

April 1, 2020

Ms. Graciela C. Gutierrez  
Auditor-Controller  
County of Butte  
25 County Center Drive  
Oroville, CA 95965

Re: County of Butte ("County") GASB 75 Valuation

Dear Ms. Gutierrez:

This report sets forth the results of our GASB 75 actuarial valuation of the County's retiree health insurance program as of July 1, 2019.

In June, 2015 the Governmental Accounting Standards Board (GASB) issued new accrual accounting standards for Other Postemployment Benefits (OPEB), GASB 74 and GASB 75. GASB 74/75 require public employers such as the County to perform periodic actuarial valuations to measure and disclose their OPEB liabilities for the financial statements of both the employer and the trust, if any, set aside to pre-fund these liabilities. The County must obtain actuarial valuations of its retiree health insurance program under GASB 75 not less frequently than once every two years. The County implemented GASB 75 based on the results of an actuarial valuation performed by DFA as of July 1, 2017.

The net impact of OPEB on the County's Net Position is projected to decrease from \$69,406,110 as of June 30, 2019, to \$68,557,614 as of June 30, 2020. The County's OPEB Expense for fiscal 2019-20 is \$4,100,569, or 3.17% of projected covered payroll.

The County has selected Pacific Crest Actuaries (PCA) to perform this actuarial valuation of the County's retiree health insurance program as of July 1, 2019, to be used for the fiscal years ending June 30, 2020 and 2021.

The report is organized as follows:

- (1) Introduction and discussion; GASB 75 accounting and disclosures.
- (2) Information not relating to GASB 75 disclosures (begins on page 9).
- (3) Plan provisions, valuation data, actuarial assumptions, and certification.

We are available at (818) 718-1266 to answer any questions the County may have concerning the report.

**Introduction and Discussion**

We have determined that the present value of County-paid retiree health benefits is \$84,373,314 as of July 1, 2019. This represents the present value of all plan benefits expected to be paid by the County for its current and future retirees. If the County were to place this amount in a fund earning interest at the rate of 5.75% per year, and all other actuarial assumptions were exactly met, the fund would have exactly enough to pay all expected benefits. This number is given for informational purposes only and is not required to be included in the County's financial statement. This includes benefits for 2,129 active employees who may become eligible to retire and receive benefits in the future, and 495 retirees receiving County health benefits as of the valuation date.

When we apportion the \$84,373,314 into past service and future service components under the Entry Age, Level Percent of Pay Cost Method, the past service liability (or "Total OPEB Liability") component is \$65,452,178 as of July 1, 2019. This represents the present value of all benefits accrued through the valuation date assuming that each employee's liability is expensed from hire date until retirement date as a level percentage of pay. The \$65,452,178 is comprised of liabilities of \$46,827,168 for active employees and \$18,625,010 for retirees. The County has adopted an irrevocable trust ("CERBT") for the pre-funding of retiree healthcare benefits. Trust assets have an actuarial value of \$5,902,140 as of June 30, 2019, so the Unfunded Accrued Liability (also called the "Net OPEB Liability", equal to the AL less Actuarial Value of Assets) is \$59,550,038.

Actuarially determined contributions (ADC) have not been prepared as part of this valuation. Instead, we have provided alternative funding schedules beginning on page 10.

We have prepared the following pro-forma GASB 75 roll-forward to June 30, 2020 based on all available information as of the July 1, 2019 valuation date. A summary of the June 30, 2019 disclosures, 2019 valuation results, and projected 2020 disclosures is shown below:

	<b>Measurement Date <u>6/30/2020</u></b>	<b>Valuation Date <u>7/1/2019</u></b>	<b>Measurement Date <u>6/30/2019</u></b>
Present Value of Benefits			
Active employees	\$66,728,831	\$65,748,304	
Retirees	<u>19,049,313</u>	<u>18,625,010</u>	
<b>Total Present Value of Benefits</b>	<b>\$85,778,144</b>	<b>\$84,373,314</b>	
Entry Age Accrued Liability			
Active employees	\$49,286,595	\$46,827,168	
Retirees	<u>19,049,313</u>	<u>18,625,010</u>	
<b>Total OPEB Liability</b>	<b>\$68,335,908</b>	<b>\$65,452,178</b>	<b>\$64,124,136</b>
Fiduciary Net Position (Trust Assets)	<u>(7,883,192)</u>	<u>(5,902,140)</u>	<u>(5,902,140)</u>
<b>Net OPEB Liability</b>	<b>\$60,452,716</b>	<b>\$59,550,038</b>	<b>\$58,221,996</b>
<b>Service Cost (Beginning of Year)</b>		<b>\$2,427,296</b>	

## Summary of Results

The change in County of Butte's Net OPEB Liability, Deferred Inflows and Deferred Outflows, and the Net Impact on Statement of Net Position, together with the OPEB Expense, are shown in the following table:

	<b>Measurement Date</b>	
	<b><u>6/30/2020</u></b>	<b><u>6/30/2019</u></b>
Net OPEB Liability	\$60,452,716	\$58,221,996
Deferred Inflows of Resources	9,329,930	11,201,786
Deferred Outflows of Resources	<u>(1,225,032)</u>	<u>(17,672)</u>
<b>Net Impact on Statement of Net Position</b>	<b>\$68,557,614</b>	<b>\$69,406,110</b>
OPEB Expense (\$ Amount)	\$4,100,569	
Projected Covered Payroll	\$129,344,970	
OPEB Expense (% of Payroll)	3.17%	

For the measurement period ending June 30, 2020, the annual OPEB Expense is \$4,100,569, or 3.17% of covered payroll. This amount differs from the County's projected contribution of \$4,949,065 (including implicit subsidy and contributions to CERBT), in that it represents the change in the Net Impact on the Statement of Net Position plus employer contributions (\$68,557,614 - \$69,406,110 + \$4,949,065). A breakdown of the components of the annual OPEB Expense is shown on page 6 of the report.

This valuation should be used for the County's fiscal years ending June 30, 2020 and June 30, 2021. The June 30, 2021 disclosures should be based on a roll-forward of the results of this valuation. The roll-forward will involve actual, rather than expected, benefit payments, trust assets as of the statement date, and possibly a change in discount rate, if conditions change sufficiently in the interim. Therefore, the projected June 30, 2021 numbers are not given in this report, but will be available on a complimentary basis from PCA at the time the County prepares its June 30, 2021 disclosures.

The information given in pages 4 through 8 of this report follows the wording and format of Illustration 4 of GASB 75 for plans administered through a trust. Accordingly, the past tense is used in some cases where the period in question has not yet ended.

The disclosure information contained in this report is based on all information currently available to us as of the valuation date. Actual disclosures for the County's June 30, 2020 financial statement may require us to make revisions to take into account changes between now and June 30, 2020.

**Schedule of Changes in Net OPEB Liability  
For the Year Ended June 30, 2020**

The components of the County of Butte's Net OPEB Liability as of June 30, 2020 were as follows:

**Total OPEB Liability (TOL)**

Service cost at beginning of year	\$2,427,296
Interest on TOL plus service cost, less 1/2 benefit payments	3,730,386
Changes of benefit terms	0
Difference between expected and actual experience	1,175,224
Changes of assumptions	229,180
Benefit payments, adjusted for implicit subsidy	<u>(3,350,314)</u>
<b>Net change in Total OPEB Liability</b>	<b>\$4,211,772</b>

<b>Total OPEB Liability - beginning (6/30/19) (a)</b>	<u>\$64,124,136</u>
<b>Total OPEB Liability - ending (6/30/20) (b)</b>	<b>\$68,335,908</b>

**Plan Fiduciary Net Position**

Contributions - employer, adjusted for implicit subsidy	\$4,949,065
Contributions - member	0
Expected investment income, net of investment expense	385,252
Difference between expected and actual investment income	(0)
Changes of assumptions	0
Benefit payments, adjusted for implicit subsidy	(3,350,314)
Trustee fees	(0)
Administrative expense	(2,951)
Other	<u>(0)</u>
<b>Net change in Plan Fiduciary Net Position</b>	<b>\$1,981,052</b>

<b>Plan Fiduciary Net Position - beginning (6/30/19) (c)</b>	<u>\$5,902,140</u>
<b>Plan Fiduciary Net Position - ending (6/30/20) (d)</b>	<b>\$7,883,192</b>

<b>County's Net OPEB Liability - beginning [(a)-(c)]</b>	\$58,221,996
<b>County's Net OPEB Liability - ending [(b)-(d)]</b>	<b>\$60,452,716</b>

**Schedule of Collective Deferred Inflows and Deferred Outflows  
For the Year Ended June 30, 2020**

The current balances of collective deferred outflows and deferred inflows of resources as of June 30, 2020 were as follows:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Difference between expected and actual experience	\$1,015,264	\$0
Changes in assumptions	197,986	9,220,330
Net difference between projected and actual earnings on OPEB plan investments	<u>11,782</u>	<u>109,600</u>
<b>Total</b>	<b><u>\$1,225,032</u></b>	<b><u>\$9,329,930</u></b>

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in OPEB expense as follows:

<u>Year ended June 30:</u>	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
2021	\$197,044	\$1,871,855
2022	197,044	1,871,855
2023	191,154	1,871,855
2024	191,154	1,835,323
2025	191,154	1,545,678
2026	191,154	333,364
2027	66,328	0
2028	0	0
2029	0	0

The average of expected remaining service lives was 7.3470 as of the June 30, 2020 measurement date. This factor was used for purposes of determining annual expense and deferral amounts for bases created after June 30, 2019.

These schedules are projected and are subject to revision as of June 30, 2020 for experience gains and losses between the valuation date and June 30, 2020; specifically, benefit payments greater than or less than expected, net difference between projected and actual earnings on OPEB plan investments, and any required changes in discount rate.

A detailed schedule of the components of the deferrals, including date of creation, initial balance, and outstanding balance for each base, will be contained in the June 30, 2020 disclosure packet, to be prepared by PCA once the final Net OPEB Liability for the year is known.

**Annual OPEB Expense**  
**For the Year Ended June 30, 2020**

The annual OPEB Expense recognized by the County of Butte can be calculated as the changes in the amounts reported on the Statement of Net Position that are not attributable to employer contributions. It is the change in Net OPEB Liability minus the changes in deferred outflows plus the changes in deferred inflows plus employer contributions.

The components of the annual OPEB Expense for the County of Butte as of June 30, 2020 were as follows:

Net OPEB Liability as of June 30, 2019 (a)	\$58,221,996
Net OPEB Liability as of June 30, 2020 (b)	<u>60,452,716</u>
Change in Net OPEB Liability [(b)-(a)]	\$2,230,720
Change in Deferred Outflows	(1,207,360)
Change in Deferred Inflows	(1,871,856)
Employer Contributions*	<u>4,949,065</u>
OPEB Expense	\$4,100,569

\*Projected pay-as-you-go, increased for implicit subsidy, plus projected contributions to CERBT.

## **Net OPEB Liability**

The County's Net OPEB Liability of \$60,452,716 was based on an actuarial valuation as of July 1, 2019 and a measurement date of June 30, 2020. The results of the July 1, 2019 actuarial valuation were rolled forward to the June 30, 2020 measurement date using standard actuarial methods.

Actuarial Assumptions. The Total OPEB Liability was determined using an actuarial valuation as of July 1, 2019, using the following actuarial assumptions:

Inflation	2.25%
Salary increases	3.00%, average, including inflation
Discount rate	5.75%, net of investment expense, including inflation
Healthcare cost trend rates	6.00% for 2019-20, decreasing to 4.50% for 2022-23 and after
Retirees' share of cost	Retirees pay excess of any premiums over the County contribution, which is the PEMHCA minimum plus benefits payable under the County's sick-leave conversion plan.

Mortality rates were based on the RP-2014 Employee and Healthy Annuitant Mortality Tables for Males or Females, as appropriate, projected using a generational projection based on 100% of scale MP-2016 for years 2014 through 2029, 50% of MP-2016 for years 2030 through 2049, and 20% of MP-2016 for 2050 and thereafter.

The long-term expected rate of return (LTROR) on OPEB plan investments of 7.01% was determined by CERBT using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The discount rate of 5.75% is based on the long-term rate of return less a 1.26% margin for adverse deviations. It was determined that the LTROR was an appropriate basis for selection of the discount rate based on the results of a cross-over test performed by the plan's actuaries, PCA, as of the valuation date, which shows that plan assets, together with expected future contributions, will be sufficient to pay all expected future benefits.

**Net OPEB Liability (continued)**

All actuarial assumptions used in measuring the Total OPEB Liability are described beginning on page 20 of this report. The assumptions were based on plan experience through July 1, 2019. The actuarial cost method used for measuring the Total OPEB Liability for purposes of GASB 75 was Entry Age, Level Percent of Pay.

Sensitivity of the Net OPEB Liability to changes in the discount rate. The following presents the County's Net OPEB Liability as of June 30, 2020 calculated using the discount rate of 5.75%, as well as what the County's Net OPEB Liability would be if it were calculated using a discount rate that is 1 percentage point lower (4.75%) or 1 percentage point higher (6.75%) than the current rate:

	<u>1% Decrease (4.75%)</u>	<u>Current Rate (5.75%)</u>	<u>1% Increase (6.75%)</u>
Net OPEB Liability/(Asset)	\$68,658,667	\$60,452,716	\$53,548,109

Sensitivity of the Net OPEB Liability to changes in the healthcare trend rates. The following presents the County's Net OPEB Liability as of June 30, 2020, as well as what the County's Net OPEB Liability would be if it were calculated using healthcare trend rates that are 1 percentage point lower (5.0% grading down to 3.5%) or 1 percentage point higher (7.0% grading down to 5.5%) than the current healthcare cost trend rates:

	<u>1% Decrease (5.0% decreasing to 3.5%)</u>	<u>Current Rates (6.0% decreasing to 4.5%)</u>	<u>1% Increase (7.0% decreasing to 5.5%)</u>
Net OPEB Liability/(Asset)	\$56,251,711	\$60,452,716	\$65,317,274

## Differences from Prior Valuation

The most recent prior valuation was completed as of July 1, 2017 by DFA. The AL (Accrued Liability) as of that date was \$67,157,354 compared to \$65,452,178 as of July 1, 2019. In this section, we provide a reconciliation between the two numbers so that it is possible to trace the AL from one valuation to the next.

Several factors have caused the AL to change since 2017. The AL increases with the passage of time as employees accrue more service and get closer to receiving benefits, and decreases as benefit obligations to current retirees are satisfied. There are actuarial gains/losses from one valuation to the next, and changes in actuarial assumptions and methodology for the current valuation. To summarize, the most important changes were as follows:

1. DFA reflected a decrease of \$8,111,890 due to changes in actuarial assumptions for the June 30, 2019 disclosures.
2. We changed the healthcare trend rates from 5% for all future years to an initial rate of 6.0% decreasing to an ultimate rate of 4.5% over a period of 3 years. This decreased the AL by \$1,226,635.
3. We used a graded mortality table projection to better reflect current standards. This increased the AL by \$1,455,815.
4. There was a net experience loss (an increase in the AL) of \$1,175,224 from all other sources.

The estimated changes to the AL from July 1, 2017 to July 1, 2019 may be summarized as follows:

<b>Changes to AL</b>	<b>AL</b>
AL as of 7/1/17	<b>\$67,157,354</b>
Passage of time	5,002,310
Changes measured through 6/30/19	(8,111,890)
Changes in healthcare trend rates	(1,226,635)
Changes in projected mortality	1,455,815
Loss from all other sources	<u>1,175,224</u>
AL as of 7/1/19	<b>\$65,452,178</b>

This information is not required to be included in the County's GASB 75 disclosures.

## Funding Schedules

There are many ways to approach the pre-funding of retiree healthcare benefits. In the *Financial Results* section, we determined the accrual expense for all County-paid benefits. The expense is an orderly methodology, developed by the GASB, to account for retiree healthcare benefits. However, the GASB 75 expense has no direct relation to amounts the County may set aside to pre-fund healthcare benefits.

The table on the next page provides the County with three alternative schedules for funding (as contrasted with expensing) retiree healthcare benefits. The schedules all assume that the retiree fund earns, or is otherwise credited with, 5.75% per annum on its investments, a starting CERBT value of \$5,902,140, and that contributions and benefits are paid mid-year.

The schedules are:

1. A level contribution amount for the next 20 years.
2. A level percent of the Unfunded Accrued Liability.
3. A constant percentage increase (3%) for the next 20 years.

We provide these funding schedules to give the County a sense of the various alternatives available to it to pre-fund its retiree healthcare obligation. The three funding schedules are simply three different examples of how the County may choose to spread its costs.

By comparing the schedules, you can see the effect that early pre-funding has on the total amount the County will eventually have to pay. Because of investment earnings on fund assets, the earlier contributions are made, the less the County will have to pay in the long run. Of course, the advantages of pre-funding will have to be weighed against other uses of the money.

The table on the following page shows the required annual outlay under the pay-as-you-go method and each of the above schedules. **The three funding schedules all assume "pay-as-you-go" costs are paid from the trust; therefore, the recommended contributions under these schedules are instead of, rather than in addition to, the pay-as-you-go costs.**

These numbers are computed on a closed group basis, assuming no new entrants, and using unadjusted premiums. We use unadjusted premiums for these funding schedules because we do not recommend that the County pre-fund for the full age-adjusted costs reflected in the GASB 75 liabilities shown in the first section of this report. If the County's premium structure changes in the future to explicitly charge retirees for the full actuarial cost of their benefits, this change will be offset by a lowering of the active employee rates (all else remaining equal), resulting in a direct reduction in County operating expenses on behalf of active employees from that point forward. For this reason among others, we believe that pre-funding of the full GASB liability would be redundant.

**County of Butte**

**Sample Funding Schedules (Closed Group)**

**Starting Trust Value of \$5,902,140 as of July 1, 2019**

<b>Fiscal Year</b>	<b>Pay-as-you-go*</b>	<b>Level Contribution for 20 years</b>	<b>Level % of Unfunded Liability</b>	<b>Constant Percentage Increase</b>
2019	\$2,470,323	\$4,190,630	\$7,945,445	\$3,293,524
2020	2,463,475	4,190,630	6,949,945	3,392,330
2021	2,589,487	4,190,630	6,099,080	3,494,100
2022	2,585,648	4,190,630	5,376,098	3,598,922
2023	2,677,674	4,190,630	4,757,224	3,706,890
2024	2,870,478	4,190,630	4,230,121	3,818,097
2025	2,953,294	4,190,630	3,783,832	3,932,640
2026	3,125,049	4,190,630	3,402,403	4,050,619
2027	3,214,994	4,190,630	3,078,260	4,172,138
2028	3,399,170	4,190,630	2,800,070	4,297,302
2029	3,508,705	4,190,630	2,562,860	4,426,221
2030	3,641,385	4,190,630	2,358,046	4,559,007
2031	3,775,615	4,190,630	2,180,789	4,695,778
2032	4,004,638	4,190,630	2,026,401	4,836,651
2033	4,158,982	4,190,630	1,892,505	4,981,750
2034	4,233,400	4,190,630	1,773,750	5,131,203
2035	4,261,694	4,190,630	1,665,943	5,285,139
2036	4,285,632	4,190,630	1,566,438	5,443,693
2037	4,290,169	4,190,630	1,473,730	5,607,004
2038	4,177,866	4,190,630	1,386,415	5,775,214
2039	4,195,960	0	1,302,591	0
2040	4,174,107	0	1,223,050	0
2041	4,102,973	0	1,146,756	0
2042	4,068,206	0	1,073,035	0
2043	3,960,253	0	1,001,804	0
2044	3,910,308	0	932,693	0
2045	3,817,386	0	821,839	0
2046	3,700,126	0	700,308	0
2047	3,685,745	0	596,784	0
2048	3,624,747	0	508,607	0
2049	3,576,868	0	433,498	0
2050	3,556,563	0	369,519	0
2051	3,513,580	0	315,023	0
2052	3,480,764	0	268,604	0
2053	3,431,931	0	229,063	0
2054	3,375,392	0	195,380	0
2055	3,308,546	0	166,686	0
2060	2,857,808	0	75,656	0
2065	2,256,034	0	34,690	0

\*Projected pay-as-you-go adjusted for implicit subsidy is \$3,350,314 for 2019-20 and \$3,474,443 for 2020-21.

## **Actuarial Assumptions**

In order to perform the valuation, the actuary must make certain assumptions regarding such items as rates of employee turnover, retirement, and mortality, as well as economic assumptions regarding healthcare inflation and interest rates. Our assumptions are based on a standard set of assumptions we have used for similar valuations, modified as appropriate for the County. For example, turnover rates are taken from a standard actuarial table, T-5, increased by 40% at all ages. This matches the County's historic turnover patterns. Retirement rates were also based on recent County retirement patterns. Both assumptions should be reviewed in the next valuation to see if they are tracking well with experience.

The discount rate of 5.75% is based on the CERBT long-term rate of return, net of investment expenses and a 1.26% margin for adverse deviations. This is in accordance with the guidelines for the selection of this rate under GASB 75 for funded plans such as the County's. The healthcare trend rates are based on our analysis of recent County experience and our knowledge of the general healthcare environment.

In determining the cost of covering early retirees (those under the age of 65), we used an age-adjusted claims cost matrix fitted to the average single premium for active employees and early retirees. A complete description of the actuarial assumptions used in the valuation is set forth in the "Actuarial Assumptions" section.

## **Projected Annual Pay-as-you go Costs**

As part of the valuation, we prepared a projection of the expected annual cost to the County to pay benefits on behalf of its retirees on a pay-as-you-go basis. These numbers are computed on a closed group basis, using unadjusted premiums, assume no new entrants, and are net of retiree contributions. Projected pay-as-you-go costs for selected years are as follows:

<b>FYB</b>	<b>Pay-as-you-go</b>
2019	\$2,470,323
2020	2,463,475
2021	2,589,487
2022	2,585,648
2023	2,677,674
2024	2,870,478
2025	2,953,294
2030	3,641,385
2035	4,261,694
2040	4,174,107
2045	3,817,386
2050	3,556,563
2055	3,308,546
2060	2,857,808
2065	2,256,034

### **Breakdown by Employee/Retiree Group**

We understand that the County allocates cost to the employee groups based on the Annual Required Contribution equal to Service Cost plus a 30-year amortization of the unfunded accrued liability. Exhibit I, attached at the end of the report, shows a breakdown of the components (ARC, AL, Service Cost, and PVFB) by bargaining unit (or non-represented group) and separately by active employees (future retirees) and current retirees.

### **Certification**

The actuarial certification, including a caveat regarding limitations of scope, if any, is contained in the "Actuarial Certification" section at the end of the report.

We have enjoyed working with the County on this report, and are available to answer any questions you may have concerning any information contained herein.

Sincerely,  
PACIFIC CREST ACTUARIES

A handwritten signature in cursive script that reads "T. Louis Filliger".

T. Louis Filliger, FSA, EA, MAAA  
Actuary

## Benefit Plan Provisions

### **Healthcare Coverage under the California Public Employees Medical and Hospital Care Act ("PEMHCA")**

For all employees, except members represented by Teamsters Local 137, the County sponsors healthcare coverage under PEMHCA, commonly referred to as PERS Health. PEMHCA provides health insurance through a variety of Health Maintenance Organization (HMO) and Preferred Provider Organization (PPO) options. Delta Dental (Premier and DPO), vision and life insurance are also available. The County also offers medical, dental and vision coverage (but not life insurance) to its retirees.

Participation in PEMHCA is financed through employee/retiree contributions and County monthly, per-employee contributions to PEMHCA. For 2019, the monthly County contributions are \$136.00 for both active and retired members. For 2020, those amounts both increased to \$139.00 and will remain in lock-step for all future years.

The County also provides premium reimbursements according to agreements with its various employee groups (subject to benefit and eligibility changes that took effect in 2010), as described below.

#### **Agreements with BCCOA – General, BCCOA – Supervisory, DSA – General, DSA – Management, PPOA – General, PPOA Management, DDAA, PEA, BCMEA, Confidential and Skilled Trades**

Healthcare Coverage – Employees who upon termination, immediately retire under the provisions of the County's contract with CalPERS are eligible for the County's PEMHCA contribution towards health benefits coverage (employees only) for life, while getting health benefits from CalPERS. Upon the death of the retiree, a spouse may qualify for PEMHCA contribution as survivor.

Premium Reimbursement – Employees hired before July 1, 2010, with 10 years or more of cumulative service with the County under age 65, and who, upon termination, immediately retire under the provisions of the County's contract with CalPERS are eligible for the following reimbursement:

1. 12 months of reimbursable health premiums immediately following retirement.
2. Conversion of sick leave to health insurance provided the retiree makes an irrevocable election at the time of retirement to receive one of the following benefit options:

## **Benefit Plan Provisions (Continued)**

- One month of retiree-only premiums for each day of accrued sick leave at retirement;
- One month of 2-party premiums (employee and spouse) for each 2½ days more than 30 days accrued sick leave at retirement to cover both employee and spouse until age 65; or
- One month of retiree-only premiums for each day of accrued sick leave until the sick leave credit is exhausted or the retiree reaches age 65, and 1½ month of premiums for spousal coverage for each day of accrued sick leave more than thirty days until the sick leave credit is exhausted or the spouse reaches age 65.

After a retiree's death, the retiree's spouse may use remaining sick leave to purchase medical benefits, subject to the provisions of the respective agreement applicable to County benefit for sick leave conversion for health insurance.

The level of County reimbursements is stipulated in the respective agreements.

### Provisions for Non-Represented Employees and Board Members' Executive Assistants

Healthcare Coverage – Employees who, upon termination, immediately retire under the provisions of the County's contract with CalPERS are eligible for the PEMHCA contribution towards health benefits coverage (employees only) for life while getting health benefits from CalPERS. Upon the death of the retiree, a spouse may qualify for PEMHCA contribution as survivor.

Premium Reimbursement – Employees with 10 years or more of cumulative service with the County, less than 65, and who, upon termination, immediately retire under the provisions of the County's contract with CalPERS are eligible for conversion of sick leave to health insurance provided the retiree makes an irrevocable election at the time of retirement to receive one of the following benefit options:

**Benefit Plan Provisions  
(Continued)**

- One month of retiree-only premiums for each day of accrued sick leave at retirement;
- One month of 2-party premiums (employee and spouse) for each 2½ days more than 30 days accrued sick leave at retirement to cover both employee and spouse until age 65; or
- One month of retiree-only premiums for each day of accrued sick leave until the sick leave credit is exhausted or the retiree reaches age 65, and 1½ month of premiums for spousal coverage for each day of accrued sick leave more than thirty days until the sick leave credit is exhausted or the spouse reaches age 65.

After a retiree's death, the retiree's spouse may use remaining sick leave to purchase medical benefits, subject to the provisions of the respective agreement applicable to County benefit for sick leave conversion for health insurance.

Employees in this category hired January 1, 2013 or later, with 5 years or more of cumulative service with the County, and who, upon termination, immediately retire from County service are eligible for the following:

1. 12 months of reimbursable health premiums immediately following retirement;
2. Conversion of sick leave to health insurance provided that after the first year of retirement, miscellaneous members elect one of the following two options:
  - One month of retiree-only premiums for each day of accrued sick leave at retirement; or
  - One month of retiree-only premiums for each day of accrued sick leave until the sick leave credit is exhausted or the retiree reaches age 65, and one month of premiums for spousal coverage for each 1½ day of accrued sick leave more than thirty days until the sick leave credit is exhausted or the spouse reaches age 65.

The level of County reimbursements is stipulated in the respective agreements.

**Benefit Plan Provisions  
(Continued)**

Provisions for Elected Department Heads, Appointed Department Heads and Board of Supervisors

Healthcare Coverage – Employees who upon termination, immediately retire under the provisions of the County's contract with CalPERS are eligible for the PEMHCA contribution towards health benefits coverage (employees only) for their remaining lifetimes while receiving health insurance through CalPERS. The PEMHCA contribution is applicable even if the retiree does not qualify for the following benefits, due to time served.

Premium Reimbursement – Employees sworn into office prior to January 1, 2010, retiring before age of 65 with 5 years or more of cumulative service with Butte County and who, upon termination, immediately retire under the provision of the County's contract with CalPERS and who are eligible under PEMHCA and who enroll in health care, may continue to cover themselves and eligible dependents under the health plan. The County shall pay the premium contribution.

Employees sworn into office after December 31, 2009, with 5 years or more of cumulative service with Butte County, retiring prior to age 65, under the provisions of the County's contract with CalPERS, who are eligible under PEMHCA and who enroll in health care, may continue to cover themselves and eligible dependents under the health plan. The County shall pay a premium contribution at the rate of the HMO, Delta Dental PPO, and Vision Service Plan premiums for such coverage until the retiree becomes 65 years of age.

**Healthcare Coverage under the Northern California General Teamsters Security Fund ("NCGTSE") and Teamsters Retiree Trust ("TRT")**

For employees represented by Teamsters Local 137, the County provides healthcare coverage through the Northern California General Teamsters Security Fund Plan Select Plus (including a Kaiser option), or Plan E (a HDHP with an HSA). Coverage is funded through County and employee contributions.

The County offers a Flexible Benefits Plan for employees who decline medical coverage. The County provides dental and/or vision programs for employees (regardless of medical participation) and basic group term life insurance (at County expense).

For its retirees, the County offers medical, dental and vision coverage (but not life insurance) and provides premium reimbursements according to agreements with its various employee groups (subject to benefit and eligibility changes that took effect in 2010), as described below.

<b>Benefit Plan Provisions (Continued)</b>
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Agreements with General Unit and Social Service Workers' Unit

Employees and their eligible dependents who retire and are eligible for County-paid premiums shall be covered under the NCGTSF plan at the same level and premium amount as active employees.

Employees and their eligible dependents that are not eligible for County-paid premiums shall be covered under the TRT plan, except those employees who are in a retired status as of 12/31/17 shall have the option of the NCGTSF or the TRT plan.

Premium Reimbursement – Effective January 1, 2018 all retirees and their eligible dependents who are not eligible for Medicare and who pay retiree premiums and are in a retired status as of December 31, 2017 will receive a County contribution of \$80.00 per month towards health insurance for the rest of their lives while receiving insurance under NCGTSF or the trust.

**Healthcare Premiums**

The following table shows selected monthly 2020 PERS Health (PEMHCA) premiums for retirees within Region 1. Other medical options are available but are not shown here for considerations of space. Dental and vision rates in effect for 2019-20 are also included.

	Blue Shield HMO	PERS Care PPO	PERS Choice PPO	Delta Dental Premier	Delta Dental DPO	Vision Service Plan
<b><u>Basic Plan</u></b>						
Retiree	\$1,127.77	\$1,133.14	\$861.18	\$41.64	\$38.20	\$13.90
Retiree + 1	2,255.54	2,266.28	1,722.36	89.94	83.40	13.90
Family	2,932.20	2,946.16	2,239.07	133.50	131.06	13.90
<b><u>Medicare Supplement</u></b>						
Retiree	N/A	\$384.78	\$351.39	N/A	N/A	N/A
Retiree + 1	N/A	769.56	702.78	N/A	N/A	N/A
Family	N/A	1,154.34	1,054.17	N/A	N/A	N/A

The following table shows premiums for the Teamsters Medical plan (NCGTSF):

	Select Plus	Plan E - HSA
<b><u>Basic Plan</u></b>		
Retiree	\$694.00	\$629.00
Retiree + 1	1,159.00	1,046.00
Employee + Children	1,065.00	965.00
Family	1,486.00	1,329.00

**Valuation Data**

**Active and Retiree Census**

Age distribution of retirees included in the valuation

Age	Statutory Minimum Only (Non-Teamsters)	County Stipend (Non-Teamsters)	\$80/month for Life (Teamsters)	County Stipend (Teamsters)	Total
Under 50	0	2	0	1	3
50-54	1	6	1	1	9
55-59	5	27	1	5	38
60-64	23	71	8	37	132
65-69	70	0	17	0	94
70-74	72	0	27	0	99
75-79	41	0	15	0	56
80-84	27	0	7	0	34
85-89	16	0	5	0	21
90+	<u>9</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>9</u>
All Ages	264	106	81	44	495
Average Age	72.91	60.50	72.40	61.41	69.17

Age/Years of service distribution of active employees included in the valuation

Years→	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
<u>Age</u>									
<25	30								30
25-29	150	25							175
30-34	180	95	3						278
35-39	124	88	51	19					282
40-44	85	73	50	72	19				299
45-49	65	55	42	76	63	17	1		319
50-54	55	42	34	51	46	33	8	2	271
55-59	45	38	30	48	41	36	11	4	253
60-64	21	32	24	39	17	11	4	5	153
65+	<u>8</u>	<u>19</u>	<u>12</u>	<u>7</u>	<u>14</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>69</u>
All Ages	763	467	246	312	200	100	27	14	2,129

Average Age: 44.63  
Average Service: 10.12

## Actuarial Assumptions

The liabilities set forth in this report are based on the actuarial assumptions described in this section.

Valuation Date:	July 1, 2019
Measurement Dates:	June 30, 2020 (and for June 30, 2021 roll-forward)
Discount Rate:	5.75% per annum
Salary Increases:	3.00% per annum (for normal cost and amortization of UAL)
Pre-retirement Turnover:	According to Crocker-Sarason Table T-5 less mortality, increased by 40% at all ages. Sample rates are as follows:

Age	Turnover (%)
25	10.8%
30	10.1
35	8.8
40	7.2
45	5.6
50	3.6
55	1.3

Pre-retirement Mortality:	RP-2014 Employee Mortality, projected. Sample baseline deaths per 1,000 employees are as follows:
---------------------------	---

Age	Males	Females
25	0.48	0.17
30	0.45	0.22
35	0.52	0.29
40	0.63	0.40
45	0.97	0.66
50	1.69	1.10
55	2.79	1.67
60	4.69	2.44

Post-retirement Mortality:	RP-2014 Healthy Annuitant Mortality, projected. Sample baseline deaths per 1,000 retirees are as follows:
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Age	Males	Females
55	5.74	3.62
60	7.78	5.19
65	11.01	8.05
70	16.77	12.87
75	26.83	20.94
80	44.72	34.84
85	77.50	60.50
90	135.91	107.13

<b>Actuarial Assumptions (Continued)</b>
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Claim Cost per Retiree or Spouse:

Age	Medical/Rx	Dental/Vision
50	\$10,982	\$643
55	12,731	643
60	14,758	643
64	16,611	643
65+	4,186	643

Retirement Rates:

Age	Percent Retiring*
50	2.0%
51	3.0
52	4.0
53	5.0
54	6.0
55	7.0
56	8.0
57	10.0
58	11.0
59	12.0
60	13.0
61	15.0
62	20.0
63	22.0
64	25.0
65	100.0

\* Of those having met eligibility to receive PERS retirement benefits. The percentage refers to the probability that an active employee who has reached the stated age will retire within the following year.

Trend Rate:

Healthcare costs were assumed to increase according to the following schedule:

FYB	Medical/Rx	Dental/Vision	Medical CPI
2019	6.0%	4.0%	3.5%
2020	5.5	4.0	3.5
2021	5.0	4.0	3.5
2022+	4.5	4.0	3.5

Percent Waiving Coverage:

30% (applies to future retirees only)

Percent of Retirees with Spouses:

Future Retirees: 60% of future retirees were assumed to have spouses. Female spouses assumed three years younger than male spouses. Current Retirees: Based on actual spousal data.

**Actuarial Assumptions  
(Continued)**

Future Sick Leave Accrual:	Under age 30: 59 hours per year of employment Age 30+: 34 hours per year of employment
Minimum Benefit Increases:	Statutory minimum PEMHCA benefit assumed indexed with 3.5% medical inflation for all future years.
Mortality Projection:	Generational projection based on 100% of scale MP-2016 for years 2014 through 2029, 50% of MP-2016 for years 2030 through 2049, and 20% of MP-2016 for 2050 and thereafter.
PERS Administration Fee:	Not included.
"Cadillac Tax" under ACA:	Repealed in December, 2019; not included.

## Actuarial Certification

The results set forth in this report are based on our actuarial valuation of the health and welfare benefit plans of the County of Butte ("County") as of July 1, 2019.

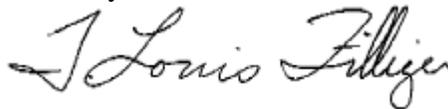
The valuation was performed in accordance with generally accepted actuarial principles and practices. We relied on census data for active employees and retirees provided to us by the County in January, 2020. We also made use of claims, premium, expense, and enrollment data, and copies of relevant sections of healthcare documents provided to us by the County, as well as trust account values as reported to the County by CERBT.

The assumptions used in performing the valuation, as summarized in this report, and the results based thereupon, represent our best estimate of the actuarial costs of the program under GASB 75, and the Actuarial Standards of Practice for measuring post-retirement healthcare benefits. We have used a graded version of mortality improvement scale MP-2016, consistent with our belief that MP-2016 is overly optimistic in its long-term projection of mortality rate improvements.

Throughout the report, we have used unrounded numbers, because rounding and the reconciliation of the rounded results would add an additional, and in our opinion unnecessary, layer of complexity to the valuation process. By our publishing of unrounded results, no implication is made as to the degree of precision inherent in those results. Clients and their auditors should use their own judgment as to the desirability of rounding when transferring the results of this valuation report to the clients' financial statements.

The undersigned actuary meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Certified by:



T. Louis Filliger, FSA, EA, MAAA Date: 4/1/2020  
Actuary

**County of Butte**

**7/1/19 Annual Required Contribution**

**Broken down by Employee & Retiree group**

**Exhibit I**

<b>Discount Rate</b>	5.75%
<b>Salary Increases</b>	3.00%
<b>Investment Return</b>	5.75%
<b>Total Assets</b>	\$ 5,902,140
<b>Accrued Liability (EAN)</b>	\$65,452,178
<b>Implicit Subsidy Factor</b>	1.4344

<b>Employee/Retiree Group</b>	<b>Active Employees</b>	<b>Less:</b>	<b>30-Year</b>	<b>ARC</b>	<b>Retirees</b>	<b>30-Year</b>	<b>ARC</b>	<b>Total</b>					
	<b>PVB</b>	<b>Assets</b>	<b>Amortization</b>	<b>Actives</b>	<b>PVB=AL</b>	<b>Amortization</b>	<b>Retirees</b>	<b>ARC</b>					
	<b>AL</b>	<b>UAL</b>	<b>of UAL</b>	<b>SC</b>	<b>Assets</b>	<b>of AL</b>	<b>Assets</b>	<b>Ret+Actives</b>					
Appointed Department Heads	3,146,788	2,329,963	(210,105)	2,119,858	106,698	133,101	<b>239,799</b>	772,744	(69,682)	703,062	35,387	<b>35,387</b>	<b>275,186</b>
Board's Administrative Assistants	177,454	115,858	(10,447)	105,411	5,306	39,100	<b>44,406</b>	-	-	-	-	-	<b>44,406</b>
Butte County Employees' Association	14,264,924	9,079,733	(818,764)	8,260,969	415,796	641,994	<b>1,057,790</b>	1,992,027	(179,631)	1,812,396	91,223	<b>91,223</b>	<b>1,149,013</b>
Correctional Officers Assoc. - General	2,585,225	1,832,440	(165,240)	1,667,200	83,914	85,449	<b>169,363</b>	373,943	(33,720)	340,223	17,124	<b>17,124</b>	<b>186,487</b>
Correctional Officers Assoc. - Mgmt	239,153	211,124	(19,038)	192,086	9,668	3,431	<b>13,099</b>	425,479	(38,367)	387,112	19,484	<b>19,484</b>	<b>32,583</b>
Deputy Sheriff's Assoc. - General	3,238,518	2,538,095	(228,872)	2,309,223	116,229	75,389	<b>191,618</b>	2,743,465	(247,391)	2,496,074	125,634	<b>125,634</b>	<b>317,252</b>
Deputy Sheriff's Assoc. - Mgmt	751,562	659,520	(59,472)	600,048	30,202	11,668	<b>41,870</b>	1,084,409	(97,786)	986,623	49,659	<b>49,659</b>	<b>91,529</b>
Elected Dept. Heads & Board	600,620	376,295	(33,932)	342,363	17,232	25,976	<b>43,208</b>	135,779	(12,244)	123,535	6,218	<b>6,218</b>	<b>49,426</b>
Management Employees Association	18,082,110	13,838,261	(1,247,863)	12,590,398	633,707	541,697	<b>1,175,404</b>	7,326,726	(660,688)	6,666,038	335,519	<b>335,519</b>	<b>1,510,923</b>
Assistant Dept. Heads & Non-Rep	1,606,491	1,209,018	(109,023)	1,099,995	55,366	45,584	<b>100,950</b>	1,052,549	(94,913)	957,636	48,200	<b>48,200</b>	<b>149,150</b>
Probation Police Officers Assoc. - General	4,080,871	3,250,052	(293,073)	2,956,979	148,832	96,486	<b>245,318</b>	900,000	(81,157)	818,843	41,214	<b>41,214</b>	<b>286,532</b>
Probation Police Officers Assoc. - Mgmt	109,050	98,443	(8,877)	89,566	4,508	1,060	<b>5,568</b>	-	-	-	-	-	<b>5,568</b>
Professional Employees Association	1,228,917	730,382	(65,862)	664,520	33,447	101,619	<b>135,066</b>	317,951	(28,671)	289,280	14,560	<b>14,560</b>	<b>149,626</b>
Social Service Workers	10,057,538	6,953,570	(627,037)	6,326,533	318,431	374,072	<b>692,503</b>	537,336	(48,454)	488,882	24,607	<b>24,607</b>	<b>717,110</b>
Confidential	1,157,242	828,272	(74,689)	753,583	37,930	43,359	<b>81,289</b>	236,154	(21,295)	214,859	10,814	<b>10,814</b>	<b>92,103</b>
Skilled Trades	3,076,759	1,918,989	(173,045)	1,745,944	87,878	148,299	<b>236,177</b>	365,401	(32,950)	332,451	16,733	<b>16,733</b>	<b>252,910</b>
Butte County DD Attorneys Assoc.	772,386	594,629	(53,621)	541,008	27,230	22,685	<b>49,915</b>	158,975	(14,336)	144,639	7,280	<b>7,280</b>	<b>57,195</b>
Miscellaneous	572,695	262,524	(23,673)	238,851	12,022	36,327	<b>48,349</b>	202,072	(18,222)	183,850	9,254	<b>9,254</b>	<b>57,603</b>
<b>Totals</b>	<b>\$65,748,303</b>	<b>\$46,827,168</b>	<b>(\$4,222,633)</b>	<b>\$42,604,535</b>	<b>\$2,144,396</b>	<b>\$2,427,296</b>	<b>\$4,571,692</b>	<b>\$18,625,010</b>	<b>(\$1,679,507)</b>	<b>\$16,945,503</b>	<b>\$852,910</b>	<b>\$852,910</b>	<b>\$5,424,602</b>