



**CITY OF SAN RAFAEL
RETIREE HEALTHCARE PLAN**

**June 30, 2019 Actuarial Valuation
Plan Funding for 2020/21 and 2021/22**

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June 29, 2020

CONTENTS

| Topic | Page |
|----------------------------------|-------------|
| Benefit Summary | 1 |
| Implied Subsidy | 5 |
| Data Summary | 7 |
| Actuarial Assumptions Highlights | 11 |
| Assets | 17 |
| Results | 21 |
| Actuarial Certification | 37 |
| Exhibits | |
| Premiums | E – 1 |
| Participant Statistics | E – 3 |
| Actuarial Assumptions | E – 19 |
| Actuarial Methods | E – 26 |
| Definitions | E – 27 |

BENEFIT SUMMARY

| | Elected Officials, Unrepresented Mid Management & Management | All other Bargaining Units¹ |
|----------------------------|---|---|
| ■ Eligibility ² | ■ Retire directly from City: <ul style="list-style-type: none"> • Age 50 (age 55 if hired \geq 7/1/11 for Miscellaneous) with 10 years service (including reciprocity) or • 30 years service (Miscellaneous), 20 years service (Safety); or • Age 70 • Disability retirement | |
| ■ Benefit | ■ Hired < 1/1/09 Full premium/cap ■ Hired \geq 1/1/09 PEMHCA Min | ■ Hired < 1/1/10 Up to cap ■ Hired \geq 1/1/10 PEMHCA Min ³ |
| ■ Surviving Spouse Benefit | ■ Benefit continues to surviving spouse | |

¹ Annual active conversion of 50 hours of sick leave to HRA (excluded from valuation)

² Age 52 and 5 or age 70 for Miscellaneous PEPRA members, age 50 and 5 or age 70 for Safety PEPRA members

³ City match 2% Firefighters salary to HRA (excluded from valuation)



June 29, 2020



BENEFIT SUMMARY

| | Elected Officials, Unrepresented Mid Management & Management | All other Bargaining Units⁴ |
|-------------------|---|---|
| ■ Medicare Part B | ■ Hired < 4/1/07 Full reimbursement ■ Hired \geq 4/1/07 None | ■ None |
| ■ Other OPEB | ■ No Dental, Vision, or Life Benefits | |

⁴ Annual active conversion of 50 hours of sick leave to HRA (excluded from valuation)



June 29, 2020



BENEFIT SUMMARY

| ■ Contributions | <u>Fiscal Year</u> | <u>Cash Pay-Go</u> | <u>Implied Subsidy</u> | <u>Trust</u> | <u>Total</u> |
|-----------------|--------------------|--------------------|------------------------|--------------|--------------|
| | | 2018/19 | \$ 2,409,000 | \$ 663,000 | \$ 646,000 |
| | 2017/18 | 2,257,000 | 771,000 | 535,000 | 3,563,000 |
| | 2016/17 | 2,233,000 | 782,000 | 460,000 | 3,475,000 |
| | 2015/16 | 2,194,000 | 702,000 | - | 2,896,000 |
| | 2014/15 | 2,100,000 | - | 150,000 | 2,250,000 |
| | 2013/14 | 2,100,000 | - | 500,000 | 2,600,000 |
| | 2012/13 | 2,073,000 | - | 500,000 | 2,573,000 |
| | 2011/12 | 2,124,000 | - | - | 2,124,000 |
| | 2010/11 | 1,808,000 | - | (1,000,000) | 808,000 |
| | 2009/10 | 1,755,000 | - | (1,000,000) | 755,000 |



June 29, 2020



BENEFIT SUMMARY

| Bargaining Unit | Monthly Cap | Min Date⁵ |
|---|---|-----------------------------|
| SEIU Child Care Unit | \$543 | 1/1/10 |
| Unrepresented Mid-Management Employees | Retired < 12/1/01: \$442 Retired ≥ 12/1/01: Full prem Hired ≥ 4/1/07: \$600 | 1/1/09 |
| San Rafael Fire Chief Officer's Association | \$557 | 1/1/10 |
| San Rafael Firefighters' Association, I.A.F.F., Local 1775 | \$557 | 1/1/10 |
| San Rafael Police Association | \$386 | 1/1/10 |
| San Rafael Police Mid-Management Association | \$566 | 1/1/10 |
| SEIU 1021 | \$752 | 1/1/10 |
| Public Employees Bargaining Unit (PEU) Local 1 | \$659 | 1/1/10 |
| Unrepresented Management Employees and Council City Clerk and Elected Part-Time City Attorney | Hired < 4/1/07: Full prem. Hired ≥ 4/1/07: \$600 | 1/1/09 |
| Western Council of Engineers (WCE) | \$752 | 1/1/10 |

⁵ Employees hired on or after date receive only PEMHCA minimum (\$136 in 2019, \$139 in 2020).

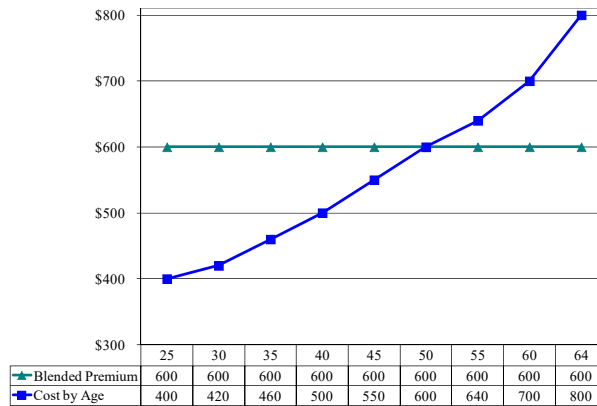


June 29, 2020

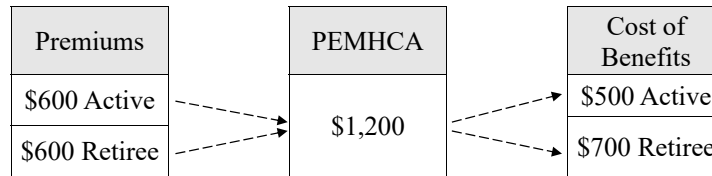


IMPLIED SUBSIDY

- For PEMHCA, employer cost for allowing retirees to participate at active rates.
 - General trend:



- Sample active age 40, retire age 60:



June 29, 2020



IMPLIED SUBSIDY

- GASB defers to actuarial standards of practice
- Previous Actuarial Standards of Practice No. 6⁶ (ASOP 6) allowed community rated plans to value liability using premiums, resulting in no implied subsidy
- In May 2014, Actuarial Standards Board released revised ASOP 6:
 - Requires implied subsidy valued for community rated plans such as PEMHCA
 - Timing: effective with all valuations on or after March 31, 2015 with earlier implementation encouraged
 - Valuations on and after 6/30/15 include the implied subsidy

⁶ Measuring Retiree Group Benefits Obligations and Determining Retiree Group Benefits Plan Costs or Contributions.



June 29, 2020



DATA SUMMARY

Actives

| | 6/30/07 | 6/30/09 ⁷ | 6/30/11 ⁸ | 6/30/13 ⁹ | 6/30/15 | 6/30/17 | 6/30/19 |
|---------------------|------------|----------------------|----------------------|----------------------|------------|------------|------------|
| ■ Count | | | | | | | |
| • Cap | 408 | 377 | 326 | 294 | 261 | 213 | 165 |
| • PEMHCA Min | <u>n/a</u> | <u>4</u> | <u>35</u> | <u>76</u> | <u>115</u> | <u>149</u> | <u>191</u> |
| • Total | 408 | 381 | 361 | 370 | 376 | 366 | 356 |
| ■ Average | | | | | | | |
| • Age | 44.7 | 44.3 | 44.6 | 44.0 | 44.4 | 44.2 | 43.1 |
| • City Service | 11.6 | 10.7 | 10.9 | 11.1 | 11.2 | 11.3 | 10.5 |
| • Pay | \$72,800 | \$77,900 | \$77,000 | \$77,900 | \$ 80,700 | \$ 88,800 | \$ 94,100 |
| ■ Total Pay (000's) | 29,719 | 29,689 | 27,784 | 28,808 | 30,346 | 32,506 | 33,491 |

⁷ Data as of April 2010.

⁸ Data as of December 2011.

⁹ Data as of October 2013.



June 29, 2020



DATA SUMMARY

Retirees

| | 6/30/07 | 6/30/09 ¹⁰ | 6/30/11 ¹¹ | 6/30/13 ¹² | 6/30/15 | 6/30/17 | 6/30/19 |
|---------------------------------|---------|-----------------------|-----------------------|-----------------------|---------|---------|---------|
| ■ Count | 247 | 291 | 308 | 328 | 323 | 337 | 359 |
| ■ Average | | | | | | | |
| • Age | 66.6 | 65.9 | 66.7 | 67.4 | 68.7 | 70.0 | 70.3 |
| • Retirement Age ¹³ | | | | | | | |
| ➤ Misc. | n/a | 59.3 | 59.5 | 59.1 | 59.3 | 59.3 | 59.7 |
| ➤ Safety | n/a | 54.1 | 54.8 | 55.2 | 54.9 | 54.8 | 55.2 |
| • Monthly Benefit ¹⁴ | \$ 480 | \$ 537 | \$ 573 | \$ 554 | \$ 629 | \$ 640 | \$ 644 |

¹⁰ Data as of April 2010.

¹¹ Data as of December 2011.

¹² Data as of October 2013.

¹³ Service retirements only.

¹⁴ Excludes Medicare Part B reimbursement.



June 29, 2020



DATA SUMMARY

Parking Fund/SRSD
6/30/19 Participant Statistics¹⁵

| | Parking Fund | SRSD | Other | Total |
|---------------------|---------------------|-------------|--------------|--------------|
| ■ Actives | | | | |
| • Counts | 19 | 14 | 323 | 356 |
| • Averages | | | | |
| ➤ Age | 47.8 | 48.5 | 42.6 | 43.1 |
| ➤ Pay | \$ 70,400 | \$ 89,800 | \$95,600 | 94,100 |
| • Service | | | | |
| ➤ Allocated average | 8.8 | 11.6 | 10.6 | 10.5 |
| ➤ Average in group | 8.9 | 11.8 | 10.6 | 10.5 |
| • Total Pay (000's) | \$ 1,342 | \$ 1,288 | \$ 30,965 | \$ 33,491 |
| ■ Retirees | | | | |
| • Counts | 6 | 8 | 345 | 359 |
| • Average Age | 66.7 | 67.9 | 70.4 | 70.3 |

¹⁵ Counts assigned to groups based upon City research of personnel and financial records for each participant.



DATA SUMMARY

Parking Fund/SRSD
6/30/17 Participant Statistics¹⁶

| | Parking Fund | SRSD | Other | Total |
|---------------------|---------------------|-------------|--------------|--------------|
| ■ Actives | | | | |
| • Counts | 18 | 15 | 333 | 366 |
| • Averages | | | | |
| ➤ Age | 50.9 | 53.3 | 43.4 | 44.2 |
| ➤ Pay | \$65,900 | \$89,700 | \$90,000 | \$88,800 |
| • Service | | | | |
| ➤ Allocated average | 10.4 | 15.4 | 11.2 | 11.3 |
| ➤ Average in group | 10.3 | 14.9 | 11.2 | 11.3 |
| • Total Pay (000's) | \$1,187 | \$1,346 | \$29,973 | \$32,506 |
| ■ Retirees | | | | |
| • Counts | 3 | 5 | 329 | 337 |
| • Average Age | 65.0 | 68.5 | 70.0 | 70.6 |

¹⁶ Counts assigned to groups based upon City research of personnel and financial records for each participant.



ACTUARIAL ASSUMPTIONS HIGHLIGHTS

Discount Rate

■ CERBT Investment Options, allocations revised in 2018

| | Strategy 1 | Strategy 2 | Strategy 3 |
|---------------|------------|------------|------------|
| Global Equity | 59% | 40% | 22% |
| Fixed Income | 25% | 43% | 49% |
| TIPS | 5% | 5% | 16% |
| Commodities | 3% | 4% | 5% |
| REITs | <u>8%</u> | <u>8%</u> | <u>8%</u> |
| Total | 100% | 100% | 100% |

■ City in CERBT Strategy 1



June 29, 2020

11



ACTUARIAL ASSUMPTIONS HIGHLIGHTS

Discount Rate

■ Future expected returns

- Stochastic simulations of geometric average returns over 20 years
- 5,000 trials
- 2.75% inflation assumption
- Projections based on 5 independent Investment Advisors 2017 10-year Capital Market Assumptions and where available, investment advisors anticipated long-term trends
- COVID-19 impact:
 - No adjustment to (long term) discount rate
 - Assets projected for 19/20 with 0% return
- Confidence levels:

| | Strategy 1 | Strategy 2 | Strategy 3 |
|----------------------|--------------|------------|------------|
| 50% Confidence Level | 6.75% | 6.25% | 5.50% |
| 55% Confidence Level | 6.50% | 6.00% | 5.50% |
| 60% Confidence Level | 6.00% | 5.75% | 5.25% |



June 29, 2020

12



ACTUARIAL ASSUMPTIONS HIGHLIGHTS

| Assumption | June 30, 2017 Valuation | June 30, 2019 Valuation |
|---------------------|--|---|
| ■ Valuation Date | ■ June 30, 2017 ■ 2018/19 & 2019/20 | ■ June 30, 2019 ■ 2020/21 & 2021/22 |
| ■ Funding Policy | ■ Pay-go with no CERBT account reimbursement ■ Total payment not < ADC | ■ Same |
| ■ General Inflation | ■ 2.75% | ■ Same |
| ■ Discount Rate | ■ 6.75% | ■ Same |
| ■ Payroll Increases | ■ Aggregate increases – 3.00% ■ Merit Increases – Same as 6/30/17 MCERA assumptions | ■ Aggregate increases – 3.00% ■ Merit Increases – Same as 6/30/19 MCERA assumptions (no change from 6/30/17 MCERA valuation) |
| ■ Cap Increases | ■ None | ■ Same |



June 29, 2020

13



ACTUARIAL ASSUMPTIONS HIGHLIGHTS

| Assumption | June 30, 2017 Valuation | June 30, 2019 Valuation |
|-----------------------------------|--|---|
| ■ Participation at Retirement | <ul style="list-style-type: none"> ■ Actives: <ul style="list-style-type: none"> ● Capped benefit: <ul style="list-style-type: none"> ➢ Currently covered: 100% ➢ Currently waived: 80% ● PEMHCA minimum: 60% ■ Retirees: same as current election | <ul style="list-style-type: none"> ■ Actives: <ul style="list-style-type: none"> ● Capped benefit: <ul style="list-style-type: none"> ➢ Currently covered: 90% ➢ Currently waived: 70% ● PEMHCA minimum: 60% ■ Retirees: same as current election |
| ■ Medicare Eligible Rate | <ul style="list-style-type: none"> ■ Actives and Retirees under 65: <ul style="list-style-type: none"> ● Hired < 4/1/86: 80% Misc, 90% Safety ● Hired > 4/1/86: 100% ■ Retirees over 65: current Medicare eligible status | <ul style="list-style-type: none"> ■ Actives and Retirees under 65: <ul style="list-style-type: none"> ● Hired < 4/1/86: 85% Misc, 95% Safety ● Hired > 4/1/86: 100% ■ Retirees over 65: Same |
| ■ PPACA High Cost Plan Excise Tax | ■ 2.0% cash subsidy load | ■ Removed |



June 29, 2020

14



ACTUARIAL ASSUMPTIONS HIGHLIGHTS

| Assumption | June 30, 2017 Valuation | June 30, 2019 Valuation |
|---|---|---|
| <ul style="list-style-type: none"> ■ Mortality, Withdrawal, Disability | <ul style="list-style-type: none"> ■ 6/30/17 MCERA valuation assumptions ■ Pre-retirement mortality: projected 15-year static with 90% of MP-2016 ■ Post-retirement mortality: projected fully generational with Scale MP-2017 | <ul style="list-style-type: none"> ■ Same ■ Mortality projected fully generational with Scale MP-2019 |



ACTUARIAL ASSUMPTIONS HIGHLIGHTS

| Assumption | June 30, 2017 Valuation | | June 30, 2019 Valuation | | | |
|--|--------------------------------|----------------------------------|--------------------------------|-------------|----------------------------------|-----------------|
| <ul style="list-style-type: none"> ■ Healthcare Trend | | <u>Non-Medicare</u> | <u>Medicare</u> | | <u>Non-Medicare</u> | <u>Medicare</u> |
| | <u>Year</u> | <u>All Plans Actual Premiums</u> | | <u>Year</u> | <u>All Plans Actual Premiums</u> | |
| | 2017 | Actual Premiums | | 2017 | n/a | |
| | 2018 | Actual Premiums | | 2018 | n/a | |
| | 2019 | 7.50% | 6.50% | 2019 | Actual Premiums | |
| | 2020 | 7.50% | 6.50% | 2020 | Actual Premiums | |
| | 2021 | 7.25% | 6.30% | 2021 | 7.25% | 6.30% |
| | 2022 | 7.00% | 6.10% | 2022 | 7.00% | 6.10% |
| | 2023 | 6.75% | 5.90% | 2023 | 6.75% | 5.90% |
| | 2024 | 6.50% | 5.70% | 2024 | 6.50% | 5.70% |
| | 2025 | 6.25% | 5.50% | 2025 | 6.25% | 5.50% |
| | 2026 | 6.00% | 5.30% | 2026 | 6.00% | 5.30% |
| | 2027 | 5.80% | 5.15% | 2027 | 5.80% | 5.15% |
| | 2028 | 5.60% | 5.00% | 2028 | 5.60% | 5.00% |
| | 2029 | 5.40% | 4.85% | 2029 | 5.40% | 4.85% |
| | 2030 | 5.20% | 4.70% | 2030 | 5.20% | 4.70% |
| | 2031-2035 | 5.05% | 4.60% | 2031-2035 | 5.05% | 4.60% |
| | 2036-2045 | 4.90% | 4.50% | 2036-2045 | 4.90% | 4.50% |
| | 2046-2055 | 4.75% | 4.45% | 2046-2055 | 4.75% | 4.45% |
| | 2056-2065 | 4.60% | 4.40% | 2056-2065 | 4.60% | 4.40% |
| | 2066-2075 | 4.30% | 4.20% | 2066-2075 | 4.30% | 4.20% |
| | 2076+ | 4.00% | 4.00% | 2076+ | 4.00% | 4.00% |



ASSETS

Market Value of Plan Assets¹⁷
(000's Omitted)

| | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| ■ Market Value (beginning of year) | \$ 10,889 | \$ 11,178 | \$ 12,666 | \$ 15,492 | \$ 15,608 | \$ 15,757 | \$ 17,873 | \$ 19,824 |
| • Contribution | - | 500 | 500 | 150 | - | 460 | 535 | 646 |
| • Benefit Payments | - | - | - | - | - | - | - | - |
| • Administrative Expenses ¹⁸ | n/a | (0) | (19) | (16) | (13) | (8) | (9) | (10) |
| • Investment Expenses | n/a | n/a | n/a | n/a | n/a | (6) | (7) | (7) |
| • Investment Return | 289 | 988 | 2,346 | (19) | 162 | 1,670 | 1,432 | 1,233 |
| ■ Market Value (end of year) | 11,178 | 12,666 | 15,492 | 15,608 | 15,757 | 17,873 | 19,824 | 21,685 |
| ■ Approximate Return | 2.7% | 8.8% | 18.4% | -0.2% | 1.0% | 10.6% | 7.9% | 6.1% |

¹⁷ MCERA 401(h) account transferred to CERBT 6/26/13.

Commencing 2015/16 CalPERS issues audited financial statements which differ from above.

¹⁸ Beginning in 2016/2017, investment expenses provided separately



June 29, 2020

17



ASSETS

Actuarial Value of Plan Assets¹⁹
(000's Omitted)

| | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 |
|--|----------|----------|----------|----------|----------|----------|----------|----------|
| ■ Actuarial Value (beginning of year) | \$10,861 | \$11,130 | \$12,505 | \$14,253 | \$15,499 | \$16,449 | \$18,057 | \$19,806 |
| • Contribution | - | 500 | 500 | 150 | - | 460 | 535 | 646 |
| • Benefit Payments | - | - | - | - | - | - | - | - |
| • Credited Return | 269 | 875 | 1,248 | 1,096 | 950 | 1,148 | 1,214 | 1,309 |
| ■ Actuarial Value (end of year) | 11,130 | 12,505 | 14,253 | 15,499 | 16,449 | 18,057 | 19,806 | 21,761 |
| ■ Approximate Return | 2.6% | 7.9% | 10.0% | 7.7% | 6.1% | 7.0% | 6.7% | 6.6% |

¹⁹ MCERA asset smoothing through 6/30/12. Rolling 5 year smoothing starting in 2012/13.



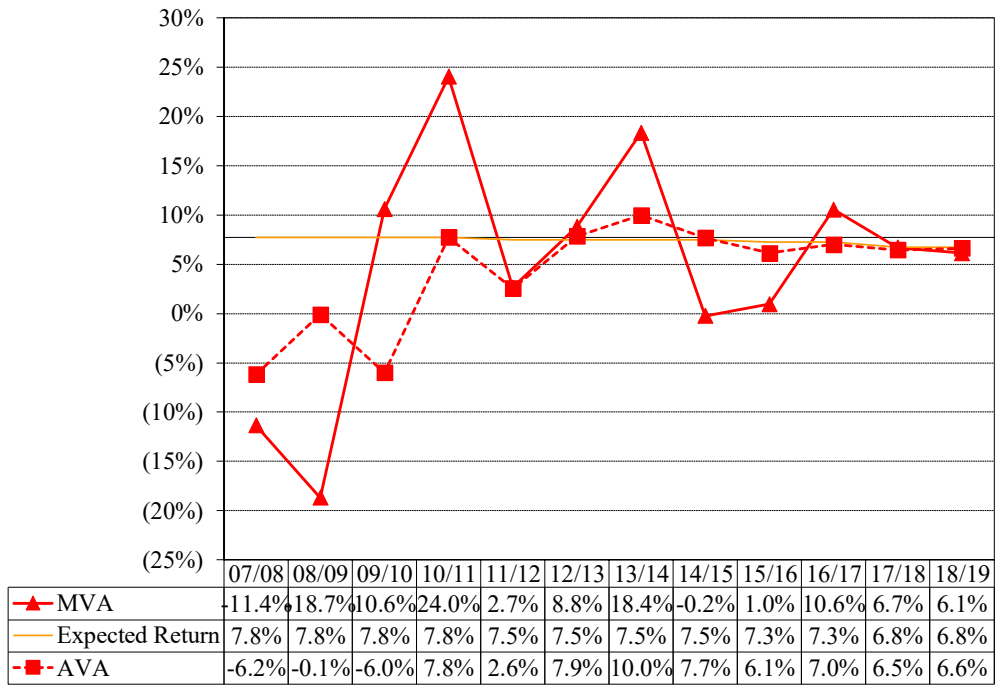
June 29, 2020

18



ASSETS

Historical Returns



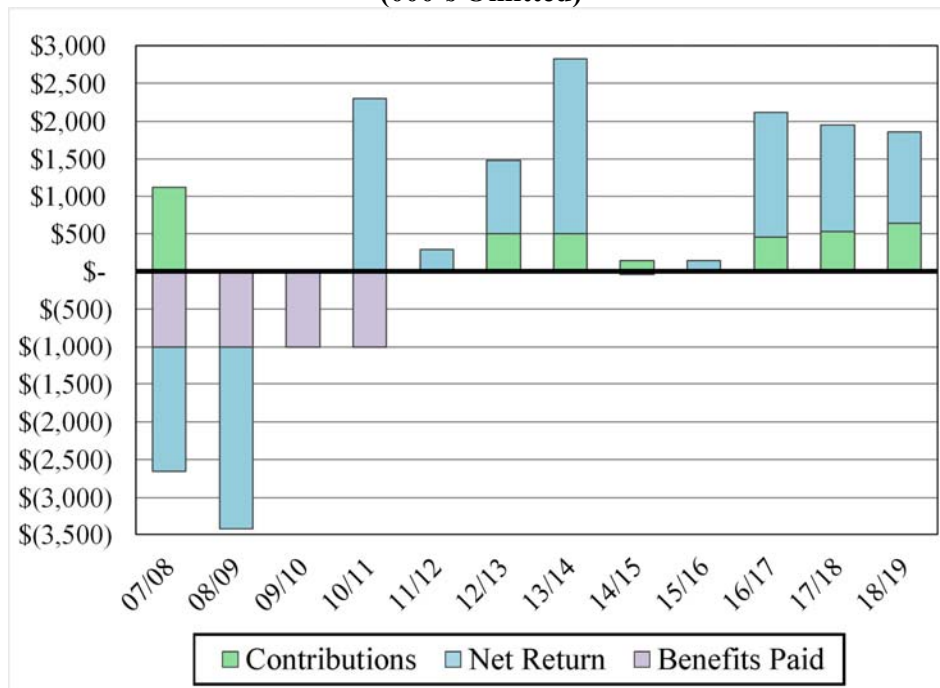
June 29, 2020

19



ASSETS

Actuarial Value of Plan Assets (000's Omitted)



June 29, 2020

20



RESULTS

Funded Status (000's Omitted)

| | 6/30/17 Valuation | | 6/30/19 Valuation | |
|--------------------------------------|-------------------|-------------------|-------------------|-------------------|
| | 6/30/17 | Projected 6/30/18 | 6/30/19 | Projected 6/30/20 |
| ■ Present Value of Benefits | | | | |
| • Actives | \$ 21,211 | | \$ 17,439 | |
| • Retirees | <u>36,891</u> | | <u>36,612</u> | |
| • Total | 58,102 | | 54,051 | |
| ■ Actuarial Accrued Liability | | | | |
| • Actives | 14,690 | | 11,671 | |
| • Retirees | <u>36,891</u> | | <u>36,612</u> | |
| • Total | 51,581 | \$ 52,893 | 48,283 | \$ 48,890 |
| ■ Actuarial Value of Assets | <u>18,057</u> | <u>19,709</u> | <u>21,761</u> | <u>23,645</u> |
| ■ Unfunded AAL | 33,524 | 33,184 | 26,522 | 25,245 |
| ■ Funded Ratio | 35.0% | 37.2% | 45.1% | 48.4% |



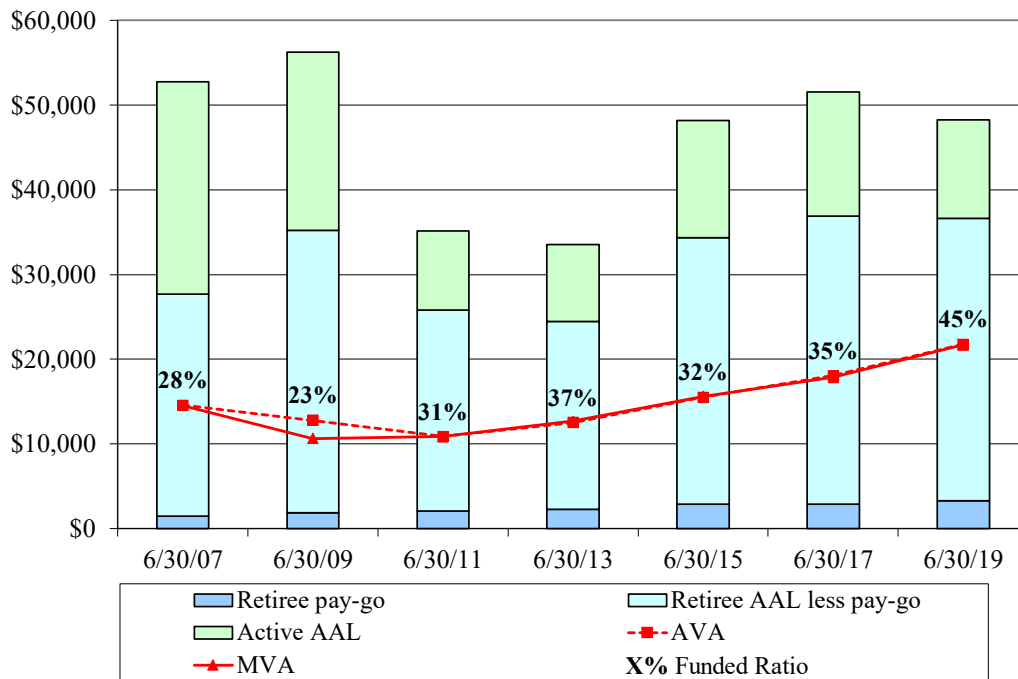
June 29, 2020

21



RESULTS

Historical Funded Status (000's Omitted)



June 29, 2020

22



RESULTS

Actuarial Accrued Liability Gain/Loss
(000's Omitted)

| | AAL |
|--|---------------------------|
| ■ Actual @ 6/30/17 | \$ 51,581 |
| ■ Expected @ 6/30/19 | 54,173 |
| ■ Changes | |
| • Mortality improvement projection | (252) |
| • Medicare eligibility assumption change | (508) |
| • Participation at retirement change | (1,229) |
| • Remove ACA Excise Tax | (745) |
| • Premiums < Expected | (6,342) |
| • Demographic/Other | <u>3,187²⁰</u> |
| • Total | (5,890) |
| ■ Actual @ 6/30/19 | 48,283 |

²⁰ Primarily due to retirees turning 65 in non-Medicare plans.



RESULTS

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RESULTS

Actuarially Determined Contribution (ADC) (000's Omitted)

| | 6/30/2017 Val | | 6/30/2019 Val | |
|------------------------------|---------------|--------------|---------------|--------------|
| | 2018/19 | 2019/20 | 2020/21 | 2021/22 |
| ■ ADC - \$ | | | | |
| • Service Cost ²¹ | \$ 880 | \$ 863 | \$ 746 | \$ 744 |
| • UAAL Amortization | <u>2,732</u> | <u>2,814</u> | <u>2,280</u> | <u>2,349</u> |
| • Total ADC | 3,612 | 3,677 | 3,027 | 3,093 |
| ■ Projected Payroll | 34,486 | 35,520 | 34,496 | 35,531 |
| ■ ADC - % | | | | |
| • Service Cost | 2.6% | 2.4% | 2.2% | 2.1% |
| • UAAL Amortization | <u>7.9%</u> | <u>7.9%</u> | <u>6.6%</u> | <u>6.6%</u> |
| • Total ADC | 10.5% | 10.4% | 8.8% | 8.7% |

²¹ Service cost include estimated CERBT and PEMHCA administrative expenses.



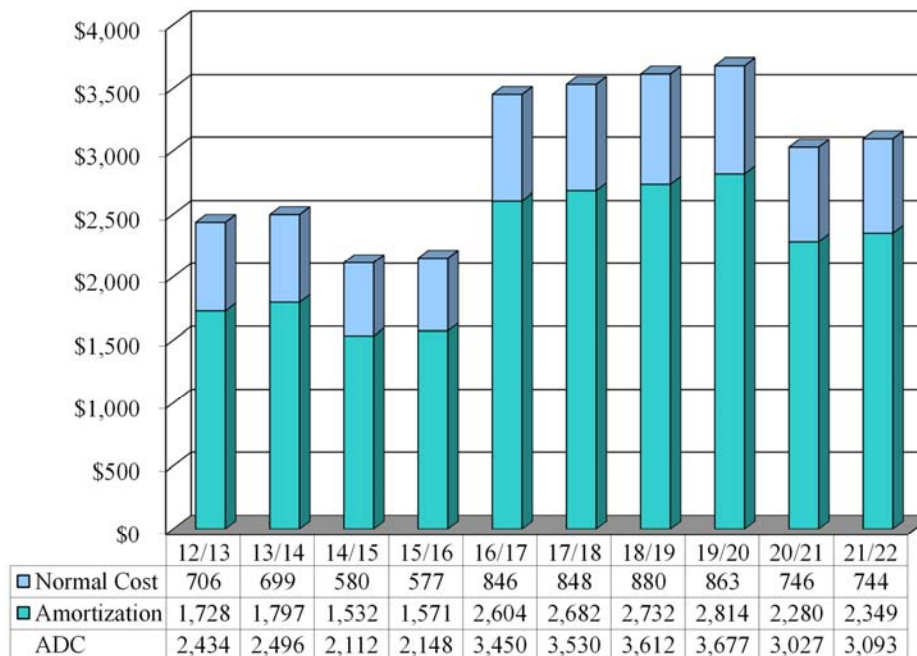
June 29, 2020

25



RESULTS

Actuarially Determined Contribution (ADC) (000's Omitted)



June 29, 2020

26



RESULTS

Amortization Bases
(000's Omitted)

| | 6/30/2017 Val | | 6/30/2019 Val | |
|---------------------------------|---------------|--------------|---------------|--------------|
| | 6/30/18 | 6/30/19 | 6/30/20 | 6/30/21 |
| ■ Outstanding Balance | | | | |
| • Initial UAAL | \$ 44,331 | \$ 43,674 | \$ 42,863 | \$ 41,885 |
| • (Gain)/Loss | | | | |
| ➤ 2009 valuation | (4,232) | (4,169) | (4,092) | (3,998) |
| ➤ 2011 valuation | (26,284) | (25,894) | (25,413) | (24,833) |
| ➤ 2013 valuation | (2,812) | (2,771) | (2,719) | (2,657) |
| ➤ 2015 valuation | 12,401 | 12,218 | 11,991 | 11,717 |
| ➤ 2017 valuation | 851 | 838 | 823 | 804 |
| ➤ 2019 valuation | - | - | (6,840) | (6,684) |
| • Contribution Loss (projected) | <u>8,928</u> | <u>8,796</u> | <u>8,632</u> | <u>8,435</u> |
| • Total | 33,184 | 32,692 | 25,245 | 24,669 |



June 29, 2020

27



RESULTS

Amortization Payments
(000's Omitted)

| | 6/30/2017 Val | | 6/30/2019 Val | |
|---------------------------------|---------------|------------|---------------|------------|
| | 2018/19 | 2019/20 | 2020/21 | 2021/22 |
| ■ Payment | | | | |
| • Initial UAAL | \$ 3,649 | \$ 3,759 | \$ 3,872 | \$ 3,988 |
| • (Gain)/Loss | | | | |
| ➤ 2009 valuation | (348) | (359) | (370) | (381) |
| ➤ 2011 valuation | (2,164) | (2,229) | (2,296) | (2,364) |
| ➤ 2013 valuation | (232) | (238) | (246) | (253) |
| ➤ 2015 valuation | 1,021 | 1,052 | 1,083 | 1,116 |
| ➤ 2017 valuation | 70 | 72 | 74 | 77 |
| ➤ 2019 valuation | | | (618) | (636) |
| • Contribution Loss (projected) | <u>735</u> | <u>757</u> | <u>780</u> | <u>803</u> |
| • Total | 2,732 | 2,814 | 2,280 | 2,349 |
| • Amortization years | 17 | 16 | 15 | 14 |



June 29, 2020

28



RESULTS

Contributions Projection
(000's Omitted)

| Fiscal Year | Contribution | | | | Payroll | Contribution as % of Payroll |
|-------------|-----------------------|----------------------------------|-------------|--------------------|-----------|------------------------------|
| | Cash Benefit Payments | Implied Subsidy Benefit Payments | Pre-Funding | Total Contribution | | |
| 2020/21 | \$ 2,538 | \$ 757 | \$ (268) | \$ 3,027 | \$ 34,496 | 8.8% |
| 2021/22 | 2,584 | 767 | (258) | 3,093 | 35,531 | 8.7% |
| 2022/23 | 2,644 | 785 | (275) | 3,154 | 36,597 | 8.6% |
| 2023/24 | 2,713 | 814 | (306) | 3,221 | 37,694 | 8.5% |
| 2024/25 | 2,773 | 848 | (326) | 3,295 | 38,825 | 8.5% |
| 2025/26 | 2,806 | 845 | (279) | 3,372 | 39,990 | 8.4% |
| 2026/27 | 2,871 | 896 | (318) | 3,449 | 41,190 | 8.4% |
| 2027/28 | 2,932 | 943 | (343) | 3,532 | 42,425 | 8.3% |
| 2028/29 | 2,975 | 973 | (332) | 3,616 | 43,698 | 8.3% |
| 2029/30 | 2,998 | 1,006 | (301) | 3,703 | 45,009 | 8.2% |



June 29, 2020

29



RESULTS

Discount Rate Sensitivity
(000's Omitted)

| | 5.50% | 6.25% | 6.75% | 7.25% |
|---------------------------|---------------|---------------|---------------|---------------|
| ■ PVPB on 6/30/19 | \$ 63,468 | \$ 57,511 | \$ 54,051 | \$ 50,939 |
| ■ Funded Status @ 6/30/19 | | | | |
| • AAL | 55,125 | 50,841 | 48,283 | 45,935 |
| • Assets | <u>24,844</u> | <u>22,914</u> | <u>21,761</u> | <u>20,703</u> |
| • Unfunded AAL | 30,281 | 27,927 | 26,522 | 25,232 |
| ■ 2020/21 ADC | | | | |
| • Service Cost | \$ 979 | \$ 831 | \$ 746 | \$ 672 |
| • UAAL Amort. | <u>2,656</u> | <u>2,427</u> | <u>2,280</u> | <u>2,139</u> |
| • Total ADC | 3,635 | 3,257 | 3,027 | 2,812 |
| • ADC as % of Pay | 10.5% | 9.4% | 8.8% | 8.2% |



June 29, 2020

30



RESULTS

Actuarial Obligations – June 30, 2019

(000's Omitted)

| | Cash Subsidy | Implied Subsidy | Total |
|---|-------------------------|----------------------------|---------------|
| ■ Present Value of Benefits | | | |
| • Actives | \$ 10,913 | \$ 6,526 | \$ 17,439 |
| • Retirees | <u>28,666</u> | <u>7,946</u> | <u>36,612</u> |
| • Total | 39,579 | 14,472 | 54,051 |
| ■ Actuarial Accrued Liability (AAL) | | | |
| • Actives | 7,544 | 4,126 | 11,671 |
| • Retirees | <u>28,666</u> | <u>7,946</u> | <u>36,612</u> |
| • Total | 36,210 | 12,072 | 48,283 |
| ■ Actuarial Value of Assets²² | <u>16,320</u> | <u>5,441</u> | <u>21,761</u> |
| ■ Unfunded AAL | 19,890 | 6,631 | 26,522 |
| ■ 2020/21 Service Cost | 479 | 267 | 746 |
| ■ 2020/21 Pay-As-You-Go Cost | 2,538 | 757 | 3,295 |

²³ For illustrative purposes, assets allocated on AAL.



June 29, 2020

31



RESULTS

Actuarially Determined Contribution (ADC) – Fiscal Year 2020/21

(000's Omitted)

| | Cash Subsidy | Implied Subsidy | Total |
|----------------------------|-------------------------|----------------------------|--------------|
| ■ ADC - \$ | | | |
| • Service Cost | \$ 479 | \$ 267 | \$ 746 |
| • UAAL Amortization | <u>1,704</u> | <u>576</u> | <u>2,280</u> |
| • Total | 2,183 | 843 | 3,027 |
| ■ Projected Payroll | 34,496 | 34,496 | 34,496 |
| ■ ADC - % | | | |
| • Service Cost | 1.4% | 0.8% | 2.2% |
| • UAAL Amortization | <u>4.9%</u> | <u>1.7%</u> | <u>6.6%</u> |
| • Total | 6.3% | 2.4% | 8.8% |



June 29, 2020

32



RESULTS

Actuarial Obligations – June 30, 2019

(000's Omitted)

| | Miscellaneous | Safety | Total |
|--|---------------|---------------|---------------|
| ■ Present Value of Benefits | | | |
| • Actives | \$ 10,486 | \$ 6,953 | \$ 17,439 |
| • Retirees | <u>22,108</u> | <u>14,504</u> | <u>36,612</u> |
| • Total | 32,594 | 21,457 | 54,051 |
| ■ Actuarial Accrued Liability (AAL) | | | |
| • Actives | 7,387 | 4,284 | 11,671 |
| • Retirees | <u>22,108</u> | <u>14,504</u> | <u>36,612</u> |
| • Total | 29,495 | 18,788 | 48,283 |
| ■ Assets²³ | <u>13,293</u> | <u>8,468</u> | <u>21,761</u> |
| ■ Unfunded AAL | 16,202 | 10,320 | 26,522 |
| ■ Service Cost (20/21) | 430 | 316 | 746 |
| ■ Pay Go Costs (20/21) | 2,012 | 1,283 | 3,295 |

²³ For illustrative purposes, assets allocated on AAL.



June 29, 2020

33



RESULTS

Actuarially Determined Contribution (ADC) – Fiscal Year 2020/21

(000's Omitted)

| | Miscellaneous | Safety | Total |
|----------------------------------|---------------|-------------|--------------|
| ■ ADC- \$ | | | |
| • Normal Cost | \$ 430 | \$ 316 | \$ 746 |
| • UAL Amortization ²⁴ | <u>1,392</u> | <u>888</u> | <u>2,280</u> |
| • Total ADC | 1,822 | 1,205 | 3,027 |
| ■ Projected Payroll | 18,321 | 16,175 | 34,496 |
| ■ ADC - % | | | |
| • Normal Cost | 2.3% | 2.0% | 2.2% |
| • UAL Amortization | <u>7.6%</u> | <u>5.5%</u> | <u>6.6%</u> |
| • Total ADC | 9.9% | 7.4% | 8.8% |

²⁴ For illustrative purposes, amortization amount allocated on AAL.



June 29, 2020

34



RESULTS

Parking Fund/SRSD

**Actuarial Obligations – June 30, 2019
(000's Omitted)**

| | Parking Fund | SRSD |
|-------------------------------|---------------------|--------------|
| ■ PVPB | | |
| • Actives | \$ 806 | \$ 1,119 |
| • Retirees | <u>685</u> | <u>1,336</u> |
| • Total | 1,491 | 2,455 |
| ■ AAL | | |
| • Actives | 475 | 813 |
| • Retirees | <u>685</u> | <u>1,336</u> |
| • Total | 1,160 | 2,149 |
| ■ Assets²⁵ | <u>523</u> | <u>969</u> |
| ■ Unfunded AAL | 637 | 1,180 |
| ■ Pay Go Costs (20/21) | 82 | 113 |

²⁵ For illustrative purposes, assets allocated on AAL.



RESULTS

Parking Fund/SRSD Results

**Actuarially Determined Contribution (ADC) – Fiscal Year 2020/21
(000's Omitted)**

| | Parking Fund | SRSD |
|----------------------------------|---------------------|-------------|
| ■ ADC- \$ | | |
| • Service Cost | \$ 44 | \$ 43 |
| • UAL Amortization ²⁶ | <u>56</u> | <u>104</u> |
| • Total ADC | 100 | 147 |
| ■ Projected Payroll | 1,342 | 1,292 |
| ■ ADC - % | | |
| • Service Cost | 3.3% | 3.3% |
| • UAL Amortization | <u>4.2%</u> | <u>8.1%</u> |
| • Total ADC | 7.5% | 11.4% |

²⁶ For illustrative purposes, amortization amount allocated on AAL.



ACTUARIAL CERTIFICATION

This report presents the City of San Rafael Retiree Healthcare Plan ("Plan") June 30, 2019 actuarial valuation. The purpose of this valuation is to:

- Determine the Plan's June 30, 2019 Funded Status, and
- Calculate the 2020/21 and 2021/22 Actuarially Determined Contributions.

Information provided in this report may be useful to the City for the Plan's financial management. Future valuations may differ significantly if the Plan's experience differs from our assumptions or if there are changes in Plan design, actuarial methods or actuarial assumptions. The project scope did not include an analysis of this potential variation.

The valuation is based on Plan provisions, participant data, and asset information provided by the City as summarized in this report, which we relied on and did not audit. We reviewed the participant data for reasonableness.

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

Respectfully submitted,



Doug Pryor, ASA, EA, MAAA
Vice President
Bartel Associates, LLC
June 29, 2020



Tak Frazita, ASA, EA, MAAA
Associate Actuary
Bartel Associates, LLC
June 29, 2020



June 29, 2020

37



ACTUARIAL CERTIFICATION

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June 29, 2020

38



PARTICIPANT STATISTICS

2019 PEMHCA Monthly Premiums

Bay Area

| Plan | Non-Medicare Eligible | | | Medicare Eligible | | |
|--------------------------|-----------------------|-------------|-------------|-------------------|-----------|-------------|
| | Single | 2-Party | Family | Single | 2-Party | Family |
| Anthem Select | \$ 831.44 | \$ 1,662.88 | \$ 2,161.74 | n/a | n/a | n/a |
| Anthem Traditional | 1,111.13 | 2,222.26 | 2,888.94 | \$ 357.44 | \$ 714.88 | \$ 1,072.32 |
| Blue Shield Access+ | 970.90 | 1,941.80 | 2,524.34 | n/a | n/a | n/a |
| Health Net SmartCare | 901.55 | 1,803.10 | 2,344.03 | n/a | n/a | n/a |
| Kaiser | 768.25 | 1,536.50 | 1,997.45 | 323.74 | 647.48 | 971.22 |
| UnitedHealthcare | n/a | n/a | n/a | 299.37 | 598.74 | 898.11 |
| Western Health Advantage | 767.01 | 1,534.02 | 1,994.23 | n/a | n/a | n/a |
| PERS Choice | 866.27 | 1,732.54 | 2,252.30 | 360.41 | 720.82 | 1,081.23 |
| PERS Select | 543.19 | 1,086.38 | 1,412.29 | 360.41 | 720.82 | 1,081.23 |
| PERSCare | 1,131.68 | 2,263.36 | 2,942.37 | 394.83 | 789.66 | 1,184.49 |



June 29, 2020

E - 1



PARTICIPANT STATISTICS

2020 PEMHCA Monthly Premiums

Region 1

| Medical Plan | Non-Medicare Eligible | | | Medicare Eligible | | |
|--------------------------|-----------------------|-------------|-------------|-------------------|-----------|------------|
| | Single | 2-Party | Family | Single | 2-Party | Family |
| Anthem Select | \$ 868.98 | \$ 1,737.96 | \$ 2,259.35 | \$ 388.15 | \$ 776.30 | \$1,164.45 |
| Anthem Traditional | 1,184.84 | 2,369.68 | 3,080.58 | 388.15 | 776.30 | 1,164.45 |
| Blue Shield Access+ | 1,127.77 | 2,255.54 | 2,932.20 | n/a | n/a | n/a |
| Blue Shield Trio | 833.00 | 1,666.00 | 2,165.80 | n/a | n/a | n/a |
| Health Net SmartCare | 1,000.52 | 2,001.04 | 2,601.35 | n/a | n/a | n/a |
| Kaiser | 768.49 | 1,536.98 | 1,998.07 | 339.43 | 678.86 | 1,018.29 |
| UnitedHealthcare | 899.94 | 1,799.88 | 2,339.84 | 327.03 | 654.06 | 981.09 |
| Western Health Advantage | 731.96 | 1,463.92 | 1,903.10 | n/a | n/a | n/a |
| PERS Choice | 861.18 | 1,722.36 | 2,239.07 | 351.39 | 702.78 | 1,054.17 |
| PERS Select | 520.29 | 1,040.58 | 1,352.75 | 351.39 | 702.78 | 1,054.17 |
| PERSCare | 1,133.14 | 2,266.28 | 2,946.16 | 384.78 | 769.56 | 1,154.34 |



June 29, 2020

E - 2



PARTICIPANT STATISTICS

Participant Statistics
June 30, 2019

| | Miscellaneous | Police | Fire | Total |
|---------------------|---------------|------------|------------|------------|
| ■ Actives | | | | |
| • Count | 226 | 64 | 66 | 356 |
| • Average Age | 45.4 | 39.1 | 39.1 | 43.1 |
| • Average Service | 10.6 | 11.1 | 9.9 | 10.5 |
| • Average Pay | \$ 78,700 | \$ 115,100 | \$ 126,300 | \$ 94,100 |
| • Payroll (\$000s) | 17,787 | 7,368 | 8,336 | 33,491 |
| ■ Retirees | | | | |
| ➤ Count < 65 | 57 | 18 | 31 | 106 |
| ➤ Count ≥ 65 | <u>139</u> | <u>46</u> | <u>68</u> | <u>253</u> |
| ➤ Total | 196 | 64 | 99 | 359 |
| • Average Age | 70.7 | 68.0 | 70.7 | 70.3 |
| • Avg. Svc Ret. Age | 59.7 | 55.1 | 55.2 | 57.9 |



June 29, 2020

E - 3



PARTICIPANT STATISTICS

Participant Statistics
June 30, 2017

| | Miscellaneous | Police | Fire | Total |
|---------------------|---------------|------------|------------|------------|
| ■ Actives | | | | |
| • Count | 231 | 66 | 69 | 366 |
| • Average Age | 46.6 | 41.2 | 38.8 | 44.2 |
| • Average Service | 11.6 | 12.1 | 9.7 | 11.3 |
| • Average Pay | \$ 72,200 | \$ 113,100 | \$ 121,300 | \$ 88,800 |
| • Payroll (\$000s) | 16,672 | 7,463 | 8,371 | 32,506 |
| ■ Retirees | | | | |
| ➤ Count < 65 | 54 | 18 | 36 | 108 |
| ➤ Count ≥ 65 | <u>125</u> | <u>44</u> | <u>60</u> | <u>229</u> |
| ➤ Total | 179 | 62 | 96 | 337 |
| • Average Age | 70.6 | 68.7 | 69.7 | 70.0 |
| • Avg. Svc Ret. Age | 59.3 | 54.5 | 54.9 | 57.5 |



June 29, 2020

E - 4



PARTICIPANT STATISTICS

Medical Plan Participation²⁷

| Medical Plan | Actives | Retirees | | |
|--------------------------|-------------|-------------|-------------|-------------|
| | | < 65 | ≥ 65 | Total |
| Anthem Traditional | 5% | 1% | 0% | 0% |
| Blue Shield Access+ | 1% | 9% | 1% | 4% |
| Health Net SmartCare | 3% | 6% | 0% | 2% |
| Kaiser | 77% | 54% | 50% | 51% |
| United Healthcare | 0% | 1% | 12% | 9% |
| Western Health Advantage | 3% | 0% | 0% | 0% |
| PERS Choice | 4% | 8% | 12% | 11% |
| PERS Select | 1% | 0% | 0% | 0% |
| PERS Care | 1% | 6% | 23% | 17% |
| PORAC | 5% | 15% | 2% | 6% |
| Total | 100% | 100% | 100% | 100% |

²⁷ Excludes waived participants.



June 29, 2020

E - 5



PARTICIPANT STATISTICS

Active Medical Coverage

| Medical Plan | Single | 2-Party | Family | Waived | Total |
|--------------------------|------------|-----------|------------|-----------|------------|
| Anthem Traditional | 7 | 3 | 5 | - | 15 |
| Blue Shield Access+ | 1 | - | 2 | - | 3 |
| Health Net SmartCare | 1 | 3 | 4 | - | 8 |
| Kaiser | 85 | 47 | 84 | - | 216 |
| Western Health Advantage | - | - | 7 | - | 7 |
| PERS Choice | 6 | 3 | 3 | - | 12 |
| PERS Select | 2 | - | 2 | - | 4 |
| PERSCare | - | 1 | 2 | - | 3 |
| PORAC | 6 | 4 | 5 | - | 15 |
| Waived | - | - | - | 73 | 73 |
| Total | 108 | 61 | 114 | 73 | 356 |



June 29, 2020

E - 6



PARTICIPANT STATISTICS

Retiree Medical Coverage – Under Age 65

| Medical Plan | Single | 2-Party | Family | Total |
|----------------------|---------------|----------------|---------------|--------------|
| Anthem Traditional | - | 1 | - | 1 |
| Blue Shield Access+ | 5 | 2 | 3 | 10 |
| Health Net SmartCare | 4 | 2 | - | 6 |
| Kaiser | 34 | 18 | 5 | 57 |
| United Healthcare | - | 1 | - | 1 |
| PERS Choice | 5 | 3 | 1 | 9 |
| PERSCare | 3 | 2 | 1 | 6 |
| PORAC | 7 | 9 | - | 16 |
| Total | 58 | 38 | 10 | 106 |



June 29, 2020

E - 7



PARTICIPANT STATISTICS

Retiree Medical Coverage – Over Age 65

| Medical Plan | Single | 2-Party | Family | Total |
|---------------------|---------------|----------------|---------------|--------------|
| Blue Shield Access+ | 2 | - | 1 | 3 |
| Kaiser | 63 | 56 | 6 | 125 |
| United Healthcare | 19 | 12 | - | 31 |
| PERS Choice | 16 | 13 | 1 | 30 |
| PERS Select | 1 | - | - | 1 |
| PERSCare | 33 | 23 | 1 | 57 |
| PORAC | 2 | 4 | - | 6 |
| Total | 136 | 108 | 9 | 253 |



June 29, 2020

E - 8



PARTICIPANT STATISTICS

Actives by Age and City Service
Miscellaneous

| Age | City Service | | | | | | | Total |
|--------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| | < 1 | 1-4 | 5-9 | 10-14 | 15-19 | 20-24 | ≥ 25 | |
| < 25 | 4 | 11 | 2 | - | - | - | - | 17 |
| 25-29 | 4 | 10 | 3 | 1 | - | - | - | 18 |
| 30-34 | 3 | 12 | 2 | 3 | - | - | - | 20 |
| 35-39 | 2 | 9 | 4 | 3 | 1 | 1 | - | 20 |
| 40-44 | 4 | 9 | 4 | 9 | 5 | 1 | - | 32 |
| 45-49 | 2 | 4 | 4 | 6 | 6 | 3 | 1 | 26 |
| 50-54 | 1 | 4 | 3 | 6 | 4 | 6 | 10 | 34 |
| 55-59 | 2 | 8 | 4 | 1 | 2 | 4 | 6 | 27 |
| 60-64 | 1 | 3 | 1 | 9 | 4 | 3 | 3 | 24 |
| ≥ 65 | - | - | 1 | 1 | 2 | - | 4 | 8 |
| Total | 23 | 70 | 28 | 39 | 24 | 18 | 24 | 226 |



June 29, 2020

E - 9



PARTICIPANT STATISTICS

Actives by Age and City Service
Safety

| Age | City Service | | | | | | | Total |
|--------------|--------------|-----------|-----------|-----------|-----------|----------|----------|------------|
| | < 1 | 1-4 | 5-9 | 10-14 | 15-19 | 20-24 | ≥ 25 | |
| < 25 | 1 | 6 | - | - | - | - | - | 7 |
| 25-29 | 1 | 10 | 5 | - | - | - | - | 16 |
| 30-34 | 2 | 10 | 13 | 1 | - | - | - | 26 |
| 35-39 | 1 | 4 | 14 | 6 | 1 | - | - | 26 |
| 40-44 | - | - | 3 | 4 | 10 | - | - | 17 |
| 45-49 | - | - | 1 | 4 | 12 | 5 | - | 22 |
| 50-54 | - | - | - | 2 | 4 | 3 | 3 | 12 |
| 55-59 | - | - | 1 | - | - | - | - | 1 |
| 60-64 | - | - | - | 2 | - | 1 | - | 3 |
| ≥ 65 | - | - | - | - | - | - | - | - |
| Total | 5 | 30 | 37 | 19 | 27 | 9 | 3 | 130 |



June 29, 2020

E - 10



PARTICIPANT STATISTICS

Retiree Healthcare Coverage by Age Group

Miscellaneous

| Age | Single | 2-Party | Family | Total |
|--------------------|---------------|----------------|---------------|--------------|
| Under 50 | - | - | 1 | 1 |
| 50-54 | 1 | - | - | 1 |
| 55-59 | 16 | 3 | 1 | 20 |
| 60-64 | 20 | 12 | 3 | 35 |
| 65-69 | 21 | 18 | 4 | 43 |
| 70-74 | 23 | 20 | - | 43 |
| 75-79 | 14 | 8 | - | 22 |
| 80-84 | 11 | 5 | - | 16 |
| Over 85 | 12 | 3 | - | 15 |
| Total | 118 | 69 | 9 | 196 |
| Average Age | 71.3 | 70.8 | 63.2 | 70.7 |



June 29, 2020

E - 11



PARTICIPANT STATISTICS

Retiree Healthcare Coverage by Age Group

Safety

| Age | Single | 2-Party | Family | Total |
|--------------------|---------------|----------------|---------------|--------------|
| Under 50 | 2 | - | 1 | 3 |
| 50-54 | 4 | 2 | - | 6 |
| 55-59 | 4 | 5 | 4 | 13 |
| 60-64 | 11 | 16 | - | 27 |
| 65-69 | 23 | 15 | 4 | 42 |
| 70-74 | 11 | 23 | 1 | 35 |
| 75-79 | 6 | 7 | - | 13 |
| 80-84 | 8 | 5 | - | 13 |
| Over 85 | 7 | 4 | - | 11 |
| Total | 76 | 77 | 10 | 163 |
| Average Age | 70.1 | 70.2 | 62.0 | 69.7 |



June 29, 2020

E - 12



ACTUARIAL ASSUMPTIONS

| Assumption | June 30, 2017 Valuation | June 30, 2019 Valuation | |
|-----------------------------|--|--|---------------|
| ■ Service Retirement | ■ 6/30/17 MCERA valuation assumptions <div style="display: flex; justify-content: space-around;"> <u>Misc</u> <u>Safety</u> </div> Tier 1 ²⁸ 2.7%@55 3%@55 ERA 61.9 54.6 Tier 2 ²⁹ 2%@55 3%@55 ERA 62.9 54.6 Tier 3 ³⁰ 2%@62 2.7%@57 ERA 61.3 54.2 | ■ 6/30/19 MCERA valuation assumptions <div style="display: flex; justify-content: space-around;"> <u>Misc</u> <u>Safety</u> </div> Tier 1 ³¹ 2.7%@55 3%@55 ERA 62.0 55.1 Tier 2 ³² 2%@55 3%@55 ERA 63.3 55.8 Tier 3 ³³ 2%@62 2.7%@57 ERA 61.7 54.3 | |
| | ■ Part Time Employment | ■ 25% PARS employees become full time eligible | ■ Same |

²⁸ Final Average Pay based on 1 year (FAP 1); 3% COLA
²⁹ Hired ≥ 7/1/11 based on FAP 3 and 2% COLA
³⁰ PEPRA hired ≥ 1/1/13
³¹ Final Average Pay based on 1 year (FAP 1); 3% COLA
³² Hired ≥ 7/1/11 based on FAP 3 and 2% COLA
³³ PEPRA hired ≥ 1/1/13



June 29, 2020

E - 13



ACTUARIAL ASSUMPTIONS

| Assumption | June 30, 2017 Valuation | June 30, 2019 Valuation | | | | | | | | | | | | | | | | | | | | |
|---|--|--|-----------------|------|------|------|------|------|------|------|------|---|--|--|-------------|-----------------|------|------|------|------|---|--|
| ■ PEMHCA Minimum Increases | ■ Increases to \$136 for 2019, 4.25% after 2019 | ■ Increases to \$139 for 2020, estimated \$143 for 2021, 4.25% after 2021 | | | | | | | | | | | | | | | | | | | | |
| ■ Medicare Part B Trend | <table border="0"> <thead> <tr> <th><u>Year</u></th> <th><u>Medicare</u></th> </tr> </thead> <tbody> <tr> <td>2019</td> <td>0.0%</td> </tr> <tr> <td>2020</td> <td>3.7%</td> </tr> <tr> <td>2021</td> <td>4.4%</td> </tr> <tr> <td>2022</td> <td>5.1%</td> </tr> <tr> <td colspan="2" style="text-align: center;">Converging to Medical Trends after 2022</td> </tr> </tbody> </table> | <u>Year</u> | <u>Medicare</u> | 2019 | 0.0% | 2020 | 3.7% | 2021 | 4.4% | 2022 | 5.1% | Converging to Medical Trends after 2022 | | <table border="0"> <thead> <tr> <th><u>Year</u></th> <th><u>Medicare</u></th> </tr> </thead> <tbody> <tr> <td>2021</td> <td>4.4%</td> </tr> <tr> <td>2022</td> <td>5.1%</td> </tr> <tr> <td colspan="2" style="text-align: center;">Converging to Medical Trends after 2022</td> </tr> </tbody> </table> | <u>Year</u> | <u>Medicare</u> | 2021 | 4.4% | 2022 | 5.1% | Converging to Medical Trends after 2022 | |
| <u>Year</u> | <u>Medicare</u> | | | | | | | | | | | | | | | | | | | | | |
| 2019 | 0.0% | | | | | | | | | | | | | | | | | | | | | |
| 2020 | 3.7% | | | | | | | | | | | | | | | | | | | | | |
| 2021 | 4.4% | | | | | | | | | | | | | | | | | | | | | |
| 2022 | 5.1% | | | | | | | | | | | | | | | | | | | | | |
| Converging to Medical Trends after 2022 | | | | | | | | | | | | | | | | | | | | | | |
| <u>Year</u> | <u>Medicare</u> | | | | | | | | | | | | | | | | | | | | | |
| 2021 | 4.4% | | | | | | | | | | | | | | | | | | | | | |
| 2022 | 5.1% | | | | | | | | | | | | | | | | | | | | | |
| Converging to Medical Trends after 2022 | | | | | | | | | | | | | | | | | | | | | | |
| ■ Medical Plan at Retirement | ■ Currently covered: same as current elections | ■ Same | | | | | | | | | | | | | | | | | | | | |



June 29, 2020

E - 14



ACTUARIAL ASSUMPTIONS

| Assumption | June 30, 2017 Valuation | June 30, 2019 Valuation |
|--|--|--|
| <ul style="list-style-type: none"> ■ Marital Status | <ul style="list-style-type: none"> ■ Covered actives and retirees – based on current coverage election ■ Waived actives – 80% married | <ul style="list-style-type: none"> ■ Same |
| <ul style="list-style-type: none"> ■ Spouse Age | <ul style="list-style-type: none"> ■ Males 3 years older than females | <ul style="list-style-type: none"> ■ Same |
| <ul style="list-style-type: none"> ■ Dependents at Retirement | <ul style="list-style-type: none"> ■ Pre-65: <ul style="list-style-type: none"> • Actives: 20% • Retirees: same as current coverage ■ Post-65: 0% | <ul style="list-style-type: none"> ■ Same |



ACTUARIAL ASSUMPTIONS

| Assumption | June 30, 2017 Valuation | June 30, 2019 Valuation |
|--|---|--|
| <ul style="list-style-type: none"> ■ Medicare Participation | <ul style="list-style-type: none"> ■ For Pre-Medicare, all eligible elect City reimbursement of Part B ■ For those currently Eligible for Medicare, based on current coverage | <ul style="list-style-type: none"> ■ Same |
| <ul style="list-style-type: none"> ■ CERBT Administrative Expenses | <ul style="list-style-type: none"> ■ Included in the ADC ■ 0.05% of assets | <ul style="list-style-type: none"> ■ Same |
| <ul style="list-style-type: none"> ■ PEMHCA Administrative Expenses | <ul style="list-style-type: none"> ■ Included in the ADC ■ 0.33% of premiums | <ul style="list-style-type: none"> ■ Included in the ADC ■ 0.27% of premiums |



ACTUARIAL ASSUMPTIONS

| Assumption | June 30, 2017 Valuation | | June 30, 2019 Valuation | | | | |
|--|--|-----------------|--------------------------------|---------------|----------|-----------------------|----------|
| ■ HMO Medical Claims Costs 2019 PEMHCA Implied Subsidy Estimate | ■ Sample estimated monthly claims costs | | | | | | |
| | Bay Area Region - Non-Medicare Eligible | | | | | | |
| | | <u>HNS Care</u> | | <u>Kaiser</u> | | <u>Western Health</u> | |
| | <u>Age</u> | <u>M</u> | <u>F</u> | <u>M</u> | <u>F</u> | <u>M</u> | <u>F</u> |
| | 25 | \$325 | \$569 | \$281 | \$492 | \$277 | \$484 |
| | 35 | 414 | 702 | 358 | 607 | 353 | 597 |
| | 45 | 592 | 862 | 511 | 745 | 504 | 733 |
| | 55 | 982 | 1,143 | 849 | 987 | 836 | 972 |
| | 60 | 1,239 | 1,299 | 1,071 | 1,122 | 1,055 | 1,105 |
| | 65 | 1,403 | 1,406 | 1,213 | 1,215 | 1,195 | 1,196 |
| | 70 | 1,494 | 1,490 | 1,291 | 1,287 | 1,272 | 1,267 |
| | 75 | 1,570 | 1,566 | 1,357 | 1,352 | 1,336 | 1,331 |
| | 80 | 1,650 | 1,646 | 1,426 | 1,421 | 1,405 | 1,399 |
| | Bay Area Region - Medicare Eligible | | | | | | |
| | | <u>HNS Care</u> | | <u>Kaiser</u> | | <u>Western Health</u> | |
| <u>Age</u> | <u>M</u> | <u>F</u> | <u>M</u> | <u>F</u> | <u>M</u> | <u>F</u> | |
| 65 | n/a | n/a | \$294 | \$294 | n/a | n/a | |
| 70 | n/a | n/a | 313 | 312 | n/a | n/a | |
| 75 | n/a | n/a | 329 | 328 | n/a | n/a | |
| 80 | n/a | n/a | 345 | 345 | n/a | n/a | |



June 29, 2020

E - 17



ACTUARIAL ASSUMPTIONS

| Assumption | June 30, 2017 Valuation | | June 30, 2019 Valuation | | | | |
|--|--|--------------------|--------------------------------|--------------------|----------|-----------------|----------|
| ■ PPO Medical Claims Costs 2019 PEMHCA Implied Subsidy Estimate | ■ Sample estimated monthly claims costs | | | | | | |
| | Bay Area Region - NonMedicare Eligible | | | | | | |
| | | <u>PERS Choice</u> | | <u>PERS Select</u> | | <u>PERSCare</u> | |
| | <u>Age</u> | <u>M</u> | <u>F</u> | <u>M</u> | <u>F</u> | <u>M</u> | <u>F</u> |
| | 25 | \$253 | \$473 | \$183 | \$356 | \$324 | \$596 |
| | 35 | 334 | 595 | 245 | 452 | 423 | 743 |
| | 45 | 498 | 742 | 375 | 569 | 623 | 924 |
| | 55 | 866 | 1,007 | 670 | 780 | 1,071 | 1,243 |
| | 60 | 1,111 | 1,156 | 868 | 900 | 1,368 | 1,423 |
| | 65 | 1,271 | 1,261 | 996 | 985 | 1,561 | 1,549 |
| | 70 | 1,359 | 1,342 | 1,067 | 1,050 | 1,666 | 1,646 |
| | 75 | 1,431 | 1,413 | 1,126 | 1,107 | 1,754 | 1,733 |
| | 80 | 1,508 | 1,489 | 1,187 | 1,168 | 1,846 | 1,824 |
| | Bay Area Region - Medicare Eligible | | | | | | |
| | | <u>PERS Choice</u> | | <u>PERS Select</u> | | <u>PERSCare</u> | |
| <u>Age</u> | <u>M</u> | <u>F</u> | <u>M</u> | <u>F</u> | <u>M</u> | <u>F</u> | |
| 65 | \$291 | \$352 | \$291 | \$352 | \$303 | \$366 | |
| 70 | 316 | 384 | 316 | 384 | 329 | 399 | |
| 75 | 331 | 403 | 331 | 403 | 345 | 419 | |
| 80 | 348 | 423 | 348 | 423 | 362 | 440 | |



June 29, 2020

E - 18



ACTUARIAL METHODS

| Method | June 30, 2017 Valuation | June 30, 2019 Valuation |
|-----------------------------|---|--|
| ■ Cost Method | ■ Entry Age Normal | ■ Same |
| ■ Amortization Method | ■ Level percentage of payroll | ■ Same |
| ■ Actuarial Value of Assets | <ul style="list-style-type: none"> ■ Investment gains and losses spread over 5-year rolling period ■ Not less than 80% nor more than 120% of market value | ■ Same |
| ■ Amortization Period | ■ 17-year fixed (closed) period for 6/30/18 UAAL | ■ 15-year fixed (closed) period for 6/30/20 UAAL |



June 29, 2020

E - 19



DEFINITIONS

| | |
|---|--|
| <ul style="list-style-type: none"> ■ GASBS 75 Accrual Accounting | <ul style="list-style-type: none"> ■ Project future employer-provided benefit cash flows for current active employees and current retirees ■ Discount projected cash flow to valuation date using discount rate (assumed return on assets used to pay benefits) and other actuarial assumptions to determine present value of projected future benefits (PVB) ■ Allocate PVB to past, current, and future periods using the actuarial cost method ■ Actuarial cost method used for this valuation is the Entry Age Normal Cost method which determines Normal Cost as a level percentage of payroll (same method used by CalPERS) ■ Normal Cost is amount allocated to current fiscal year ■ Actuarial Accrued Liability (AAL) is amount allocated to prior service with employer ■ Unfunded AAL (UAAL) is AAL less plan assets pre-funded in a segregated and restricted trust |
| <ul style="list-style-type: none"> ■ PayGo Cost | <ul style="list-style-type: none"> ■ Cash subsidy is employer pay-as-you-go benefit payments for retirees ■ Implied subsidy is difference between actual cost of retiree benefits and retiree premiums subsidized by active employee premiums |



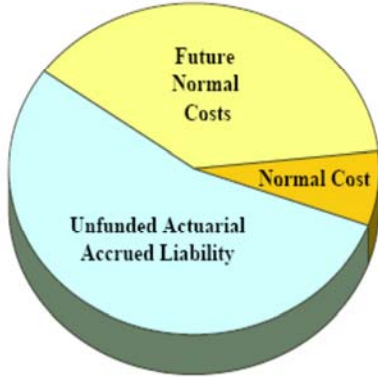
June 29, 2020

E - 20



Present Value of Benefits

Present Value of Benefits
(Without Plan Assets)



Present Value of Benefits
(With Plan Assets)

