## City Council Memorandum

## ISSUES:

Conduct a Public Hearing and adopt a resolution authorizing the issuance of the 2020 Taxable Pension Obligation Bonds Series A or such other mechanism as financial markets dictate (The "2020 POBs") to refinance a portion of the City's Unfunded Accrued Liability with the California Public Employees' Retirement System and providing the terms and conditions of such bonds; approve the form of a Preliminary Official Statement to assist the Underwriter in marketing the 2020 Taxable Pension Obligation Bonds; and approve the financing team. The 2020 POBs will refinance a portion of the City's debt with the California Public Employees' Retirement System in order to create interest rate savings and a more affordable repayment structure.

## RECOMMENDATIONS:

That the City Council:

1. Conduct a Public Hearing relative to the 2020 Taxable Pension Obligation Bonds;
2. Adopt a Resolution authorizing the issuance of the 2020 Taxable Pension Obligation Bonds, to refinance a portion of the City's Unfunded Accrued Liability with the California Public Employees' Retirement System, and providing the terms and conditions of such bonds;
3. Authorize the City Manager, or his designee, to execute all documents necessary to close the bond refinancing and make certain changes to the final documents necessary to complete the transaction;
4. Approve the form of a Preliminary Official Statement to assist the Underwriter in marketing the 2020 Taxable Pension Obligation Bonds; and
5. Approve the financing team inclusive of Stradling Yocca Carlson \& Rauth as Bond and Disclosure Counsel, NHA Advisors as Municipal Advisor and Bank of America Securities and Raymond James as Underwriters.

## BACKGROUND:

The California Public Employees' Retirement System (CalPERS) Board of Administration has approved several changes to improve the funded status of the retirement plan, including lowering the discount rate assumption from $7.5 \%$ to $7.0 \%$, modifying amortization methods, and updating assumptions about life expectancy. These relatively recent changes have resulted in increases in employer contributions for all agencies participating in CaIPERS. Based on the most recent CaIPERS actuarial report, it is currently anticipated that the City's pension costs will increase by approximately 28\% by Fiscal Year 2024/25 and continue to grow through FY 2030/31.

Staff has been exploring various strategies to reduce pension costs, lower its unfunded liability, and prevent service reductions. The use of Pension Obligation Bonds (POB), as discussed in more detail below, provides for an opportunity to address a portion of the forecasted deficits that have largely been driven by increases in pension costs.

The City provides regular and limited-term employees retirement benefits offered through CaIPERS. Retirement benefits are provided through one of two plans: safety plans for sworn police and fire employees, and a plan for all other (miscellaneous) employees. According to the most recent CaIPERS actuarial valuation as of June 30, 2018, the City's total Unfunded Accrued Liability (UAL) is $\$ 627$ million. This number is projected to be $\$ 642$ million as of June 30, 2020, which is the amount that the FY 2020/21 UAL payment scheduled for July 1, 2020 will be based upon. This does not include any impact of the recent stock market drop, the results of which will not be known until the fiscal year is completed and impact to CaIPERS investments are determined. We anticipate the data to be available in July 2020 and incorporated into the June 30, 2020 valuation report that will be released in the summer of 2021. The chart below depicts the projected repayment schedule (by plan) of the $\$ 642$ million at a $7.0 \%$ interest rate, which is the interest rate CalPERS assesses on the UAL.

Riverside Total CaIPERS UAL (Citywide)


Annual payments are projected to grow from $\$ 45$ million to $\$ 70$ million over the next decade and are the primary driver behind the City's projected annual budget deficits. For comparison, CalPERS costs were $\$ 35$ million in 2019 and $\$ 41$ million in 2020. General Fund deficits are projected at $\$ 11.6$ million for FY 2020/21 and $\$ 10.7$ million for FY 2021/22 and are expected to
increase from those levels thereafter. These deficits do not include any impacts from COVID-19. It should be noted that the overall UAL will change every year moving forward, with below average CaIPERS investment performance adding to the City's payments (layered in over a 20-year repayment period), and with above average investment performance off-setting the current payments. Given the recent stock market drop and overall market volatility, it is likely that the City's UAL will increase if FY 2019/20 returns are well under the current $7.0 \%$ target. It is estimated that the City's UAL would increase by $\$ 130$ million if returns are at $0 \%, \$ 225$ million if returns are negative $5 \%$, and over $\$ 300$ million if returns are negative $10 \%$. This could add $\$ 14$ to $\$ 30+$ million in annual payments starting in 5 to 6 years if CalPERS doesn't recover those losses, meaning that the projected General Fund deficits could ultimately be higher than currently projected.

On January 15, 2020, the Finance Committee heard the presentation from the Finance Department on the conceptual use of Pension Obligation Bonds to restructure the City's Unfunded Accrued Liability with the California Public Employee's Retirement System. After discussion, the Finance Committee unanimously voted to receive the report as presented and forwarded the report to full City Council for additional input and direction.

On February 4, 2020, the City Council heard the presentation from the Finance Department on the conceptual use of Pension Obligation Bonds to restructure the City's Unfunded Accrued Liability with the California Public Employee's Retirement System to create the potential for General Fund savings and long-term financial stability. Following discussion, the City Council approved the Finance Committee's recommendations to receive and order filed the report; directed the Finance Department to continue the required due diligence in order to fully assess options; conduct sensitivity analysis; and develop an optimal restructuring plan.

On March 12, 2020, the Budget Engagement Commission heard a report regarding the conceptual use of pension obligation bonds to restructure the City's Unfunded Accrued Liability with California Public Employees' Retirement System to create the potential for General Fund savings and longer-term financial stability. Following discussion, the Budget Engagement Commission received the report, requested past performance safety to be reported at future meeting, and ordered filed the report.

With the direction of both the Committee and City Council, the team has made significant progress in conducting a comprehensive evaluation of the POB concept. This progress is summarized in the bullets below and outlined in greater detail in the section below and attached presentation.

- Key progress made includes:
- Two underwriters (Bank of America and Raymond James) were hired through a competitive RFP process
- Legal (Bond and Disclosure) Counsel and the City's Actuary were engaged
- 25+ structuring options for the proposed POBs were analyzed, including different sizes, maturities and shapes of repayment schedules
- Options were refined through robust discussions and meetings with financing team members, staff and the Finance Committee Chair
- Refined options have been stress tested to better assess the impact on projected savings under significant underperformance by CaIPERS
- Legal documents and a preliminary official statement were prepared


## DISCUSSION:

The City has been conducting a robust due diligence process to prudently evaluate a restructuring of its UAL through a POB. The City has previously issued POBs in 2004 and 2005 (refinanced several times for interest rate savings - most recently in 2017). The City engaged its actuary (Bartel and Associates) to perform an analysis of how those POBs have performed for the City, given these POBs were issued prior to the Great Recession and during a period when several assumption changes were made by CaIPERS that negatively impacted local agencies. The results of this analysis are that the City has saved $\$ 56$ million over the last 15 years from the time of issuance $(2004 / 2005)$ through the end of 2019.

The restructuring concept entails borrowing money at interest rates (has ranged from $2.5 \%$ to $4.0 \%$ over the last 6 months) lower than CaIPERS is charging on the City's UAL (7.0\%) debt and using that money to pay off a portion of its UAL debt with CaIPERS. The City then has the flexibility to amortize the new payments to create a more predictable and affordable overall repayment shape that is estimated to generate significant cash flow savings, especially during the next 12 years, which are the most challenging for the City's budget.

## POB History and Recent Market Trends

In the 1990s and 2000's, pension bonds were widely used across the nation. Pension bonds fell out of favor after the bankruptcy judges for Stockton and San Bernardino placed PERS contributions in a priority position to pension bond payments owed to investors. Additional negative sentiment was delivered with the Government Finance Officers Association position of discouraging the use of pension bonds, primarily due to reinvestment risks.

Over the last two years, historically low interest rates (see chart below), increasing market receptivity from investors and rating agencies, and new payment-smoothing techniques have all contributed to a re-emergence of the POB market. Several municipalities have recently issued POBs, including the cities of Glendora, Pasadena, Monrovia, Hawthorne, La Verne, Marysville, Chowchilla, Baldwin Park, Pacifica, and Brawley, as well as several others in process, including Riverside County, and the cities of Ontario, Huntington Beach, Grass Valley, West Covina, Pomona, Larkspur, El Monte, Azusa, and several others.

Historical 30-Year Treasury Rates


Since the spread of the Coronavirus, the oil price war, and corresponding crash in the equities markets, the market for taxable and tax-exempt bonds issued by municipalities has been tumultuous given the lack of liquidity in the market. During the weeks of March $7^{\text {th }}$ and $15^{\text {th }}$, interest rates skyrocketed nearly $2.00 \%$, with little to no interest by investors to purchase bonds from municipalities. During the week of March $22^{\text {nd }}$, interest rates recovered nearly $3 / 4$ of that increase given the improved liquidity from the Government stimulus package. Recent efforts by the Federal Reserve to support orderly market activity and support to state and local governments from the CARES Act have been received positively by investors of municipal bonds. Given the recent pronounced volatility in the market, the City's intention is to continue conducting the necessary due diligence, finalizing the required legal documentation, and obtaining a credit rating so that the City is in a position to re-evaluate the market and the POB strategy in May/June of 2020. If conditions are not favorable, the City may decide to delay the POB financing until a more opportune time or not proceed at all.

POBs are not without risks, notably reinvestment risk and market timing risk that occurs after the time of issuance of the POBs. The potential benefits and risks/considerations are discussed below and highlighted in even more detail in the attached presentation.

## Potential Benefits of a UAL Restructuring:

The primary potential benefits of a UAL restructuring include:

- Enhanced Fiscal Sustainability, Budget Predictability and Stabilized Costs - due to restructuring payments into more level shape
- Near-Term Budgetary Savings - the projected savings is concentrated in the first 10 to 15 years, the time period the City faces the most budgetary pressure and largest deficits
- Interest Rate Savings - there is potential for interest rate savings given that borrowing rates have ranged from $2.50 \%$ to $4.00 \%$ over the past six months
- Increase Funding Ratio of Pension Plan - current funding levels are between 70 and $80 \%$ for each plan; a restructuring could increase them to above $90 \%$ for both plans. Funding ratios in the low 90 percentile are typically recommend by many actuaries
- Flexibility to Modify Maturity (Shorten or Lengthen) - City has the option to shorten or lengthen maturity based on objectives; however, the recommended options all include maintaining the same maturity, with no maturity extension and projected savings in every year (no dissavings/added payments in any year)
- Preserve Service Levels and Limit Need to Reduce Reserve Levels - to the extent that a restructuring can act as the primary solution to addressing the deficits, the need to reduce service levels and draw down reserves may be limited


## Structuring Options Evaluation and Refined Scenarios

As part of the structuring options evaluation process, the City and its financing team have evaluated over 25 different options. The options vary as to the size of UAL financed, which amortization base layers of the UAL are paid off, the targeted funding ratios for each plan, length of maturity of the POB, and shape of repayment for the POB. This process has identified three options for final consideration.

Since the time that the Finance Committee and Council received the initial presentation, the City has shifted towards a proportional savings structure instead of the originally contemplated level
debt structure. While not a major change, the new structure does not require an extension of the maturity of the debt like the level debt structure did, nor does it have any years where payments are expected to be higher than they are currently. All of the savings is focused into the next 10 to 15 years, where the City faces the most budgetary pressure. Slide 9 of the attached presentation depicts the difference in repayment shape between the two structuring strategies.

The City has also eliminated the option of solely paying UAL off in the Safety Plan, with all refined options assuming that both the Safety and Miscellaneous Plans are funded to the same targeted funding ratio. This strategy is more equitable (provides benefits to all City funds) and reduces the chances that the Safety Plan becomes overfunded ( $>100 \%$ funding ratio). It is the City's objective to limit the targeted funding ratios to about $92 \%$.

Other objectives for all 3 of the final scenarios include generating at least $\$ 7$ million of General Fund savings in FY 2021 and FY 2022 (to address deficits), and then at least $\$ 10$ million from FY 2023 to FY 2032, where the City's projected General Fund deficits are expected to grow the highest. Given the recent/potential COVID-19 impacts on the City's projected revenues, the City also has flexibility within the proposed POB to create up to \$15M in annual savings for FY 2021 or FY 2022 if needed. The City's CFO will assess the need for this strategy later in the fiscal year after COVID-19 impacts are better analyzed.

The three final scenarios for discussion are shown below. The sizes range from paying off 55\% of the City's UAL to $79 \%$ of the City's UAL, with targeted funding ratios between $89 \%$ and $95 \%$.

## 1. $55 \%$ of Total UAL ( $\approx \$ 350$ million)

- Increases funding ratio (assets/liability) to 89\%


## 2. $67 \%$ of Total UAL ( $\approx \$ 430$ million)

- Increases funding ratio (assets/liability) to 92\%


## 3. $79 \%$ of Total UAL ( $\approx \$ 500$ million)

- Increases funding ratio (assets/liability) to 95\%

The table below provides estimated savings and key metrics for each of these scenarios. Common to each is the estimated interest rate of $3.53 \%$ (including all costs), and the average life of the POB debt, which is between 11.3 to 12.1 years in each scenario. Projected cumulative savings ranges from $\$ 132$ million (Scenario 1) up to $\$ 195$ million (Scenario 3), with present value (PV) savings (discounting back future savings into today's dollars) ranging from $\$ 101$ million to $\$ 141$ million. PV savings as a percentage of UAL paid off (common metric for refinancing, with typical minimum threshold of 3 to $5 \%$ ) ranges from $28 \%$ to $29 \%$. One of the most notable distinctions is the amount of annual General Fund savings that is projected to be generated from FY 2021 to FY 2032. Scenario 1 creates $\$ 7$ to $\$ 10.0$ million of General Fund savings through 2032, Scenario 2 creates $\$ 7$ to $\$ 10.9$ million and Scenario 3 creates $\$ 7$ to $\$ 13.0$ million.

PROPOSED POB OPTIONS - SAVINGS SUMMARY

| Summary of Financing | Scenario 1 | Scenario 2 | Scenario 3 |
| :---: | :---: | :---: | :---: |
| \% of Safety UAL Funded | 60\% | 70\% | 80\% |
| \% of Miscellaneous UAL Funded | 50\% | 64\% | 77\% |
| Total UAL Funded (\$ millions) | \$353.90 | \$430.70 | \$503.40 |
| Target Funding Ratio (Both Plans) | 89\% | 92\% | 95\% |
| All-in Interest Rate with Costs | 3.53\% | 3.53\% | 3.53\% |
| Average Life of Bonds (Years) | 12.1 | 11.6 | 11.3 |
| Projected Benefit Summary |  |  |  |
| Projected Cumulative Benefit (\$ millions) | \$132.20 | \$159.88 | \$195.45 |
| Projected Present Value Benefit (\$ millions) | \$101.47 | \$120.56 | \$141.38 |
| Projected Present Value Benefit (\% of UAL Funded) | 28.67\% | 27.99\% | 28.03\% |
| Projected Annual General Fund Savings (20212032, \$ millions) | \$7.0-\$10.0 | \$7.0-\$10.9 | \$7.0-\$13.0 |

Note: Preliminary estimates; subject to change depending on market conditions and other factors. All present value calculations discounted at All-in Interest Rate for each scenario.

A graphical depiction of each of these scenarios is shown below. Note that the grey bars represent the City's current debt repayment schedule with CaIPERS for its \$642M UAL at June 30, 2020, and the lines represent the City's projected overall (POB combined with refunded UAL) payments after the POB is issued.


Additional detail on the City's projected payments after each POB scenario, and annual savings, is shown in the table below. Highlighted in red on the right side is the specific estimates of annual savings through 2032 applicable to the City's General Fund. The columns on the left in grey represent estimated annual savings for all City funds.

PROPOSED POB OPTIONS - CURRENT VS. ESTIMATED NEW PAYMENTS

|  | Total (\$ millions) |  |  |  |  |  |  | General Fund (\$ millions) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current UAL | Scenario 1 (89\% Target Funding) |  | Scenario 2 (92\% Target Funding) |  | Scenario 3 (95\% Target Funding) |  | Current UAL | Scenario 1 (89\% Target Funding) |  | Scenario 2 (92\% Target Funding) |  | Scenario 3 (95\% Target Funding) |  |
| Fiscal Year | Payments | Payments | Savings | Payments | Savings | Payments | Savings | Payments | Payments | Savings | Payments | Savings | Payments | Savings |
| 2021 | 46.1 | 36.0 | 10.0 | 37.8 | 8.2 | 39.1 | 7.0 | 32.9 | 25.9 | 7.0 | 25.9 | 7.0 | 25.9 | 7.0 |
| 2022 | 51.5 | 44.1 | 7.4 | 44.5 | 7.0 | 44.5 | 7.0 | 37.1 | 30.1 | 7.0 | 30.1 | 7.0 | 30.1 | 7.01 |
| 2023 | 55.8 | 48.8 | 7.0 | 47.8 | 8.0 | 47.8 | 8.0 | 40.5 | 33.5 | 7.0 | 32.5 | 8.0 | 32.5 | 8.01 |
| 2024 | 57.8 | 50.8 | 7.0 | 49.8 | 8.0 | 48.8 | 9.0 | 42.3 | 35.3 | 7.0 | 34.3 | 8.0 | 33.3 | 9.0 |
| 2025 | 59.0 | 52.0 | 7.0 | 50.0 | 9.0 | 49.0 | 10.0 | 42.8 | 35.8 | 7.0 | 33.8 | 9.0 | 32.8 | 10.0 |
| 2026 | 62.0 | 54.5 | 7.5 | 51.5 | 10.5 | 49.9 | 12.2 | 45.4 | 38.4 | 7.0 | 36.4 | 9.0 | 35.4 | 10.01 |
| 2027 | 63.0 | 54.5 | 8.5 | 51.5 | 11.5 | 49.9 | 13.2 | 45.9 | 37.9 | I 8.0 | 35.9 | 10.0 | 35.9 | 10.0 |
| 2028 | 64.8 | 50.5 | 14.2 | 51.5 | 13.2 | 49.9 | 14.9 | 47.2 | 39.2 | I 8.0 | 37.2 | 10.0 | 37.2 | 10.0 |
| 2029 | 66.5 | 54.5 | 12.0 | 51.5 | 15.0 | 49.9 | 16.7 | 48.5 | 39.5 | 9.0 | 38.5 | 10.0 | 38.2 | 10.3 |
| 2030 | 68.4 | 54.6 | 13.8 | 51.5 | 16.9 | 49.9 | 18.5 | 49.8 | 40.8 | 1 9.0 | 39.8 | 10.0 | 38.2 | 11.6 |
| 2031 | 70.2 | 54.5 | 15.7 | 51.5 | 18.7 | 49.9 | 20.4 | 51.2 | 41.2 | I 10.0 | 40.3 | 10.9 | 38.2 | 13.0 |
| 2032 | 64.1 | 54.1 | 10.0 | 51.5 | 12.6 | 49.8 | 14.3 | 47.7 | 37.7 | 10.0 | 37.7 | 10.0 | 37.7 | 10.01 |
| 2033 | 62.4 | 54.6 | 7.8 | 51.5 | 10.9 | 49.9 | 12.5 | 46.7 | 43.1 | 3.6 | 40.3 | 6.4 | 38.2 | 8.5 |
| 2034 | 58.3 | 54.6 | 3.7 | 51.5 | 6.8 | 49.9 | 8.4 | 43.4 | 41.7 | 1.7 | 40.3 | 3.2 | 38.2 | 5.2 |
| 2035 | 55.0 | 54.6 | 0.5 | 51.5 | 3.5 | 49.9 | 5.2 | 41.3 | 41.1 | 0.2 | 39.7 | 1.6 | 38.2 | 3.1 |
| 2036 | 50.8 | 50.8 | 0.0 | 50.8 | 0.0 | 49.9 | 1.0 | 38.4 | 38.4 | 0.0 | 38.4 | 0.0 | 37.9 | 0.4 |
| 2037 | 43.9 | 43.9 | 0.0 | 43.9 | 0.0 | 43.9 | 0.0 | 33.4 | 33.4 | 0.0 | 33.4 | 0.0 | 33.4 | 0.0 |
| 2038 | 40.5 | 40.5 | 0.0 | 40.5 | 0.0 | 40.5 | 0.0 | 30.9 | 30.9 | 0.0 | 30.9 | 0.0 | 30.9 | 0.0 |
| 2039 | 36.9 | 36.9 | 0.0 | 36.9 | 0.0 | 36.9 | 0.0 | 28.2 | 28.2 | 0.0 |  | 0.0 | 28.2 | 0.0 |
| 2040 | 34.5 | 34.5 | 0.0 | 34.5 | 0.0 | 29.9 | 4.6 | 26.3 | 26.2 | 0.0 | 26.2 | 0.0 | 24. | 2.1 |
| 2041 | 33.2 | 33.2 | - | 33.2 | - | 26.9 | 6.2 | 25.2 | 25.2 | - | 25.2 | - | 22.3 | 2.9 |
| 2042 | 22.2 | 22.2 | - | 22.2 | 0.0 | 17.2 | 5.0 | 17.6 | 17.6 | - | 17.6 | 0.0 | 12.3 | 2.3 |
| 2043 | 15.5 | 15.5 | 0.0 | 15.5 | (0.0) | 14.1 | 1.3 | 14.7 | 14.7 | 0.0 | 14.7 | 0.0) | 14.1 | 0.6 |
| 2044 | 12.6 | 12.6 | - | 12.6 | (0.0) | 12.6 | 0.0 | 12.6 | 12.6 | - | 12.6 |  | 12.6 | 0.0 |
| 2045 | 3.3 | 3.3 | 0.0 | 3.3 | - | 3.2 | 0.1 | 3.3 | 3.3 | 0.0 | 3.3 |  | 3.2 | 0.1 |
| 2046 | 0.3 | 0.3 | 0.0 | 0.3 | 0.0 | 0.3 | (0.0) | 0.3 | 0.3 | 0.0 | 0.3 | 0.0 | 0.3 | (0.0) |
| TOTAL | 1,198.4 | 1,066.2 | 132.2 | 1,038.5 | 159.9 | 1,003.0 | 195.4 | 893.3 | 791.8 | 101.6 | 773.2 | 120.1 | $\sqrt{752.1}$ | 141.2 |

Est. Annual Savings to General Fund through FY 2032

## GFOA Concerns

The Government Finance Officer's Association (GFOA) published several concerns about POBs in 2015. Slide 22 in the attached presentation addresses these concerns in detail. In summary, one of the six concerns is very applicable to the City's proposed POB issuance, whereas the other five are not as relevant and/or don't pertain to the City's proposed structure. The concern that is applicable is reinvestment and market timing risk. What this means is that potential savings are estimated and based on the assumption that CaIPERS earns the target rate of return (7.0\%) over the next 20 years. Actual savings will be dependent on CaIPERS future investment returns, with savings lower than expected if CaIPERS earns below $7.0 \%$ and higher if they earn more than $7.0 \%$. The rule of thumb is that present value savings will be realized if CaIPERS earns more than the interest rate that the City pays on the new POB.

The fact that interest rates are at historically low levels naturally mitigates reinvestment risk, as it creates over 350 basis points ( $3.50 \%$ ) of cushion between CaIPERS expected rate of return ( $7.0 \%$ ) and the City's projected borrowing rate (3.50\%). While CaIPERS could earn less than $3.50 \%$ over the next 20 years, the likelihood of this is low.

As shown on slide 16, our team estimated the impacts to PV savings if CaIPERS were to earn $6 \%$, as well as $5 \%$ returns instead of $7 \%$. The results demonstrate that savings are significantly reduced, but still very healthy and above 5\% PV savings (under the 5\% CaIPERS return scenario) and $19-20 \%$ PV savings (under the $6 \%$ CaIPERS return scenario).

A related risk is market timing risk, since a large loss (for example, from a stock market crash) in the year after POB proceeds are given to CaIPERS to invest may mean that the new UAL created would be larger under a POB scenario vs. one where the City did not issue a POB. As part of the stress testing shown on slides 16 and 17, the City's team has estimated the impacts under a scenario where CaIPERS took a $20 \%$ loss in the first year following a POB and then earned $7 \%$ thereafter. The results show that the City would still be better off under this scenario of "very poor timing" if it had issued the POB vs. not issued, both on a near term cash flow basis and on a PV savings basis. This scenario is also conservative in the sense that it assumes CalPERS earns 7\% each year thereafter. Historically, however, CalPERS has tended to recover some of these losses with a rebound after a year with a big loss.

Recent Stock Market Crash and Potential Benefit to Proposed POBs - The recent sizable drop in the US equity market may be beneficial for the proposed financing strategy as the market has historically rebounded from prior similar events. As shown below, future returns have been higher than normal when starting from a point in time after a large market correction. While there is no guarantee that past results will dictate future performance, these are important facts to consider, and is the rationale discussed on the attached (Attachment 7) article that was published on March $25^{\text {th }}$ discussing considerations related to the ideal timing of issuing POBs.

## 2001/2002 Crash: CaIPERS Returns Through 2019

- Starting right before 2001-2002 Crash (-13\%): 6.2\%
- Starting right after 2001-2002 Crash (-13\%): 7.7\%


## 2008/2009 Crash: CalPERS Returns Through 2019

- Starting right before 2008-2009 Crash (-28\%): 5.5\%
- Starting right after 2008-2009 Crash (-28\%): 9.5\%


## Results of $3^{r d}$ Party Actuary Stress Testing Analysis: Bartel and Associates

Over the past month, the City and its team have worked with the City's actuary to stress test 3 POB options. Originally (early March), the POB interest rates assumed were between $2.55 \%$ and 2.80\% (Options 2a and 3a in the Actuarial Report - Attached 8). However, given the increased volatility in the market after that initial analysis, the team re-engaged Bartel to add an Option 3b to the analysis. This option closely corresponds to the Option 2 discussed earlier ( $92 \%$ Funding Ratio) and since it is the most conservative scenario (based on higher interest rate of $3.53 \%$ ), is the focus of this section and in the attached presentation on Slide 19.

The results of the analysis include an expected PV savings benefit of $\$ 84$ million ( $20 \%$ of refunded UAL), and a $75 \%$ chance of generating PV savings. Bartel's analysis incorporates the results of 1,000 different potential CalPERS investment returns simulations to better assess potential volatility on the expected savings from the POB.

It should be noted that Bartel's expected PV savings estimate of $\$ 84$ million is lower than the $\$ 120$ million stated above (Page 6) of the report given that Bartel uses a more conservative assumption for CaIPERS future returns: $6.4 \%$ on average for the next 9 years, and $6.9 \%$ on average for the 20 year period (as opposed to the standard $7 \%$ that is assumed in most POB savings analyses).

Their report can be found in Attachment 6.

## Other Common Criticisms of POBs:

The options evaluation and stress testing process described above fully addresses the most common criticism of POBs, that savings are dependent on future returns by CaIPERS. The City's own experience with POBs and the current stress testing results demonstrate that this risk is manageable, and that the City has carefully evaluated and mitigated it.

A second criticism of POBs is that it exchanges a "soft" liability for "hard" bonded debt. It should be made clear that the CaIPERS UAL is already a debt - it is legally enforceable and has a mandatory repayment schedule. Furthermore, rating agencies treat the UAL as debt when calculating overall liabilities.

Another criticism is that POBs have allowed agencies to "kick the can down the road" and/or contributed to unsound policy decisions. There have been some agencies (mostly out of state)
that have used POBs as purely a one-time budget fix, or as a contribution holiday, where the agency stops making payments into the pension fund. Many pushed out payments and extended the maturity of the debt significantly. For some of these issuers, the POB was seen as a last-ditch effort to remain fiscally solvent or used to enhance benefits for employees. The City is not utilizing any of these tactics through the proposed POB.

Lastly, another common misconception is that rating agencies may view POBs negatively. However, recent rating reports on other CA city POBs indicate that the rating agencies understand the merits of using POBs to lower the issuer's cost of carry and to create a more affordable pension cost profile.

As demonstrated through this process, the City is using the proposed POB as one tool to fully and prudently address its pension liabilities and has gone through an extensive process to illuminate the potential risks, and the impact to projected savings under those negative situations. The proposed POB is not extending payments and includes an immediate amortization of principal in year 1.

## Other Considerations:

As mentioned earlier, the City's proposed POBs are projected to help with some, but not all of the projected deficits, even under the largest Scenario 3. Given the recent stock market crash, there is a strong likelihood that returns from CaIPERS for FY 2019/20 will be significantly below average. While this doesn't impact the projected savings of the POB (since all savings are determined AFTER the POB is closed and money is sent and invested with CaIPERS), it does mean the current pension challenge may get worse. Based on rough estimates, the City's UAL could increase between $\$ 130$ million and $\$ 225$ million if earnings are between $0 \%$ and negative $5 \%$ for this fiscal year. This means that annual payments could go up between $\$ 14$ to $\$ 24$ million annually starting in about 5 to 6 years. While CaIPERS can recover and offset these losses before they begin to impact the City's budget, it is prudent for the City to take steps, using the POB and other cost management strategies, to develop a plan to address these additional spikes that are above and beyond the spikes that the City already faces.

As the City assesses market conditions in May, it will also be important to consider the impacts of the current year return when determining the optimal size and shape of repayment for the proposed POB.

## Conclusion and Recommendation:

City staff and its team of experts have conducted a robust due diligence process to address the potential benefits, and potential risks, in a comprehensive manner. The current market environment may provide for a significantly lower risk profile than during other periods in the past, and the proposed POB provides the City with the opportunity to take more control over the City's budget by developing a more affordable and predictable repayment shape for pension debt. The proposed POBs will help address some of the City's budget deficit, but not all, and may reduce the need to take more aggressive actions such as service reductions or reserve depletion. The projected deficits are likely to be exacerbated by the recent downturn in the equities market and could also impact the City's revenue streams if a recession occurs.

After thorough evaluation, the City's CFO is recommending that the City execute Scenario 2, which brings the funding ratios of both plans to $92 \%$ and includes paying off about $2 / 3$ of the City's UAL. While the dollar amount of UAL to be paid off to target $92 \%$ is about $\$ 430$ million based on
the actuarial valuation last Fall, this number may change once the team considers predicted returns for FY 2019/20. Finance staff will work with its team to assess this in May and then optimize the POB structure with the most up to date information from CaIPERS. In order to provide the City's CFO with maximum flexibility in determining the optimal size of the POB, a not to exceed amount of $\$ 525$ million has been included in the resolution.

Also included in the resolutions is a not to exceed true interest cost of $4.25 \%$ (this equates to $\$ 85$ million of estimated present value savings, or $20 \%$ of refunded UAL - if the POB interest rate was $4.25 \%$ ). While the estimated interest rate is anticipated to be significantly less than this, the threshold is meant to create a reasonable amount of flexibility for the City.

The resolution also provides for the use of bond insurance (if available and cost effective) and the issuance of additional series of POBs (still constrained by same limitations above). While it is expected that the City will issue one series of bonds, this flexibility would allow the City to break the POB issuance into separate smaller issuances if the market dictated that this strategy would be more optimal and cost effective.

## Proposed Next Steps:

The City and its team intend to meet with the credit rating agencies in late April/early May and be in a position to reassess market condition in mid to late May. If market conditions are favorable, the City's goal is to close the financing by June $23^{\text {rd }}$, which will deliver savings to the City starting in FY 2021. If the market is not favorable, and the City closes the transaction after June $23^{\text {rd }}$, savings would not be generated until FY 2022

## Good Faith Estimates:

The good faith estimates discussed below with respect to the 2020 POBs are provided in accordance with California Government Code Section 5852.1. Such good faith estimates have been provided by NHA Advisors, the City's Municipal Advisor, in consultation with BofA Securities, as Senior Managing Underwriter of the 2020 POBs, and are based on assumptions of the Estimated Principal Amount of the 2020 POBs and on market interest rates prevailing at the time such estimate is prepared. The estimates assume that the City issues one series of POBs. If executed in multiple series, the costs estimates would be different than shown below.

Principal Amount: The Municipal Advisor has informed the City that, based on the City's financing plan and current market conditions, its good faith estimate of the aggregate principal amount of the 2020 POBs to be sold (the Estimated Principal Amount) is $\$ 432.3$ million.

True Interest Cost of the Bonds: The Municipal Advisor has informed the City that its good faith estimate of the true interest cost of the 2020 POBs (which is the rate necessary to discount the amounts payable on the respective principal and interest payment to the purchase price received for the Bonds) is $3.50 \%$.

Finance Charge of the Bonds: The Municipal Advisor has informed the City that its good faith estimates of the finance charge for the 2020 POBs (which is the sum of all fees and charges paid to third parties, or costs associated with the 2020 POBs) is $\$ 1.63$ million. Such fees and charges include fees for bond and disclosure counsel, municipal advisor, trustee, rating agencies, printing and underwriting.

Detailed estimates of these fees for each party are below:

- Underwriting: \$1,080,000 (0.25\% of par)
- Rating Agencies (S\&P and Fitch): \$240,000
- Bond/Disclosure Counsel: \$145,000
- Municipal Advisor: \$125,000
- Actuary: \$20,000
- Trustee, Printing and Miscellaneous: \$20,000

These fees are all paid for with bond proceeds. Bond Insurance is not currently assumed to be available. If available, and the actual cost of bond insurance is determined to be lower than the additional savings (from lower interest rates) it generates, a bond insurance policy could be potentially be purchased closer to the time of pricing. Estimated savings from the proposed 2020 POBs take into account all of these costs.

Amount of Proceeds to be Received: The Municipal Advisor has informed the City that its good faith estimate of the amount of proceeds expected to be received by the City for sale of the 2020 POBs (less the finance charge of the 2020 POBs, as estimated above, and any reserves funded with proceeds of the 2020 POBs) is $\$ 430.7$ million.

Total Payment Amount: The Municipal Advisor has informed the City that its good faith estimate of the total payment amount of all payments the City will make to pay debt service on the 2020 POBs calculated to the final maturity of the 2020 POBs is $\$ 609.5$ million.

The foregoing estimates constitute good faith estimates only. The actual principal amount of the 2020 POBs issued and sold, the true interest costs, the finance charges, the amount of proceeds received, and the total payment amount may differ from such good faith estimates due to:

1. The actual date of the sale of the 2020 POBs being different than the date assumed for purposes of such estimates;
2. The actual principal amount of the 2020 POBs sold being different from the Estimated Principal Amount;
3. The actual amortization of the 2020 POBs being different than the amortization assumed for purposes of such estimates;
4. The actual market interest rates at the time of sale of the 2020 POBs being different than those estimated for purposes of such estimates;
5. Other market conditions; or
6. Alterations in the City's financing plan, delays in the financing, additional legal work (including federal tax law due diligence), or a combination of such factors.

The actual date of sale of the 2020 POBs and the actual principal amount of 2020 POBs sold will be determined by the City based on the timing of the need for proceeds of the 2020 POBs and other factors. The actual interest rates and amortization of the 2020 POBs will depend on market interest rates at the time of sale. Market interest rates are affected by economic and other factors beyond the control of the City. If market rates change so that the transaction is no longer financially beneficial, the City can terminate the transaction at any time before the refunding bonds are issued.

## FISCAL IMPACT:

The 2020 POBs will deliver at least \$7M of guaranteed annual savings to the City in FY 2021 and FY 2022. Future savings is dependent on which scenario is executed and CalPERS future investment returns. The recommended Option 2 is estimated to generate over $\$ 150$ million of cash flow savings to the City over the life of the Bonds.

Prepared by: Edward Enriquez, Chief Financial Officer/City Treasurer Certified as to
availability of funds: Edward Enriquez, Chief Financial Officer/City Treasurer
Approved by: Carlie Myers, Deputy City Manager
Approved as to form: Gary G. Geuss, City Attorney

Attachments:

1. Resolution
2. $12^{\text {th }}$ Supplemental Trust Agreement
3. Preliminary Official Statement
4. Bond Purchase Agreement
5. Continuing Disclosure Certificate
6. Bartel Sensitivity Analysis Report
7. Recent Article on POBs
8. Presentation
9. Notice of Public Hearing
