valuation date (7/1/17) to the prior measurement date (6/30/16).

## Note Disclosures

### Plan Information

<b>Fiscal Year End</b>	<b>June 30, 2018</b>
■ Plan Type	Multiple Employer
■ OPEB Trust	Yes
■ Special Funding Situation	No
■ Nonemployer Contributing Entities	No

**Note Disclosures**

**Expected Long-Term Rate of Return**

	Target Allocation*	Expected Geometric Real Rate of Return
	CERBT Strategy 1	
<ul style="list-style-type: none"> <li>■ Asset Class Component                             <ul style="list-style-type: none"> <li>● Global Equity</li> <li>● Fixed Income</li> <li>● TIPS</li> <li>● Commodities</li> <li>● REITs</li> </ul> </li> </ul>	57% 27% 5% 3% 8%	4.82% 1.47% 1.29% 0.84% 3.76%
■ Assumed Long-Term Rate of Inflation		2.75%
■ Margin for Adverse Deviation		1.25%
■ Expected Long-Term Net Rate of Return, Rounded		5.50%

\* Policy target effective October 13, 2014

**Note Disclosures**

**Number of Employees Covered by the Benefit Terms**

Measurement Date	June 30, 2017
■ Inactive employees receiving benefit payments	1,591
■ Inactive employees entitled to but not yet receiving benefit payments	0
■ Active employees	2,040
■ Total	3,631

**Note Disclosures**

**Net OPEB Liability/(Asset)**

(Amounts in 000's)

	<b>Fiscal Year Ending</b>	
	<b>6/30/18</b>	<b>6/30/17</b>
■ Measurement Date	6/30/17	6/30/16
■ Total OPEB Liability (TOL)	\$ 370,692	\$ 358,720
■ Fiduciary Net Position (FNP)*	84,658	66,466
■ Net OPEB Liability (NOL)	286,034	292,254
■ Funded status (FNP/TOL)	22.8%	18.5%

\* Per CERBT Schedule of Changes in Fiduciary Net Position by Employer for Fiscal Year Ended June 30, 2017

**Note Disclosures**

**Changes in Net OPEB Liability/(Assets)**

(Amounts in 000's)

	<b>Total OPEB Liability</b>	<b>Fiduciary Net Position</b>	<b>Net OPEB Liability</b>
■ Balance at 6/30/17*	\$ 358,720	\$ 66,466	\$ 292,254
■ Changes for the year			
● Service Cost	5,731	-	5,731
● Interest	19,676	-	19,676
● Difference between actual and expected experience	-	-	-
● Changes of benefit terms	-	-	-
● Assumption changes	-	-	-
● Contributions - employer	-	24,264	(24,264)
● Contributions - employee	-	-	-
● Net investment income	-	7,400	(7,400)
● Benefit payments	(13,435)	(13,435)	-
● Administrative expenses	-	(37)	37
■ Net Changes	11,972	18,192	(6,220)
■ Balance at 6/30/18**	370,692	84,658	286,034

\* Measurement date 6/30/16

\*\* Measurement date 6/30/17

**Note Disclosures**

**Sensitivity of Net OPEB Liability**

(Amounts in 000's)

■ **Changes in the Discount Rate**

	<b>Discount Rate</b>		
	<b>4.50% (1% Decrease )</b>	<b>5.50% (Current Rate)</b>	<b>6.50% (1% Increase )</b>
■ Net OPEB Liability	\$ 340,411	\$ 286,034	\$ 241,607

■ **Changes in the Healthcare Trend Rate**

	<b>Healthcare Trend Rate</b>		
	<b>1% Decrease</b>	<b>Current Trend</b>	<b>1% Increase</b>
■ Net OPEB Liability	\$ 266,346	\$ 286,034	\$ 304,001

**Note Disclosures**

**OPEB Expense for Fiscal Year**

(Amounts in 000's)

	<b>2017/18</b>
■ OPEB Expense	\$ 20,802

See slide 22 for OPEB expense detail, which is not required disclosure.

**Note Disclosures**

**Deferred Outflows/Inflows Balances at June 30, 2018**

(Amounts in 000's)

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
■ Differences between expected and actual experience	\$ -	\$ -
■ Changes of assumptions	-	-
■ Net difference between projected and actual earnings on plan investments*	-	2,758
■ Employer contributions made subsequent to the measurement date	22,478	-
■ Total	22,478	2,758

\* Deferred Inflows and Outflows combined for footnote disclosure.

**Note Disclosures**

**Recognition of Deferred Outflows and Inflows of Resources  
in Future OPEB Expense**

(Amounts in 000's)

<b>Fiscal Year Ending June 30:</b>	<b>Deferred Outflows/(Inflows) of Resources</b>
■ 2019	\$ (689)
■ 2020	(689)
■ 2021	(689)
■ 2022	(691)
■ 2023	-
■ Thereafter	-

**Note Disclosures**

**Significant Actuarial Assumptions Used for Total OPEB Liability**

Actuarial Assumption	June 30, 2017 Measurement Date
■ Actuarial Valuation Date	■ July 1, 2017
■ Expected Long-Term Rate of Return on Investments	■ 5.50%
■ 20-Year Municipal Bond Rate	■ N/A ■ Plan assets projected to be sufficient to pay all benefits from trust
■ Discount Rate	■ 5.50% at June 30, 2017 ■ 5.50% at June 30, 2016
■ General Inflation	■ 2.75% per annum
■ Mortality, Retirement, Disability, Termination	■ Marin County Employees' Retirement Association 2011-2014 Experience Study
■ Mortality Improvement	■ Mortality projected fully generational with Scale MP-2017

**Note Disclosures**

**Significant Actuarial Assumptions Used for Total OPEB Liability**

Actuarial Assumption	June 30, 2017 Measurement Date
■ Medical Trend	■ Non-Medicare - 7.5% for 2019, decreasing to an ultimate rate of 4.0% in 2076 and later years ■ Medicare - 6.5% for 2019, decreasing to an ultimate rate of 4.0% in 2076 and later years ■ Medicare Part B - 0.0% for 2019, increasing to Medicare trend in 2023 and later years
■ Plan 3 Cap Increase	■ 3% per year
■ Participation	■ Varies by Plan and years of service

**Required Supplementary Information**

**Changes in Net OPEB Liability/(Assets) and Related Ratios**

(Amounts in 000's)

Fiscal Year	2017/18
Measurement Period	2016/17
■ Changes in Total OPEB Liability	
● Service Cost	\$ 5,731
● Interest	19,676
● Changes of benefit terms	-
● Difference between actual and expected experience	-
● Assumption changes	-
● Benefit payments	(13,435)
■ Net Changes	11,972
■ Total OPEB Liability (beginning of year)	358,720
■ Total OPEB Liability (end of year)	370,692

**Required Supplementary Information**

**Changes in Net OPEB Liability/(Assets) and Related Ratios**

(Amounts in 000's)

Fiscal Year	2017/18
Measurement Period	2016/17
■ Changes in Plan Fiduciary Net Position	
● Contributions - employer	\$ 24,264
● Contributions - employee	-
● Net investment income	7,400
● Benefit payments	(13,435)
● Administrative expenses	(37)
● Other changes	-
● Net Changes	18,192
■ Plan Fiduciary Net Position (beginning of year)	66,466
■ Plan Fiduciary Net Position (end of year)	84,658

\* Includes \$1,572 in implied Subsidy benefit payments



**Required Supplementary Information**

**Changes in Net OPEB Liability/(Assets) and Related Ratios**

(Amounts in 000's)

	<b>Fiscal Year 2017/18</b>
■ Net OPEB Liability/(Asset)	\$ 286,034
■ Fiduciary Net Position as a percentage of the Total OPEB Liability	22.8%
■ Covered employee payroll*	203,311
■ Net OPEB Liability as a percentage of covered employee payroll	140.7%

\* Covered employee payroll for measurement period ending 6/30/17

**Required Supplementary Information**

**Schedule of Employer Contributions**

(Amounts in 000's)

	<b>Fiscal Year 2017/18</b>
■ Actuarially determined contribution	\$ 21,561
■ Contributions in relation to the Actuarially determined contribution	22,478
■ Contribution deficiency/(excess)	(917)
■ Covered employee payroll*	209,589
■ Contributions as a percentage of covered employee payroll	10.7%

\* Covered employee payroll for fiscal year ending 6/30/18

**Notes to Schedule of Employer Contribution**  
**Methods and Assumptions for**  
**Actuarially Determined Contribution**

■ Valuation Date	■ July 1, 2017
■ Actuarial Cost Method	■ Entry Age Normal, Level percentage of payroll
■ Amortization Method	■ Level percentage of payroll ■ Investment gain/loss - Over closed 25-year period that includes a 3-year phase-in from 2017/18 ■ Other - Over closed 25-year period from 2017/18
■ Asset Valuation	■ Market value of assets

**Actuarial Certification**

This report presents the County of Marin Retiree Healthcare Plan 2018 reporting and disclosure information under Governmental Accounting Standards Board Statement No. 75 (GASBS 75).

The report provides information intended for reporting under GASBS 75, but may not be appropriate for other purposes. Information provided in this report may be useful to the County for the Plan's financial management. Future valuations may differ significantly if the Plan's experience differs from our assumptions or if there are changes in Plan design, actuarial methods, or actuarial assumptions. The project scope did not include an analysis of this potential variation.

The valuation is based on Plan provisions, participant data, and asset information provided by the County as summarized in this report, which we relied on and did not audit. We reviewed the participant data for reasonableness. As permitted under GASBS 75, the total OPEB liability has been calculated from the July 1, 2017 actuarial valuation. Additional information on participants included in the valuation, actuarial assumptions, and asset information can be found in our actuarial valuation report dated December 2017.

To the best of our knowledge, this report is complete and accurate and has been conducted using generally accepted actuarial principles and practices. Additionally, in our opinion, actuarial methods and assumptions comply with GASBS 75. As members of the American Academy of Actuaries meeting the Academy Qualification Standards, we certify the actuarial results and opinions herein.

Respectfully submitted,



Marilyn Oliver, FSA, MAAA, EA, FCA  
 Vice President  
 Bartel Associates, LLC  
 July 27, 2018



Tak Frazita, ASA, MAAA, EA  
 Associate Actuary  
 Bartel Associates, LLC  
 July 27, 2018

**Supporting Calculations**

**Recognition of Deferred Outflows/Inflows at June 30, 2018**

**Differences between Expected and Actual Experience**

(Amounts in 000's)

FYE	Initial Amt	Initial Recog Period	Amount Recognized in OPEB Expense for FYE							Balances of Deferred	
			2018	2019	2020	2021	2022	2023	2024+	Out-flows	(In-flows)
2018	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total			-	-	-	-	-	-	-	-	-

**Supporting Calculations**

**Recognition of Deferred Outflows/Inflows at June 30, 2018**

**Changes of Assumptions**

(Amounts in 000's)

FYE	Initial Amt	Initial Recog Period	Amount Recognized in OPEB Expense for FYE							Balances of Deferred	
			2018	2019	2020	2021	2022	2023	2024+	Out-flows	(In-flows)
2018	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total			-	-	-	-	-	-	-	-	-

## Supporting Calculations

### Recognition of Deferred Outflows/Inflows at June 30, 2018

#### Projected Versus Actual Earnings on Investments

(Amounts in 000's)

FYE	Initial Amt	Initial Recog Period	Amount Recognized in OPEB Expense for FYE							Balances of Deferred	
			2018	2019	2020	2021	2022	2023	2024+	Out-flows	(In-flows)
2018	\$(3,447)	5	\$ (689)	\$ (689)	\$ (689)	\$ (689)	\$ (691)	\$ -	\$ -	\$ -	\$(2,758)
Total			(689)	(689)	(689)	(689)	(691)	-	-	-	(2,758)

\* Calculation of initial amount for measurement period ending 6/30/17:

Projected earnings on investments of \$3,953 (slide 23), less

Actual earnings on investments of \$7,400 (net investment income, slide 14), equals

Projected earnings less actual earnings of \$(3,447)

## Supporting Calculations

### Components of GASBS 75 OPEB Expense

(Amounts in 000's)

	Fiscal Year 2017/18
■ Service Cost	\$ 5,731
■ Interest on Total OPEB Liability	19,676
■ Changes of benefit terms	-
■ Projected earning on investments	(3,953)
■ Employee contributions	-
■ Administrative expenses	37
■ Recognition of deferred outflows/inflows	
● Difference in experience	-
● Change of assumptions	-
● Investment gain/loss	(689)
■ OPEB Expense	20,802

**Supporting Calculations**

**Components of GASBS 75 OPEB Expense**

**Calculation of Projected Earnings on Investments**

(Amounts in 000's)

	<b>Dollar Amount</b>	<b>Expected Return</b>	<b>Portion of Year</b>	<b>Projected Earnings</b>
■ Fiduciary Net Position	\$ 66,466	5.50%	100%	\$ 3,656
■ Employer contributions	24,264	5.50%	50%	667
■ Employee contributions	-	5.50%	50%	-
■ Benefit payments	(13,435)	5.50%	50%	(369)
■ Administrative expenses	(37)	5.50%	50%	(1)
■ Projected earnings				3,953



**Supporting Calculations**

**Components of GASBS 75 OPEB Expense**

**Calculation of Interest on Total OPEB Liability**

(Amounts in 000's)

	<b>Dollar Amount</b>	<b>Expected Return</b>	<b>Portion of Year</b>	<b>Interest</b>
■ Total OPEB Liability	\$ 358,720	5.50%	100%	\$ 19,730
■ Change of benefit terms*	-	5.50%	0%	-
■ Difference in experience*	-	5.50%	0%	-
■ Change of assumptions*	-	5.50%	0%	-
■ Service Cost	5,731	5.50%	100%	315
■ Benefit payments	(13,435)	5.50%	50%	(369)
■ Total Interest				19,676

\* At end of measurement period



## Supporting Calculations

### GASBS 75 Balance Equation

(Amounts in 000's)

	Fiscal Year Ending	
	6/30/17	6/30/18
■ Measurement date	<b>6/30/16</b>	<b>6/30/17</b>
■ Total OPEB Liability	\$ 358,720	\$ 370,692
■ Fiduciary Net Position	66,466	84,658
■ Net OPEB Liability	292,254	286,034
■ Deferred inflows of resources	-	2,758
■ Deferred (outflows) of resources	-	-
■ Balance Sheet	292,254	288,792

Check:

■ Balance Sheet 6/30/17	\$ 292,254
● OPEB Expense	20,802
● Contributions	(24,264)
■ Balance Sheet 6/30/18	288,792

## Supporting Calculations

### Discount Rate Crossover Test

#### Projection of Fiduciary Net Position

(Amounts in millions)

Year	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Admin Expenses	Projected Investment Earnings	Projected Ending Fiduciary Net Position
1	\$ 85	\$ 22	\$ 14	\$ 0	\$ 4	\$ 96
2	96	22	15	0	5	108
3	108	22	17	0	6	118
4	118	22	18	0	6	128
5	128	22	19	0	7	138
6	138	22	20	0	8	148
7	148	23	22	0	8	157
8	157	23	23	0	8	165
9	165	23	24	0	9	174
10	174	24	25	0	9	182
15	211	25	29	0	11	218
20	250	28	32	0	13	259
25	309	32	32	0	17	326
26	326	0	31	0	17	312
30	270	0	28	0	14	255
35	200	0	22	0	10	188
40	143	0	17	0	7	133
45	97	0	13	0	5	89
50	60	0	9	0	3	54
55	34	0	6	0	2	30
60	18	0	3	0	1	16
70	8	0	0	0	0	8