## **OPEB Trust Fund**





## **Definitions**

- OPEB: Other (than pension) Post Employment Benefits: Medical benefits paid to retirees
- Normal Cost (NC): value of benefits to be earned by employees in the coming year
- Actuarial Accrued Liability (AAL): value of benefits earned to date
- Unfunded Actuarial Accrued Liability: AAL minus Assets
- Discount Rate (DR): Rate used to calculate present value of future benefits. Higher rate => lower present value





## **Current Investment Policy**

- In accordance with Government Code Sections 53620-53622, assets of the City of Berkeley retiree medical plan trusts may be invested in any form or type of investments deemed prudent by the City Council.
- Current investments \$39.3 million
  - Fixed income
  - Highly rated, low risk
  - Study assumes long term return on current assets =
     4% per year





## **Recommended Investment Policy**

- Change investment allocation to produce higher long-term average future returns
  - Use outside investment manager
  - Study includes 6% average annual future return assuming recommendation accepted





## **Investment Policy Rationale**

- Long Term Investment Horizon
  - Benefits will be paid over 30 years or more
  - Annual cash requirements for benefit payments are relatively small compared to total fund
  - Fund has time to make up for periodic losses expected with riskier asset allocation
    - ☐ If additional risk is accompanied by higher expected long term returns





## **Investment Policy Rationale**

**Contributions + Investment Earnings** 

**Benefits** + **Expenses** 

- Example: CalPERS
  - 65% of every pension dollar from investment earnings
- Results of Recommended Policy:
  - Larger portion of benefits paid by investment earnings
  - Lower contributions and actuarial liabilities





# **OPEB Funding**

- **Miscellaneous Employees**
- **■** Police
- **■** Fire
- "PERIP"





## **Definitions**

- Normal Cost (NC): value of benefits to be earned by employees in the coming year
- Unfunded Actuarial Accrued Liability: AAL minus Assets
- ARC or Actuarially Determined Contribution (ADC): Full Prefunding:
  - Normal Cost plus
  - Amortization (payment over time) of UAAL
- "Pay as you Go" or "Pay-Go": Benefits are paid as they come due. No fund is built up.





## **OPEB Funding Study Assumptions**

- Projection assumptions for study
  - Recommended investment policy: 6%/yr future returns
  - Current investment policy: 4%/yr future returns
  - Full prefunding = normal cost + 20 year amortization of unfunded actuarial accrued liability
  - No change in number of active employees





## **OPEB Funding**

**■ Miscellaneous Employees** 





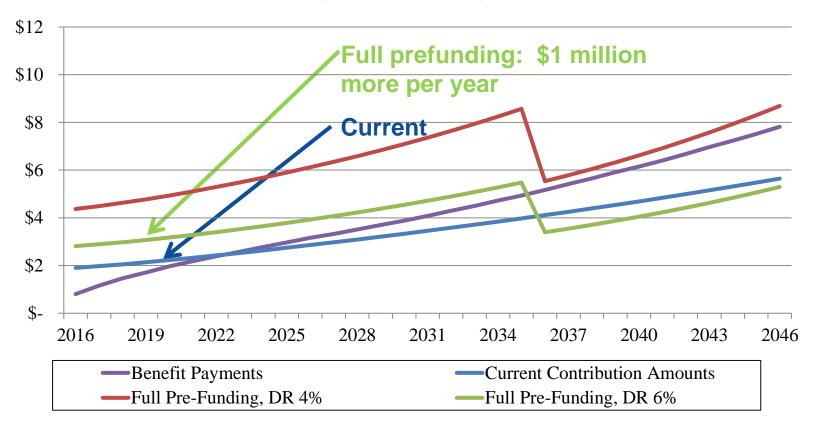
#### Benefit

- City pays retiree premium up to a cap and subject to benefit percentage schedule
  - □ 100% after 20 years
- Cap varies by bargaining group, medical coverage and retirement date
- Cap increases by Kaiser premium %, up to 4.5%/year
- Current funding policy: Percent of payroll specified in MOUs





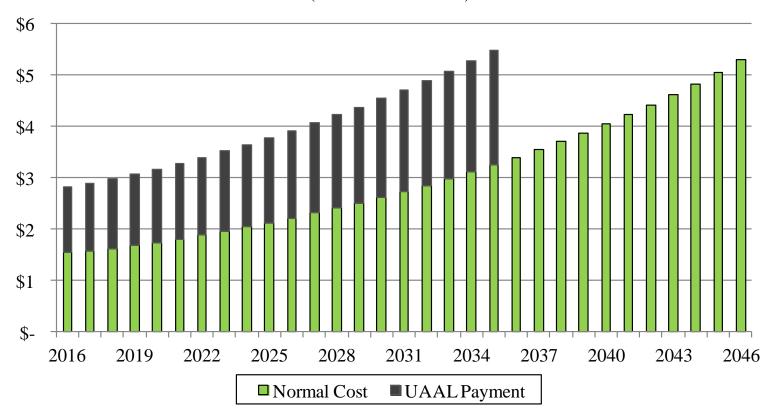
#### **Contribution**







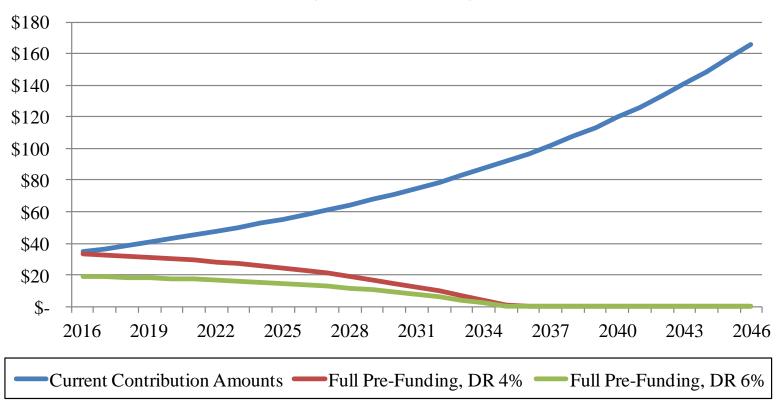
#### Full Pre-Funding, Discount Rate 6.0%







#### **Unfunded Actuarial Accrued Liability**







# **OPEB – Miscellaneous Funding Recommendation**

- Recommendation
  - Full prefunding of actuarially determined contribution
  - Approximately \$1 million per year increase over current contribution amounts
    - □ \$1 million is total for all bargaining units





# **OPEB Funding**

**■ Police** 





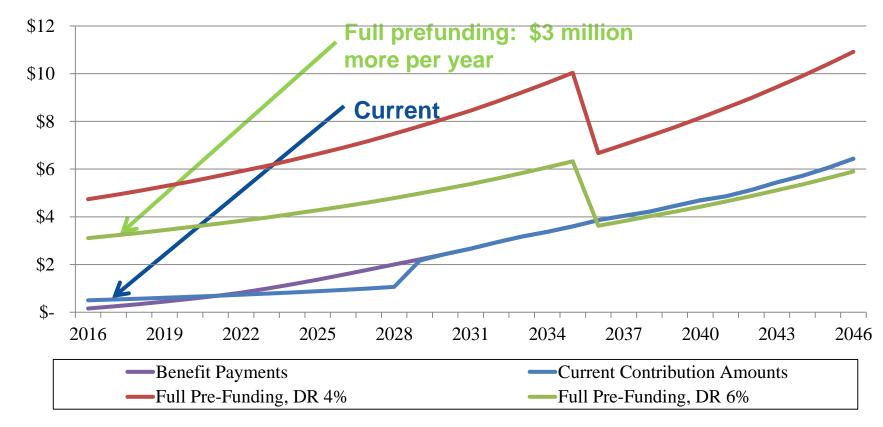
#### Benefit

- City pays retiree premium up to a cap and subject to benefit percentage schedule
  - □ 100% after 20 years
- Cap increases annually by the percentage increase of Kaiser premium up to 6%
- Retirees after September 2012 only
- Current contribution amounts: approximately 10% of actuarially determined contribution





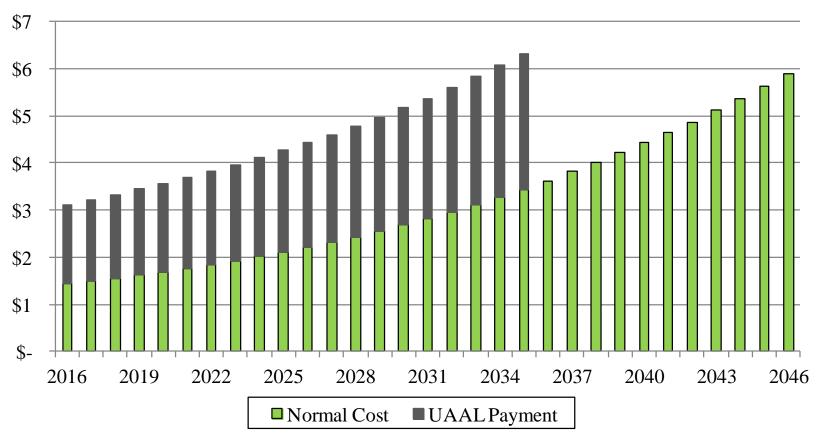
#### **Contribution**







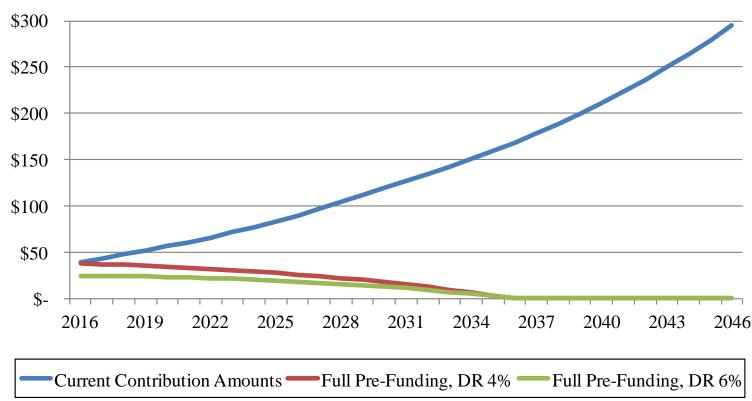
#### Full Pre-Funding, Discount Rate 6.0%







#### **Unfunded Actuarial Accrued Liability**







# **OPEB – Police Funding Recommendation**

- Recommendation
  - Full prefunding of actuarially determined contribution
  - Approximately \$3 million per year increase over current contribution amounts





# **OPEB Funding**

**■** Fire



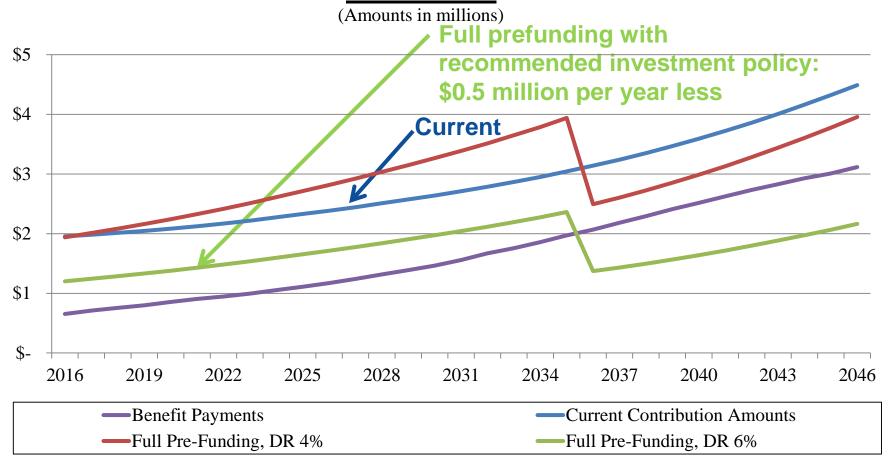


- Benefit
  - City pays retiree premium up to a cap and subject to benefit percentage schedule
    - □ 100% after 25 years
  - Cap increases annually by 4.5%
  - Retirees after July 1997 only
- Current contribution amounts: Full prefunding of actuarially recommended contribution, 4% discount rate, 30 year rolling amortization





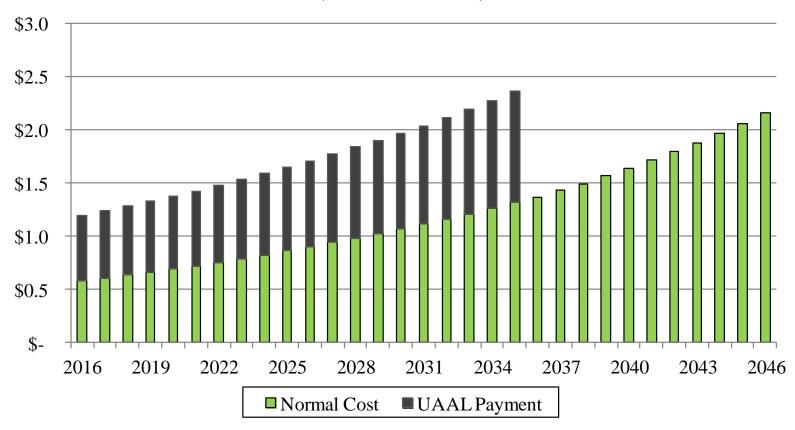
#### **Contribution**







#### Full Pre-Funding, Discount Rate 6.0%

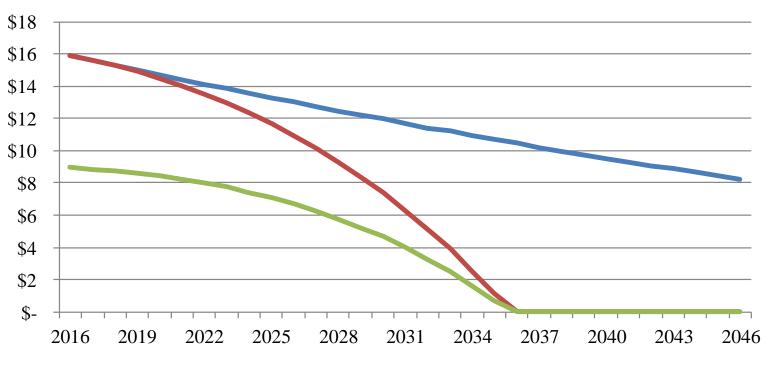






#### **Unfunded Actuarial Accrued Liability**

(Amounts in millions)

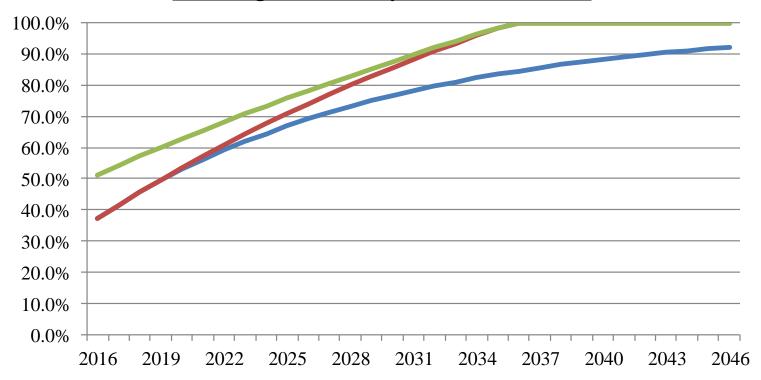


Current Contribution Amounts — Full Pre-Funding, DR 4% — Full Pre-Funding, DR 6%





#### **Funding of Liability for Past Service**



Current Contribution Amounts — Full Pre-Funding, DR 4% — Full Pre-Funding, DR 6%





# **OPEB – Fire Funding Recommendation**

#### Recommendation

- Recommended asset allocation reduces actuarial liabilities
- Reduced actuarially determined contribution
  - ☐ Amortization period shortened to 20 years
  - □ Approximately \$500,000 per year reduced contribution





# **OPEB Funding**

■ "PERIP"





# Police Retirement Income Plan (Closed; Intended for Retiree Medical)

#### Benefit

- City pays Kaiser 2-party premium subject to benefit percentage schedule
  - □ 100% after 25 years
- Retirees before September 2012 only
- Current contribution amounts: benefit payments only ("pay-go")





### Police Retirement Income Plan

#### **Contribution**

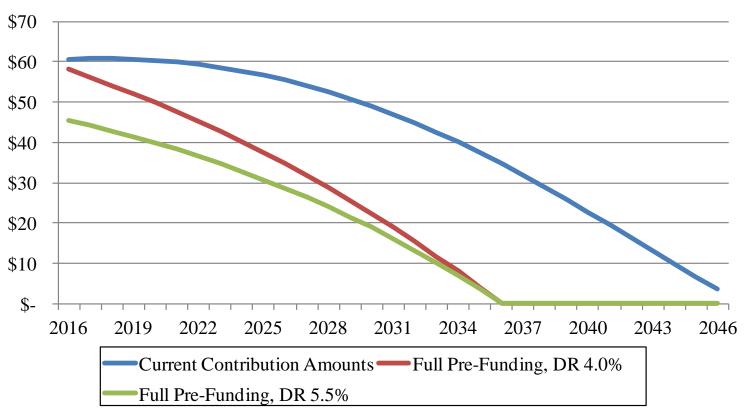
(Amounts in millions) Full pre-funding initially \$2 million \$5 more per year \$4 \$3 \$2 **Current = benefit payments** \$1 2019 2034 2016 2022 2025 2028 2031 2037 2040 2043 2046 Benefit Payments **Current Contribution Amounts** Full Pre-Funding, DR 4.0% —Full Pre-Funding, DR 5.5%





### Police Retirement Income Plan

#### **Unfunded Actuarial Accrued Liability**







## Police Retirement Income Plan Funding Recommendation

#### Recommendation

- Recommend full prefunding
  - □ Assumed slightly more conservative investments over time so 5.5% discount rate
  - □ \$1.7 M higher contribution in initial year than current

#### Comments

- Closed plan
- Unfunded liabilities decrease slowly under current contribution amounts (no prefunding)





# **OPEB Funding**

**■** Total





### **Total of All OPEB Plans**

#### Summary of Recommendation

(\$ Millions)

Plan	Current Contribution Amounts	Increase	Full Pre-Funding ADC (DR 6%)
Miscellaneous	\$1.9	\$0.9	\$2.8
Police	0.5	2.6	3.1
Fire	2.0	(0.7)	1.2
PERIP	<u>2.0</u>	<u>1.7</u>	<u>3.7</u>
Total	\$6.3	\$4.5	\$10.8





# CalPERS Rate Projections





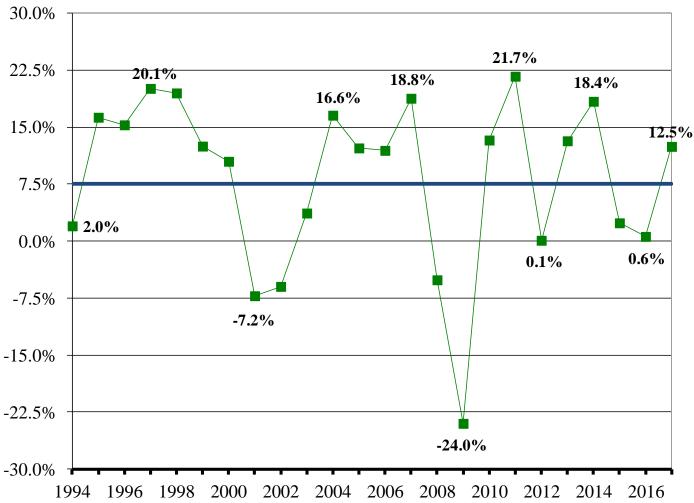
#### **How Did We Get Here?**

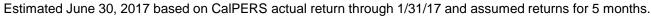
- Investment Losses
- Enhanced Benefits
- CalPERS Contribution Policy
- Demographics
- PEPRA





#### **Historical Investment Returns**









#### **Enhanced Benefits**

- At CalPERS, enhanced benefits implemented using all (future & prior) service
  - Miscellaneous 2.7% @ 55
  - Safety 3% @ 50
- Typically not negotiated with cost sharing





### **CalPERS Old Policy**

- Effective with 2003 valuations:
  - Slow (15 year) recognition of investment losses into funded status
  - Rolling 30 year amortization of all (primarily investment) losses
- Designed to:
  - First smooth rates
  - Second pay off UAL and
- Mitigated contribution volatility





#### **Demographics**

- Around the State
  - Large retiree liability compared to actives
  - Declining active population
- Commonly 60% 65% of liability is for retirees
  - City of Berkeley
    - ☐ Miscellaneous: 57%
    - □ Police & Fire: 70%





#### **PEPRA**

- Public Employees Pension Reform Act
  - Effective for new hires on and after 1/1/2013
  - Not for "laterals" from another public plan
- New employees have lower benefits and pay more
  - Will reduce employer contribution for future hires
  - Does not impact current unfunded liabilities
  - Slow to impact total employer pension cost





### Where Are Rates Going?

- CalPERS Changes
- CalPERS Rate Projections





#### **Contribution Policy Changes**

- Rate increases ramp up FY 2016 thru 2020
- Designed to:
  - First pay off UAL and
  - Second smooth rates
- No asset smoothing
- 5-year ramp up for amortization bases
- All amortization bases have fixed periods
  - No rolling amortization





### **Assumption Changes**

- Rate increases ramp up FY 2017 thru 2021
- Mainly anticipate future mortality improvement





#### **Discount Rate**

- CalPERS Board was told at end of 2016:
  - Long term return on current asset mix expected to average 7%
  - Returns over next 10 years average under 7%
- Board lowered discount rate
  - 3 year phase-in, each with 5-year ramp-up

	<u>Rate</u>	Initial Year	Full Year
• 6/30/16 val.	7.375%	18/19	22/23
• 6/30/17 val.	7.25%	19/20	23/24
• 6/30/18 val.	7.00%	20/21	24/25





### **Risk Mitigation Strategy**

- Move to more conservative investments over time
  - Years when investment return is 2%+ above expected
  - Essentially use ≈50% of investment gains to pay for cost increases
- Lower discount rate in concert with investment mix changes
  - Likely reduces discount rate from 7% to 6% over ≈20 years





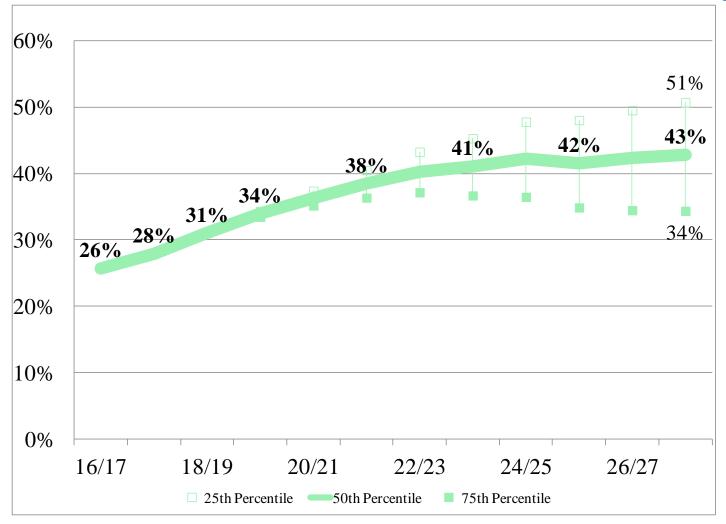
#### **Other Factors**

- New Tier 2 and PEPRA hires reduce costs
- Projected return for FY 2017 = 12.5%
  - Based on returns through 12/31/16
- Projections reflect lower than 7.0% expected returns in next 10 years (expect average 6.5%)
- Modeling shows most likely contribution level and 25<sup>th</sup> & 75<sup>th</sup> percentiles





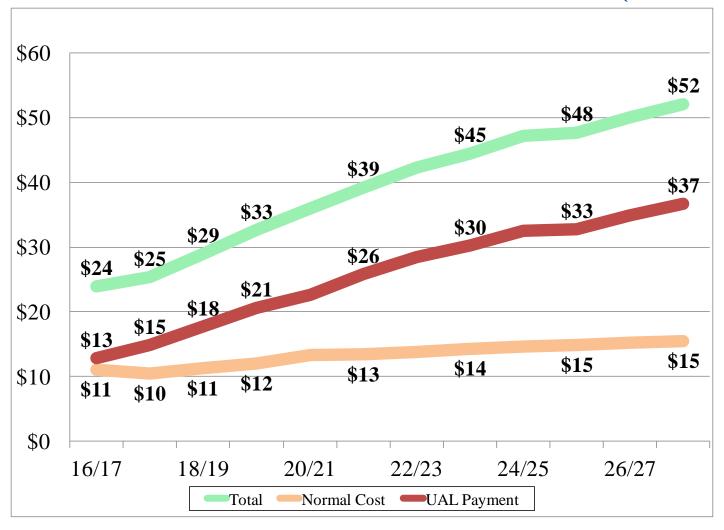
#### Miscellaneous-CalPERS Rates (% Payroll)







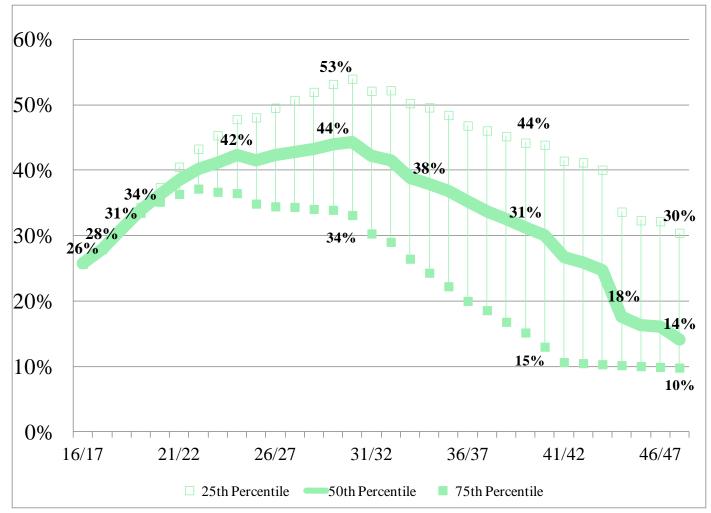
#### Miscellaneous-CalPERS Rates (\$millions)







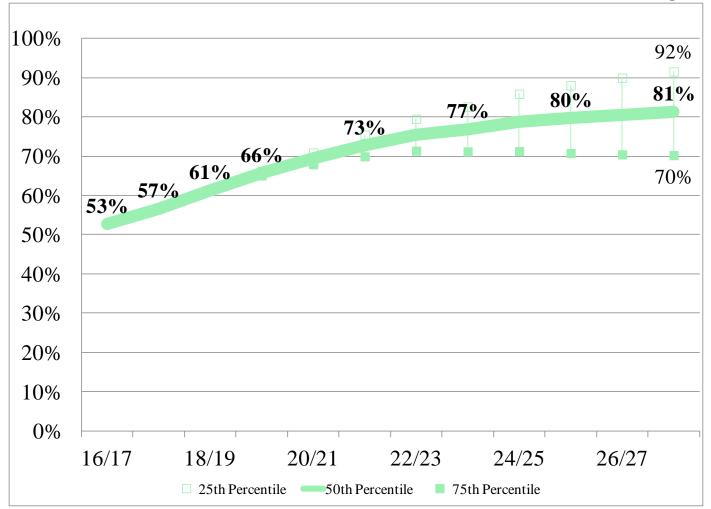
#### Miscellaneous-CalPERS Rates (% Payroll)







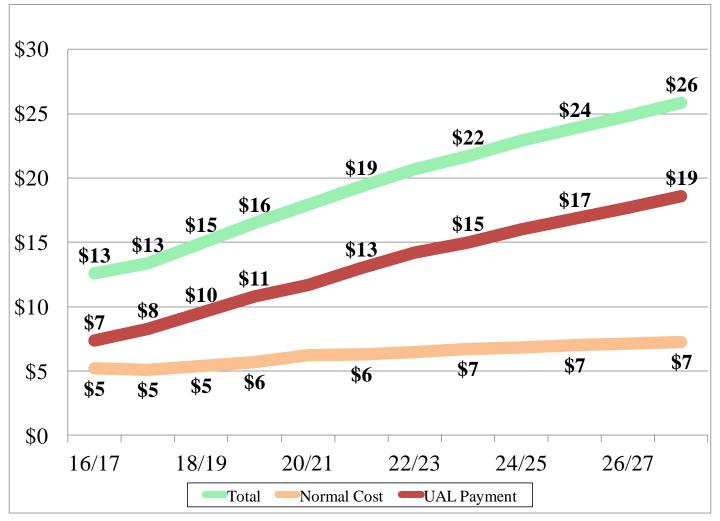
### Police – CalPERS Rates (% of Payroll)







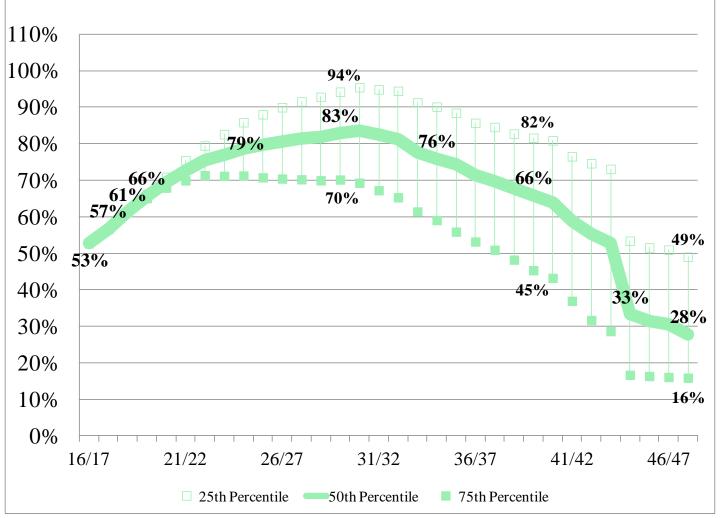
## Police – CalPERS Rates (\$millions)







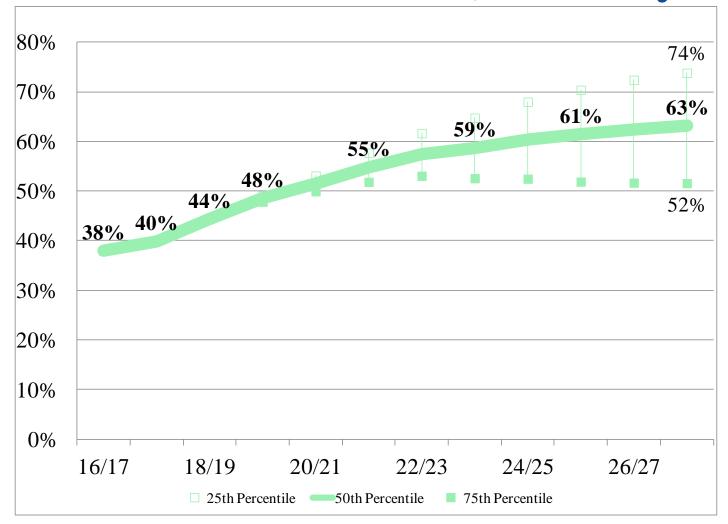
## Police – CalPERS Rates (% of Payroll)







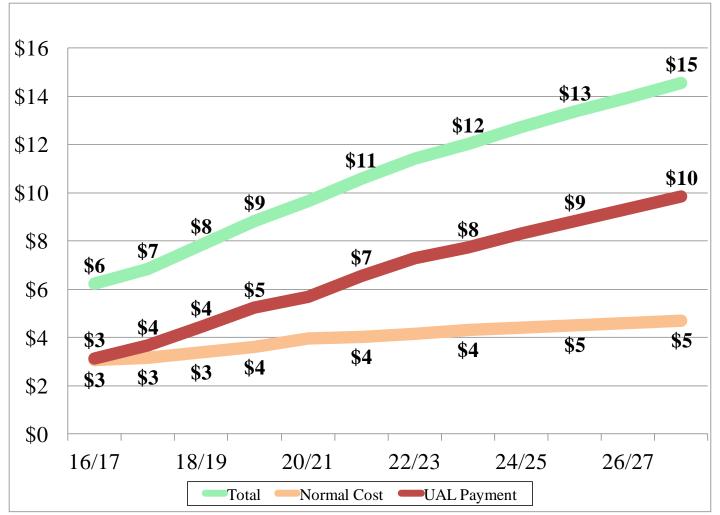
### Fire – CalPERS Rates (% of Payroll)







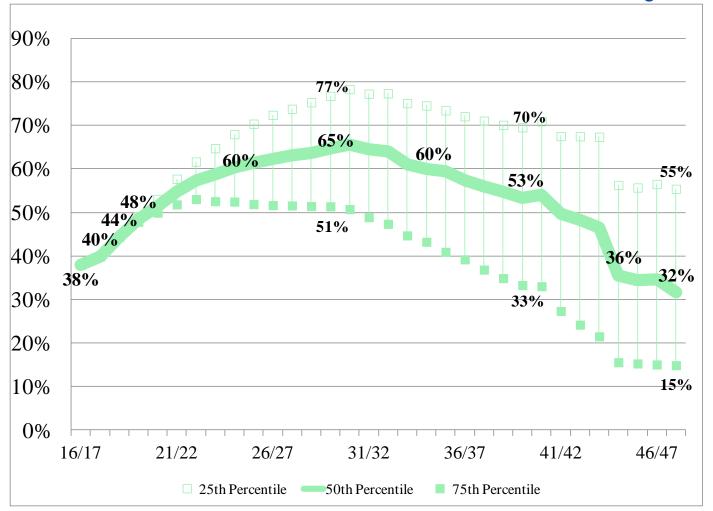
#### Fire – CalPERS Rates (\$millions)







#### Fire – CalPERS Rates (% of Payroll)







# Summary 10th-Year Impact (% of Payroll)

	FY 2017-18	FY 2027-2028
Miscellaneous	27.9%	42.8%
Police	56.6%	81.3%
Fire	39.9%	63.1%
Overall	34.6%	52.4%





# Summary 10th-Year Impact (\$millions)

	FY 2017-18	FY 2027-2028
Miscellaneous	\$25.3	\$52.2
Police	\$13.4	\$25.8
Fire	\$6.8	\$14.6
Overall	\$45.5	\$92.6





# **CalPERS Funding**





#### Pay Down Unfunded Liability

- The City is already paying the full actuarially determined contribution for its CalPERS plans
- The City's funded status is similar to other CalPERS public agencies
- Most ideas to pay down the unfunded liability ahead of schedule are not recommended
  - Pension Obligation Bond (POB) is interest arbitrage
  - Success not guaranteed





#### Irrevocable Supplemental (§115) Trust

- Can only be used to:
  - Reimburse City for CalPERS contributions
  - Make payments directly to CalPERS
  - Nothing else
- Investments significantly less restricted than City investment funds
  - Designed for long term returns
  - Likely much higher (5% 7%) investment return





### Irrevocable Supplemental (§115) Trust

- Over 70 trusts already established
  - PARS, PFM, Keenan, Other
- Likely will not "count" for GASB accounting
  - Will not reduce net pension liability





#### Irrevocable Supplemental (§115) Trust

- Best use: Rate Stabilization
  - "Seed" trust with initial deposit
  - Determine "target" CalPERS contribution
  - If CalPERS required contribution is below target => pay difference into trust
  - If CalPERS required contribution is above target => trust pays difference to CalPERS





#### **CalPERS Funding Recommendation**

- Establish irrevocable supplemental (Section 115) pension Trusts
- \$3 Million initial "seed" deposit
  - \$3 million is total for Miscellaneous, Police and Fire
  - Additional Trust "start up" contributions:
    - □ 3% payroll in year 1 (\$4 million)
    - □ 4% payroll in year 2 (\$5.5 million)





# Summary





#### **Summary of Recommendations**

- OPEB Trust Fund:
  - Invest for the long term to generate more earnings
- OPEB Funding (Misc, Police, Fire, "PERIP")
  - Full pre-funding; will increase annual contribution
  - Total \$4.5 million additional per year
- CalPERS
  - Establish Supplemental Trust
  - \$3 million initial, \$4 million year 1, \$5.5 million year 2

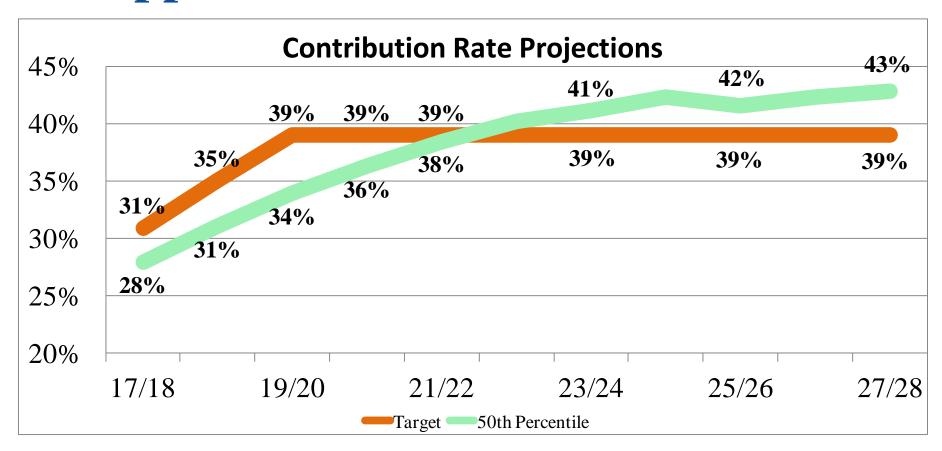


## Thank You





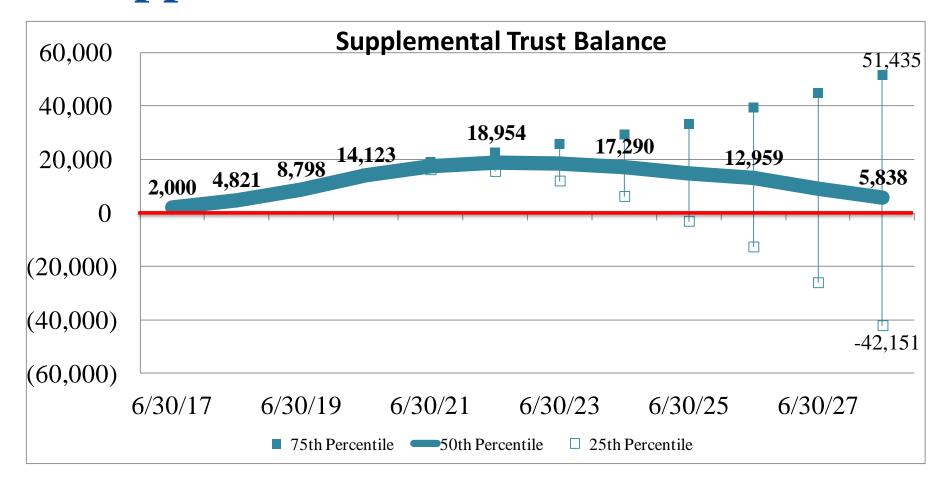
#### Supplemental Trust: Miscellaneous







#### Supplemental Trust: Miscellaneous









# BARTEL SSOCIATES, LLC

### City of Berkeley

# Pension and OPEB Funding Study

John E. Bartel, President Mary Beth Redding, Vice President Bianca Lin, Assistant Vice President Katherine Moore, Associate Actuary

**April 4, 2017** 

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