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# City of San José Police and Fire Department Postemployment Healthcare Plan

## Actuarial Valuation Funding Report as of June 30, 2018

**Produced by Cheiron**

**February 2019**

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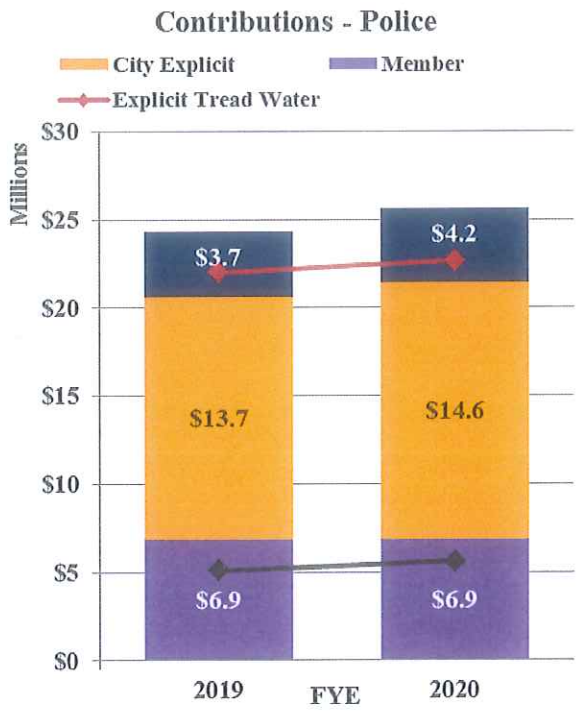
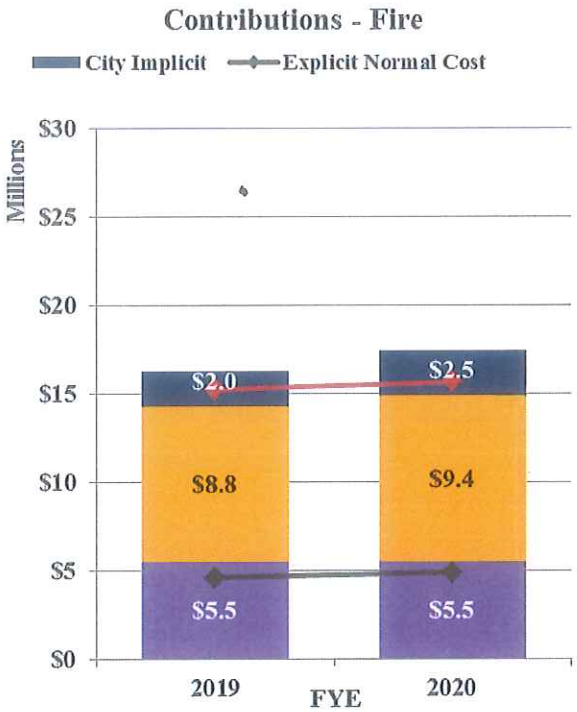
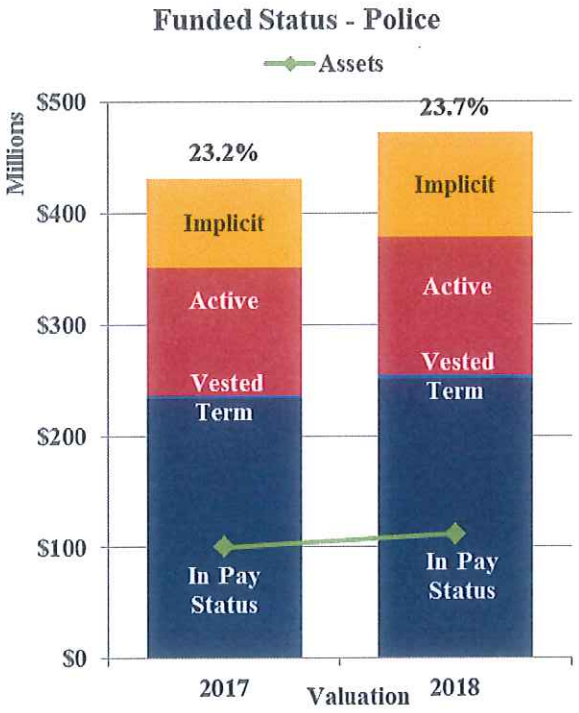
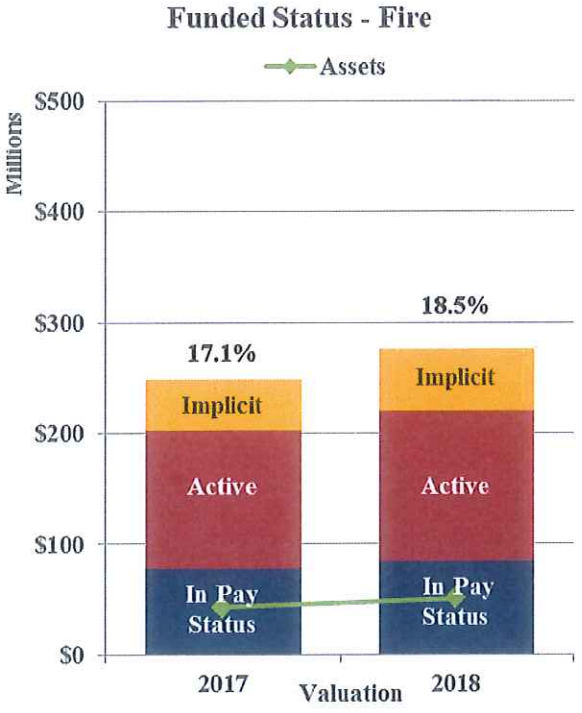
## SECTION I – BOARD SUMMARY

### Dashboard



## SECTION I – BOARD SUMMARY

This report measures assets and liabilities of the City of San José Police and Fire Department Postemployment Healthcare Plan for funding purposes only. There is a separate report for financial reporting.

The charts on the previous page are intended to provide a quick overview of the current valuation results compared to the prior valuation results. The charts on the top show contributions for FYE 2019 and 2020 for Police (left chart) and Fire (right chart). The normal cost shown by the black line represents the expected cost of the explicit premium subsidy benefits attributable to the current year of service. All contributions above the normal cost go toward paying off the Unfunded Actuarial Liability (UAL) attributable to the explicit subsidy benefits. The Tread Water amount shown by the red line represents the amount needed to pay the normal cost and interest on the explicit subsidy UAL. Contributions in the gold bar above the Tread Water line reduce the principal of the explicit subsidy UAL. Since the top of the gold bar is below the Tread Water line, the dollar amount of the explicit subsidy UAL is expected to grow slightly. As the amortization period shortens, this relationship will change and the UAL will be paid off. The implicit subsidy is funded on a pay-as-you-go basis.

The charts on the bottom summarize the funded status as of the June 30, 2017 and June 30, 2018 actuarial valuations. The stacked bars represent the Actuarial Liability, with the liability for the explicit subsidy broken into separate components for members currently receiving benefits, vested terminated members, and active members. The gold bar at the top represents the liability for the implicit subsidy.

More detail and discussion is provided in the following sections.

## SECTION I – BOARD SUMMARY

### Contributions

There are two components to the benefits under the Plan: the explicit subsidy and the implicit subsidy. The explicit subsidy (or premium subsidy) is paid by the Plan and is the premium for health coverage selected by the retiree, up to 100% of the premium for the lowest cost plan offered to active employees. The implicit subsidy is the difference between the expected claims cost for a retiree or spouse and the total (retiree plus city) premium.

Historically, member and City contributions to the plan have been negotiated through collective bargaining separately for Police and Fire and have not been actuarially determined. With the implementation of Measure F, member contributions are fixed at 8.0% of pay; the City's contribution toward the explicit subsidy is actuarially determined separately for Police and Fire; and the City also pays the implicit subsidy on a pay-as-you-go basis as a part of active health premiums. In addition, the City has the option to limit its contribution for the explicit subsidy to 11% of Police and Fire payroll.

Table I-1 shows the contribution amounts for the fiscal years ending in 2019 and 2020.

**Table I-1**
**Summary of Contribution Amounts**

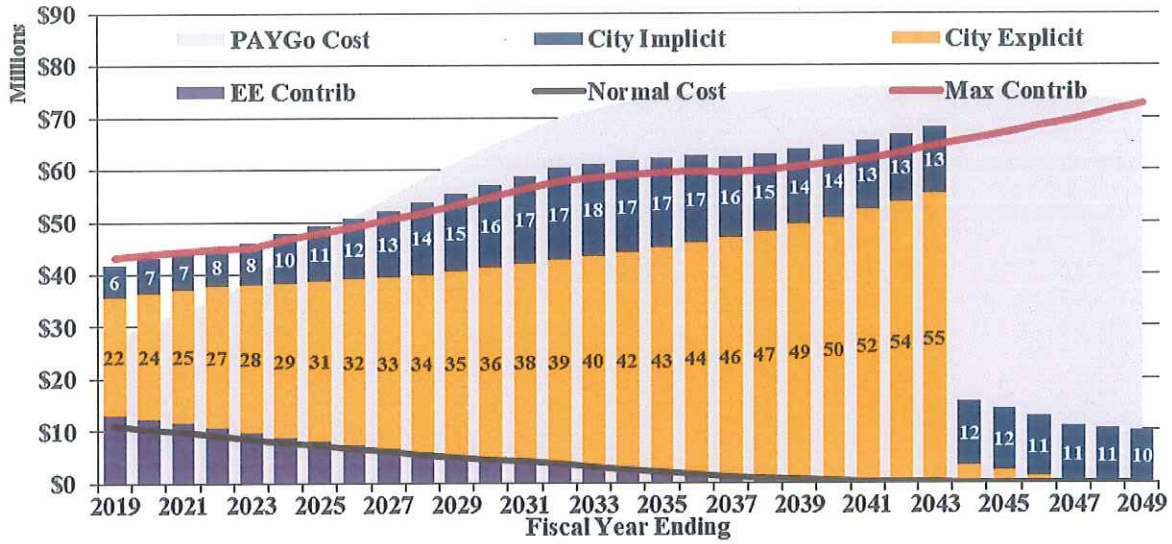
| | FYE 2020 | FYE 2019 | % Change |
|---|---|---|---|
| **Explicit Subsidy** | | | |
| **Police Department** | | | |
| Members | $ 6,871 | $ 6,891 | -0.3% |
| City's Actuarially Determined Contribution | 14,595 | 13,723 | 6.4% |
| **Fire Department** | | | |
| Members | $ 5,477 | $ 5,519 | -0.8% |
| City's Actuarially Determined Contribution | 9,408 | 8,752 | 7.5% |
| **Total Explicit Subsidy** | | | |
| Members | $ 12,348 | $ 12,410 | -0.5% |
| City's Actuarially Determined Contribution | 24,003 | 22,475 | 6.8% |
| Estimated City Optional Cap | 24,808 | 23,148 | 7.2% |
| **Implicit Subsidy** | | | |
| Police Department | $ 4,188 | $ 3,699 | 13.2% |
| Fire Department | 2,543 | 2,017 | 26.1% |
| Total Implicit Subsidy | $ 6,732 | $ 5,716 | 17.8% |

*Dollar amounts in thousands*

## SECTION I – BOARD SUMMARY

The chart below shows the projected contributions to the Plan. The purple bars represent the member contributions, the gold bars are the City's contributions to pre-fund the explicit subsidy, and the blue bars are the City contributions to pay the implicit subsidy. The red line represents the sum of member contributions, the implicit subsidy, and the City's optional cap for its explicit subsidy contribution. To the extent the bars rise above the red line, the projected contributions exceed the City's optional cap. The gray area behind the bars represents the projected annual benefit payments.

### Projected Contributions FYE 2019-2049




Because the Plan is closed to new entrants, the member contributions are expected to decline as current active members retire or otherwise leave active employment with the City. The City's actuarially determined contribution is expected to increase faster than payroll as the member contributions decrease. The Plan has historically had positive net cash flow, but we only expect that to last for a few more years.

## SECTION I – BOARD SUMMARY

### Funded Status

Table I-2 below summarizes the Actuarial Liability, Market Value of Assets, Unfunded Actuarial Liability, and funded percentage for the Plan as of June 30, 2018 compared to June 30, 2017. The Actuarial Liability for the explicit subsidy increased 7.7% for Police and 8.9% for Fire, primarily due to assumption changes. At the same time, assets increased 11.7% for Police and 19.4% for Fire due to contributions and investment returns. As a result, the Unfunded Actuarial Liability increased by 6.1% for Police and 6.1% for Fire and the funded percentage improved from 28.4% to 29.5% for Police and from 21.1% to 23.1% for Fire.

**Table I-2**
**Summary of Funded Status - Explicit Subsidy Only**

| | 6/30/2018 | 6/30/2017 | % Change |
|---|---|---|---|
| **Police Department** | | | |
| Actuarial Liability | | | |
| Actives | $ 123,877 | $ 115,599 | 7.2% |
| Deferred Vested | 3,392 | 2,447 | 38.6% |
| In Pay Status | 251,461 | 233,677 | 7.6% |
| Total | $ 378,730 | $ 351,723 | 7.7% |
| Assets | 111,659 | 99,926 | 11.7% |
| Unfunded Actuarial Liability | $ 267,071 | $ 251,797 | 6.1% |
| Funded Percentage | 29.48% | 28.41% | 1.1% |
| **Fire Department** | | | |
| Actuarial Liability | | | |
| Actives | $ 84,792 | $ 77,995 | 8.7% |
| Deferred Vested | 0 | 234 | -100.0% |
| In Pay Status | 135,404 | 123,947 | 9.2% |
| Total | $ 220,196 | $ 202,176 | 8.9% |
| Assets | 50,861 | 42,591 | 19.4% |
| Unfunded Actuarial Liability | $ 169,335 | $ 159,585 | 6.1% |
| Funded Percentage | 23.10% | 21.07% | 2.0% |
| **Grand Total** | | | |
| Aggregate UAL | $ 436,407 | $ 411,382 | 6.1% |
| Aggregate Funded Percentage | 27.14% | 25.73% | 1.4% |

*Dollar amounts in thousands*

## SECTION I – BOARD SUMMARY

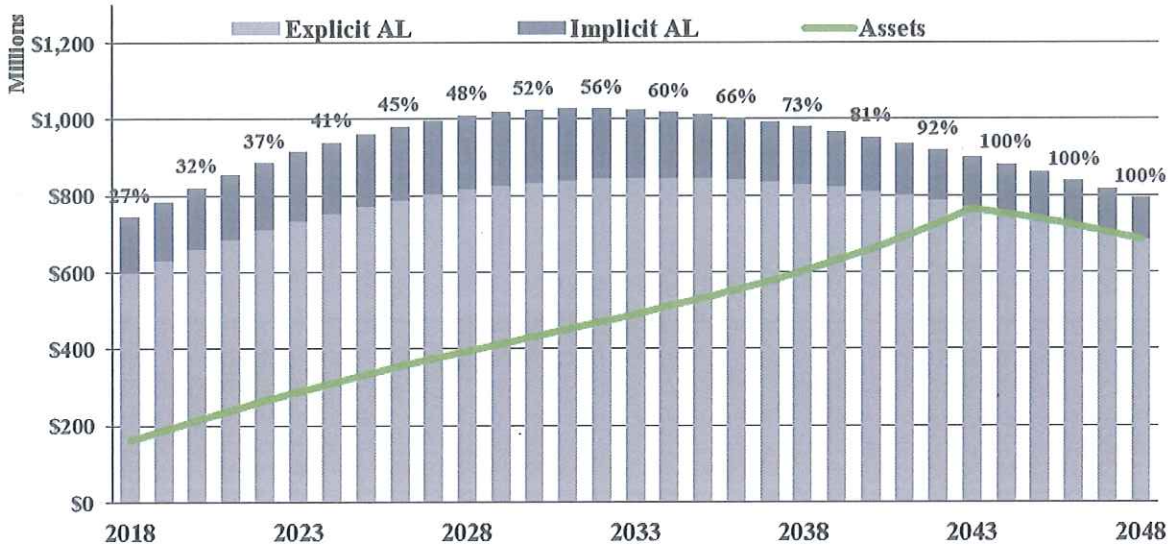
The chart below shows the historical trend of assets and the Actuarial Liability (excluding the implicit subsidy) on a funding basis for the City of San José Police and Fire Department Postemployment Healthcare Plan. The Actuarial Liability grew from 2009 to 2010, reflecting the accumulation of additional benefits as well as rising health care costs, reductions in the discount rate, and changes to other assumptions. The reduction in the Actuarial Liability from 2010 to 2013 was primarily due to plan changes and favorable medical cost trend experience, offset by changes in the discount rate. The increase in the Actuarial Liability from 2014 through 2016 was primarily the expected growth of the Actuarial Liability with some adjustments due to changes in assumptions. The decrease in the Actuarial Liability in 2017 was primarily due to plan changes and health assumption changes. The increase in the Actuarial Liability in 2018 is primarily due to assumption changes, including the reduction of the discount rate from 6.875% to 6.5%.

| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Funded Ratio** | 9.9% | 8.5% | 9.2% | 11.1% | 14.7% | 16.8% | 19.4% | 21.7% | 27.0% | 27.1% |
| **UAL/(Surplus)** *(in millions)* | $507.2 | $627.8 | $596.8 | $529.8 | $437.0 | $462.1 | $477.4 | $489.0 | $411.4 | $436.4 |
| **Discount Rate** | 8.000% | 7.750% | 7.500% | 7.250% | 7.125% | 7.000% | 7.000% | 6.875% | 6.875% | 6.500% |

The chart on the next page shows a 30-year projection of assets and Actuarial Liability (AL), and also shows the projected funded percentage for the explicit subsidy. The AL for the implicit subsidy is shown in dark gray while the AL for the explicit subsidy is shown in a lighter gray. If all assumptions are met in the future including an expected return of 6.50% each year, the funded percentage for the explicit subsidy is expected to reach about 100% by 2044.

## SECTION I – BOARD SUMMARY

### Projected Assets and Actuarial Liability 2018-2048



## Changes Since the Prior Valuation

Table I-3 below breaks out the sources of the changes in UAL for the fiscal year ending June 30, 2018. The total UAL increased about $47.0 million since the prior year. The explicit subsidy UAL increased $25 million and the implicit subsidy UAL increased $22 million.

**Table I-3**
**Changes in Unfunded Actuarial Liability**

| | Implicit | Explicit | Total |
|---|---|---|---|
| Unfunded Actuarial Liability, June 30, 2017 | $ 126,348 | $ 411,382 | $ 537,729 |
| Unfunded Actuarial Liability, June 30, 2018 | 148,348 | 436,407 | 584,754 |
| **Change in Unfunded Actuarial Liability** | **$ 22,000** | **$ 25,025** | **$ 47,025** |
| **Sources of Changes** | | | |
| Contributions below Tread Water | $ 5,770 | $ 1,040 | $ 6,810 |
| Investment Experience | 0 | 3,990 | 3,990 |
| Experience Changes | 6,245 | (9,646) | (3,401) |
| Assumption Changes | 9,985 | 28,858 | 38,843 |
| VEBA Elections | 0 | 783 | 783 |
| **Total Changes** | **$ 22,000** | **$ 25,025** | **$ 47,025** |

*Dollar amounts in thousands*

For the explicit subsidy, the primary sources of the increase in the UAL were the assumption changes ($29 million increase) offset by plan experience ($10 million decrease). The assumption changes were primarily due to the discount rate and health trend changes. The experience changes were mainly driven by the lower than expected increases in the Medicare eligible premium rates. In addition, contributions fell short of the Tread Water level (normal cost plus interest on the UAL) by about $1 million. Investment experience increased the UAL by about $4 million. Additional assets transferred to the VEBA had a very minor impact.

For the implicit subsidy, the primary sources of the increase in the UAL were assumption changes ($10 million), plan experience ($6 million), and contributions that fell short of the normal cost plus interest on the UAL ($6 million).

## SECTION I – BOARD SUMMARY

Table I-4 below provides a summary of the results of this valuation compared to the prior valuation.

**Table I-4**
**Summary of Valuation Results**

| | June 30, 2018 | | | | |
|---|---|---|---|---|---|
| | Police | Fire | Total | June 30, 2017 | % Change |
| Active Members | | | | | |
| Eligible for Full Benefits | 680 | 533 | 1,213 | 1,276 | -4.9% |
| Eligible for Catastrophic Disability Only | 294 | 131 | 425 | 267 | 59.2% |
| Total Active Members | 974 | 664 | 1,638 | 1,543 | 6.2% |
| Deferred Vested Members | 15 | 0 | 15 | 12 | 25.0% |
| Members in Pay Status (Including In-Lieu) | 1,281 | 829 | 2,110 | 2,058 | 2.5% |
| Total | 2,270 | 1,493 | 3,763 | 3,613 | 4.2% |
| Full Benefit Member Payroll | $ 93,398 | $ 70,325 | $ 163,722 | $ 162,422 | 0.8% |
| Total Payroll | 131,888 | 86,541 | 218,429 | 203,816 | 7.2% |
| Actuarial Liability | | | | | |
| Explicit Subsidy | $ 378,730 | $ 220,196 | $ 598,926 | $ 553,899 | 8.1% |
| Implicit Subsidy | 93,087 | 55,261 | 148,348 | 126,348 | 17.4% |
| Total Actuarial Liability | $ 471,817 | $ 275,457 | $ 747,274 | $ 680,246 | 9.9% |
| Market Value of Assets | 111,659 | 50,861 | 162,519 | 142,517 | 14.0% |
| Explicit Subsidy Unfunded Actuarial Liability | $ 267,071 | $ 169,335 | $ 436,407 | $ 411,382 | 6.1% |
| Explicit Subsidy Funded Percentage | 29.48% | 23.10% | 27.14% | 25.73% | 1.4% |
| Total Unfunded Actuarial Liability | $ 360,158 | $ 224,596 | $ 584,754 | $ 537,729 | 8.7% |
| Total Funded Percentage | 23.7% | 18.5% | 21.7% | 21.0% | 0.8% |

| | FYE 2020 | | | | |
|---|---|---|---|---|---|
| | Police | Fire | Total | FYE 2019 | % Change |
| City's ADC Amount | $ 14,595 | $ 9,408 | $ 24,003 | $ 22,475 | 6.8% |
| City's ADC Rate | 10.7% | 10.5% | 10.6% | 11.0% | -0.4% |
| City's Implicit Subsidy Payment | $ 4,188 | $ 2,543 | $ 6,732 | $ 5,716 | 17.8% |

*Dollar amounts in thousands*

## SECTION II – CERTIFICATION

The purpose of this report is to present the annual actuarial valuation of the City of San José Police and Fire Postemployment Department Healthcare Plan. This report is for the use of the Board in setting actuarially determined amounts for the City to contribute to the Plan. There is a separate report for accounting and financial reporting under GASB Statements 74 and 75.

In preparing our report, we relied on information, some oral and some written, supplied by the Plan. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

The health assumptions were adopted by the Board of Administration at the January 10, 2019 and February 7, 2019 Board meetings based upon our recommendations. The discount rate used in this report was adopted by the Board of Administration with our input at the February 7, 2019 Board meeting. All other assumptions were adopted at the November 2, 2017 Board meeting based on recommendations from our experience study covering plan experience during the period from July 1, 2009 through June 30, 2017. Please refer to the Experience Study Report and our Board presentations for an explanation of the rationale for each assumption.

The liability measures and funding ratios in this report are for the purpose of establishing contribution amounts. These measures are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligations.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and, changes in plan provisions or applicable law.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices that are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This report was prepared for the Board for the purposes described herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

## SECTION II – CERTIFICATION

This valuation report does not reflect future changes in benefits, penalties, taxes, or administrative costs that may be required as a result of the Patient Protection and Affordable Care Act of 2010, related legislation, or regulations.

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## SECTION III – ASSETS

Assets are invested in two separate trust vehicles: a 401(h) account within the pension plan and a separate 115 Trust. All City contributions are made to the 115 Trust while member contributions are being made to the 401(h) account and benefit payments are currently being made from the 401(h) account.

### Statement of Change in Market Value of Assets

Table III-1 and Table III-2 show the changes in the Market Value of Assets for the last two fiscal years for Police and Fire separately. The implicit subsidy is shown as both a contribution and a payment from the plan, but it is not actually contributed to the trust or paid from the trust. It is just paid directly by the City as a part of active health plan premiums.

**Table III-1**
**Market Value of Assets - Police Department**

| | Fiscal Year Ending 2018 | | | Fiscal Year Ending 2017 | | |
|---|---|---|---|---|---|---|
| | 401(h) | 115 Trust | Total | 401(h) | 115 Trust | Total |
| Market Value, Beginning of Year | $ 39,108 | $ 60,818 | $ 99,926 | $ 39,327 | $ 49,597 | $ 88,923 |
| Contributions | | | | | | |
| Member | 9,294 | 0 | 9,294 | 10,344 | 0 | 10,344 |
| City | 0 | 11,265 | 11,265 | 0 | 10,905 | 10,905 |
| Implicit Subsidy | 3,699 | 0 | 3,699 | 796 | 0 | 796 |
| Total | $ 12,993 | $ 11,265 | $ 24,258 | $ 11,140 | $ 10,905 | $ 22,045 |
| Net Investment Earnings | 2,636 | 2,511 | 5,148 | 3,623 | 5,220 | 8,844 |
| Benefit Payments | | | | | | |
| Premium Payments | 13,414 | 0 | 13,414 | 14,135 | 0 | 14,135 |
| Implicit Subsidy | 3,699 | 0 | 3,699 | 796 | 0 | 796 |
| Total | $ 17,113 | $ 0 | $ 17,113 | $ 14,931 | $ 0 | $ 14,931 |
| Administrative Expenses | 63 | 52 | 115 | 51 | 72 | 123 |
| One-Time VEBA Transfer | 0 | 444 | 444 | 0 | 4,831 | 4,831 |
| Market Value, End of Year | $ 37,561 | $ 74,098 | $ 111,659 | $ 39,108 | $ 60,818 | $ 99,926 |
| Estimated Rate of Return | 6.9% | 3.4% | 4.7% | 9.5% | 8.5% | 8.9% |

*Dollar amounts in thousands*

## SECTION III – ASSETS

**Table III-2**
**Market Value of Assets - Fire Department**

| | Fiscal Year Ending 2018 | | | Fiscal Year Ending 2017 | | |
|---|---|---|---|---|---|---|
| | 401(h) | 115 Trust | Total | 401(h) | 115 Trust | Total |
| Market Value, Beginning of Year | $ 6,768 | $ 35,823 | $ 42,591 | $ 7,423 | $ 27,078 | $ 34,502 |
| Contributions | | | | | | |
| Member | 6,833 | 0 | 6,833 | 7,772 | 0 | 7,772 |
| City | 0 | 8,401 | 8,401 | 0 | 8,163 | 8,163 |
| Implicit Subsidy | 2,017 | 0 | 2,017 | 803 | 0 | 803 |
| Total | $ 8,850 | $ 8,401 | $ 17,251 | $ 8,575 | $ 8,163 | $ 16,738 |
| Net Investment Earnings | 420 | 1,502 | 1,922 | 656 | 2,955 | 3,610 |
| Benefit Payments | | | | | | |
| Premium Payments | 8,556 | 0 | 8,556 | 9,065 | 0 | 9,065 |
| Implicit Subsidy | 2,017 | 0 | 2,017 | 803 | 0 | 803 |
| Total | $ 10,573 | $ 0 | $ 10,573 | $ 9,868 | $ 0 | $ 9,868 |
| Administrative Expenses | 12 | 30 | 43 | 18 | 41 | 58 |
| One-Time VEBA Transfer | 0 | 288 | 288 | 0 | 2,333 | 2,333 |
| Market Value, End of Year | $ 5,454 | $ 45,407 | $ 50,861 | $ 6,768 | $ 35,823 | $ 42,591 |
| Estimated Rate of Return | 6.9% | 3.3% | 3.9% | 9.4% | 8.3% | 8.5% |

*Dollar amounts in thousands*

In the last year, investments, in aggregate, returned approximately 4.7% for Police and 3.9% for Fire compared to an expected rate of return of 6.875%, resulting in a total investment loss of approximately $4.0 million. The assets in the 401(h) account returned approximately 6.9% for Police and 6.9% for Fire while the assets in the 115 trust returned approximately 3.4% for Police and 3.3% for Fire.

The chart on the following page shows the actual investment return on the Market Value of Assets compared to the assumed return for the last nine years. The average of the actual returns is about 6.9%.

## SECTION III – ASSETS

### Historical Rates of Return

## SECTION IV – MEASURES OF LIABILITY

This section presents detailed information on liability measures for the Plan for funding purposes, including:

- Projected Benefit Payments,
- Present value of future benefits,
- Normal cost, and
- Actuarial Liability.

**Projected Benefit Payments:** The projected benefit payments are the fundamental basis for the valuation representing the amount that is expected to be paid in each future year for members in the Plan as of the valuation date if all assumptions are met. Tables IV-1 and IV-2 show the expected net benefit payments for the next 20 years for the Police and Fire Departments respectively. These payments include the expected annual implicit subsidy as well as expected plan premium payments (the explicit subsidy).

## SECTION IV – MEASURES OF LIABILITY

**Table IV-1**
**Expected Net Benefit Payments - Police Department**

| Fiscal Year Ending June 30 | Explicit Subsidy | | | Implicit Subsidy | Total Expected Payments |
|---|---|---|---|---|---|
| | Medical | Dental | Total | | |
| 2019 | $ 11,872 | $ 1,504 | $ 13,376 | $ 3,789 | $ 17,166 |
| 2020 | 13,062 | 1,613 | 14,675 | 4,188 | 18,864 |
| 2021 | 14,261 | 1,720 | 15,980 | 4,457 | 20,437 |
| 2022 | 15,555 | 1,831 | 17,386 | 4,711 | 22,096 |
| 2023 | 17,272 | 1,955 | 19,228 | 5,007 | 24,235 |
| 2024 | 19,975 | 2,073 | 22,048 | 6,089 | 28,136 |
| 2025 | 21,170 | 2,184 | 23,354 | 6,765 | 30,119 |
| 2026 | 22,589 | 2,281 | 24,869 | 7,376 | 32,245 |
| 2027 | 24,104 | 2,385 | 26,489 | 7,992 | 34,481 |
| 2028 | 25,534 | 2,479 | 28,013 | 8,711 | 36,724 |
| 2029 | 26,819 | 2,568 | 29,387 | 9,308 | 38,695 |
| 2030 | 28,092 | 2,647 | 30,739 | 9,982 | 40,721 |
| 2031 | 29,044 | 2,719 | 31,763 | 10,421 | 42,184 |
| 2032 | 30,114 | 2,792 | 32,906 | 10,786 | 43,692 |
| 2033 | 30,893 | 2,862 | 33,755 | 10,780 | 44,535 |
| 2034 | 31,665 | 2,931 | 34,597 | 10,655 | 45,252 |
| 2035 | 32,307 | 2,990 | 35,298 | 10,343 | 45,640 |
| 2036 | 32,953 | 3,043 | 35,996 | 9,883 | 45,879 |
| 2037 | 33,325 | 3,087 | 36,412 | 9,023 | 45,435 |
| 2038 | 33,786 | 3,123 | 36,909 | 8,495 | 45,404 |

*Dollar amounts in thousands*

## SECTION IV – MEASURES OF LIABILITY

**Table IV-2**
**Expected Net Benefit Payments - Fire Department**

| Fiscal Year Ending June 30 | Explicit Subsidy | | | Implicit Subsidy | Total Expected Payments |
|---|---|---|---|---|---|
| | Medical | Dental | Total | | |
| 2019 | $ 7,310 | $ 974 | $ 8,284 | $ 2,321 | $ 10,605 |
| 2020 | 7,941 | 1,024 | 8,964 | 2,543 | 11,508 |
| 2021 | 8,627 | 1,079 | 9,706 | 2,768 | 12,474 |
| 2022 | 9,356 | 1,141 | 10,497 | 2,864 | 13,361 |
| 2023 | 10,220 | 1,209 | 11,428 | 3,091 | 14,519 |
| 2024 | 11,333 | 1,275 | 12,608 | 3,561 | 16,169 |
| 2025 | 12,250 | 1,338 | 13,588 | 3,982 | 17,570 |
| 2026 | 13,136 | 1,397 | 14,532 | 4,297 | 18,829 |
| 2027 | 14,105 | 1,460 | 15,565 | 4,764 | 20,330 |
| 2028 | 14,971 | 1,520 | 16,491 | 5,108 | 21,599 |
| 2029 | 15,801 | 1,572 | 17,374 | 5,506 | 22,880 |
| 2030 | 16,471 | 1,619 | 18,089 | 5,872 | 23,962 |
| 2031 | 17,230 | 1,669 | 18,899 | 6,350 | 25,249 |
| 2032 | 17,947 | 1,721 | 19,668 | 6,688 | 26,356 |
| 2033 | 18,577 | 1,777 | 20,353 | 6,830 | 27,183 |
| 2034 | 19,132 | 1,833 | 20,965 | 6,836 | 27,801 |
| 2035 | 19,745 | 1,888 | 21,633 | 6,899 | 28,532 |
| 2036 | 20,228 | 1,932 | 22,160 | 6,722 | 28,882 |
| 2037 | 20,797 | 1,979 | 22,776 | 6,506 | 29,281 |
| 2038 | 21,284 | 2,013 | 23,297 | 6,336 | 29,633 |

*Dollar amounts in thousands*

## SECTION IV – MEASURES OF LIABILITY

**Present Value of Future Benefits:** The present value of future benefits represents the expected amount of money needed today, if all assumptions are met, to pay for all benefits both earned as of the valuation date and expected to be earned in the future by current plan members under the current plan provisions. Table IV-3 below shows the present value of future benefits as of June 30, 2018 and June 30, 2017.

**Table IV-3**
**Present Value of Future Benefits**

| | June 30, 2018 | | | | June 30, 2017 | |
|---|---|---|---|---|---|---|
| | Actives | Deferred Vested | In Pay Status | Total | Total | % Change |
| **Police Department** | | | | | | |
| Explicit Subsidy | $ 164,080 | $ 3,392 | $ 251,461 | $ 418,932 | $ 386,474 | 8.4% |
| Implicit Subsidy | 54,689 | 1,000 | 49,753 | 105,443 | 89,144 | 18.3% |
| **Total Police** | **$ 218,769** | **$ 4,392** | **$ 301,215** | **$ 524,375** | **$ 475,619** | **10.3%** |
| **Fire Department** | | | | | | |
| Explicit Subsidy | $ 125,780 | $ 0 | $ 135,404 | $ 261,184 | $ 239,784 | 8.9% |
| Implicit Subsidy | 42,484 | 0 | 26,542 | 69,026 | 58,048 | 18.9% |
| **Total Fire** | **$ 168,264** | **$ 0** | **$ 161,946** | **$ 330,210** | **$ 297,832** | **10.9%** |
| **Total Explicit Subsidy** | **$ 289,860** | **$ 3,392** | **$ 386,865** | **$ 680,117** | **$ 626,258** | **8.6%** |
| Total Implicit Subsidy | 97,173 | 1,000 | 76,295 | 174,469 | 147,193 | 18.5% |
| **Grand Total** | **$ 387,033** | **$ 4,392** | **$ 463,161** | **$ 854,585** | **$ 773,451** | **10.5%** |

*Dollar amounts in thousands*

## SECTION IV – MEASURES OF LIABILITY

### Normal Cost

Under the Entry Age (EA) actuarial cost method, the present value of future benefits for each individual is spread over the individual's expected working career as a level percentage of the individual's expected pay. The normal cost rate is determined by taking the value, as of entry age into the Plan, of each member's projected future benefits divided by the value, also at entry age, of the each member's expected future salary. The normal cost rate is multiplied by current salary to determine each member's normal cost. The normal cost of the Plan is the sum of the normal costs for each individual. The normal cost represents the expected amount of money needed to fund the benefits attributed to the next year of service under the Entry Age actuarial cost method. Table IV-4 shows the EA normal cost as of June 30, 2018 and June 30, 2017 separately by component.

**Table IV-4**
**Normal Cost**

| | June 30, 2018 | | June 30, 2017 | | % Change |
|---|---|---|---|---|---|
| | Amount | Percent | Amount | Percent | Amount |
| **Police Department** | | | | | |
| Explicit Subsidy | | | | | |
| Non-Medicare Eligible | $ 3,342 | 3.69% | $ 2,899 | 3.25% | 15.2% |
| Medicare Eligible | 2,189 | 2.42% | 1,896 | 2.12% | 15.4% |
| Dental | 505 | 0.56% | 490 | 0.55% | 3.1% |
| **Total Explicit Subsidy** | **$ 6,036** | **6.67%** | **$ 5,285** | **5.92%** | **14.2%** |
| Implicit Subsidy | 1,879 | 2.08% | 1,457 | 1.63% | 29.0% |
| **Total Police** | **$ 7,915** | **8.75%** | **$ 6,743** | **7.55%** | **17.4%** |
| **Fire Department** | | | | | |
| Explicit Subsidy | | | | | |
| Non-Medicare Eligible | $ 2,345 | 3.44% | $ 2,162 | 3.19% | 8.4% |
| Medicare Eligible | 2,192 | 3.22% | 1,914 | 2.82% | 14.5% |
| Dental | 429 | 0.63% | 414 | 0.61% | 3.8% |
| **Total Explicit Subsidy** | **$ 4,966** | **7.29%** | **$ 4,490** | **6.62%** | **10.6%** |
| Implicit Subsidy | 1,657 | 2.43% | 1,343 | 1.98% | 23.3% |
| **Total Fire** | **$ 6,623** | **9.72%** | **$ 5,833** | **8.60%** | **13.5%** |
| **Total Explicit Subsidy** | **$ 11,002** | **13.96%** | **$ 9,776** | **12.54%** | **12.5%** |
| Total Implicit Subsidy | 3,536 | 4.51% | 2,800 | 3.61% | 26.3% |
| **Grand Total** | **$ 14,538** | **18.47%** | **$ 12,576** | **16.15%** | **15.6%** |

*Dollar amounts in thousands*

## SECTION IV – MEASURES OF LIABILITY

### Actuarial Liability

The Actuarial Liability represents the expected amount of money needed today, if all assumptions are met, to pay for benefits attributed to service prior to the valuation date under the Entry Age actuarial cost method. As such, it is the amount of assets targeted by the actuarial cost method for the Plan to hold as of the valuation date. It is not the amount necessary to settle the obligation. Table IV-5 shows the Actuarial Liability as of June 30, 2018 and June 30, 2017 separately by component.

**Table IV-5**
**Actuarial Liability**

| | June 30, 2018 | | | | June 30, 2017 | |
|---|---|---|---|---|---|---|
| | Actives | Deferred Vested | In Pay Status | Total | Total | % Change |
| **Police Department** | | | | | | |
| Explicit Subsidy | | | | | | |
| Non-Medicare Eligible | $ 54,734 | $ 1,251 | $ 58,759 | $ 114,744 | $ 113,941 | 0.7% |
| Medicare Eligible | 57,861 | 1,798 | 170,001 | 229,661 | 203,370 | 12.9% |
| Dental | 11,282 | 342 | 22,701 | 34,325 | 34,411 | -0.3% |
| **Total Explicit Subsidy** | **$ 123,877** | **$ 3,392** | **$ 251,461** | **$ 378,730** | **$ 351,723** | **7.7%** |
| Implicit Subsidy | 42,333 | 1,000 | 49,753 | 93,087 | 79,616 | 16.9% |
| **Total Police** | **$ 166,211** | **$ 4,392** | **$ 301,215** | **$ 471,817** | **$ 431,339** | **9.4%** |
| **Fire Department** | | | | | | |
| Explicit Subsidy | | | | | | |
| Non-Medicare Eligible | $ 36,348 | $ 0 | $ 21,452 | $ 57,800 | $ 55,479 | 4.2% |
| Medicare Eligible | 40,731 | 0 | 100,983 | 141,714 | 126,336 | 12.2% |
| Dental | 7,712 | 0 | 12,969 | 20,681 | 20,362 | 1.6% |
| **Total Explicit Subsidy** | **$ 84,792** | **$ 0** | **$ 135,404** | **$ 220,196** | **$ 202,176** | **8.9%** |
| Implicit Subsidy | 28,719 | 0 | 26,542 | 55,261 | 46,732 | 18.3% |
| **Total Fire** | **$ 113,510** | **$ 0** | **$ 161,946** | **$ 275,457** | **$ 248,908** | **10.7%** |
| **Total Explicit Subsidy** | **$ 208,669** | **$ 3,392** | **$ 386,865** | **$ 598,926** | **$ 553,899** | **8.1%** |
| Total Implicit Subsidy | 71,052 | 1,000 | 76,295 | 148,348 | 126,348 | 17.4% |
| **Grand Total** | **$ 279,721** | **$ 4,392** | **$ 463,161** | **$ 747,274** | **$ 680,246** | **9.9%** |

*Dollar amounts in thousands*

## SECTION V – CONTRIBUTIONS

### Amortization of the Unfunded Actuarial Liability

Under the contribution allocation procedure employed by the Plan, there are two components to the contribution toward the explicit subsidy: the normal cost and an amortization payment on the Unfunded Actuarial Liability (UAL). The normal cost was developed in Section IV. This section develops the UAL contribution and the City's actuarially determined contribution for the explicit subsidy. The implicit subsidy is funded on a pay-as-you-go basis through the payment of active health premiums.

The difference between the Actuarial Liability and the Market Value of Assets is the Unfunded Actuarial Liability (UAL). Table V-1 calculates the UAL and funded percentage for the explicit subsidy and the implicit subsidy.

**Table V-1**
**Unfunded Actuarial Liability**

| | June 30, 2018 | | | June 30, 2017 | | |
|---|---|---|---|---|---|---|
| | Explicit | Implicit | Total | Explicit | Implicit | Total |
| **Police Department** | | | | | | |
| Actuarial Liability | $ 378,730 | $ 93,087 | $ 471,817 | $ 351,723 | $ 79,616 | $ 431,339 |
| Assets | 111,659 | 0 | 111,659 | 99,926 | 0 | 99,926 |
| **Unfunded Actuarial Liability** | **$ 267,071** | **$ 93,087** | **$ 360,158** | **$ 251,796** | **$ 79,616** | **$ 331,412** |
| **Funded Percentage** | **29.5%** | **0.0%** | **23.7%** | **28.4%** | **0.0%** | **23.2%** |
| **Fire Department** | | | | | | |
| Actuarial Liability | $ 220,196 | $ 55,261 | $ 275,457 | $ 202,176 | $ 46,732 | $ 248,908 |
| Assets | 50,861 | 0 | 50,861 | 42,591 | 0 | 42,591 |
| **Unfunded Actuarial Liability** | **$ 169,335** | **$ 55,261** | **$ 224,596** | **$ 159,585** | **$ 46,732** | **$ 206,317** |
| **Funded Percentage** | **23.1%** | **0.0%** | **18.5%** | **21.1%** | **0.0%** | **17.1%** |
| **Aggregate UAL** | **$ 436,407** | **$ 148,348** | **$ 584,754** | **$ 411,382** | **$ 126,348** | **$ 537,729** |
| **Aggregate Funded Percentage** | **27.1%** | **0.0%** | **21.7%** | **25.7%** | **0.0%** | **21.0%** |

*Dollar amounts in thousands*

The UAL for the explicit subsidy as of June 30, 2017 was amortized as a level percentage of payroll over 25 years. Payment levels for future amortization bases are phased in and out over three years. Table V-2 shows the schedule of amortization bases for payment of the UAL.

**Table V-2**
**UAL Amortization**

| | Outstanding Balance | Remaining Period | Remaining Phase-in | Remaining Phase-out | Payment |
|---|---|---|---|---|---|
| **Police Department** | | | | | |
| Fresh Start UAL | $ 240,776 | 24 | N/A | N/A | $ 14,451 |
| 2018 Changes | 11,285 | 25 | 3 | 3 | 227 |
| 7/1/2018 Payment* | 15,011 | | | | |
| **Total 2018 Police UAL** | **$ 267,071** | | | | **$ 14,678** |
| **Fire Department** | | | | | |
| Fresh Start UAL | $ 150,491 | 24 | N/A | N/A | $ 9,033 |
| 2018 Changes | 9,462 | 25 | 3 | 3 | 190 |
| 7/1/2018 Payment* | 9,382 | | | | |
| **Total 2018 Fire UAL** | **$ 169,335** | | | | **$ 9,223** |
| **Grand Total** | **$ 436,407** | | | | **$ 23,901** |

** FYE 2019 amortization payment discounted to 7/1/2018* *Dollar amounts in thousands*

## Contribution Amounts

The City pays the actuarially determined contribution for the explicit subsidy, but has the option to cap its contribution at 11% of Police and Fire payroll, including the payroll for members covered by the VEBA instead of this Plan. The actuarially determined contribution is the normal cost plus administrative expenses plus the amortization payment on the UAL less expected member contributions. Members contribute 8.00% of pay.

Table V-3 shows the components of the Actuarially Determined Contribution (ADC) amounts for the explicit subsidy for FYE 2020 and 2019.

## SECTION V – CONTRIBUTIONS

**Table V-3**
**City's Actuarially Determined Contribution (ADC)**
**Explicit Subsidy Only**

| | | FYE 2020 | | FYE 2019 | % Change |
|---|---|---|---|---|---|
| **Police Department** | | | | | |
| Projected Full Benefit Payroll | $ | 85,887 | $ | 86,133 | -0.3% |
| Normal Cost Rate | | 6.67% | | 5.92% | 12.7% |
| Normal Cost Amount | $ | 5,728 | $ | 5,095 | 12.4% |
| Administrative Expense | | 106 | | | |
| UAL Payment | | 15,632 | | 15,518 | 0.7% |
| Total Contribution | $ | **21,466** | $ | **20,614** | 4.1% |
| Projected Member Contributions | | 6,871 | | 6,891 | -0.3% |
| **City's ADC Amount** | $ | **14,595** | $ | **13,723** | **6.4%** |
| Projected Payroll | | 136,175 | | 124,209 | 9.6% |
| City's ADC Percentage | | 10.7% | | 11.0% | -3.0% |
| **City's ADC Amount (BOY)** | $ | **14,341** | $ | **13,471** | **6.5%** |
| **Fire Department** | | | | | |
| Projected Full Benefit Payroll | $ | 68,461 | $ | 68,985 | -0.8% |
| Normal Cost Rate | | 7.29% | | 6.63% | 10.0% |
| Normal Cost Amount | $ | 4,989 | $ | 4,571 | 9.2% |
| Administrative Expense | | 73 | | | |
| UAL Payment | | 9,822 | | 9,699 | 1.3% |
| Total Contribution | $ | **14,885** | $ | **14,271** | 4.3% |
| Projected Member Contributions | | 5,477 | | 5,519 | -0.8% |
| **City's ADC Amount** | $ | **9,408** | $ | **8,752** | **7.5%** |
| Projected Payroll | | 89,354 | | 86,231 | 3.6% |
| City's ADC Percentage | | 10.5% | | 10.1% | 3.7% |
| **City's ADC Amount (BOY)** | $ | **9,244** | $ | **8,591** | **7.6%** |
| **Grand Totals** | | | | | |
| City's ADC Amount | $ | 24,003 | $ | 22,475 | 6.8% |
| Projected Payroll | | 225,528 | | 210,440 | 7.2% |
| City's ADC Percentage | | 10.6% | | 10.7% | -0.3% |
| City's ADC Amount (BOY) | $ | 23,585 | $ | 22,061 | 6.9% |

*Dollar amounts in thousands*

## SECTION VI – ACTUARIAL SECTION OF THE CAFR

The Government Finance Officers Association (GFOA) maintains a checklist of items to be included in the Plan's Comprehensive Annual Financial Report (CAFR) in order to receive recognition for excellence in financial reporting. The schedules in this section are listed by the GFOA for inclusion in the Actuarial Section of the Plan's CAFR. All amounts prior to June 30, 2010 were calculated by the prior actuary.

**Table VI-1**

**Member Benefit Coverage Information**

| Actuarial Valuation Date | Actuarial Liability: Retirees and Vested Terminated (A) | Actuarial Liability: Active Members (B) | Market Value of Assets * | Portion of Liability Covered by Market Value of Assets*: (A) | Portion of Liability Covered by Market Value of Assets*: (B) |
|---|---|---|---|---|---|
| 6/30/2018 | $ 467,552 | $ 279,721 | $ 162,519 | 35% | 0% |
| 6/30/2017 | 427,750 | 252,496 | 142,517 | 33% | 0% |
| 6/30/2016 | 472,004 | 306,867 | 135,207 | 29% | 0% |
| 6/30/2015 | 451,735 | 288,018 | 114,565 | 25% | 0% |
| 6/30/2014 | 429,034 | 277,676 | 93,605 | 22% | 0% |
| 6/30/2013 | 421,999 | 278,526 | 75,035 | 18% | 0% |
| 6/30/2012 | 600,869 | 396,452 | 66,385 | 11% | 0% |
| 6/30/2011 | 622,691 | 381,104 | 60,709 | 10% | 0% |
| 6/30/2010 | 568,611 | 377,697 | 58,586 | 10% | 0% |
| 6/30/2009 | 436,249 | 325,355 | 55,618 | 13% | 0% |

** Actuarial Value of Assets for 6/30/2016 and earlier* *Dollar amounts in thousands*

Table VI-1 was previously referred to as the Solvency Test by the Government Finance Officers Association (GFOA). It should be noted, however, that it does not test the solvency of the plan in the sense understood by financial economists that a 100% ratio would mean that there were sufficient assets to settle the obligation on the valuation date. Instead, a 100 percent ratio only means that assets are expected to be sufficient if all assumptions are met in the future, including the expected rate of return on investments. Consequently, we understand that the new GFOA checklist refers to the exhibit as providing member benefit coverage information.

**Table VI-2**

**Analysis of Financial Experience**

| Actuarial Valuation Date | Investment Income | Combined Liability Experience | Total Financial Experience | Non-Recurring Items | Total Experience |
|---|---|---|---|---|---|
| 6/30/2018 | $ (3,990) | $ 3,401 | $ (589) | $ (36,387) | $ (36,976) |
| 6/30/2017 | 2,647 | (15,108) | $ (12,461) | 29,245 | 16,784 |
| 6/30/2016 | (2,914) | (2,728) | $ (5,642) | 4,864 | (778) |
| 6/30/2015 | 582 | 7,990 | $ 8,572 | (3,449) | 5,123 |
| 6/30/2014 | 2,802 | 16,222 | $ 19,024 | 13,689 | 32,713 |
| 6/30/2013 | 2,437 | (4,536) | $ (2,099) | 258,939 | 256,840 |
| 6/30/2012 | (6,011) | 4,760 | $ (1,251) | 58,173 | 56,922 |
| 6/30/2011 | (2,661) | 5,967 | $ 3,306 | 1,146 | 4,452 |
| 6/30/2010 | (3,067) | (11,242) | $ (14,309) | (122,599) | (136,908) |

*Dollar amounts in thousands*

## *Schedule of Funding Progress*

The schedule of funding progress compares the assets used for funding purposes to the comparable liabilities to determine how well the Plan is funded and how this status has changed over the past several years. The Actuarial Liability is compared to the Actuarial Value of Assets to determine the funding ratio.

## SECTION VI – ACTUARIAL SECTION OF THE CAFR

**Table VI-3**

**Schedule of Funding Progress**

| Actuarial Valuation Date | Market Value of Assets * (a) | Actuarial Liability (b) | Unfunded Actuarial Liability (UAL) (b - a) | Funded Ratio (a ÷ b) | Annual Covered Payroll (c) | UAL as a Percentage of Covered Payroll ((b - a) ÷ c) |
|---|---|---|---|---|---|---|
| 6/30/2018 | $ 162,519 | $ 747,274 | 584,755 | 21.7% | $ 218,429 | 268% |
| 6/30/2017 | 142,517 | 680,246 | 537,729 | 21.0% | 203,816 | 264% |
| 6/30/2016 | 135,207 | 778,871 | 643,664 | 17.4% | 194,072 | 332% |
| 6/30/2015 | 114,565 | 739,753 | 625,188 | 15.5% | 184,733 | 338% |
| 6/30/2014 | 93,605 | 706,710 | 613,105 | 13.2% | 188,189 | 326% |
| 6/30/2013 | 75,035 | 700,525 | 625,490 | 10.7% | 184,645 | 339% |
| 6/30/2012 | 66,385 | 997,321 | 930,936 | 6.7% | 172,626 | 539% |
| 6/30/2011 | 60,709 | 1,003,795 | 943,086 | 6.0% | 190,726 | 494% |
| 6/30/2010 | 58,586 | 946,308 | 887,722 | 6.2% | 222,699 | 399% |
| 6/30/2009 | 55,618 | 761,604 | 705,986 | 7.3% | 243,196 | 290% |

** Actuarial Value of Assets for 6/30/2016 and earlier*

*Dollar amounts in thousands*

**Schedule of Active Member Data**

| Valuation Date | Active Member Counts | | | Annual Payroll | Average Annual Pay | Percent Change in Average Pay |
|---|---|---|---|---|---|---|
| | Under Age 65 | Age 65+ | Total | | | |
| 2018 | 1,638 | 0 | 1,638 | $218,429,298 | $133,351 | 1.0% |
| 2017 | 1,543 | 0 | 1,543 | 203,670,038 | 131,996 | 7.6% |
| 2016 | 1,582 | 0 | 1,582 | 194,072,092 | 122,675 | 4.9% |
| 2015 | 1,577 | 0 | 1,577 | 184,481,838 | 116,983 | 2.8% |
| 2014 | 1,654 | 0 | 1,654 | 188,188,712 | 113,778 | 5.2% |
| 2013 | 1,707 | 0 | 1,707 | 184,645,250 | 108,169 | 7.7% |
| 2012 | 1,718 | 0 | 1,718 | 172,625,503 | 100,481 | -8.6% |
| 2011 | 1,735 | 0 | 1,735 | 190,726,258 | 109,929 | -11.5% |
| 2010 | 2,020 | 1 | 2,021 | 251,058,473 | 124,225 | 1.4% |
| 2009 | N/A | N/A | 2,083 | 255,222,552 | 122,526 | 14.9% |

## SECTION VI – ACTUARIAL SECTION OF THE CAFR

**Schedule of Retirees and Beneficiaries Added to and Removed from Rolls**

| Period | Beginning of Period | | Added to Rolls | Removed from Rolls | End of Period | | Net Change | | % Increase in Annual Subsidy | Average Annual Subsidy |
|---|---|---|---|---|---|---|---|---|---|---|
| | Count | Annual Subsidy | Count | Count | Count | Annual Subsidy | Count | Annual Subsidy | | |
| **Medical** | | | | | | | | | | |
| 2017-18 | 1,974 | $ 20,173,930 | 120 | 58 | 2,036 | $ 17,150,934 | 62 | $ (3,022,995) | -15.0% | $ 8,424 |
| 2016-17 | 1,921 | 19,013,844 | 98 | 45 | 1,974 | 20,173,930 | 53 | 1,160,086 | 6.1% | 10,220 |
| 2015-16 | 1,899 | 18,605,787 | 88 | 66 | 1,921 | 19,013,844 | 22 | 408,057 | 2.2% | 9,898 |
| 2014-15 | 1,849 | 18,994,780 | 106 | 56 | 1,899 | 18,605,787 | 50 | (388,993) | -2.0% | 9,798 |
| 2013-14 | 1,832 | 19,538,587 | 79 | 62 | 1,849 | 18,994,780 | 17 | (543,807) | -2.8% | 10,273 |
| 2012-13 | 1,789 | 21,488,930 | 94 | 51 | 1,832 | 19,538,587 | 43 | (1,950,343) | -9.1% | 10,665 |
| 2011-12 | 1,736 | 21,104,972 | 107 | 54 | 1,789 | 21,488,930 | 53 | 383,958 | 1.8% | 12,012 |
| 2010-11 | 1,676 | 19,632,008 | 119 | 59 | 1,736 | 21,104,972 | 60 | 1,472,964 | 7.5% | 12,157 |
| 2009-10 | 1,555 | 16,584,591 | N/A | N/A | 1,676 | 19,632,008 | 121 | 3,047,417 | 18.4% | 11,714 |
| 2007-09 | 1,362 | 13,277,469 | N/A | N/A | 1,555 | 16,584,591 | 193 | 3,307,122 | 24.9% | 10,665 |
| **Dental** | | | | | | | | | | |
| 2017-18 | 2,056 | $ 2,547,592 | 98 | 57 | 2,097 | $ 2,587,773 | 41 | $ 40,181 | 1.6% | $ 1,234 |
| 2016-17 | 2,018 | 2,403,048 | 80 | 42 | 2,056 | 2,547,592 | 38 | 144,544 | 6.0% | 1,239 |
| 2015-16 | 1,992 | 2,388,385 | 65 | 39 | 2,018 | 2,403,048 | 26 | 14,663 | 0.6% | 1,191 |
| 2014-15 | 1,917 | 2,303,884 | 108 | 33 | 1,992 | 2,388,385 | 75 | 84,501 | 3.7% | 1,199 |
| 2013-14 | 1,890 | 2,301,504 | 68 | 41 | 1,917 | 2,303,884 | 27 | 2,380 | 0.1% | 1,202 |
| 2012-13 | 1,855 | 2,398,735 | 71 | 33 | 1,890 | 2,301,504 | 35 | (97,231) | -4.1% | 1,218 |
| 2011-12 | 1,798 | 2,325,033 | 70 | 18 | 1,855 | 2,398,735 | 57 | 73,702 | 3.2% | 1,293 |
| 2010-11 | 1,707 | 2,267,352 | 104 | 24 | 1,798 | 2,325,033 | 91 | 57,681 | 2.5% | 1,293 |
| 2009-10 | 1,519 | 1,794,454 | N/A | N/A | 1,707 | 2,267,352 | 188 | 472,898 | 26.4% | 1,328 |
| 2007-09 | 1,375 | 1,629,777 | N/A | N/A | 1,519 | 1,794,454 | 144 | 164,677 | 10.1% | 1,181 |

*Annual subsidies are explicit amounts*

## APPENDIX A – MEMBERSHIP INFORMATION

### Member Data

| Valuation Date | June 30, 2018 | June 30, 2017 | % Change |
|---|---|---|---|
| **Active Employees Eligible for Full Benefits** | | | |
| ***Police*** | | | |
| Count | 680 | 717 | -5.16% |
| Average Age | 45.6 | 45.0 | 1.45% |
| Average OPEB Benefit Service | 17.8 | 17.3 | 3.09% |
| Total Payroll | $99,405,066 | $100,852,366 | -1.44% |
| ***Fire*** | | | |
| Count | 533 | 559 | -4.65% |
| Average Age | 45.1 | 44.4 | 1.39% |
| Average OPEB Benefit Service | 15.7 | 15.0 | 4.42% |
| Total Payroll | $72,805,706 | $74,894,723 | -2.79% |
| **Active Employees Eligible for Catastrophic Disability Only** | | | |
| ***Police*** | | | |
| Count | 294 | 180 | 63.33% |
| Average Age | 31.6 | 32.1 | -1.75% |
| Average OPEB Benefit Service | 3.0 | 4.1 | -25.18% |
| Total Payroll | $32,483,118 | $19,446,961 | 67.03% |
| ***Fire*** | | | |
| Count | 131 | 87 | 50.57% |
| Average Age | 34.5 | 35.0 | -1.30% |
| Average OPEB Benefit Service | 3.6 | 4.2 | -13.57% |
| Total Payroll | $13,735,408 | $8,475,988 | 62.05% |
| **Retirees and Surviving Spouses with Coverage*** | | | |
| Medical and Dental Coverage | 1,948 | 1,972 | -1.22% |
| Medical Coverage Only | 8 | 2 | 300.00% |
| In-Lieu Medical with Dental Coverage | 75 | 0 | N/A |
| Dental Coverage Only | 74 | 84 | -11.90% |
| In-Lieu Medical Coverage Only | 5 | 0 | N/A |
| **Total** | **2,110** | **2,058** | 2.53% |
| **Term Vested Members**** | 15 | 12 | 25.00% |

** Counts do not include dependent spouses.*

*** Includes only those members with 20 or more years of OPEB benefit service.*

## APPENDIX A – MEMBERSHIP INFORMATION

| Status Reconciliation | Active | Terminated Vested | Retiree | Surviving Spouse | Disabled | Total |
|---|---|---|---|---|---|---|
| **Beginning of Year** | **1,543** | **12** | **927** | **226** | **905** | **3,613** |
| New Hires | 0 | 0 | 0 | 0 | 0 | 0 |
| Rehires | 16 | 0 | 0 | 0 | 0 | 16 |
| Non-Vested Termination | (13) | 0 | 0 | 0 | 0 | (13) |
| Vested Terminations | (6) | 6 | 0 | 0 | 0 | 0 |
| Service Retirements | (48) | (3) | 51 | 0 | 0 | 0 |
| Disabled Retirements | (12) | 0 | (13) | 0 | 25 | 0 |
| New Survivors | 0 | 0 | 0 | 24 | 0 | 24 |
| No longer covered | (5) | 0 | (12) | (9) | (27) | (53) |
| Data corrections | 1 | 0 | 7 | 0 | 6 | 14 |
| New Catastrophic Disability | 162 | 0 | 0 | 0 | 0 | 162 |
| **End of Year** | **1,638** | **15** | **960** | **241** | **909** | **3,763** |

*Counts do not include dependent spouses*

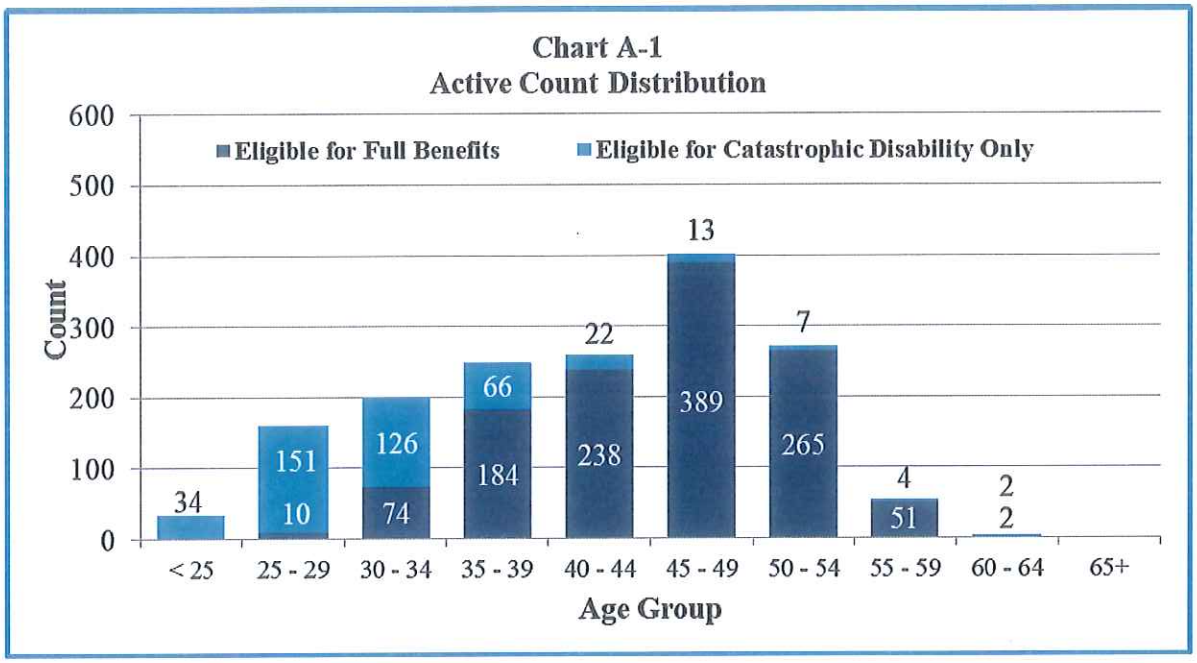
*Counts include members in In-Lieu credit program and those eligible for catastrophic disability only*

## Member Data as of June 30, 2018:

| Active Employees Eligible For Full Benefits<br>Years of OPEB Benefit Service | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Age Group | < 5 | 5 - 9 | 10 - 14 | 15 - 19 | 20 - 24 | 25 - 29 | 30 + | Total |
| Under 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 to 29 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 10 |
| 30 to 34 | 2 | 45 | 27 | 0 | 0 | 0 | 0 | 74 |
| 35 to 39 | 2 | 70 | 97 | 15 | 0 | 0 | 0 | 184 |
| 40 to 44 | 0 | 29 | 81 | 113 | 15 | 0 | 0 | 238 |
| 45 to 49 | 1 | 12 | 44 | 126 | 188 | 18 | 0 | 389 |
| 50 to 54 | 0 | 1 | 10 | 61 | 145 | 45 | 3 | 265 |
| 55 to 59 | 0 | 0 | 1 | 8 | 20 | 21 | 1 | 51 |
| 60 to 64 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| 65 and up | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **5** | **167** | **260** | **324** | **369** | **84** | **4** | **1,213** |

## APPENDIX A – MEMBERSHIP INFORMATION

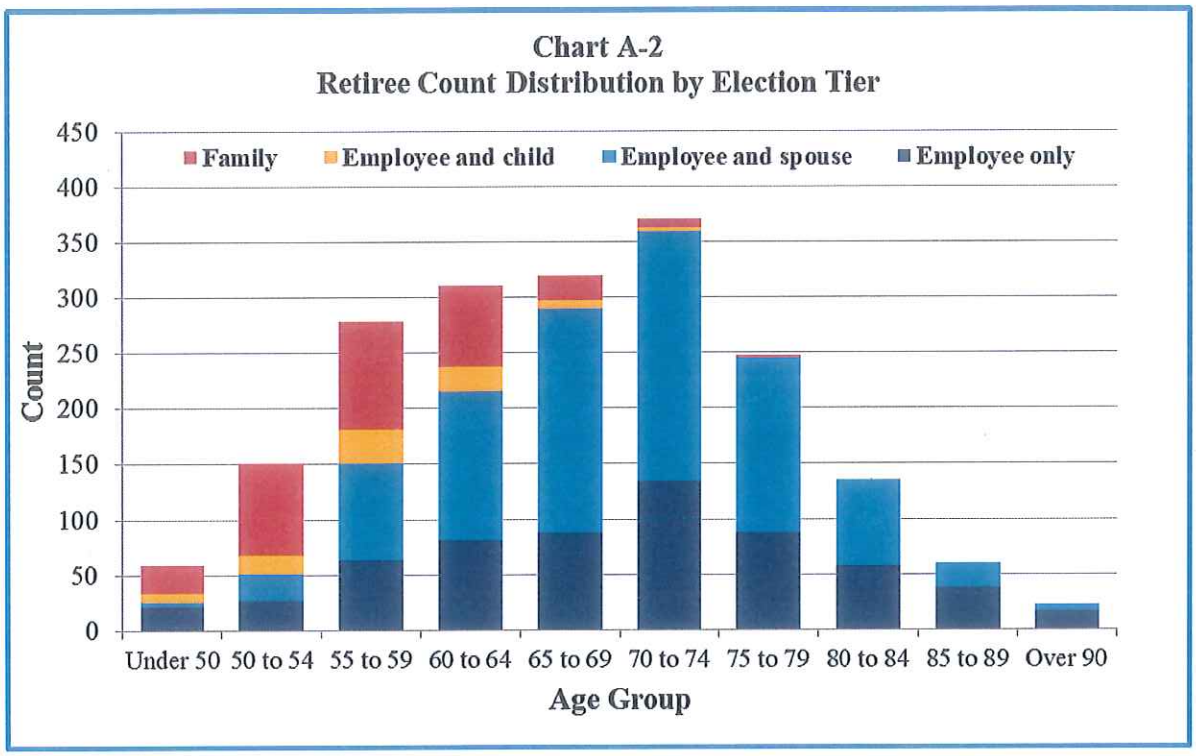
| Active Employees Eligible for Catastrophic Disability Benefits Only | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Years of OPEB Benefit Service | | | | | | | |
| Age Group | < 5 | 5 - 9 | 10 - 14 | 15 - 19 | 20 - 24 | 25 - 29 | 30 + | Total |
| Under 25 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| 25 to 29 | 151 | 0 | 0 | 0 | 0 | 0 | 0 | 151 |
| 30 to 34 | 120 | 3 | 3 | 0 | 0 | 0 | 0 | 126 |
| 35 to 39 | 50 | 8 | 8 | 0 | 0 | 0 | 0 | 66 |
| 40 to 44 | 12 | 1 | 6 | 3 | 0 | 0 | 0 | 22 |
| 45 to 49 | 2 | 2 | 0 | 3 | 6 | 0 | 0 | 13 |
| 50 to 54 | 3 | 0 | 0 | 2 | 2 | 0 | 0 | 7 |
| 55 to 59 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 4 |
| 60 to 64 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| 65 and up | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **373** | **15** | **17** | **10** | **9** | **1** | **0** | **425** |



## APPENDIX A – MEMBERSHIP INFORMATION

| Retirees, Disabled Retirees and Surviving Spouses | | | | |
|---|---|---|---|---|
| | Medical Insurance | | | Dental |
| Age Group | Males | Females | Total | Insurance |
| Under 50 | 44 | 15 | 59 | 73 |
| 50 to 54 | 126 | 25 | 151 | 179 |
| 55 to 59 | 227 | 52 | 279 | 302 |
| 60 to 64 | 287 | 24 | 311 | 330 |
| 65 to 69 | 289 | 30 | 319 | 337 |
| 70 to 74 | 312 | 59 | 371 | 391 |
| 75 to 79 | 208 | 39 | 247 | 250 |
| 80 to 84 | 101 | 35 | 136 | 148 |
| 85 to 89 | 38 | 22 | 60 | 63 |
| Over 90 | 10 | 13 | 23 | 24 |
| **Total** | **1,642** | **314** | **1,956** | **2,097** |

*Counts do not include dependent spouses*



## APPENDIX A – MEMBERSHIP INFORMATION

| Medical Plan Elections as of January 1, 2019 | | | |
|---|---|---|---|
| **Medical Plan** | **Retirees & Surviving Spouses** | **Spouses** | **Total** |
| **Pre-Medicare Medical Plans** | | | |
| Kaiser DHMO | 61 | 152 | 213 |
| Kaiser HDHP | 48 | 40 | 88 |
| Kaiser $25 Co-pay | 437 | 317 | 754 |
| Kaiser $15 Co-pay (Hawaii) | 4 | 8 | 12 |
| Kaiser $25 Co-pay (Northwest) | 2 | 2 | 4 |
| Sutter Health DHMO | 8 | 6 | 14 |
| Sutter Health $20 Co-pay | 62 | 55 | 117 |
| PPO / POS $25 Co-pay | 178 | 174 | 352 |
| **Total** | **800** | **754** | **1,554** |
| | | | |
| **Medicare Medical Plans** | | | |
| Kaiser Senior Advantage | 477 | 259 | 736 |
| Kaiser Senior Advantage (Hawaii) | 7 | 3 | 10 |
| Kaiser Senior Advantage (Northwest) | 8 | 3 | 11 |
| BS Medicare HMO | 62 | 31 | 93 |
| BS Medicare PPO/POS | 602 | 334 | 936 |
| **Total** | **1,156** | **630** | **1,786** |

| Current Vested Terminations* | | | |
|---|---|---|---|
| **Age Group** | **Male** | **Female** | **Total** |
| Under 45 | 0 | 0 | 0 |
| 45 to 49 | 9 | 1 | 10 |
| 50 to 54 | 3 | 2 | 5 |
| 55 to 59 | 0 | 0 | 0 |
| 60 to 64 | 0 | 0 | 0 |
| Over 65 | 0 | 0 | 0 |
| **Total** | **12** | **3** | **15** |

* *Includes only those term vested participants with at least 20 years of OPEB benefit service*

# APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

## Economic Assumptions

The expected return on plan assets and per person cost trend assumptions shown below were adopted by the Board of Administration with our input at the February 7, 2019 Board meeting.

### 1. Expected Return on Plan Assets

6.50% per year. The Board expects a long-term rate of return of 6.8% based on Meketa's 20-year capital market assumptions and the System's current investment policy.

### 2. Per Person Cost Trends

| | Annual Increase | | | |
|---|---|---|---|---|
| To Calendar Year | Pre-Medicare | Medicare Eligible | Dental | Part B Premiums |
| 2020 | 8.00% | 6.00% | 3.50% | 4.13% |
| 2021 | 7.73 | 5.88 | 3.50 | 5.24 |
| 2022 | 7.46 | 5.75 | 3.50 | 4.04 |
| 2023 | 7.20 | 5.63 | 3.50 | 5.70 |
| 2024 | 6.93 | 5.50 | 3.50 | 6.06 |
| 2025 | 6.66 | 5.38 | 3.50 | 5.37 |
| 2026 | 6.39 | 5.25 | 3.50 | 4.66 |
| 2027 | 6.13 | 5.13 | 3.50 | 6.13 |
| 2028 | 5.86 | 5.00 | 3.50 | 5.96 |
| 2029 | 5.59 | 4.88 | 3.50 | 5.79 |
| 2030 | 5.32 | 4.75 | 3.50 | 5.62 |
| 2031 | 5.05 | 4.63 | 3.50 | 5.45 |
| 2032 | 4.79 | 4.50 | 3.50 | 5.28 |
| 2033 | 4.52 | 4.38 | 3.50 | 5.12 |
| 2034 | 4.25 | 4.25 | 3.50 | 4.95 |
| 2035 | 4.25 | 4.25 | 3.50 | 4.78 |
| 2036 | 4.25 | 4.25 | 3.50 | 4.61 |
| 2037 | 4.25 | 4.25 | 3.50 | 4.44 |
| 2038 | 4.25 | 4.25 | 3.50 | 4.27 |
| 2039 | 4.25 | 4.25 | 3.50 | 4.11 |
| 2040 | 4.25 | 4.25 | 3.50 | 3.94 |
| 2041 | 4.25 | 4.25 | 3.50 | 3.77 |
| 2042 | 4.25 | 4.25 | 3.50 | 3.60 |
| 2043 | 4.25 | 4.25 | 3.50 | 3.60 |
| 2044+ | 4.25 | 4.25 | 3.50 | 3.60 |

Actual premium increases for 2019 were reflected in the valuation. Deductibles, Co-payments, Out-of-Pocket Maximums, and Annual Maximum (where applicable) are assumed to increase at the above trend rates.

### 3. Changes Since the Last Valuation

The expected return on Plan assets was reduced from 6.875% to 6.50%.

The per-person cost trends were updated.

## APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

### Demographic Assumptions

The plan election assumptions were adopted by the Board of Administration at the January 10, 2019 Board meeting based on our recommendations. The other demographic assumptions shown below were adopted at the November 2, 2017 Board meeting based on recommendations from our experience study covering plan experience during the period from July 1, 2009 through June 30, 2017. Please refer to the full experience study report for details, including the rationale for each assumption.

#### 1. Retirement Rates

Rates of retirement are based on age and service according to the following Tables. Tier 1 rates only apply when the member is eligible for unreduced pension benefits.

| Tier 1 Rates of Retirement by Age and Service | | | | |
|---|---|---|---|---|
| | Police | | Fire | |
| Age | <30 Years | 30+ Years | <30 Years | 30+ Years |
| 50 | 55.0% | 100.0% | 35.0% | 100.0% |
| 51 | 45.0 | 100.0 | 35.0 | 100.0 |
| 52 | 40.0 | 100.0 | 35.0 | 100.0 |
| 53 – 55 | 35.0 | 100.0 | 35.0 | 100.0 |
| 56 - 57 | 35.0 | 100.0 | 27.5 | 100.0 |
| 58 - 61 | 50.0 | 100.0 | 27.5 | 100.0 |
| 62+ | 100.0 | 100.0 | 100.0 | 100.0 |

| Tier 2 Rates of Retirement by Age and Service | | | | |
|---|---|---|---|---|
| | Police | | | |
| Age | 5 - 19 Years | 20 - 24 Years | 25 – 29 Years | 30+ Years |
| 50 - 56 | 2.0% | 2.0% | 2.0% | 5.0% |
| 57 - 59 | 7.5 | 10.0 | 20.0 | 100.0 |
| 60 - 61 | 10.0 | 20.0 | 35.0 | 100.0 |
| 62 - 64 | 25.0 | 50.0 | 75.0 | 100.0 |
| 65+ | 100.0 | 100.0 | 100.0 | 100.0 |

## APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

| Tier 2 Rates of Retirement by Age and Service | | | | |
|---|---|---|---|---|
| | Fire | | | |
| Age | 5 - 19 Years | 20 - 24 Years | 25 – 29 Years | 30+ Years |
| 50 - 56 | 1.0% | 1.0% | 1.0% | 2.5% |
| 57 - 59 | 5.0 | 7.5 | 15.0 | 100.0 |
| 60 - 61 | 7.5 | 15.0 | 25.0 | 100.0 |
| 62 - 64 | 20.0 | 35.0 | 50.0 | 100.0 |
| 65+ | 100.0 | 100.0 | 100.0 | 100.0 |

Tier 1 terminated vested members are assumed to retire at age 55 and Tier 2 terminated vested members are assumed to retire at age 60.

### 2. Rates of Termination

Sample rates of refund/termination are show in the following table.

| Rates of Termination | | |
|---|---|---|
| Service | Police | Fire |
| 0 | 16.00% | 25.00% |
| 1 | 11.75 | 7.00 |
| 2 | 9.85 | 3.50 |
| 3 | 8.35 | 1.75 |
| 4 | 7.00 | 1.25 |
| 5 | 5.75 | 1.00 |
| 6 | 4.75 | 0.90 |
| 7 | 4.00 | 0.80 |
| 8 | 3.50 | 0.70 |
| 9 | 3.50 | 0.60 |
| 10 | 3.50 | 0.50 |
| 11 | 3.50 | 0.50 |
| 12 | 3.00 | 0.50 |
| 13 | 2.50 | 0.50 |
| 14 | 2.00 | 0.50 |
| 15+ | 2.00 | 0.50 |

*Termination rates do not apply once a member is eligible for unreduced retirement.

## APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

### 3. Rates of Mortality

Mortality rates for actives, retirees, beneficiaries, terminated vested, and reciprocals are based on the sex-distinct employee and annuitant mortality tables shown below. Future mortality improvements are reflected by applying the SOA MP-2017 projection scale on a generational basis from the base year of 2009.

| Base Mortality Tables | | |
|---|---|---|
| **Category** | **Male** | **Female** |
| **Healthy Annuitant** | 0.948 times the CalPERS 2009 Healthy Annuitant Mortality Table (Male) | 1.048 times the CalPERS 2009 Healthy Annuitant Mortality Table (Female) |
| **Healthy Non-Annuitant** | 0.948 times the CalPERS 2009 Employee Mortality Table (Male) | 1.048 times the CalPERS 2009 Employee Mortality Table (Female) |
| **Disabled Annuitant** | 0.903 times the CalPERS 2009 Industrial Disability Mortality Table (Male) | 0.903 times the CalPERS 2009 Industrial Disability Mortality Table (Male) |

### 4. Disability Rates

For Police, disability rates are equal to the CalPERS police industrial and non-industrial rates for public agencies multiplied by 90% for ages under 50 and 140% for ages 50 and older. For Fire, disability rates are equal to the CalPERS fire industrial and non-industrial rates for public agencies multiplied by 90% for ages under 50 and 180% for ages 50 and older. Sample disability rates of active participants are provided in the table below.

| Rates of Disability at Selected Ages | | |
|---|---|---|
| **Age** | **Police** | **Fire** |
| 25 | 0.16% | 0.03% |
| 30 | 0.45 | 0.08 |
| 35 | 0.74 | 0.15 |
| 40 | 1.03 | 0.28 |
| 45 | 1.32 | 0.50 |
| 50 | 2.70 | 5.08 |
| 55 | 6.88 | 7.54 |
| 60 | 8.71 | 10.77 |
| 65 | 10.47 | 14.84 |

100% of disabilities are assumed to be duty related.

## 5. Salary Increase Rate

Wage inflation component: 3.25%

The following merit component is added to wage inflation, based on an individual member's years of service:

| Salary Merit Increases | |
|---|---|
| Years of Service | Merit/ Longevity |
| 0 | 6.00% |
| 1 | 5.50 |
| 2 | 5.00 |
| 3 | 4.50 |
| 4 | 4.00 |
| 5 | 3.50 |
| 6 | 2.75 |
| 7 | 2.00 |
| 8 | 1.50 |
| 9 | 1.00 |
| 10 | 0.75 |
| 11+ | 0.50 |

## 6. Percent of Retirees Electing Coverage

80% of active members are assumed to elect coverage upon retirement and 20% are assumed to enter the In-Lieu credit program. 50% of term vested members are assumed to elect coverage upon retirement and 50% are assumed to enter the in-Lieu credit program. Retirees are assumed to continue in their current plan.

Members who elect to receive the In-Lieu credits are assumed to remain in the In-Lieu credit program for five years, after which they are assumed to elect coverage and use their In-Lieu credits.

A new, Sutter Health Vista High Deductible plan will be offered as of 1/1/2019.

Retirees who are not yet age 65 are assumed to be eligible for Medicare when they reach age 65 and are assumed to enroll in the Medicare-eligible plan corresponding to their current Pre-Medicare plan election. Future retirees are assumed to elect plans in the proportion shown in the table on the next page.

## APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

| Assumed Elections for Future Retirees* | | | |
|---|---|---|---|
| | % Electing | | % Electing |
| **Medical Coverage** | | **In-Lieu** | |
| · Active Members | 80% | · Active Members | 20% |
| · Terminated Vested Members | 50% | · Terminated Vested Members | 50% |

** Eligible for coverage*

| Assumed Plan Elections for Future Retirees* | | | |
|---|---|---|---|
| | % Electing | | % Electing |
| **Pre-Medicare Medical Plans** | | **Medicare-Eligible Medical Plans** | |
| · Kaiser DHMO | 8% | · Kaiser Senior Advantage | 41% |
| · Kaiser $25 Co-pay | 56% | · BS Medicare HMO | 6% |
| · Kaiser HDHP | 5% | · BS Medicare PPO | 53% |
| · Sutter Health DHMO | 1% | | |
| · Sutter Health $20 Co-pay | 7% | **Dental Plans (All Retirees)** | |
| · Sutter Health Vista | 0% | · Delta Dental PPO | 99% |
| · PPO $25 Co-pay | 23% | · DeltaCare HMO | 1% |

** Eligible for coverage and elect coverage*

### 7. Family Composition

80% of married males and 50% of married females will elect spouse coverage in a medical plan at retirement.

100% of employees with a spouse will elect spouse coverage in a dental plan at retirement.

Pre-Medicare, 47% of males and 35% of females will cover children.

### 8. Enrollment by Rating Tier:

For current retirees, their actual enrollment by rating tier is used to value the explicit subsidy. For future retirees, the following assumptions are used:

## APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

| Assumed Rating Tier Elections for Future Retirees | | | | |
|---|---|---|---|---|
| | Single | Emp/Sp | Emp/Chd | Family |
| Pre-Medicare Medical Plans | | | | |
| Males | 19% | 34% | 7% | 40% |
| Females | 52% | 13% | 21% | 14% |
| Medicare Medical Plans | | | | |
| Males | 26% | 74% | 0% | 0% |
| Females | 73% | 27% | 0% | 0% |

### 9. Dependent Age

For current retirees, actual spouse date of birth was used when available. For future retirees, husbands are assumed to be three years older than their wives.

### 10. Married Percentage

| Percentage Married | |
|---|---|
| Gender | Percentage |
| Males | 85% |
| Females | 85% |

### 11. Administrative Expenses

For FYE 2020, trust administrative expenses are assumed to equal $53.69 per full benefit member and are assumed to increase at the wage inflation assumption of 3.25% per annum.

### 12. Changes Since the Last Valuation

Plan enrollment assumptions were updated based on recent experience and the expected impact of added and dropped plans.

The trust administrative expense assumption was added.

In-Lieu election and period coverage assumptions were added.

## Claim and Health Plan Benefit Expense Assumptions

The claim and expense assumptions shown below were adopted by the Board of Administration at the January 10, 2019 Board meeting based upon our recommendations.

The claims costs are based on the fully insured premiums charged to the City for the active and retiree population in 2018 and 2019. For non-Medicare adults, the premiums for each coverage tier (retiree only, retiree plus spouse, retiree plus child(ren) and retiree plus family) were blended based on enrollment data for the 2018 calendar year. The same process was used for Medicare adults, except only Medicare-eligible retirees were included. The resulting per person per month (PPPM) cost was then adjusted using age curves. The pre-Medicare adult claims curves were then loaded for the cost of children; the load for children decreases by retiree age since older retirees have fewer children. The impact of children on Medicare costs was assumed to be de minimis. All claims costs are developed separately for the Federated, Police, and Fire Postemployment Healthcare Plans of the City of San José.

This report does not reflect future changes in benefits, penalties, taxes, or administrative costs that may be required as a result of the Patient Protection and Affordable Care Act of 2010 related legislation and regulations.

### 1. Average Annual Claims and Expense Assumptions

The following claim and expense assumptions were developed as of July 1, 2018 based on the premiums for 2018 and 2019. The explicit subsidy amount (100% of the premium for the lowest cost health plan available to active City employees) is assumed to grow based on the Pre-Medicare cost trend rates.

The following tables show the claims costs for each medical plan as of the valuation date:

| Sample Claims Costs - Non-Medicare Eligible | | | | | | |
|---|---|---|---|---|---|---|
| | Kaiser DHMO | | Kaiser $25 Co-Pay | | Kaiser HDHP | |
| Age | Male | Female | Male | Female | Male | Female |
| 40 | 6,708 | 8,154 | 11,215 | 13,820 | 13,599 | 16,675 |
| 45 | 6,770 | 7,886 | 11,502 | 13,514 | 13,866 | 16,241 |
| 50 | 7,055 | 7,963 | 12,193 | 13,830 | 14,609 | 16,541 |
| 55 | 7,702 | 8,342 | 13,536 | 14,690 | 16,123 | 17,485 |
| 60 | 8,894 | 8,673 | 15,860 | 15,462 | 18,794 | 18,324 |
| 64 | 10,390 | 8,459 | 18,698 | 15,217 | 22,088 | 17,978 |

## APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

| Sample Claims Costs - Non-Medicare Eligible | | | | | | |
|---|---|---|---|---|---|---|
| | Sutter DHMO | | Sutter $20 Co-pay | | PPO $100 Co-pay | |
| Age | Male | Female | Male | Female | Male | Female |
| 40 | 5,751 | 7,032 | 8,591 | 10,656 | 14,001 | 17,484 |
| 45 | 5,844 | 6,833 | 8,879 | 10,474 | 14,585 | 17,276 |
| 50 | 6,135 | 6,939 | 9,486 | 10,783 | 15,709 | 17,897 |
| 55 | 6,746 | 7,313 | 10,610 | 11,525 | 17,705 | 19,248 |
| 60 | 7,840 | 7,644 | 12,512 | 12,196 | 21,012 | 20,480 |
| 64 | 9,196 | 7,485 | 14,809 | 12,050 | 24,967 | 20,313 |

| Sample Claims Costs - Medicare Eligible | | | | | | |
|---|---|---|---|---|---|---|
| | Kaiser Senior Adv | | BS Med HMO | | BS Med PPO | |
| Age | Male | Female | Male | Female | Male | Female |
| 65 | 3,401 | 3,000 | 3,401 | 3,000 | 5,742 | 5,066 |
| 70 | 3,611 | 3,059 | 3,611 | 3,059 | 6,098 | 5,165 |
| 75 | 4,151 | 3,440 | 4,151 | 3,440 | 7,009 | 5,808 |
| 80 | 4,713 | 3,901 | 4,713 | 3,901 | 7,959 | 6,587 |
| 85 | 5,090 | 4,263 | 5,090 | 4,263 | 8,595 | 7,198 |

| Sample Claims Costs - Dental | | | | |
|---|---|---|---|---|
| | Delta Dental PPO | | DeltaCare HMO | |
| Age | Male | Female | Male | Female |
| All | 729 | 729 | 317 | 317 |

2. **Medicare Part D Subsidy**

   Per GASB guidance, the Part D Subsidy has not been reflected in this valuation.

3. **Medicare Part B**

   All Medicare eligible retirees are assumed to participate in Medicare Part B.

4. **Medicare Eligibility**

   All retirees who turn age 65 are assumed to be eligible for Medicare.

5. **Annual Limits**

   Assumed to increase at the same rate as trend.

6. **Lifetime Maximums**

   Are not assumed to have any financial impact.

7. **Geography**

   Implicitly assumed to remain the same as current retirees.

8. **Retiree Contributions**

   Retirees pay the difference between the actual premium for the elected medical plan and the lowest cost medical plan available to active members, if the retiree is eligible to receive the explicit subsidy. No retiree contributions are required for dental.

9. **Changes Since the Last Valuation**

   None.

# APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

## Contribution Allocation Procedure

The contribution allocation procedure primarily consists of an actuarial cost method, an asset smoothing method, and an amortization method as described below.

1. **Actuarial Cost Method**

   The Entry Age actuarial cost method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund the retirement benefits between each member's date of hire and assumed retirement. The Actuarial Liability is the difference between the present value of future benefits and the present value of future normal costs. Or, equivalently, it is the accumulation of normal costs for all periods prior to the valuation date. The normal cost and Actuarial Liability are calculated on an individual basis. The sum of the individual amounts is the normal cost and Actuarial Liability for the Plan. The Actuarial Liability for the Plan represents the target amount of assets the Plan should have as of the valuation date according to the actuarial cost method.

2. **Asset Valuation Method**

   The Actuarial Value of Assets equals the Market Value of Assets.

3. **Amortization Method**

   The Unfunded Actuarial Liability is the difference between the Actuarial Liability and the Actuarial Value of Assets. The Unfunded Actuarial Liability as of June 30, 2017 was amortized as a level percent of payroll over a closed 25-year period. All future amortization based will be amortized over 25-year periods with a 3-year phase-in and phase-out.

4. **Contributions**

   The City will contribute the annual implicit subsidy as part of active employee health premiums and will prefund the explicit subsidy based on the normal cost, administrative expenses, and the amortization payment described above less expected employee contributions. The City has the option to limit its contribution to no more than 11% of total payroll.

   Active members that are eligible for full benefits will contribute 8.00% of pay.

5. **Changes Since the Last Valuation**

   None.

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

### POSTEMPLOYMENT HEALTHCARE PLAN

**Eligibility:** Employees hired before July 2013 that did not elect to opt-in to the Voluntary Employees' Beneficiary Association (VEBA).

**Medical/Dental:**

Employees who retire (include deferred vested members) with at least 15 years of service with the City ("OPEB benefit service"), or with a monthly pension equal to at least 37.5% of final compensation, are eligible to elect medical coverage upon retirement. Tier 1 employees (hired before August 4, 2013) are eligible for unreduced service retirement at age 55 with 20 years of service, age 50 with 25 years of service, age 70 with no service requirement, or any age with 30 years of service. Reduced service retirement is available at age 50 with 20 years of service. Tier 2 employees (hired on or after August 4, 2013) are eligible for unreduced service retirement at age 60 with 10 years of service or reduced service retirement at age 50 with 10 years of service. Service credited through reciprocity agreements counts towards an employee's required service to retire, but only service with the City counts towards the required years of service to receive OPEB benefits.

Employees who become disabled with at least 15 years of service or have a monthly pension equal to at least 37.5% of final compensation are eligible to elect medical coverage upon retirement.

Spouses or domestic partners of retired members are allowed to participate if they were enrolled in the City's medical plan at the time of the member's retirement. Dependent children are eligible to receive coverage until the age of 26.

Surviving spouses/domestic partners/children of deceased members are eligible for coverage if the following conditions are met:

The employee has 15 years of service at time of death or is entitled to a monthly pension of at least 37.5% of final compensation; and,
Both the member and the survivors were enrolled in the active medical plan immediately before death; and,
The survivor will receive a monthly pension benefit.

Employees who separate from service after July 5, 1992 with 20 years of service, leaving contributions in the retirement plan, are eligible to elect medical and/or dental coverage upon retirement.

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

**Benefits for Retirees:**

**Medical:** The Retirement System, through the medical benefit account, pays 100% of the premium for the lowest cost health plan available to active City employees. The member pays the difference if another plan is elected.

To the extent that the elected plan premium is less than the maximum subsidy amount, Medicare-eligible retirees receive reimbursement of Medicare Part B premiums for themselves and their covered spouse, if applicable.

**Dental:** The Retirement System, through the medical benefit account, pays 100% of the dental insurance premiums.

**Premiums:** Monthly premiums before adjustments for 2018 and 2019 are as follows.

| 2018 Monthly Premiums | | | | |
|---|---|---|---|---|
| | Single | Emp/Sp | Emp/Chd | Family |
| **Medical** | | | | |
| Non-Medicare Monthly Rates | | | | |
| Kaiser DHMO | $486.24 | $972.48 | $850.92 | $1,458.72 |
| Kaiser $25 Co-pay | 593.84 | 1,187.68 | 1,039.22 | 1,781.52 |
| Kaiser HDHP | 409.70 | 819.40 | 716.98 | 1,229.10 |
| Blue Shield PPO $25 Co-pay | 1,104.14 | 2,208.26 | 1,932.26 | 3,312.40 |
| Sutter Health $20 Co-pay | 627.26 | 1,254.52 | 1,097.66 | 1,881.72 |
| Sutter Health DHMO | 513.62 | 1,027.22 | 898.84 | 1,540.86 |
| Medicare-Eligible Monthly Rates | | | | |
| Kaiser Senior Advantage | $306.28 | $612.56 | $612.56 | $918.84 |
| Blue Shield Medicare PPO / POS | 528.57 | 1,057.14 | 1,057.14 | 1,885.26 |
| Blue Shield Medicare HMO | 602.56 | 1,205.12 | 1,205.12 | 1,205.12 |
| **Dental** | | | | |
| Delta Dental PPO | $50.88 | $111.92 | $122.12 | $157.72 |
| DeltaCare HMO | 24.44 | 48.86 | 42.74 | 73.30 |

*Blue Shield HMO Medicare family rates assume the children are on the Non-Medicare $20 Co-pay HMO.*

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

| 2019 Monthly Premiums | | | | |
|---|---|---|---|---|
| | Single | Emp/Sp | Emp/Chd | Family |
| **Medical** | | | | |
| Non-Medicare Monthly Rates | | | | |
| Kaiser DHMO | $528.20 | $1,056.40 | $924.36 | $1,584.60 |
| Kaiser $25 Co-pay | 645.08 | 1,290.16 | 1,128.88 | 1,935.24 |
| Kaiser HDHP | 445.04 | 890.08 | 778.82 | 1,335.12 |
| Blue Shield PPO $25 Co-pay | 1,435.38 | 2,870.74 | 2,511.94 | 4,306.12 |
| Sutter Health $20 Co-pay | 652.28 | 1,304.56 | 1,141.44 | 1,956.78 |
| Sutter Health DHMO | 534.06 | 1,068.12 | 934.56 | 1,602.12 |
| Sutter Health Vista | 445.74 | 891.50 | 780.04 | 1,337.22 |
| Medicare-Eligible Monthly Rates | | | | |
| Kaiser Senior Advantage | $300.80 | $601.60 | $601.60 | $902.40 |
| Blue Shield Medicare PPO | 528.57 | 1,057.14 | 1,057.14 | 1,585.71 |
| Blue Shield Medicare HMO | 602.56 | 1,205.12 | 1,205.12 | 1,807.68 |
| **Dental** | | | | |
| Delta Dental PPO | $50.88 | $111.92 | $122.12 | $157.72 |
| DeltaCare HMO | 24.44 | 48.86 | 42.74 | 73.30 |

*Blue Shield HMO Medicare family rates assume the children are on the Non-Medicare $20 Co-pay HMO.*

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

### Summary of 2019 Benefit Plans:

| Non-Medicare Plans: | Kaiser $25 Co-Pay | Kaiser DHMO | Kaiser High Deductible | Sutter Health Plus $20 Co-Pay HMO | Sutter Health Plus $1,500 Deductible | Sutter Health Plus Vista $2,500 Deductible | Blue Shield PPO $25 Co-Pay (In Network) |
|---|---|---|---|---|---|---|---|
| Annual Out-of-Pocket Maximum (one person/family) | $1,500/ $3,000 | $4,000/ $8,000 | $5,950/ $11,900 | $1,500/ $3,000 | $4,000/ $8,000 | $4,000/ $8,000 | $2,100/ $4,200 |
| Annual Deductible (one person/family) | None | $1,500/ $3,000 | $3,000/ $6,000 | None | $1,500/ $3,000 | $2,500/ $5,000 | $100/$200 |
| Office Visit copay | $25 | $40 | 30%* | $20 | $20 | 20%* | $25 |
| Emergency Room copay | $100 | 30%* | 30%* | $100 | 30%* | 20%* | $100 |
| Hospital Care copay | $100 | 30%* | 30%* | $100 | 30%* | 20%* | $100 |
| Prescription Drug retail copay (30-day supply): | | | | | | | |
| Generic | $10 | $10 | $10 | $10 | $10 | $10 | $10 |
| Brand | $25 | $30 | $30 | $30 | $30 | $30 | $25 |
| Non-Formulary | N/A | N/A | N/A | $60 | $60 | $60 | $40 |

** After deductible is paid.*

| Medicare-Eligible Plans: | Kaiser | BS HMO | BS PPO |
|---|---|---|---|
| Annual Out-of-Pocket Maximum (one person/family) | $1,500/$3,000 | $1,000/$2,000 | $2,000/$4,000 |
| Annual Deductible (one person/family) | None | None | $100/$200 |
| Office Visit copay | $25 | $25 | $25 |
| Emergency Room copay | $50 | $100 | $100 |
| Hospital Care copay | $250 | $100 | $100 + 10% |
| Prescription Drug retail copay (30-day supply): | | | |
| Generic | $10 | $10 | $10 |
| Brand | $10 | $25 | $25 |
| Non-Formulary | N/A | $40 | $40 |

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

### Cost-Sharing Provisions:

It is assumed for the purpose of this valuation that the City of San José will in the future maintain a consistent level of cost sharing for benefits with the retirees. This may be achieved by adjusting benefit provisions, contributions or both.

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

### VOLUNTARY EMPLOYEES' BENEFICIARY ASSOCIATION (VEBA)

**Eligibility:** Employees hired after June 2013 or employees who elected to opt-in to the Voluntary Employees' Beneficiary Association (VEBA).

**Contributions:** Employees are required to make mandatory contributions into the VEBA on a pre-tax basis.

**Medical:** VEBA funds can be used to reimburse members for eligible healthcare expenses.

VEBA members on service-connected disability will receive benefits from the Postemployment Healthcare Plan only up to age 65 once VEBA funds exhausted

**Note: The summary of major plan provisions is designed to outline principal plan benefits. If the Department of Retirement Services should find the plan summary not in accordance with the actual provisions, the actuary should immediately be alerted so the proper provisions are valued.**

## APPENDIX D – GLOSSARY OF TERMS

### 1. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, and retirement; changes in compensation; rates of investment earnings, and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and, other relevant items.

### 2. Actuarial Cost Method

A procedure for determining the actuarial present value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a normal cost and an Actuarial Liability.

### 3. Actuarial Gain (Loss)

A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

### 4. Actuarial Liability

The portion of the actuarial present value of projected benefits that will not be paid by future normal costs. It represents the value of the past normal costs with interest to the valuation date.

### 5. Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments. The actuarial present value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made. As a simple example: assume you owe $100 to a friend one year from now. Also, assume there is a 1% probability of your friend dying over the next year, in which case you will not be obligated to pay him. If the assumed investment return is 10%, the actuarial present value is:

| Amount | Probability of Payment | | $\frac{1}{(1+\text{Discount Rate})}$ | | |
|---|---|---|---|---|---|
| $100 | x | (1 - .01) | 1/(1+.1) | = | $90 |

### 6. Actuarial Valuation

The determination, as of a specified date, of the normal cost, Actuarial Liability, Actuarial Value of Assets, and related actuarial present values for a pension plan.

## APPENDIX D – GLOSSARY OF TERMS

### 7. Actuarial Value of Assets

The value of cash, investments, and other property belonging to a pension plan as used by the actuary for the purpose of an actuarial valuation. The purpose of an Actuarial Value of Assets is to smooth out fluctuations in market values. This way long-term costs are not distorted by short-term fluctuations in the market.

### 8. Amortization Payment

The portion of the pension plan contribution, which is designed to pay interest and principal on the Unfunded Actuarial Liability in order to pay for that liability in a given number of years.

### 9. Entry Age Normal Actuarial Cost Method

A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated as a level percentage of pay from the individual's date of entry into the plan to the individual's assumed cessation of employment.

### 10. Normal Cost

That portion of the actuarial present value of pension plan benefits and expenses which is allocated to a valuation year by the actuarial cost method.

### 11. Unfunded Actuarial Liability

The excess of the Actuarial Liability over the Actuarial Value of Assets.

### 12. Funded Percentage

The ratio of the Actuarial Value of Assets to the Actuarial Liability.

### 13. Mortality Table

A set of percentages that estimate the probability of death at a particular point in time. Typically, the rates are annual and based on age and sex.

### 14. Discount Rate

The assumed interest rate used for converting projecting dollar related values to a present value as of the valuation date.

## APPENDIX D – GLOSSARY OF TERMS

### 15. Medical Trend

The assumed increase in dollar related values in the future due to the increase in the cost of health care.

## APPENDIX E – LIST OF ABBREVIATIONS

Actuarial Accrued Liability (AAL)
Actuarial Valuation Report (AVR)
Annual Required Contribution (ARC)
Coordination of Benefits (COB)
Deductible and Coinsurance (DC)
Deferred Retirement Option Plan (DROP)
Durable Medical Equipment (DME)
Employee Assistance Program (EAP)
Employee Benefits Division (EBD)
Fiscal Year Ending (FYE)
Governmental Accounting Standards Board (GASB)
Hospital Emergency Room (ER)
In-Network (INN)
Inpatient (IP)
Medicare Eligible (ME)
Net Other Postemployment Benefit (NOO)
Non-Medicare Eligible (NME)
Not Applicable (NA)
Office Visit (OV)
Other Postemployment Benefit (OPEB)
Out-of-Network (OON)
Out-of-Pocket (OOP)
Outpatient (OP)
Pay-as-you-go (PAYGo)
Per Person Per Month (PPPM)
Pharmacy (Rx)
Preferred Provider Organization (PPO)
Primary Care Physician (PCP)
Specialist Care Provider (SCP)
Summary Plan Description (SPD)
Unfunded Actuarial Accrued Liability (UAAL)
Unfunded Actuarial Liability (UAL)
Urgent Care (UC)

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