STAFF REPORT

Agenda Date: 11/4/2020

TO:
Honorable Mayor and Members of the City Council

THROUGH:
Bruce Moe, City Manager

FROM:
Steve S. Charelian, Finance Director
Henry Mitzner, Controller
Libby Bretthauer, Senior Financial Analyst
Julie Bondarchuk, Senior Accountant

SUBJECT:
Consider the Issuance of Pension Obligation Bonds for Long-Term CalPERS Pension Liabilities and Adopt a Pension Policy (Finance Director Charelian).
APPROVE

RECOMMENDATION:
The Finance Subcommittee and staff recommend that the City Council approve the issuance of Pension Obligation Bonds (POBs), and adopt a Pension Policy. Staff further recommends issuing POBs at 100% of the UAL at the time of issuance (currently estimated at $91.5 million) to yield the highest present value savings and take advantage of historically low borrowing rates.

FISCAL IMPLICATIONS:
Paying at least the interest due on the City's CalPERS Unfunded Actuarial Liability (UAL) of an estimated $91.5 million is a priority for the City; otherwise, the UAL balance will continue to grow. Issuance of Pension Obligation Bonds can save the City up to $31,800,000 (present value) in pension amortization cash payments over the next 25 years. The savings is calculated by taking the difference between making amortization payments to CalPERS compared to debt service payments over the same period.

BACKGROUND:
The City provides retirement benefits to its employees by contracting with the California Public Employees' Retirement System (CalPERS). CalPERS offers a defined benefit plan where retirement benefits are based on a formula, rather than contributions and earnings to a savings plan. Retirement benefit formulas are calculated based on an employee's years of service

credit, age at retirement, and final compensation, which is determined by an employee's average salary, excluding overtime, for a defined period of employment. Retirement formulas for employee groups vary based on classification (Miscellaneous or Safety), and within these groups, by date of entering CalPERS membership ("Classic" or "PEPRA" if entered into CalPERS after January 1, 2013).

Retirement benefits are funded by contributions from both employees and the City ("normal" annual service costs) as well as investment earnings. CalPERS invests contribution payments with the goal of earning sufficient returns over the long-term to pay defined benefits as promised and cover CalPERS expenses. When investment earnings do not meet expectations over extended periods, the funded status of the entire retirement system is at risk with all member agencies sharing the burden.

CalPERS actuaries perform annual evaluations of the plan to determine the accrued actuarial liability (i.e. defined benefits that will be owed in the future) for each member agency. The accrued actuarial liability is determined by discounting future benefits payable using a rate equal to the expected long-term earnings rate of CalPERS investments. The accrued actuarial liability is inversely related to the discount rate as a lower discount rate will result in a higher accrued actuarial liability.

The funded status of the plan is determined by the difference between the accumulated financial assets of the plan (fiduciary position) and the accrued actuarial liability. If the fiduciary position is less than the accrued actuarial liability, the plan is underfunded, and an Unfunded Actuarial Liability (UAL) exists. Employers have the sole responsibility to pay down their UAL by increasing contributions since the accrued benefits earned by an employee/retiree may not be reduced per California law.

According to the latest analysis from the City's CalPERS Actuary, which was released in July 2020, the City's UAL for all employee groups across all funds is projected to be $91.5 million as of June 30, 2021. The City's plans are currently 73 percent funded.

The discount rate (currently at 7%) signifies CalPERS' assumed return on investments and is used by CalPERS actuaries to calculate the UAL. In the event that CalPERS reduces the current discount rate, all agencies in CalPERS will be impacted by higher liabilities and, consequently, required payment contributions.

When CalPERS last reduced its discount rate, causing employer liabilities to significantly increase, CalPERS implemented a "ramp up" strategy to smooth out the increases in UAL contributions. As opposed to a fixed-level payment schedule, CalPERS started using a 25 year amortization schedule where payments are ramped up in the beginning years and ramped down in the ending years. For agencies wanting to accelerate the payoff of their UAL, CalPERS allows additional discretionary payments at any time.

Similar to bonded debt or a mortgage, the UAL is "amortized" (i.e. gradually reduced or paid off with regular payments covering principal and interest) over a period of time. To calculate the interest cost of the City gradually paying down its outstanding UAL of $91.5 million, the UAL is multiplied by the discount rate. At the current discount rate of seven percent, the implicit interest cost in Fiscal Year (FY) 2020-2021 is roughly $6.4 million. By accelerating payments to CalPERS, the City will be paying down the principal balance of the UAL, thereby saving on interest costs.

At the October 6, 2020, City Council meeting staff presented the consideration of the issuing of POBs for long-term CalPERS pension liabilities and pension policy. To allow additional time for questions, City Council requested staff to bring back the item to the October 20, 2020 Council meeting. After additional discussion and questions, Council continued this item to the November 4, 2020 City Council meeting.

DISCUSSION:

As of July 2020, the funded status of all City of Manhattan Beach retirement plans is currently estimated at 73 percent. The City's unfunded actuarial liability (UAL) will be approximately $91.5 million as of June 30, 2021 (CalPERS most recent return on investments of 4.7 percent for the fiscal year ended June 30, 2020, will be factored into next year's valuation report).

This demand on City resources over the next 20-25 years will need to be balanced with liquidity needs for ongoing City operations, community priorities, and long-term infrastructure needs. Staff analyzed various options to reduce the UAL, while preserving the City's fiscal integrity, with the following goals in mind:

- Preserve financial flexibility to meet or maintain City service obligations while funding pension benefit obligations.

- Consistent with the Government Finance Officers' Association (GFOA) recommendations, strive to repay or amortize unfunded pension liabilities over a period not-to-exceed 20 years (ideally fall in the 15-20 year range, but never exceed 25 years).

- Shorter amortization periods dramatically reduce interest costs and better matches the cost with the work-life of plan participants (i.e. equitable allocation of cost among generations).

- Pay at least the interest owed on the UAL to avoid negative amortization which ultimately increases UAL and interest costs.

- Introduce a level dollar repayment schedule to improve the likelihood that funds will be available to meet future payment demands. A level dollar payment plan becomes a decreasing percentage of the annual budget over time, whereas an increasing dollar payment plan moves in a commensurate manner with rising budgets. Level dollar repayment plan also helps facilitate the budget process and long-term financial planning.

With these funding goals in mind, staff made recommendations on paying down the City's UAL during the September 26, 2019, FSC meeting. One option was to make additional discretionary payments to CalPERS to lower principal and remove negative amortization. The FSC directed staff to research issuing POBs. At the July 6, 2020, FSC meeting, staff brought back options to issue POBs for the City's UAL between 80%-100%. At the July 22, 2020, meeting, the FSC approved a Pension Policy and directed staff to bring forward to City Council the consideration of POBs with the best financing option available at a percentage less than 100%. Upon further review, staff is recommending that the Council authorize issuance of POBs in an amount equal to 100% of the then-current UAL in order to take advantage of historically low interest rates and maximize cost savings.

These funding goals formed the basis of the funding options and recommendations discussed with the Finance Subcommittee on September 26, 2019, and more recently on July 6 and July 22, 2020. From the initial report in 2019, municipal borrowing rates have fallen dramatically, making the cost of borrowing more attractive than the seven percent interest rate currently assessed by CalPERS. The Finance Subcommittee (FSC) discussed current market conditions and Pension Obligation Bond funding options. As a result, the FSC voted to recommend funding the CalPERS pension liability using the best financing option available and directed staff to prepare a report for full City Council approval.

Staff also contracted with Bartel Associates, LLC for actuarial services to independently evaluate the City's UAL position under a variety of discount rates and financial return scenarios. These different scenarios enable the City to develop a long-term financial plan and budget depending on future anticipated outcomes. Bartel Associates provides more updated actuarial information which is not available from CalPERS.

City staff has also been in contact with our CalPERS actuary regarding the impact of issuing POBs. Assuming POBs are issued by April 2021, CalPERS will recalculate the required UAL payment for FY 2021-2022 that was originally calculated in the actuarial report issued in June 2020. In addition, our next actuarial valuation reports will reflect the payment of bond proceeds in April 2021 and factor this into our FY 2022-2023 required UAL payment. The required UAL payment will depend on the amount contributed from bond proceeds.

At the October 6, 2020, City Council meeting staff presented the consideration of the issuing of POBs for long-term CalPERS pension liabilities and pension policy. To allow additional time for questions, City Council requested staff to bring back the item to the October 20, 2020 Council meeting. After additional discussion and questions, Council continued this item to the November 4, 2020 Council meeting. Additionally, staff created an informational web page on POBs on the City's website with frequently asked questions (FAQ) and historic public meeting reports with presentations.

PENSION OBLIGATION BONDS

Pension Obligation Bonds (POBs) are one option to address budgetary impacts from rising UAL contributions. A POB is a taxable debt issuance used to pay some or all of a public agency's UAL. The bond proceeds are deposited with CalPERS to reduce the City's UAL. Debt service payments for the bond issuance will then replace the City's UAL payments that would have been owed to CalPERS for the UAL amount that was paid off. POBs would reduce the City's borrowing cost by not adding additional debt but replacing our current debt at a lower cost

Issuing POBs removes an unknown variable cost and replaces it with a stable, fixed payment amount. POBs should only be issued when the all-in interest rate of the bond issue is significantly below the actuarial rate of interest factored into the calculation of the UAL. KNN Public Finance, the City's Municipal Advisor, has estimated the City's cost of borrowing to be

3.1%, which is well below CalPERS' discount rate of seven percent. With this criterion met, the amount of the POB is the next consideration.

A prudent objective is to fund pension plans near 100% of the total accrued liability and no less than 80%, whenever possible. For this reason, staff reviewed options for issuing POBs at various payoff percentages of the UAL.

100%	$91.5 million for Present Value Savings of $31.8 million
90%	$82.4 million for Present Value Savings of $28.6 million
80%	$73.3 million for Present Value Savings of $25.3 million

To achieve the most savings for the City, staff recommends issuing POBs at 100% of the current UAL. If CalPERS does not achieve their annual discount rate of seven percent returns, then the City's UAL will increase and create new UAL. In the event that CalPERS exceeds the seven percent annual return, then the City's UAL could potentially be reduced. While issuing POBs at 100% of our UAL yields the most savings, there is also a potential risk in stranding our assets by paying off 100% of the UAL (CalPERS will not return excess assets to the public agency if overfunded).

With the issuance of POBs, the adoption of a Pension Policy is strongly recommended to memorialize how the City intends to use the budgetary savings that will result from the issuance of the bonds. On July 22, 2020, the Finance Subcommittee approved the attached Draft Pension Policy, including the proposed plan for the use of budgetary savings.

Several cities throughout California have recently issued, or are in the process of issuing bonds. Cities who have recently issued bonds include Pasadena, Glendora, West Covina, Montebello, Ontario, Carson, and Riverside. A partial list of cities in the process of exploring bonds include Huntington Beach, Orange, Gardena, and Hawthorne.

<u>PROJECTED SAVINGS</u>

If the City issues POBs near 100% of the UAL, the projected budgetary savings over the next ten years ranges from $1.2 million to $4.5 million annually. The attached Draft Pension Policy aims to memorialize how the City plans to utilize the budgetary savings. The Draft Pension Policy recommends allocating the budgetary savings as follows: 40%-60% will be used to offset any future UAL costs that arise and 40%-60% will be used to offset General Fund operational costs.

Staff recommends including ranges within the Pension Policy to provide the City Council some flexibility when preparing the budget for each new fiscal year. However, during the Budget process each fiscal year, a recommendation for the precise savings allocation will be determined based on CalPERS' latest year-end investment return. For example, if CalPERS' fiscal year-end investment return is below its benchmark, the City Council may choose to allocate a higher portion of savings to fund future UAL costs. Alternatively, if CalPERS' fiscal year-end investment return is higher than its benchmark, then the City Council may choose to allocate more of the budgetary savings to offset General Fund operational costs or reserve those funds for future, non-enterprise, capital projects (CIP Fund).

A fundamental consideration in choosing a pension payment savings plan is the effect on the

General Fund, since the General Fund accounts for about 94 percent of all pension contributions. The options must be weighed with balancing liquidity needs and longer-term goals.

If City Council approves moving forward with the POBs, the next step will be to bring a Resolution and Indenture to the City Council meeting in December. The Indenture will identify the specific terms of the bond issuance, maximum bond amount, interest rate and a framework for the validation process.

PUBLIC OUTREACH:
The City's Finance Subcommittee discussed the topics in this report at their public meeting on September 26, 2019 as well as more recently on July 6, 2020, and July 22, 2020. This item was also presented at the October 6, 2020 City Council meeting. To allow more time for public questions, City Council asked to bring back the consideration of issuing POBs and the Pension Policy to the October 20, 2020. After additional discussion and questions, Council continued this item to the November 4, 2020 City Council meeting. Agendas for the Finance Subcommittee and City Council public meetings are posted in advance on the City's website at <https://www.citymb.info>. City staff also created an informational web page for POBs on the City's website with FAQs and historic public meeting reports.

ENVIRONMENTAL REVIEW:
The City has reviewed the proposed activity for compliance with the California Environmental Quality Act (CEQA) and has determined that the activity is not a "Project" as defined under Section 15378 of the State CEQA Guidelines; therefore, pursuant to Section 15060(c)(3) of the State CEQA Guidelines the activity is not subject to CEQA. Thus, no environmental review is necessary.

LEGAL REVIEW:
The City Attorney has reviewed this report and determined that no additional legal analysis is necessary.

ATTACHMENTS:
1. Finance Subcommittee Report (September 26, 2019)
2. Finance Subcommittee Report (July 6, 2020 and July 22, 2020)
3. Draft Pension Policy (July 22, 2020)
4. PowerPoint Presentation (October 6, 2020)
5. PowerPoint Presentation (October 20, 2020)
6. Pension Obligation Bonds FAQ's

Agenda Item #: #4

Staff Report
City of Manhattan Beach

TO: Members of the Finance Subcommittee

FROM: Steve S. Charelian, Finance Director
Henry Mitzner, Controller
Libby Bretthauer, Senior Financial Analyst LB
Julie Bondarchuk, Senior Accountant JB

DATE: September 26, 2019

SUBJECT: Funding of CalPERS Pension Liabilities and Update on PARS Pension Rate Stabilization Fund

---

RECOMMENDATION:
Staff recommends the Finance Subcommittee approve and recommend to the City Council:
a) Additional Unfunded Actuarial Liability (UAL) payments to CalPERS in the amount of $1.5 million in fiscal year (FY) 2019-20, $1.0 million in FY 2020-21, and $1.0 million in FY 2021-22;
b) A longer-term plan to pay $8.4 million to CalPERS annually from FY 2022-23 to FY 2038-39 to accelerate the pay down of the City's current UAL of $88.5 million;
c) Dedicating a portion of future year-end budgetary surpluses (capped at 25% of the surplus) toward the pay down of the City's long-term pension obligations; and
d) Changing the PARS Pension Rate Stabilization Trust Fund investment portfolio selection from "Moderate" to "Moderately Conservative" to ensure funds set aside are less susceptible to market volatility risk; and
e) Utilizing the current PARS Pension Rate Stabilization Trust Fund balance of $1.25 million toward the additional discretionary payment to CalPERS in FY 2019-20 and closing the fund.

FISCAL IMPLICATION:
Paying at least the interest due on the City's CalPERS Unfunded Actuarial Liability (UAL) of $88.5 million is a priority for the City. Otherwise, the UAL balance will continue to grow.

By applying the balance of the PARS Trust Fund toward the initial discretionary payment in FY 2019-20, the impact on the General Fund will be mitigated in the first year. In future years, the Five Year Forecast already included budgeted annual transfers of $250,000 to the PARS Trust Fund. These transfers could be repurposed to offset additional discretionary payments.

With the use of the PARS Trust Fund and future contributions from the General Fund, the General Fund unreserved balance will be reduced by approximately $5.3 million over the next five years if Option #1 is selected. However, this option also stabilizes the City's payments over the subsequent 17 years, resulting in interest cost savings of approximately $5.9 million over the 20 year period.

BACKGROUND:
The City provides retirement benefits to its employees by contracting with the California Public Employees' Retirement System (CalPERS). CalPERS offers a defined benefit plan where retirement benefits are based on a formula, rather than contributions and earnings to a savings plan. Retirement benefit formulas (e.g. 2% at 55 or 3% at 50) are calculated based on an employee's years of service credit, age at retirement, and final compensation, which is determined by an employee's average salary, excluding overtime, for a defined period of employment. Retirement formulas for employee groups vary based on classification (Miscellaneous or Safety), and within these groups, by date of entering CalPERS membership ("Classic" or "PEPRA" if entered into CalPERS after January 1, 2013).

Retirement benefits are funded by contributions from both employees and the City ("normal" annual service costs) as well as investment earnings. CalPERS invests contribution payments with the goal of earning sufficient returns over the long-term to pay defined benefits as promised and cover CalPERS expenses. When investment earnings do not meet expectations, as experienced during the Great Recession, the funded status of the entire retirement system is at risk with all member agencies sharing the burden.

CalPERS actuaries perform annual evaluations of the plan to determine the accrued actuarial liability (i.e. defined benefits that will be owed in the future) for each member agency. The accrued actuarial liability is determined by discounting future benefits payable using a rate equal to the expected long-term earnings rate of CalPERS investments. The accrued actuarial liability is inversely related to the discount rate as a lower discount rate will result in a higher accrued actuarial liability.

The funded status of the plan is determined by the difference between the accumulated financial assets of the plan (fiduciary position) and the accrued actuarial liability. If the fiduciary position is less than the accrued actuarial liability, the plan is underfunded, and an Unfunded Actuarial Liability (UAL) exists. Employers have the sole responsibility to pay down the UAL by increasing contributions since the accrued benefits earned by an employee/retiree may not be reduced per California law.

According to the latest analysis from the City's CalPERS Actuary, the City's UAL for all employee groups, and across all funds, is $88.5 million as of June 30, 2019. The UAL consists of the City's total accrued pension liability of $321 million which is 73 percent funded by fiduciary assets (i.e. investments and cash) of $233 million.

The discount rate, which signifies CalPERS assumed return on investments, is used by CalPERS actuaries to calculate the UAL. In the event that CalPERS reduces the current discount rate of 7 percent, all agencies in CalPERS will be impacted by higher liabilities and, consequently, required payment contributions.

When CalPERS last reduced its discount rate, causing employer liabilities to significantly increase, CalPERS implemented a "ramp up" strategy to smooth out the increases in UAL contributions. As opposed to a fixed-level payment schedule, CalPERS started using a 25 year amortization schedule where payments are ramped up in the beginning years and ramped down in the ending years. For agencies wanting to accelerate the payoff of their

UAL, CalPERS allows additional discretionary payments at any time.

Similar to bonded debt or a mortgage, the UAL is "amortized" (i.e. gradually reduced or paid off with regular payments covering principal and interest) over a period of time. To calculate the interest cost of the City gradually paying down its outstanding UAL of $88.5 million, the UAL is multiplied by the discount rate. At the current discount rate of 7 percent, the implicit interest cost in FY 2019-20 is roughly $6.2 million.

The budgeted amortization contribution set by CalPERS is $5.0 million in FY 2019-20, which is about $1.2 million less than the calculated interest cost of $6.2 million due to the "ramp up" strategy. Any payment to CalPERS less than the calculated interest cost results in "negative amortization", meaning the UAL will actually *increase* by the difference.

DISCUSSION:
CalPERS recently announced a preliminary 6.55 percent net return on investments for the fiscal year ended June 30, 2019. Based on the preliminary fiscal year returns, the funded status of the overall CalPERS fund is an estimated 73 percent.

As of June 2019, the funded status of all City of Manhattan Beach retirement plans is currently estimated around 73 percent, with an unfunded actuarial liability (UAL) of approximately $88.5 million. This demand on City resources over the next 20-25 years will need to be balanced with City liquidity needs, community priorities, and long-term interest savings. Staff has spent considerable time and effort to determine the most efficient means of reducing the UAL with the following goals in mind:

- Preserve financial flexibility to meet or maintain City service obligations while funding pension benefit obligations.
- Consistent with the Government Finance Officers' Association (GFOA) recommendations, strive to repay or amortize unfunded pension liabilities over a period not-to-exceed 20 years (ideally fall in the 15-20 year range, but never exceed 25 years).
- Shorter amortization periods dramatically reduce taxpayer interest costs and better matches the cost with the work-life of plan participants (i.e. equitable allocation of cost among generations).
- Pay at least the interest owed on the UAL to avoid negative amortization which ultimately adds to the interest costs paid by taxpayers.
- Introduce a level dollar repayment schedule to improve the likelihood that funds will be available to meet future payment demands. A level dollar payment plan becomes a decreasing percentage of the annual budget over time, whereas an increasing dollar payment plan moves in a commensurate manner with rising budgets.

These funding goals formed the basis of the funding options and recommendations proposed in this report. The data provided in Attachment #1 includes the most recent information provided by CalPERS and will be updated annually as more current information is available.

<u>PENSION PAYMENT SAVINGS PLAN OPTIONS</u>
Attachment #1 includes the following pension payment savings plan options:

	Payment Structure	Sum of Payments (Undiscounted)
Default	**Default Payment Contribution** -Payments ramp up and ramp down over a 25 year amortization period	**$169,953,607**
Option #1	**Three Year Ramp Up to Level Dollar** -Discretionary payments for 3 years: FY 2019-20 $1,500,000 FY 2020-21 $1,000,000 FY 2021-22 $1,000,000 -Level debt payments of $8.4 million thereafter for remaining 17 years.	**$164,071,256** *($5.9 million) below default*
Option #2	**20 Year Level Dollar** -Level debt payments of $8.1 million for 20 years.	**$161,516,600** *($8.4 million) below default*

Each of the options has its advantages and disadvantages. The default payment plan provided by CalPERS is an uneven payment structure designed with a considerable "ramp up" period to mitigate rising costs for local government agencies already struggling with budgetary deficits. Consequently, payment amounts in the first few years do not even cover the interest owed ("negative amortization") thereby *adding* to the balance of the City's UAL. After the initial ramp up period, payments continue increasing until 2032, when payments begin to ramp down.

Staff recommends avoiding negative amortization of the UAL by making additional discretionary payments, which CalPERS permits at any time. By making additional discretionary payments above the default repayment schedule, the City will accelerate the reduction of the principal balance and reduce payment amounts in later years. Rating agencies and bondholders look favorably upon formalized accelerated payment plans as it indicates the City's commitment to paying down its long-term liabilities and maximizing interest cost savings for taxpayers.

Staff analyzed various options to avoid negative amortization and accelerate the pay down of the UAL. Ultimately, two options are considered to be the most feasible while achieving the funding goals set forth above:

- **Option #1** steps up payments over an initial three-year period before 17 years of level debt payments of $8.4 million. This option achieves paying the entire principal balance in 20 years, but requires additional discretionary payments of $4.7 million over the next five years. However, payments in years 2025 through 2045 are lower than the default payments by $10.6 million, with payment difference amounts varying up to $1.5 million. In the long-term, the City would save approximately $5.9 million in interest costs compared to the default payment schedule.

- **Option #2** is a more aggressive repayment plan to achieve greater savings in the long-term. Compared to the default payment option, additional discretionary payments of $6.8 million would be needed over the next five years. However, payments in years 2025 through 2045 are lower than the default payments by nearly $15.3 million, with payment difference amounts varying up to $1.8 million. Since larger payments early on drop the principal balance, more interest cost savings (approximately $8.4 million) is achieved in the long term.

Between these two options, staff recommends Option #1 to allow sufficient time to plan for these higher payments and mitigate their budgetary impacts.

Of course, additional discretionary payments can be paid to CalPERS at any time the City desires to further accelerate the reduction of the UAL. This decision may be easiest at the end of each fiscal year when the City's Comprehensive Annual Financial Report is presented to the City Council. At this time, staff also presents the year-end General Fund surplus/deficit amount that adds or reduces the unreserved fund balance. Dedicating a portion of future year-end budgetary surpluses (with a proposed cap of 25%) toward discretionary payments to further reduce the City's UAL is recommended. With this commitment, the City will again be demonstrating to rating agencies and bondholders that we are responsibly paying down long-term liabilities and maximizing interest cost savings for taxpayers.

IMPACT ON GENERAL FUND UNRESERVED BALANCE

A fundamental consideration in choosing a pension payment savings plan is the effect on the General Fund, since the General Fund accounts for 93.4 percent of all pension contributions. The options must be weighed with balancing liquidity needs and longer-term goals.

Attachment #1 also summarizes the General Fund impact over the Five Year Forecast period for the Default Repayment plan, Option #1, and Option #2. The Financial Policy designation, calculated as 20 percent of General Fund Expenditures, differs slightly in each option based on the various yearly payment amounts. The estimated General Fund Unreserved balance ranges from over $4.0 million if the City continues with the minimum default payments to needing to utilize the Reserve for Economic Uncertainty in the more aggressive Option #2. Option #1 falls in the middle with an estimated General Fund Unreserved balance of $0.8 million at the end of FY 2023-24.

It should be noted that the attached Five Year Forecast summary also varies from the document presented with the FY 2019-20 Budget. At the time the budget was adopted in June, the City had yet to receive definitive information from LA County on the timing of Measure W funding disbursements to cities. Staff has since received confirmation from LA County's Safe Clean Water Program that cities will begin receiving Measure W disbursements in March and June of 2020. Most recent estimates indicate the City will receive up to $410,000 annually, which will be deposited to the City's Stormwater Fund, thereby reducing the required subsidy from the General Fund by up to $2.0 million over the next five years.

All options also include utilization of the PARS Pension Rate Stabilization Trust Fund to offset the additional discretionary payment in FY 2019-20.

UTILIZATION OF PARS PENSION RATE STABILIZATION FUND (PRSF)

When the FY 2019-20 Budget was adopted on June 4, 2019, annual transfers of $250,000 were budgeted in fiscal years 2019-20 through 2023-24. After completing the transfer this fiscal year, the balance of the PARS Pension Rate Stabilization Fund (PRSF) will be $1.25 million. Currently, the funds are held in PARS' "Moderate" portfolio allocation which targets a range of 40-60% equity investments. To date, the City has experienced gains and losses in monthly portfolio returns and minimal capital appreciation.

To avoid this volatility, changing the City's PARS portfolio allocation to a more conservative plan is warranted and in alignment with the City's investment principles of 1) safety, 2) liquidity, and 3) yield. Therefore, staff recommends the Finance Subcommittee consider the "Moderately Conservative" allocation with 20-40%. In 2016, the City Council assigned responsibility and authority to the Finance Subcommittee to direct investments in the PRSF.

The attached Pension Rate Stabilization Program Funding and Distribution Policy (Attachment #3) identifies who may authorize withdrawals from the fund and for what purpose. Considering CalPERS' recent investment returns of nearly seven percent, it is not economically advantageous for the City to retain the Pension Rate Stabilization Fund for the following reasons:

- A pension plan, by nature, is already a prefunding trust. Having a separate Pension Rate Stabilization Fund is redundant and increases the cost of administration.
- The cost of negative amortization on the CalPERS UAL significantly outweighs the City's PRSF portfolio returns.
- The City's relatively small trust balance is unlikely to outperform CalPERS over time.

For these reasons, staff recommends the Finance Subcommittee approve and recommend to the City Council the disbursement of the $1.25 million PRSF balance to offset the recommended additional discretionary payment to CalPERS in FY 2019-20. Additionally, the budgeted $250,000 transfer to the PRSF in future years will be repurposed to help offset discretionary payments to CalPERS from the General Fund.

OTHER PAYMENT OPTION – PENSION OBLIGATION BONDS

Pension Obligation Bonds (POBs) are another option to address budgetary impacts from rising UAL contributions. A POB is a taxable debt issuance used to extinguish some or all of a public agency's UAL. The bond proceeds would be deposited with CalPERS and mixed with other pension system assets. Debt service payments would then replace the UAL payments that would have been owed for the amount of the UAL that was paid off.

Since CalPERS' actuarial interest rate (i.e. discount rate) is not a fixed, guaranteed return on invested funds, savings over the long-run depends on whether actual investment results exceed the cost of borrowing. Attachment #4 contains further analysis and considerations on POB financing.

Attachments:

1. CalPERS Pension Payment Savings Options
2. Five Year Forecast Summary Impacts from Savings Options
3. KNN Public Finance Presentation: Pros and Cons of Pension Obligation Bonds

CITY OF MANHATTAN BEACH - CALPERS PENSION PAYMENT SAVINGS OPTION #1

ATTACHMENT #1

Unfunded Actuarial Accrued Liability as of July 2019 = $88,500,000

UNFUNDED ACCRUED LIABILITIES
Default Payment Plan
Mixed Amortization Bases

	FY	UAL, Beg of FY	Payment
1	2020	$88,500,000	$4,997,078
2	2021	89,525,939	6,071,742
3	2022	89,512,044	6,914,681
4	2023	88,625,226	7,592,907
5	2024	86,974,762	7,979,389
6	2025	84,808,983	8,370,176
7	2026	82,087,362	8,600,558
8	2027	78,936,917	8,837,399
9	2028	75,320,948	9,079,623
10	2029	71,201,301	9,329,382
11	2030	66,534,924	9,586,678
12	2031	61,275,750	9,850,433
13	2032	55,375,600	9,883,806
14	2033	49,027,919	9,740,624
15	2034	42,384,009	9,355,220
16	2035	35,673,695	9,013,953
17	2036	28,846,670	8,430,463
18	2037	22,145,326	7,493,865
19	2038	15,943,720	4,703,447
20	2039	12,194,457	4,087,660
21	2040	8,819,725	3,230,727
22	2041	6,095,188	2,595,562
23	2042	3,836,959	1,597,600
24	2043	2,452,961	1,485,639
25	2044	1,087,899	1,109,923
26	2045	15,929	15,072
		Sum of Payments	$169,953,607
		NPV Pmts @ 3%	$123,655,138

UNFUNDED ACCRUED LIABILITIES
3 Year Ramp Up to Level Dollar
Mixed Amortization Bases

	FY	UAL, Beg of FY	Payment	Pmt Difference*
1	2020	$88,500,000	$6,497,078	$1,500,000
2	2021	87,974,314	7,071,742	1,000,000
3	2022	86,817,388	7,914,681	1,000,000
4	2023	84,707,528	8,387,515	794,608
5	2024	81,960,869	8,387,515	408,126
6	2025	79,021,945	8,387,515	17,339
7	2026	75,877,296	8,387,515	(213,043)
8	2027	72,512,521	8,387,515	(449,884)
9	2028	68,912,212	8,387,515	(692,108)
10	2029	65,059,882	8,387,515	(941,867)
11	2030	60,937,888	8,387,515	(1,199,163)
12	2031	56,527,355	8,387,515	(1,462,918)
13	2032	51,808,085	8,387,515	(1,496,291)
14	2033	46,758,465	8,387,515	(1,353,109)
15	2034	41,355,373	8,387,515	(967,705)
16	2035	35,574,063	8,387,515	(626,438)
17	2036	29,388,062	8,387,515	(42,948)
18	2037	22,769,041	8,387,515	893,650
19	2038	15,686,689	8,387,515	3,684,068
20	2039	8,108,572	8,387,515	4,299,855
21	2040	-	-	(3,230,727)
22	2041			(2,595,562)
23	2042			(1,597,600)
24	2043			(1,485,639)
25	2044			(1,109,923)
26	2045			(15,072)
		Sum of Payments	$164,071,256	$ (5,882,351)
		NPV Pmts @ 3%	$121,276,715	

To avoid negative amortization that adds to the City's Unfunded Liability, additional discretionary payments are recommended:
FY 20 +$1.5M (PARS+GF)
FY 21 +$1.0M (GF)
FY 22 +$1.0M (GF)

Net pension liabilities will increase unless payments exceed the interest due on the principal balance.

To achieve long-term savings and ease the burden on future generations, Option #1 accelerates payments over the next 17 years to pay off the Unfunded Liability balance in 20 years.

In years with a surplus, the City could apply additional discretionary payments to further accelerate the payoff, or set aside these moneys in a reserve to offset future payments.

With additional discretionary payments and committing to level payments of $8.4 million, the City will save about $5.9 million over the next 25 years.

Principal balance growing due to payments not covering the interest due (Negative Amortization)
Balance declining but outstanding balance still exceeds principal balance as of July 2019
Balance declining and outstanding balance is less than principal balance as of July 2019

*Payments Over/Under the minimum default plan payments

CITY OF MANHATTAN BEACH - CALPERS PENSION PAYMENT SAVINGS OPTION #2

ATTACHMENT #1

Unfunded Actuarial Accrued Liability as of July 2019 = $88,500,000

UNFUNDED ACCRUED LIABILITIES
Default Payment Plan
Mixed Amortization Bases

	FY	UAL, Beg of FY	Payment
1	2020	$88,500,000	$4,997,078
2	2021	89,525,939	6,071,742
3	2022	89,512,044	6,914,681
4	2023	88,625,226	7,592,907
5	2024	86,974,762	7,979,389
6	2025	84,808,983	8,370,176
7	2026	82,087,362	8,600,558
8	2027	78,936,917	8,837,399
9	2028	75,320,948	9,079,623
10	2029	71,201,301	9,329,382
11	2030	66,534,924	9,586,678
12	2031	61,275,750	9,850,433
13	2032	55,375,600	9,883,806
14	2033	49,027,919	9,740,624
15	2034	42,384,009	9,355,220
16	2035	35,673,695	9,013,953
17	2036	28,846,670	8,430,463
18	2037	22,145,326	7,493,865
19	2038	15,943,720	4,703,447
20	2039	12,194,457	4,087,660
21	2040	8,819,725	3,230,727
22	2041	6,095,188	2,595,562
23	2042	3,836,959	1,597,600
24	2043	2,452,961	1,485,639
25	2044	1,087,899	1,109,923
26	2045	15,929	15,072
		Sum of Payments	$169,953,607
		NPV Pmts @ 3%	$123,655,138

UNFUNDED ACCRUED LIABILITIES
20 Year Level Dollar
Mixed Amortization Bases

	FY	UAL, Beg of FY	Payment	Pmt Difference*
1	2020	$88,500,000	$8,075,830	$3,078,752
2	2021	86,341,227	8,075,830	2,004,088
3	2022	84,031,340	8,075,830	1,161,149
4	2023	81,559,760	8,075,830	482,923
5	2024	78,915,170	8,075,830	96,441
6	2025	76,085,459	8,075,830	(294,346)
7	2026	73,057,668	8,075,830	(524,728)
8	2027	69,817,932	8,075,830	(761,569)
9	2028	66,351,414	8,075,830	(1,003,793)
10	2029	62,642,240	8,075,830	(1,253,552)
11	2030	58,673,423	8,075,830	(1,510,848)
12	2031	54,426,790	8,075,830	(1,774,603)
13	2032	49,882,892	8,075,830	(1,807,976)
14	2033	45,020,921	8,075,830	(1,664,794)
15	2034	39,818,612	8,075,830	(1,279,390)
16	2035	34,252,142	8,075,830	(938,123)
17	2036	28,296,019	8,075,830	(354,633)
18	2037	21,922,967	8,075,830	581,965
19	2038	15,103,802	8,075,830	3,372,383
20	2039	7,807,294	8,075,830	3,988,170
21	2040	-	-	(3,230,727)
22	2041			(2,595,562)
23	2042			(1,597,600)
24	2043			(1,485,639)
25	2044			(1,109,923)
26	2045			(15,072)
		Sum of Payments	$161,516,600	$ (8,437,007)
		NPV Pmts @ 3%	$120,147,958	

General Fund impact will be mitigated by using the PARS Trust balance of $1.0M and budgeted allocations to PARS of $250,000/yr in fiscal years 2020 to 2024.

Net pension liabilities will increase unless payments exceed the interest due on the principal balance.

To achieve greater long-term savings and further ease the burden on future generations, Option #2 has level dollar payments for 20 years. With bigger payments toward the principal balance earlier in the 20 year period, the City will achieve more savings in the long-term.

In years with a surplus, additional discretionary payments could be used to further accelerate the payoff, or these funds could be set aside in a reserve to offset future payments.

By accelerating the payoff with level dollar payments for 20 years, the City would save about $8.4 million over the next 25 years.

- Principal balance growing due to payments not covering the interest due (Negative Amortization)
- Balance declining but outstanding balance still exceeds principal balance as of July 2019
- Balance declining and outstanding balance is less than principal balance as of July 2019

*Payments Over/Under the minimum default plan payments

CITY OF MANHATTAN BEACH CALPERS PENSION PAYMENT SAVINGS OPTIONS

ATTACHMENT #2

GENERAL FUND FIVE YEAR FORECAST - With estimated MEASURE W funding of $400,000/year

DEFAULT PAYMENT PLAN	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Assumes continuing transfers of $250,000/year to PARS Trust for future payments to CalPERS.						
CalPERS Payments (Gen Fund Only)		$4,714,649	$5,671,007	$6,458,312	$7,091,775	$7,452,749
General Fund Surplus/(Deficit)	***$3,106,282***	***$1,060,949***	***$958,018***	***$1,161,310***	***$948,446***	***$1,645,304***
General Fund Fund Balance*	**$26,000,000**	**$26,287,918**	**$25,931,361**	**$26,236,288**	**$26,335,484**	**$27,087,560**
Financial Policy Designation	14,937,974	15,004,887	15,560,393	15,985,121	16,508,728	16,866,595
Reserve for Econ Uncertainty	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
PARS Trust (Excl. Interest)	1,000,000	1,250,000	1,500,000	1,750,000	2,000,000	2,250,000
General Fund Unreserved	6,062,026	6,033,031	4,870,968	4,501,167	3,826,756	3,970,965

OPTION #1 - 3 Yr Ramp Up	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Additional payments of $1.50M in FY 2020, $1.0M in FY 2021, and $1.0M in FY 2022; payments of $7.8 million for 17 years starting FY 2023.						
Assumes current PARS Trust balance of $1.0 million used in FY 2020 and budgeted PARS transfers of $250,000 are applied to CalPERS payments.						
CalPERS Payments (Gen Fund)		$5,068,271	$6,605,007	$7,392,312	$7,833,939	$7,833,939
CalPERS Payments (from PARS Trust)		$1,000,000	-	-	-	-
General Fund Surplus/(Deficit)	***$3,106,282***	***($292,673)***	***$24,018***	***$227,310***	***$206,282***	***$1,264,114***
General Fund Fund Balance*	**$26,000,000**	**$23,934,296**	**$22,643,739**	**$22,014,666**	**$21,371,698**	**$21,742,584**
Financial Policy Designation	14,937,974	15,275,612	15,747,193	16,171,921	16,657,160	16,942,833
Reserve for Econ Uncertainty	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
PARS Trust (Excl. Interest)	1,000,000	-	-	-	-	-
General Fund Unreserved	6,062,026	4,658,684	2,896,546	1,842,745	714,538	799,751

OPTION #2 - 20 Yr Level Dollar	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Level dollar payments of $7.5 million for twenty years.						
Assumes current PARS Trust balance of $1.0 million used in FY 2020 and budgeted PARS transfers of $250,000 are applied to CalPERS payments.						
CalPERS Payments (Gen Fund)		$6,542,825	$7,542,825	$7,542,825	$7,542,825	$7,542,825
CalPERS Payments (from PARS Trust)		$1,000,000	-	-	-	-
General Fund Surplus/(Deficit)	***$3,106,282***	***($1,767,227)***	***($913,800)***	***$76,797***	***$497,396***	***$1,555,228***
General Fund Fund Balance*	**$26,000,000**	**$22,459,742**	**$20,231,367**	**$19,451,780**	**$19,099,926**	**$19,761,926**
Financial Policy Designation	14,937,974	15,570,523	15,934,757	16,202,024	16,598,938	16,884,610
Reserve for Econ Uncertainty	4,000,000	4,000,000	4,000,000	3,249,756	2,500,988	2,877,316
PARS Trust (Excl. Interest)	1,000,000	-	-	-	-	-
General Fund Unreserved	6,062,026	2,889,219	296,610	-	-	-

*Including PARS Trust held in reserve.

ATTACHMENT #3

City of Manhattan Beach

Pros and Cons of Pension Obligation Bonds

September 19, 2019

KNN public finance
5901 West Century Blvd., Suite 750, Los Angeles, CA 90045
phone 310-348-2901 fax 510-208-8282

What is a Pension Obligation Bond?

- A Pension Obligation Bond ("POB") is a taxable debt issuance used to extinguish some or all of a public agency's unfunded actuarial accrued liability ("UAAL").
- Proceeds would be deposited with the City's pension system, CALPERS, and invested along with other pension system assets, presumably in a mix of equities and corporate fixed income securities.
- Debt service payments to bondholders would replace the portion of the employer contribution rate that was allocable to the payment of the extinguished UAAL.
- POBs are issued only when the all-in interest rate of the bond issue is significantly below the actuarial rate of interest factored into the calculation of the UAAL.
- The City of Manhattan Beach previously issued $6.8 million of Taxable Pension Obligation Bonds in 2007, which fully matured in 2014.

Long-term POB Savings Depend on Long-term Investment Returns

- Unlike a traditional bond refunding, POBs do not "lock-in" savings over the long-term because the actuarial interest rate is not a fixed, guaranteed return on invested funds.
- Over the long-run, a POB program can accelerate reinvestment earnings and shrink unfunded liabilities so long as the long-term investment of the POB proceeds exceeds the interest cost of the bonds.
- Outperformance could result in overfunding the retirement system.
- However, if the retirement system earns less than the interest cost of POBs over time, the POB program is a net cost.
- Thus, whether a POB program is successful over the long-run will depend on whether actual investment results exceed the cost of borrowing, which can only be known after many years.

Investment Risk

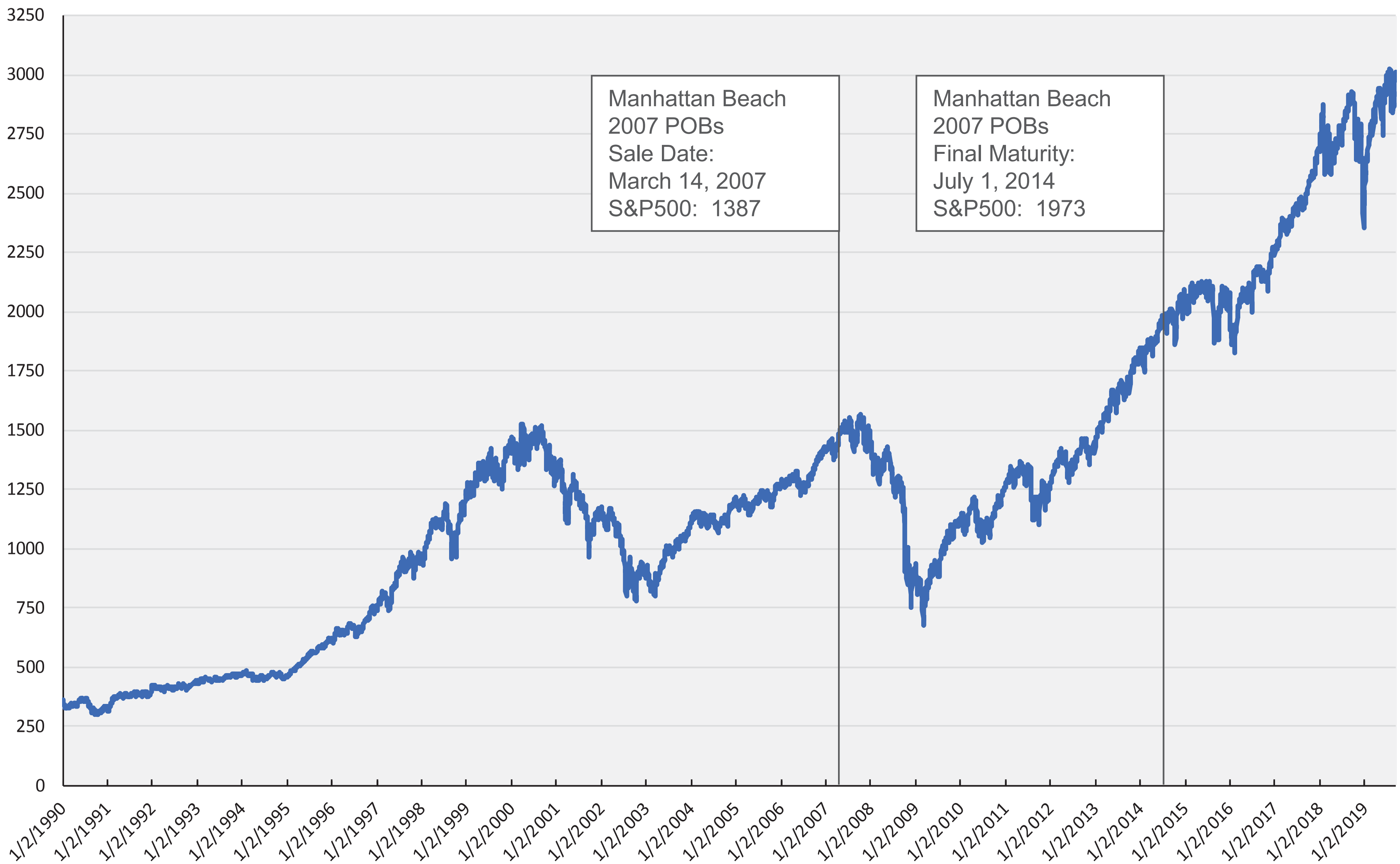
- A pension system's actuarial interest rate is higher than the bond cost because retirement systems assume more risk and are exposed to more volatility in their investments than muni bond investors and forecast a higher rate of return in exchange for taking that risk.

- Thus, POBs are a form of risk arbitrage. The City borrows against its low-risk credit rating and reinvests in corporate securities and equities, which are inherently higher risk.

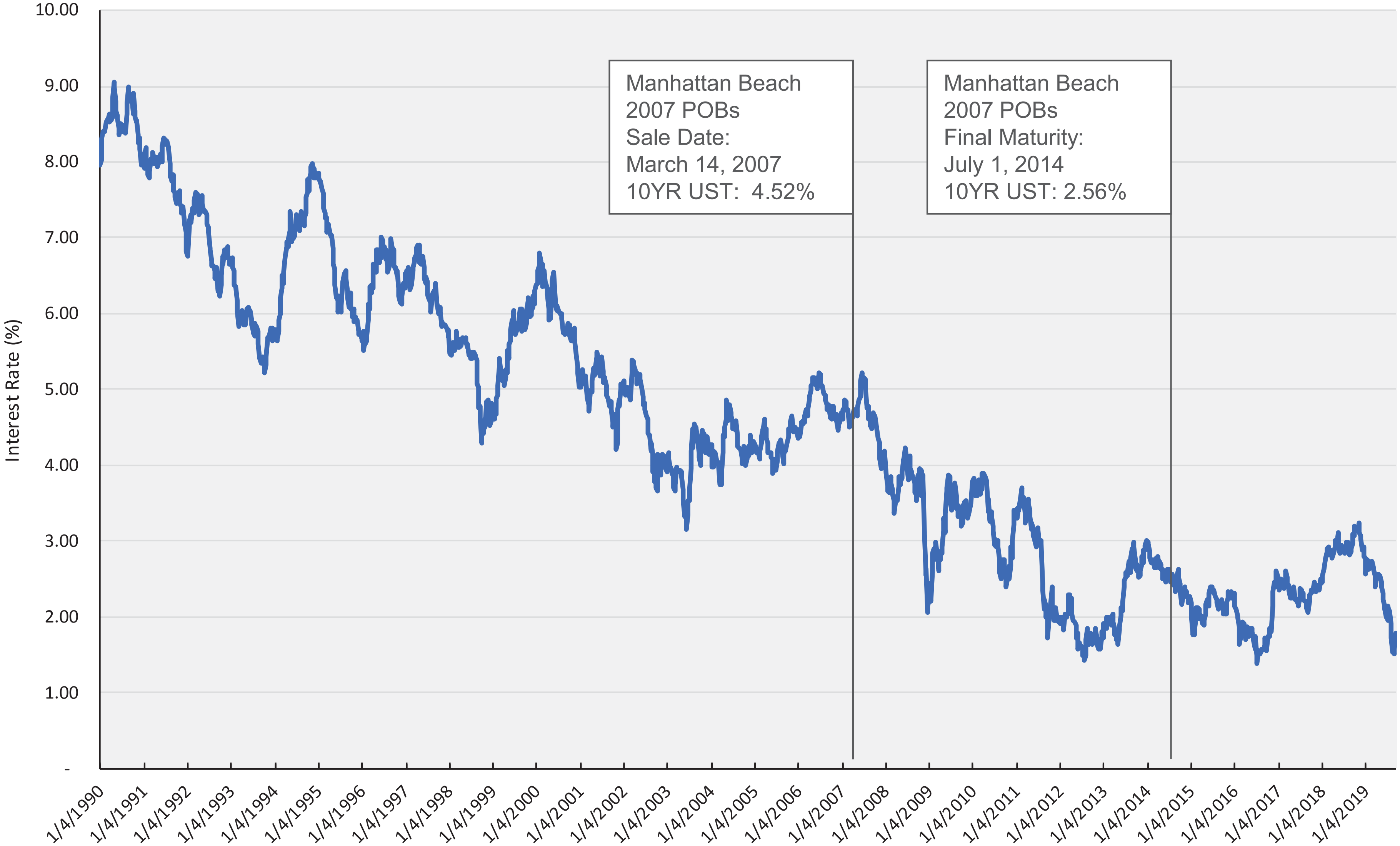
- Market timing also greatly impacts the long-term economics of a POB. Large reinvestment gains early in the life of a POB program, resulting from a rising stock market, could result in a pension system surplus and provide a cushion against future market declines. Overall, they enhance the likelihood of gains over the life of the program. However reinvestment losses early in the life of a POB program would contribute to a new unfunded liability and could require many years of future gains in order to reach "break-even."

- Thus, POBs accelerate the investment of pension assets and increase the sensitivity to investment returns, particularly in the initial years after a POB is issued. By comparison, conventional funding of the UAAL "dollar-cost averages" the investment over time.

Long-term History of the S&P500



Long-term History of the 10-yr U.S. Treasury



Other Considerations

- Overfunding: If the City's POBs are sized to eliminate the entire UAAL, above market returns could create an actuarial "surplus" in the retirement system.
  - Possibly result in political pressure to increase benefits.
  - If earnings above the actuarial rate in any given year are deposited into a supplemental benefit reserve, this can undermine the ability to achieve budgetary savings over the long-run with a POB.

- Consider issuing less than 100% of the current estimate of the UAAL in order to manage the risks of market timing and the pressures from a potentially over-funded system.

- GFOA Advisory on Pension Obligation Bonds discourages use of this instrument.

- Consider in the context of long-term capital planning: issue a tax-exempt infrastructure financing in-lieu of taxable POB.
  - Freed up cash can be used to prepay a portion of the UAAL.
  - Fungibility of cash creates a "tax-exempt" POB financing.

Agenda Item #: ______

Staff Report
City of Manhattan Beach

TO: Members of the Finance Subcommittee

FROM: Steve S. Charelian, Finance Director

DATE: July 6, 2020

SUBJECT: CalPERS Pension Costs and Pension Obligation Bond Options

---

RECOMMENDATION:
Staff recommends that the Finance Subcommittee receive and file this report.

FISCAL IMPLICATION:
Fiscal implications of the City's rising CalPERS pension costs and Pension Obligation Bond (POB) options will be discussed during the presentation.

DISCUSSION:
As a follow up to the September 26, 2019, Finance Subcommittee Report on the funding of CalPERS Pension Contributions, staff requested KNN Public Finance to prepare a presentation on the City's options to mitigate pension costs by issuing Pension Obligation Bonds.

If the City pursues the use of Pension Obligation Bonds, the adoption of a Pension Policy is strongly recommended to memorialize how the City intends to use the budgetary savings that will result from the issuance of the bonds.

Attachments:

1. KNN Public Finance Pension Obligation Bond Presentation
2. City of Manhattan Beach UAL Policy (Draft for Discussion)

City of Manhattan Beach
Unfunded Pension Liability Policy - Draft

PURPOSE

The purpose of this Unfunded Pension Liability Policy ("Policy") is to provide guidance on the development and adoption of a funding plan for any Unfunded Accrued Liabilities ("UAL") that are calculated annually by CALPERS, or for any unfunded accrued liabilities remaining immediately after the issuance of a Pension Obligation Bond (POB). This funding Policy should also support the decision making process of the City Council and should be consistent with the overall purpose and goals of the City of Manhattan Beach's pension plan. As used in this Policy, "City" shall mean the City and/or the City and its related entities, as the context may require.

The City recognizes that a fiscally prudent Policy should:

- Maintain the City's sound financial position
- Ensure the City has the flexibility to respond to changes in future service priorities, revenue levels, and operating expenditures
- Protect the City's creditworthiness
- Ensure that all pension funding decisions are structured to protect both current and future taxpayers, ratepayers and residents of the City, and
- Ensure that the City's debt is consistent with the City's strategic planning goals, objectives, capital improvement program, and/or budget

BACKGROUND

The primary goal of funding defined benefit pension plans is to ensure that sufficient assets will be accumulated to deliver promised benefits when they come due and to protect pension benefits in situations that involve employer insolvency or bankruptcy. Establishing sound funding guidelines promotes pension benefit security. The City's overall objective is to fund the CALPERS pension plan near 100% of the total accrued liability and no less than 80%, whenever possible.

The City is committed to fiscal sustainability by employing long-term financial planning efforts, maintaining appropriate reserve levels, and employing prudent practices in governance, management, budget administration, and financial reporting. This Policy is intended to make all relevant information readily available to decision-makers and the public to improve the quality of decisions, identify policy goals, and to demonstrate a commitment to long-term financial planning. Adherence to this Policy signals to rating agencies and the capital markets that the City is well managed and able to meet its obligations in a timely manner.

The purpose of this funding policy is to establish a framework for funding the City of Manhattan Beach's defined benefit pension plan, taking into account factors that are relevant to the plan and the City. These factors include:

- The financial position of the City
- Stability of the plan and / or the affordability of the annual contributions
- Benefit security
- The terms of the CALPERS contract for Manhattan Beach, along with any related collective bargaining agreements
- Minimum funding requirements under State law

There are a number of advantages to developing a funding policy to address an unfunded accrued liability. These advantages include the following:

- Provides the framework to ensure the proper management of future liabilities and to minimize the effects on operations. The adoption of a funding policy will ensure a disciplined decision making process, which will contribute to better predictability in funding.
- Having a written summary of the funding policy that is accessible to the employees and the public will help improve the transparency of funding decisions and increase the understanding of pension funding issues.
- The exercise of developing this funding policy improves the identification, understanding, and management of the risk factors that affect the variability of funding requirements and the security of benefits to the employees and retirees.

REMAINING UNFUNDED ACCRUED LIABILITY

The City is in the process of considering a POB that would generate bond proceeds to deposit with CALPERS up to an amount equal to 100% of the UAL as of ___date___ (based on the latest actuarial valuation information available to the City). After the deposit of bond proceeds to CALPERS, the City may or may not have a remaining unfunded accrued liability still owed to CALPERS.

If the City issue's a POB for less than the full 100% of the UAL, any remaining unfunded liability will be accounted for separately, for the purposes of this Policy, from any new increase in the accrued unfunded liability resulting from the annual actuarial valuation report changes.

The City will create a payoff / funding plan that will address this remaining unfunded liability immediately after the issuance of the POB. The remaining unfunded liability will be paid off or fully funded within a twenty (20) year period.

NEW UNFUNDED ACCRUED LIABILITY

Every year, CALPERS completes a new actuarial valuation report and recalculates the City of Manhattan Beach's pension liability as of the new valuation date. If the value of the funded assets is not equivalent to this new liability amount, the City will incur a new unfunded accrued liability at that point in time. The unfunded accrued liability may increase or decrease from year to year, due to the following factors:

- Changes in actuarial assumptions and experience changes (e.g., changes in the discount rate, changes in demographic experience, etc.)
- Changes in actuarial gains and losses due to asset returns being higher or lower than expected
- Changes in plan benefits

Due to the possibility of a new pension liability developing, the City of Manhattan Beach desires to create a policy in order to immediately address any new pension liabilities, or amortization bases, that arise. (Any new increase or decrease in the liability resulting from the annual actuarial valuation is identified as a separate line item, or amortization base, on the annual CALPERS actuarial valuation report.) The table below lays out the parameters for paying off / funding the UAL in a designated amount of time, based on the amount of the UAL, as follows:

New Unfunded Accrued Liability (**Any new liability incurred after the June 30, 2018 valuation report)**	**Payoff / Funding Time Period**
$0 to $5,000,000	Within 1 to 5 years
$5,000,001 to $10,000,000	Within 6 to 10 years
$10,000,001 to $15,000,000	Within 11 to 15 years
Over $15,000,0001	Within 16 to 20 years

Each year, when the City is provided with the annual valuation report from CALPERS, staff will present to the City Council, as part of the Mid-Year Budget Report, the following:

- The dollar amount of the new liability (new amortization base)
- The number of years that staff is recommending to pay off/fund the liability
- The dollar amount of the annual contribution to be made
- The funding source(s) of the payments
- The short-term and long-term financial impacts on the City's General Fund reserve balance

When a new amortization base results in a credit balance, the credit will be applied, first, to any negative bases during the same period and, secondly, against any prior year bases until the credit is fully exhausted. The remaining outstanding liability will then be recalculated and a new payoff schedule and annual contribution will be determined based on the payoff schedule above. New amortization repayment schedules will be kept within 20 years to help maximize long-term savings.

PREPAYMENT OPTIONS
At the beginning of each fiscal year, the City analyzes the cost / benefits of prepaying amounts due CALPERS during that fiscal year. The City strives to continue taking advantage of any prepayment discount that is afforded by CALPERS.

FUNDING LEVELS
The City's target funding level will be near 100% of the accrued liability. The City will strive to achieve this funding level through debt refinancing, allocation of reserves, and / or cost containment measures. The total funding amount will be a combination of the amount on deposit with CalPERS, the funds deposited in the City's Section 115 trust, and any funds reserved by the City that are designated for pension liabilities.

FUNDING OPTIONS
Funding options for the remaining unfunded liability and / or any new unfunded accrued liabilities may include the use of a Section 115 Trust and / or allocating fund reserves from any allowable fund within the City.

Section 115 Trust
A Section 115 Trust was established in 2017 to transfer funds to a trust to ensure that these funds will only be used for pension related costs. The trust assets can be accessed to pay CalPERS at any time to reduce volatility and offset unexpected pension rate increases. The trust will have funds deposited into it at the discretion of the City Council, based on recommendations made by City staff during the annual budget adoption process. For the calculation of funding levels, monies put in this trust will be treated the same as putting monies on deposit with CalPERS.

ADDITIONAL DISCRETIONARY PAYMENTS
Additional Discretionary Payments ("ADP") may be deposited with CalPERS at any time. After completion of the annual audit, all discretionary fund reserve balances will be reviewed by City staff. Based on any budgetary constraints at that time, a determination may be made that it is in the best interest of the City to use any available reserves or one-time savings from the prior fiscal year to make ADP's. ADP's should not adversely affect the general operations of the City. ADP's could be deposited with CalPERS, or invested in the City's Section 115 trust.

Any savings realized from the issuance of the 2020 POB, as determined by comparing the POB level debt service and fiscal year 2020-2021 CalPERS actuarial determined contributions, will be allocated as follows: 40%-60% of the savings will be used to offset any future UAL costs that arise and 40%-60% of the savings will be used to offset General Fund operational costs.

Each year during the Budget process, a recommendation for the precise savings allocation of the next fiscal year will be determined based on CalPERS' latest year-end investment return. If CalPERS' fiscal year-end investment return is *below* its benchmark, the City will allocate a higher portion of savings to fund future UAL costs. Alternatively, if CalPERS' fiscal year-end investment return is *higher* than its benchmark, then the City may allocate more of the budgetary savings to offset General Fund operational costs.

CONSIDERATION OF FUTURE PENSION BENEFITS

The issuance of a POB may result in the funding of the City's pension plan with CalPERS up to, and even in excess of, 100% of the plan assets necessary to pay all pension liabilities. Even though this situation may occur, the City is still obligated to make annual debt service payments on the bonds. These payments are in lieu of annual UAL payments that the City would have made to CalPERS.

To the extent that the City is making any annual debt service payments on an issued POB, it is fiscally responsible for the City to not offer any enhanced pension benefits to City employees. This will allow the City to focus its financial resources on the current pension obligations due the bondholders and / or CalPERS.

CITY OF MANHATTAN BEACH
Unfunded Pension Liability Policy - DRAFT

PURPOSE

The purpose of this Unfunded Pension Liability Policy ("Policy") is to provide guidance on the development and adoption of a funding plan for any Unfunded Accrued Liabilities ("UAL") that are calculated annually by CALPERS, or for any unfunded accrued liabilities remaining immediately after the issuance of a Pension Obligation Bond (POB). This funding Policy should also support the decision making process of the City Council and should be consistent with the overall purpose and goals of the City of Manhattan Beach's pension plan. As used in this Policy, "City" shall mean the City and/or the City and its related entities, as the context may require.

The City recognizes that a fiscally prudent Policy should:

- Maintain the City's sound financial position
- Ensure the City has the flexibility to respond to changes in future service priorities, revenue levels, and operating expenditures
- Protect the City's creditworthiness
- Ensure that all pension funding decisions are structured to protect both current and future taxpayers, ratepayers and residents of the City, and
- Ensure that the City's debt is consistent with the City's strategic planning goals, objectives, capital improvement program, and/or budget

BACKGROUND

The primary goal of funding defined benefit pension plans is to ensure that sufficient assets will be accumulated to deliver promised benefits when they come due and to protect pension benefits in situations that involve employer insolvency or bankruptcy. Establishing sound funding guidelines promotes pension benefit security. The City's overall objective is to fund the CALPERS pension plan near 100% of the total accrued liability and no less than 80%, whenever possible.

The City is committed to fiscal sustainability by employing long-term financial planning efforts, maintaining appropriate reserve levels, and employing prudent practices in governance, management, budget administration, and financial reporting. This Policy is intended to make all relevant information readily available to decision-makers and the public to improve the quality of decisions, identify policy goals, and to demonstrate a commitment to long-term financial planning. Adherence to this Policy signals to rating agencies and the capital markets that the City is well managed and able to meet its obligations in a timely manner.

The purpose of this funding policy is to establish a framework for funding the City of Manhattan Beach's defined benefit pension plan, taking into account factors that are relevant to the plan and the City. These factors include:

- The financial position of the City
- Stability of the plan and / or the affordability of the annual contributions

- Benefit security
- The terms of the CALPERS contract for Manhattan Beach, along with any related collective bargaining agreements
- Minimum funding requirements under State law

There are a number of advantages to developing a funding policy to address an unfunded accrued liability. These advantages include the following:

- Provides the framework to ensure the proper management of future liabilities and to minimize the effects on operations. The adoption of a funding policy will ensure a disciplined decision making process, which will contribute to better predictability in funding.
- Having a written summary of the funding policy that is accessible to the employees and the public will help improve the transparency of funding decisions and increase the understanding of pension funding issues.
- The exercise of developing this funding policy improves the identification, understanding, and management of the risk factors that affect the variability of funding requirements and the security of benefits to the employees and retirees.

REMAINING UNFUNDED ACCRUED LIABILITY
The City is in the process of considering a POB that would generate bond proceeds to deposit with CALPERS up to an amount equal to 100% of the UAL as of ___date___ (based on the latest actuarial valuation information available to the City). After the deposit of bond proceeds to CALPERS, the City may or may not have a remaining unfunded accrued liability still owed to CALPERS.

If the City issue's a POB for less than the full 100% of the UAL, any remaining unfunded liability will be accounted for separately, for the purposes of this Policy, from any new increase in the accrued unfunded liability resulting from the annual actuarial valuation report changes.

The City will create a payoff / funding plan that will address this remaining unfunded liability immediately after the issuance of the POB. The remaining unfunded liability will be paid off or fully funded within a twenty (20) year period.

NEW UNFUNDED ACCRUED LIABILITY
Every year, CALPERS completes a new actuarial valuation report and recalculates the City of Manhattan Beach's pension liability as of the new valuation date. If the value of the funded assets is not equivalent to this new liability amount, the City will incur a new unfunded accrued liability at that point in time. The unfunded accrued liability may increase or decrease from year to year, due to the following factors:

- Changes in actuarial assumptions and experience changes (e.g., changes in the discount rate, changes in demographic experience, etc.)

- Changes in actuarial gains and losses due to asset returns being higher or lower than expected
- Changes in plan benefits

Due to the possibility of a new pension liability developing, the City of Manhattan Beach desires to create a policy in order to immediately address any new pension liabilities, or amortization bases, that arise. (Any new increase or decrease in the liability resulting from the annual actuarial valuation is identified as a separate line item, or amortization base, on the annual CALPERS actuarial valuation report.) The table below lays out the parameters for paying off / funding the UAL in a designated amount of time, based on the amount of the UAL, as follows:

New Unfunded Accrued Liability **(Any new liability incurred after the June 30, 2019 valuation report)**	**Payoff / Funding Time Period**
$0 to $5,000,000	Within 1 to 6 years
$5,000,001 to $10,000,000	Within 7 to 11 years
$10,000,001 to $15,000,000	Within 12 to 16 years
Over $15,000,0001	Within 17 to 20 years

Each year, when the City is provided with the annual valuation report from CALPERS, staff will present to the City Council, as part of the Mid-Year Budget Report, the following:

- The dollar amount of the new liability (new amortization base)
- The number of years that staff is recommending to pay off/fund the liability
- The dollar amount of the annual contribution to be made
- The funding source(s) of the payments
- The short-term and long-term financial impacts on the City's General Fund reserve balance

When a new amortization base results in a credit balance, the credit will be applied, first, to any negative bases during the same period and, secondly, against any prior year bases until the credit is fully exhausted. The remaining outstanding liability will then be recalculated and a new payoff schedule and annual contribution will be determined based on the payoff schedule above. New amortization repayment schedules will be kept within 20 years to help maximize long-term savings.

PREPAYMENT OPTIONS

At the beginning of each fiscal year, the City analyzes the cost / benefits of prepaying amounts due CALPERS during that fiscal year. The City strives to continue taking advantage of any prepayment discount that is afforded by CALPERS.

FUNDING LEVELS

The City's target funding level will be near 100% of the accrued liability. The City will strive to achieve this funding level through debt refinancing, allocation of reserves, and / or cost containment measures. The total funding amount will be a combination of the amount on deposit with CalPERS, the funds deposited in the City's Section 115 trust, and any funds reserved by the City that are designated for pension liabilities.

FUNDING OPTIONS

Funding options for the remaining unfunded liability and / or any new unfunded accrued liabilities may include the use of a Section 115 Trust and / or allocating fund reserves from any allowable fund within the City.

Section 115 Trust

A Section 115 Trust was established in 2017 to transfer funds to a trust to ensure that these funds will only be used for pension related costs. The trust assets can be accessed to pay CalPERS at any time to reduce volatility and offset unexpected pension rate increases. The trust will have funds deposited into it at the discretion of the City Council, based on recommendations made by City staff during the annual budget adoption process. For the calculation of funding levels, monies put in this trust will be treated the same as putting monies on deposit with CalPERS.

ADDITIONAL DISCRETIONARY PAYMENTS

Additional Discretionary Payments ("ADP") may be deposited with CalPERS at any time. After completion of the annual audit, all discretionary fund reserve balances will be reviewed by City staff. Based on any budgetary constraints at that time, a determination may be made that it is in the best interest of the City to use any available reserves or one-time savings from the prior fiscal year to make ADP's. ADP's should not adversely affect the general operations of the City. ADP's could be deposited with CalPERS, or invested in the City's Section 115 trust.

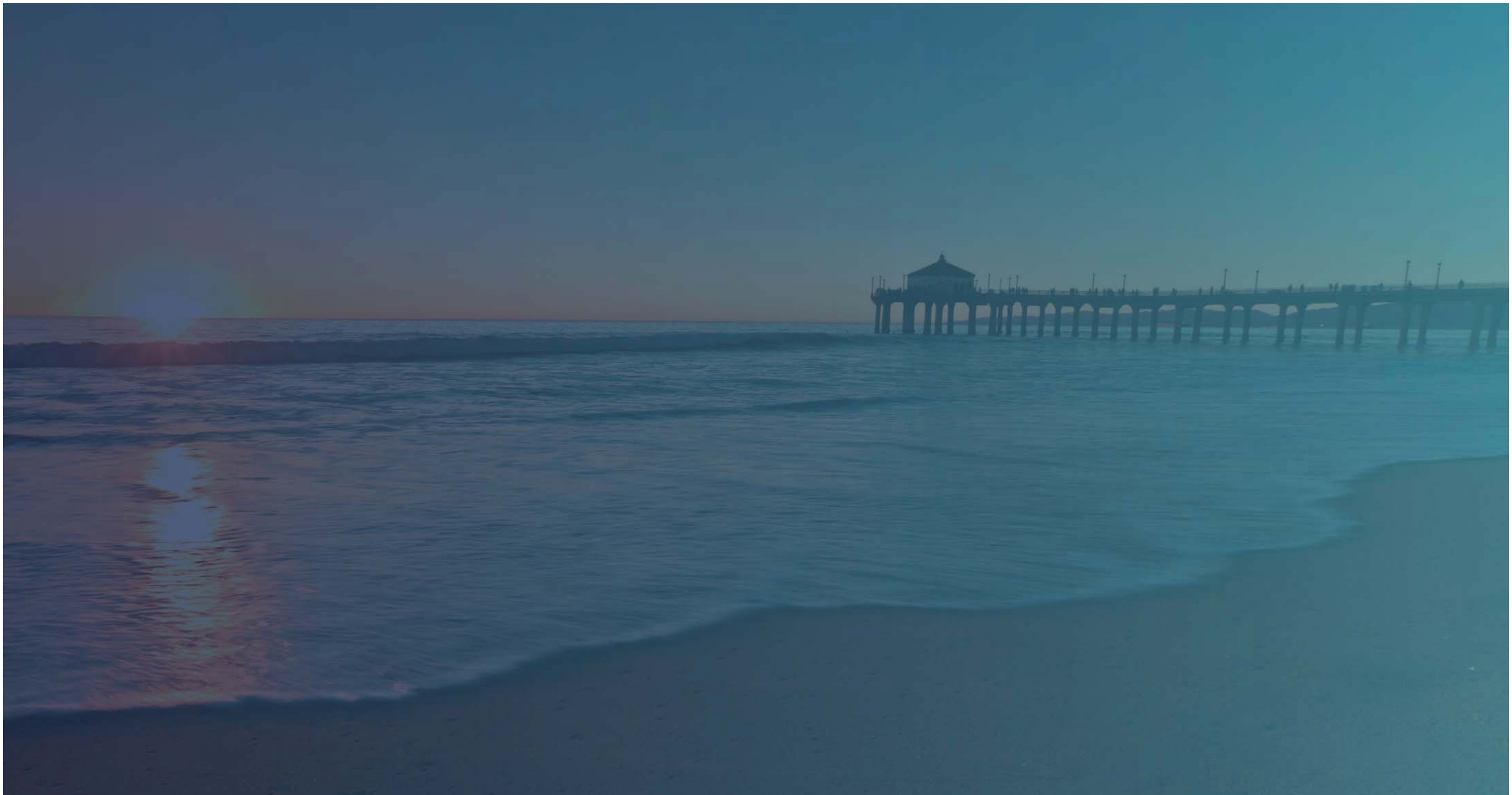
Any savings realized from the issuance of the 2020 POB, as determined by comparing the POB level debt service and fiscal year 2020-2021 CalPERS actuarial determined contributions, will be allocated as follows: 40%-60% of the savings will be used to offset any future UAL costs that arise and 40%-60% of the savings will be used to offset General Fund operational costs.

Each year during the Budget process, a recommendation for the precise savings allocation for the next fiscal year will be determined based on CalPERS' latest year-end investment return. If CalPERS' fiscal year-end investment return is *below* its benchmark, the City will allocate a higher portion of savings to fund future UAL costs. Alternatively, if CalPERS' fiscal year-end investment return is *higher* than its benchmark, then the City may allocate more of the budgetary savings to offset General Fund operational costs.

CONSIDERATION OF FUTURE PENSION BENEFITS

The issuance of a POB may result in the funding of the City's pension plan with CalPERS up to, and even in excess of, 100% of the plan assets necessary to pay all pension liabilities. Even though this situation may occur, the City is still obligated to make annual debt service payments on the bonds. These payments are in lieu of annual UAL payments that the City would have made to CalPERS.

To the extent that the City is making any annual debt service payments on an issued POB, it is fiscally responsible for the City to not offer any enhanced pension benefits to City employees. This will allow the City to focus its financial resources on the current pension obligations due the bondholders and / or CalPERS.



Options for Long-Term CalPERS Pension Liabilities

October 6, 2020 City Council Meeting

Pension Benefits Background

- City contracts with CalPERS to offer defined benefit retirement plans
  - Benefit formulas are based on years of service, age at retirement and final compensation
  - Benefit formulas vary by
    - Classification (Miscellaneous or Public Safety)
    - Date employee entered into CalPERS membership (Classic or PEPRA after January/2013)

- Benefits are funded by City (employer) and Employee contributions, as well as CalPERS investment earnings

CalPERS Funding Status

- After the Great Recession, CalPERS implemented changes to stabilize the fund
  - CalPERS Assets impacted by lower investment returns
  - Resulted in significant impacts to City Funded Status – as a consequence funded ratio declined

$$\frac{\text{Assets}}{\text{Accrued Liabilities}} \rightarrow \text{Funded Status (\%)}$$

- If Liabilities are greater than Assets, then City has an “Unfunded Actuarial Liability” (UAL)

CalPERS Funding Status

- Annual UAL payments to amortize an estimated $91.5 million increasing significantly over next ten years
  - Impacted by changes in actuarial assumptions (e.g. demographics), low investment returns, earlier retirement, etc.

Date	Jul-20		Jul-20		Jul-20			
Valuation as of	6/30/2019		6/30/2019		6/30/2019			
Plan	TOTAL FIRE		TOTAL Police		Miscellaneous Plan		TOTAL UAL	
Required Contribution In	Balance	Payment	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2022	19,942,282	1,455,513	42,841,197	3,146,788	28,807,225	2,152,306	91,590,704	6,754,607
6/30/2023	19,832,648	1,623,787	42,585,018	3,488,182	28,597,370	2,401,557	91,015,036	7,513,526
6/30/2024	19,541,273	1,728,325	41,957,766	3,707,817	28,114,995	2,569,628	89,614,034	8,005,770
6/30/2025	19,121,369	1,833,254	41,059,413	3,927,876	27,425,002	2,746,690	87,605,784	8,507,820
6/30/2026	18,563,532	1,888,281	39,870,544	4,045,461	26,503,553	2,831,629	84,937,629	8,765,371
6/30/2027	17,909,727	1,936,747	38,476,824	4,153,200	25,429,741	2,907,340	81,816,292	8,997,287
6/30/2028	17,160,021	1,988,314	36,874,093	4,263,904	24,202,448	2,985,128	78,236,562	9,237,346
6/30/2029	16,304,495	2,041,300	35,044,663	4,377,647	22,808,779	3,065,060	74,157,937	9,484,007
6/30/2030	15,334,275	2,095,740	32,969,516	4,494,520	21,234,871	3,147,186	69,538,662	9,737,446
6/30/2031	14,239,826	2,151,679	30,628,215	4,614,615	19,465,835	3,231,573	64,333,876	9,997,867
6/30/2032	13,010,899	2,209,155	27,998,795	4,738,006	17,485,678	3,099,143	58,495,372	10,046,304

CalPERS Funding Status

- If CalPERS Investment Earnings do not meet expected return *"discount rate"* of 7%, the City's UAL will continue to grow
  - UAL payments less than minimum interest costs would result in negative amortization

- Understanding risks of rising pension costs, City Council added Work Plan item in FY 2019 directing staff to provide options to address pension liabilities and impacts to the City's financial future and structural deficit

Addressing Pension Liabilities

- October 2017 – City opened PARS 115 Trust to put aside funds for future pension payments
  - Current balance of $1.674 million

- September 2019 – Options introduced at Finance Subcommittee (FSC) meeting
  - Reviewed funding options, including Additional Discretionary Payments (ADPs)
  - FSC asked staff to explore Pension Obligation Bonds (POBs)

Addressing Pension Liabilities

- February 2020 - Staff hired independent actuary (Bartel & Associates) to assist with pre-funding pay down scenario analysis

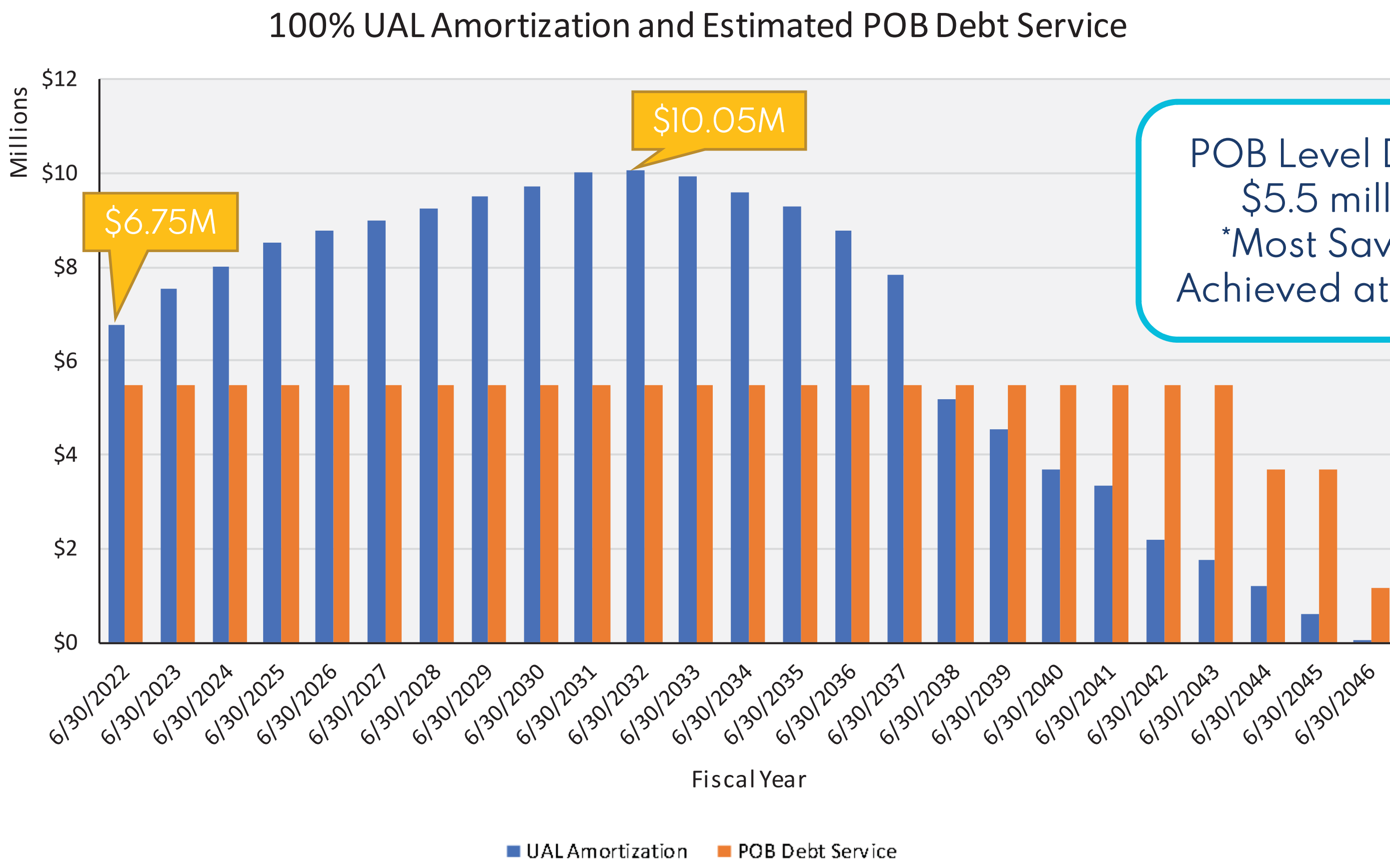
- July 6 & July 22, 2020 – FSC reviewed options for POBs funded at 80-100% of current UAL
  - Approved Draft Pension Policy, including plan for use of projected budgetary savings
    - 40%-60% used to offset future UAL costs
    - 40%-60% used to offset General Fund Operational Costs

  - FSC - Directed staff to bring POB recommendation to full City Council

SSC1 SSC2

Staff Recommendation: POBs Illustrative – 100%

- 100% POB Payment is $5.5 million



POB Level Debt =
$5.5 million
*Most Savings
Achieved at 100%*

Slide 8

SSC1	Steve S. Charelian, 10/2/2020
SSC2	Steve S. Charelian, 10/2/2020

City of Manhattan Beach

Presentation to City Council

Pension Obligation Bonds

October 6, 2020

KNN public finance

5901 West Century Blvd., Suite 750, Los Angeles, CA 90045
phone 310-348-2901 fax 510-208-8282

Pension Cost Background

Three Different Pension Cost Areas

- Employer Normal Cost - $4.46 mm for FY 2020-21
  - Employer pension costs are determined by CalPERS and paid by the City (including any cost sharing agreements)
    - Fire employer costs are 20.558% (Classic) or 13.884% (PEPRA) of payroll
    - Police employer costs are 22.540% (Classic) or 13.884% (PEPRA) of payroll
    - Misc. employer costs are 9.672% of payroll

- Employee Normal Cost - $2.90 mm for FY 2020-21
  - Employees also contribute toward pension related costs (including any cost sharing agreements)
    - Fire employees contribute 12% (Classic) or 13.75% (PEPRA) of payroll costs
    - Police employees contribute 12% (Classic) or 13.75% (PEPRA) of payroll costs
    - Misc. employees contribute 7% (Classic) or 7.25% (PEPRA) of payroll costs

- Unfunded Accrued Liability (UAL) Cost - $5.73 mm for FY 2020-21
  - UAL costs are assessed to make up for valuation lost and costs incurred from prior years
    - Lower than projected investment returns
    - Changes in actuarial assumptions

UAL Structure Similar To A Mortgage

- Accelerated UAL payments mandated by CalPERS have been the cause of our current pension crisis

- Of note, UAL payments will end when the overall accrued debt load has been paid off
  - In some ways, UAL payment is similar to a mortgage payment

- The City's UAL "mortgage" includes the following key terms:
  - An interest rate of 7% to service our UAL debt load
  - 25 years left on the term of our current "mortgage"
    - Final payment scheduled for June 30, 2046
  - Annual payments will increase through FY 2031-32

Manhattan Beach Unfunded Accrued Liability

- Per the CalPERS Actuarial Valuation reports as of June 30, 2019, the City's funded ratios were:
  - 76.1% for Miscellaneous
  - 92.8% for PEPRA Fire
  - 91.6% for PEPRA Police
  - 72.0% for Fire
  - 71.0% for Police
- Projected unfunded accrued liabilities for fiscal year 2022 are:
  - $19,942,282 for Fire
  - $42,841,197 for Police
  - <u>$28,807,225 for Miscellaneous</u>
  - **$91,590,704 Total**

Date	Jul-20		Jul-20		Jul-20			
Valuation as of	6/30/2019		6/30/2019		6/30/2019			
Plan	TOTAL FIRE		TOTAL Police		Miscellaneous Plan		TOTAL UAL	
Required Contribution In	Balance	Payment	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2022	19,942,282	1,455,513	42,841,197	3,146,788	28,807,225	2,152,306	91,590,704	6,754,607
6/30/2023	19,832,648	1,623,787	42,585,018	3,488,182	28,597,370	2,401,557	91,015,036	7,513,526
6/30/2024	19,541,273	1,728,325	41,957,766	3,707,817	28,114,995	2,569,628	89,614,034	8,005,770
6/30/2025	19,121,369	1,833,254	41,059,413	3,927,876	27,425,002	2,746,690	87,605,784	8,507,820
6/30/2026	18,563,532	1,888,281	39,870,544	4,045,461	26,503,553	2,831,629	84,937,629	8,765,371
6/30/2027	17,909,727	1,936,747	38,476,824	4,153,200	25,429,741	2,907,340	81,816,292	8,997,287
6/30/2028	17,160,021	1,988,314	36,874,093	4,263,904	24,202,448	2,985,128	78,236,562	9,237,346
6/30/2029	16,304,495	2,041,300	35,044,663	4,377,647	22,808,779	3,065,060	74,157,937	9,484,007
6/30/2030	15,334,275	2,095,740	32,969,516	4,494,520	21,234,871	3,147,186	69,538,662	9,737,446
6/30/2031	14,239,826	2,151,679	30,628,215	4,614,615	19,465,835	3,231,573	64,333,876	9,997,867
6/30/2032	13,010,899	2,209,155	27,998,795	4,738,006	17,485,678	3,099,143	58,495,372	10,046,304
6/30/2033	11,636,496	2,180,785	25,057,680	4,692,888	15,503,897	3,056,143	52,198,073	9,929,816
6/30/2034	10,195,226	2,149,231	21,957,358	4,641,801	13,427,870	2,796,720	45,580,454	9,587,752
6/30/2035	8,685,711	2,081,873	18,692,858	4,520,361	11,474,871	2,685,440	38,853,440	9,287,674
6/30/2036	7,140,207	1,966,194	15,325,463	4,302,809	9,500,271	2,494,058	31,965,941	8,763,061
6/30/2037	5,606,176	1,763,276	11,947,386	3,907,144	7,585,417	2,161,929	25,138,979	7,832,349
6/30/2038	4,174,659	1,040,998	8,742,121	2,180,593	5,880,078	1,954,090	18,796,858	5,175,681
6/30/2039	3,390,069	901,291	7,098,447	1,899,588	4,270,356	1,733,242	14,758,872	4,534,121
6/30/2040	2,695,072	790,335	5,630,391	1,675,204	2,776,403	1,200,615	11,101,866	3,666,154
6/30/2041	2,066,197	721,935	4,291,675	1,537,394	1,728,825	1,088,522	8,086,697	3,347,851
6/30/2042	1,464,056	521,190	3,001,798	1,113,305	723,867	537,816	5,189,721	2,172,311
6/30/2043	1,027,416	498,899	2,060,311	1,036,551	218,217	225,725	3,305,944	1,761,175
6/30/2044	583,269	396,160	1,132,318	805,680			1,715,587	1,201,840
6/30/2045	214,307	203,438	378,178	391,190			592,485	594,628
6/30/2046	18,869	19,518					18,869	19,518
TOTAL		**36,187,218**		**77,662,524**		**51,071,540**		**164,921,282**

Source: CalPERS Actuarial Valuation - June 30, 2019

CalPERS Cost Increases Enacted

- In response to deteriorating financial conditions, CalPERS has enacted a series of pension cost increases

  - March 16, 2012 – Change in Discount Rate from 7.75% to 7.50%
    - Designed to more accurately reflect investment return earnings
    - Impacted employer rates beginning in FY 2013-14

  - April 17, 2013 – Change in Amortization & Rate Smoothing Policy
    - Designed to pay down unfunded liabilities faster
    - Impacted employer rates beginning in FY 2015-16

  - February 18, 2014 – Change in Actuarial Assumptions & Asset Allocations
    - Designed to account for demographic and mortality adjustments
    - Impacted employer rates beginning in FY 2016-17

Additional Increases Enacted In 2016

- On December 21, 2016, the CalPERS Board voted to enact two substantial new changes
  - Lower the discount rate from 7.5% to 7.0%
  - Enact an accelerated payback schedule for all unfunded accrued liabilities (UAL)

- The net effect of the two changes includes the following:
  - Discount Rate Reduction
    - Designed to more accurately reflect investment return earnings
    - Impacted employer rates beginning in FY 2018-19
  - UAL Payment Acceleration
    - Designed to accelerate payments to fully fund existing unfunded liabilities over a 20-30 year period

Pension Obligation Bonds

Pension Obligation Bonds

- A Pension Obligation Bond ("POB") is a taxable debt issuance used to extinguish some or all of a public agency's unfunded accrued liability ("UAL").

- Proceeds would be deposited with the City's pension system, CalPERS, and invested along with other pension system assets, presumably in a mix of equities and corporate fixed income securities.
  - No "side-fund" specific to the City

- POBs are issued only when the all-in interest rate of the bond issue is significantly below the actuarial rate of interest factored into the calculation of the UAL.

- Debt service payments to bondholders would replace the portion of the employer contribution rate that was allocable to the payment of the extinguished UAL.

Why Is Refinancing Cheaper?

- One of the primary cost savings driver when assessing the POB option is the current municipal bond market
  - We currently live in a low-interest rate world, with certain governmental entities (Germany, Japan, and the EU) offering negative savings rates
  - These global market conditions have created a scenario where municipal borrowing rates are currently near the lowest levels ever recorded

- For the proposed POB, preliminary market rates indicate the City could refinance its UAL debt at a “true interest cost” of approximately 3.1%

- By comparison, CalPERS is currently assessing an interest rate of 7% on the City’s UAL debt

Reasons Why Refinancing Could Be A Bad Idea

- Issuing a POB now does nothing to address future possible unfunded actuarial liabilities growth
  - Returning our UAL to zero now does nothing to keep it at zero in the future

- CalPERS could over-perform from an investment perspective, and we wouldn't have had to issue such a large POB
  - If Cal PERS over-performs and beats 7% investment returns (6.7% return earned in FY 2018/19), then our UAL amount will decrease

- Unknown possible State legislative/ judicial changes in the future
  - The State and/ or the Courts could make pension rule changes to reduce our UAL amounts

Reasons Why Refinancing Makes Sense

- Refinancing removes an unknown cost variable and replaces UAL cost increases with a stable fixed payment amount
  - i.e. variable rate to fixed rate

- Interest rates are at historic lows

- Issuing a POB to refinance the UAL does not preclude the City from taking part in any future State/court decisions, if any, related to pension program changes
  - Near-term pension program fixes are unlikely

- Even if the pension fund is overfunded, those funds stay in the City's CalPERS account and can be used to cover future UAL shortfalls

Other Pension Obligation Bond Considerations

- Overfunding: If the City's POBs are sized to eliminate the entire UAL, above market returns could create an actuarial "surplus" in the retirement system.
  - Possibly result in political pressure to increase benefits.
  - If earnings above the actuarial rate in any given year are deposited into a supplemental benefit reserve, this can undermine the ability to achieve budgetary savings over the long-run with a POB.

- Consider issuing less than 100% of the current estimate of the UAL in order to manage the risks of market timing and the pressures from a potentially over-funded system.

- GFOA Advisory on Pension Obligation Bonds discourages use of this instrument.

- Consider in the context of long-term capital planning: issue a tax-exempt infrastructure financing in-lieu of taxable POB.
  - Freed up cash can be used to prepay a portion of the UAL.
  - Fungibility of cash creates a "tax-exempt" POB financing.

POBs are Increasing In the Current Market

	Sale Dates	CA POB Issuers	Par Amount ($MM)
1	2/5/2020	City of Pasadena	$131.805
2	4/22/2020	County of Riverside	$719.995
3	4/30/2020	City of Larkspur	$18.295
4	5/13/2020	City of Ontario	$236.585
5	5/27/2020	City of Montebello	$153.425
6	6/2/2020	City of Inglewood	$101.620
7	6/4/2020	City of Riverside	$432.165
8	6/9/2020	City of El Monte	$118.725
9	6/10/2020	City of Carson	$108.020
10	6/11/2020	North County Fire Protection District	$20.305
11	7/23/2020	West Covina Public Financing Authority**	$204.095
12	8/13/2020	City of Pomona	$219.890
13	9/17/2020	City of Azusa	$70.075

** West Covina issued Lease Revenue Bonds as an alternative to POBs because their POB validation proceeding was challenged. The LRBs refunded their CalPERS UAL.

Illustrative Pension Obligation Bonds – 100%

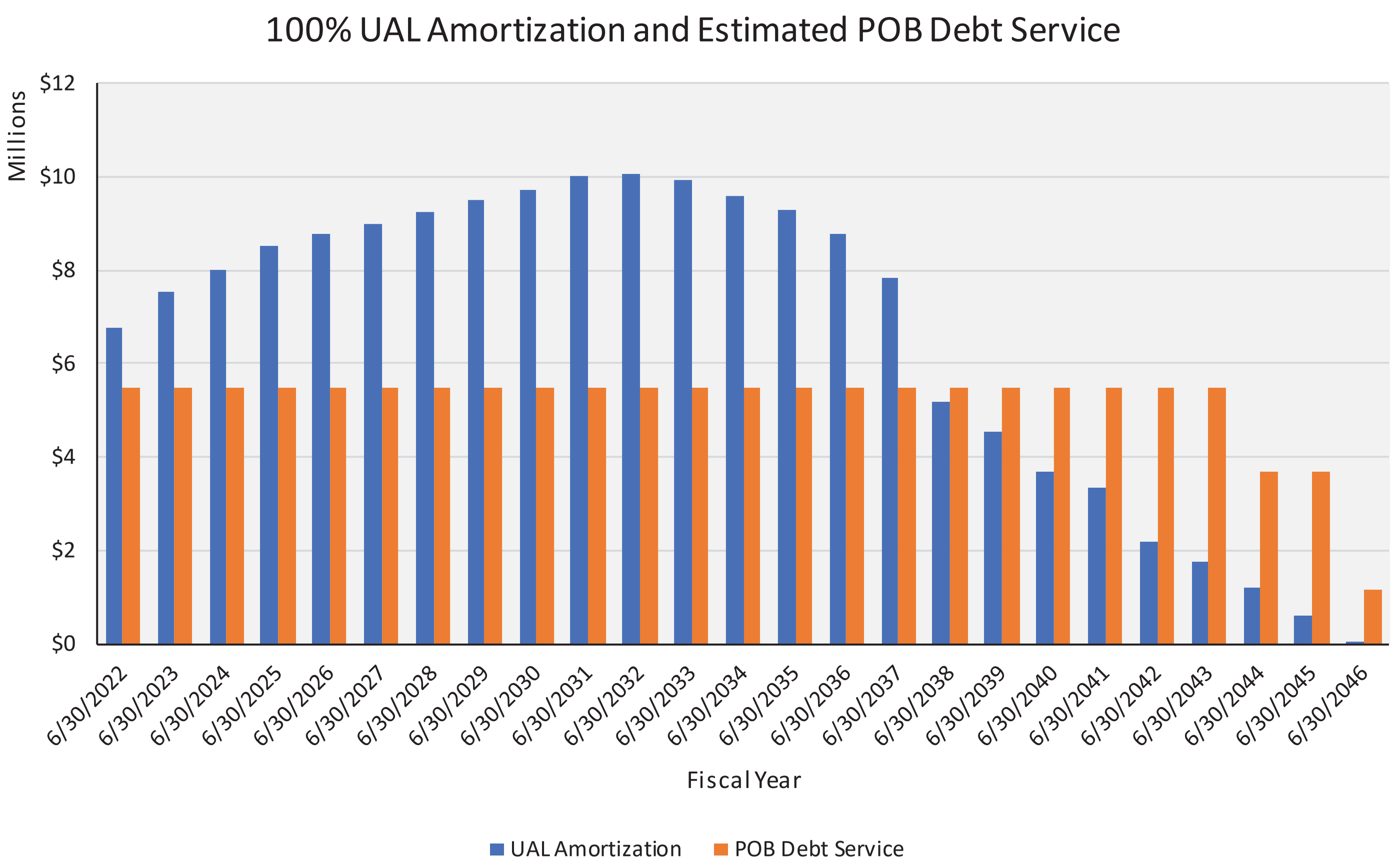
- 100% UALs and level debt service

	100% Fire UAL 19,942,282			arb yld 3.1%	100% Police UAL 42,841,197			arb yld 3.1%	100% Misc. UAL 28,807,225			arb yld 3.1%	100% Total UAL 91,590,704			arb yld 3.1%
Required Contribution In	Payment	POB Debt Service	Savings	PV Savings	Payment	POB Debt Service	Savings	PV Savings	Payment	POB Debt Service	Savings	PV Savings	Payment	POB Debt Service	Savings	PV Savings
6/30/2022	1,455,513	1,153,374	302,139	293,106	3,146,788	2,533,671	613,117	594,786	2,152,306	1,791,551	360,755	349,970	6,754,607	5,478,596	1,276,011	1,237,862
6/30/2023	1,623,787	1,155,898	467,889	440,330	3,488,182	2,543,225	944,958	889,300	2,401,557	1,800,618	600,939	565,544	7,513,526	5,499,741	2,013,786	1,895,174
6/30/2024	1,728,325	1,153,029	575,296	525,225	3,707,817	2,540,294	1,167,524	1,065,907	2,569,628	1,797,009	772,620	705,374	8,005,770	5,490,331	2,515,439	2,296,506
6/30/2025	1,833,254	1,154,358	678,897	601,278	3,927,876	2,540,483	1,387,393	1,228,772	2,746,690	1,796,992	949,698	841,119	8,507,820	5,491,833	3,015,988	2,671,168
6/30/2026	1,888,281	1,154,608	733,674	630,365	4,045,461	2,538,253	1,507,208	1,294,979	2,831,629	1,800,144	1,031,485	886,242	8,765,371	5,493,005	3,272,367	2,811,587
6/30/2027	1,936,747	1,154,067	782,681	652,367	4,153,200	2,539,266	1,613,934	1,345,220	2,907,340	1,796,884	1,110,456	925,569	8,997,287	5,490,217	3,507,071	2,923,156
6/30/2028	1,988,314	1,157,134	831,180	672,079	4,263,904	2,542,071	1,721,833	1,392,248	2,985,128	1,796,257	1,188,872	961,303	9,237,346	5,495,462	3,741,885	3,025,630
6/30/2029	2,041,300	1,153,934	887,366	696,059	4,377,647	2,542,071	1,835,576	1,439,845	3,065,060	1,798,557	1,266,504	993,459	9,484,007	5,494,562	3,989,446	3,129,363
6/30/2030	2,095,740	1,154,462	941,278	716,274	4,494,520	2,539,023	1,955,497	1,488,053	3,147,186	1,798,501	1,348,686	1,026,294	9,737,446	5,491,986	4,245,461	3,230,621
6/30/2031	2,151,679	1,153,981	997,698	736,509	4,614,615	2,538,767	2,075,848	1,532,409	3,231,573	1,796,720	1,434,854	1,059,221	9,997,867	5,489,468	4,508,400	3,328,140
6/30/2032	2,209,155	1,157,461	1,051,694	753,159	4,738,006	2,541,125	2,196,881	1,573,271	3,099,143	1,798,164	1,300,980	931,682	10,046,304	5,496,750	4,549,555	3,258,112
6/30/2033	2,180,785	1,154,389	1,026,396	713,066	4,692,888	2,540,087	2,152,802	1,495,612	3,056,143	1,797,040	1,259,104	874,735	9,929,816	5,491,515	4,438,301	3,083,414
6/30/2034	2,149,231	1,155,206	994,026	669,932	4,641,801	2,541,369	2,100,432	1,415,603	2,796,720	1,798,893	997,828	672,494	9,587,752	5,495,467	4,092,285	2,758,029
6/30/2035	2,081,873	1,154,745	927,128	606,165	4,520,361	2,539,757	1,980,604	1,294,937	2,685,440	1,798,527	886,913	579,872	9,287,674	5,493,029	3,794,645	2,480,973
6/30/2036	1,966,194	1,152,968	813,227	515,799	4,302,809	2,540,161	1,762,649	1,117,981	2,494,058	1,800,873	693,185	439,661	8,763,061	5,494,001	3,269,060	2,073,441
6/30/2037	1,763,276	1,154,833	608,443	374,375	3,907,144	2,542,344	1,364,800	839,761	2,161,929	1,795,715	366,214	225,331	7,832,349	5,492,892	2,339,457	1,439,467
6/30/2038	1,040,998	1,156,707	-115,709	-69,067	2,180,593	2,538,203	-357,610	-213,459	1,954,090	1,797,181	156,910	93,660	5,175,681	5,492,091	-316,410	-188,866
6/30/2039	901,291	1,157,552	-256,261	-148,390	1,899,588	2,542,004	-642,416	-371,997	1,733,242	1,796,931	-63,689	-36,880	4,534,121	5,496,487	-962,366	-557,266
6/30/2040	790,335	1,157,368	-367,033	-206,180	1,675,204	2,538,404	-863,200	-484,900	1,200,615	1,799,967	-599,352	-336,684	3,666,154	5,495,739	-1,829,585	-1,027,763
6/30/2041	721,935	1,156,155	-434,220	-236,629	1,537,394	2,542,575	-1,005,181	-547,775	1,088,522	1,796,116	-707,594	-385,605	3,347,851	5,494,845	-2,146,994	-1,170,009
6/30/2042	521,190	1,153,913	-632,723	-334,495	1,113,305	2,539,173	-1,425,868	-753,799	537,816	1,800,550	-1,262,734	-667,556	2,172,311	5,493,635	-3,321,324	-1,755,851
6/30/2043	498,899	1,154,672	-655,773	-336,316	1,036,551	2,541,160	-1,504,609	-771,645	225,725	1,796,246	-1,570,521	-805,449	1,761,175	5,492,077	-3,730,902	-1,913,410
6/30/2044	396,160	1,154,196	-758,036	-377,139	805,680	2,540,323	-1,734,643	-863,023	0	0	0	0	1,201,840	3,694,518	-2,492,678	-1,240,162
6/30/2045	203,438	1,157,484	-954,046	-460,468	391,190	2,541,662	-2,150,472	-1,037,920	0	0	0	0	594,628	3,699,145	-3,104,517	-1,498,387
6/30/2046	19,518	1,154,360	-1,134,842	-531,353	0	0	0	0	0	0	0	0	19,518	1,154,360	-1,134,842	-531,353
TOTAL	**36,187,218**	**28,876,850**	**7,310,368**	**6,896,051**	**77,662,524**	**60,965,467**	**16,697,057**	**14,964,168**	**51,071,540**	**39,549,430**	**11,522,111**	**9,899,356**	**164,921,282**	**129,391,746**	**35,529,536**	**31,759,575**

AAA rates as of 9/4/2020 plus 25 basis point cushion; PV Savings at Arbitrage Yield

Illustrative Pension Obligation Bonds – 100%

- 100% UALs and level debt service



Illustrative Pension Obligation Bonds – 90%

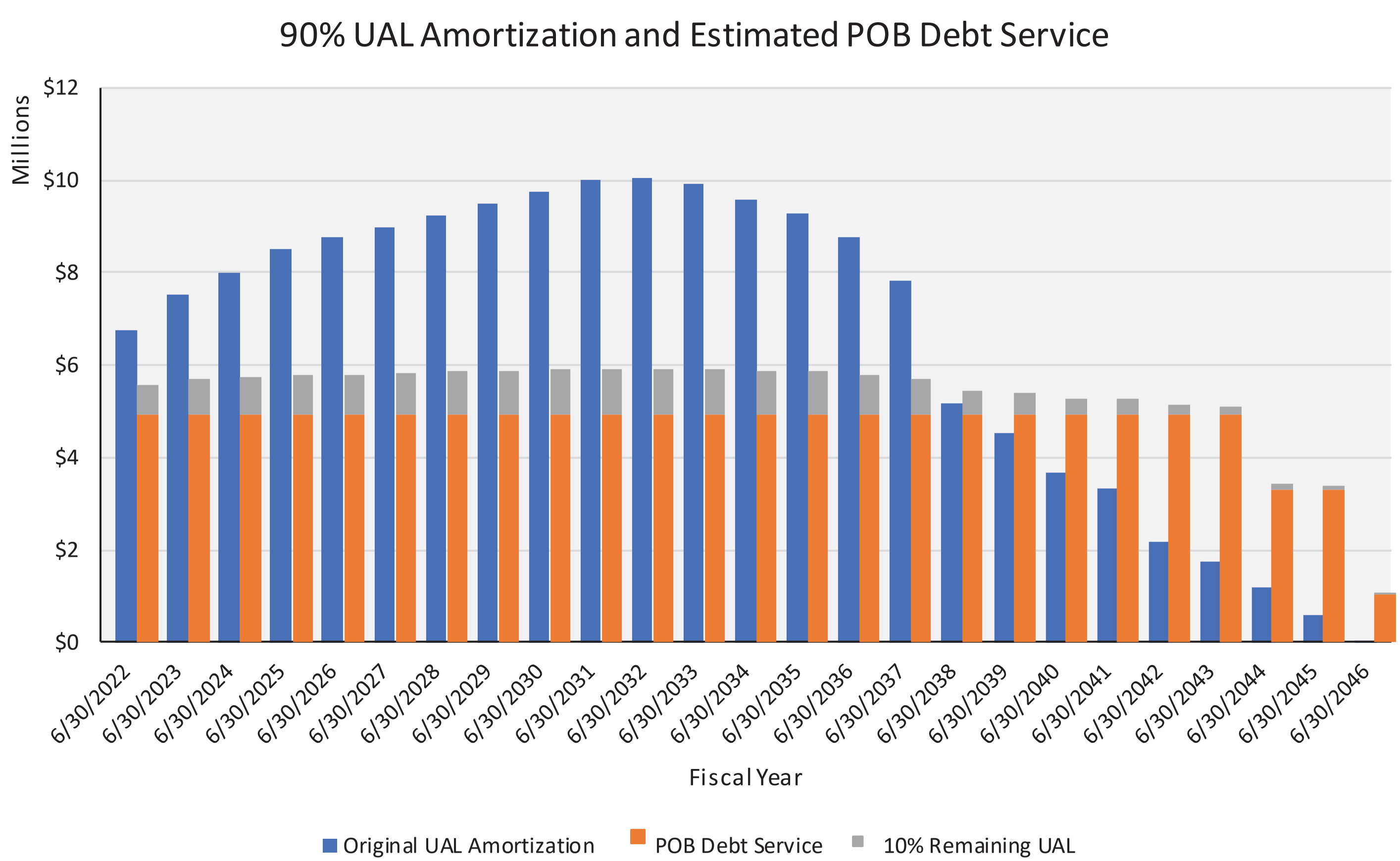
- 90% UALs and level debt service

		90%	10%			90%	10%			90%	10%			90%	10%			
		Fire UAL	Fire UAL			Police UAL	Police UAL			Misc. UAL	Misc. UAL			Total UAL	Total UAL		arb yld	
		17,948,054	1,994,228			38,557,077	4,284,120			25,926,503	2,880,723			82,431,634	9,159,070		3.1%	Remaining
Required Contribution In	Original Payment	POB Debt Service	Remaining UAL Pymt	Savings	Original Payment	POB Debt Service	Remaining UAL Pymt	Savings	Original Payment	POB Debt Service	Remaining UAL Pymt	Savings	Original Payment	POB Debt Service	Remaining UAL Pymt	Savings	PV Savings	UAL pymt +POB
6/30/2022	1,455,513	1,035,659	145,551	274,303	3,146,788	2,279,994	314,679	552,115	2,152,306	1,613,525	215,231	323,550	6,754,607	4,929,178	675,461	1,149,968	1,115,588	5,604,639
6/30/2023	1,623,787	1,041,584	162,379	419,824	3,488,182	2,288,288	348,818	851,076	2,401,557	1,616,303	240,156	545,099	7,513,526	4,946,174	751,353	1,815,999	1,709,037	5,697,527
6/30/2024	1,728,325	1,039,489	172,833	516,004	3,707,817	2,287,163	370,782	1,049,873	2,569,628	1,619,112	256,963	693,553	8,005,770	4,945,764	800,577	2,259,430	2,062,778	5,746,341
6/30/2025	1,833,254	1,041,664	183,325	608,265	3,927,876	2,289,326	392,788	1,245,762	2,746,690	1,620,576	274,669	851,445	8,507,820	4,951,566	850,782	2,705,473	2,396,154	5,802,348
6/30/2026	1,888,281	1,037,850	188,828	661,603	4,045,461	2,289,280	404,546	1,351,635	2,831,629	1,620,366	283,163	928,100	8,765,371	4,947,496	876,537	2,941,338	2,527,171	5,824,033
6/30/2027	1,936,747	1,038,388	193,675	704,685	4,153,200	2,287,617	415,320	1,450,263	2,907,340	1,618,932	290,734	997,674	8,997,287	4,944,937	899,729	3,152,622	2,627,722	5,844,665
6/30/2028	1,988,314	1,042,658	198,831	746,825	4,263,904	2,288,105	426,390	1,549,409	2,985,128	1,620,340	298,513	1,066,276	9,237,346	4,951,102	923,735	3,362,510	2,718,874	5,874,836
6/30/2029	2,041,300	1,040,758	204,130	796,413	4,377,647	2,286,105	437,765	1,653,778	3,065,060	1,619,840	306,506	1,138,715	9,484,007	4,946,702	948,401	3,588,905	2,815,174	5,895,102
6/30/2030	2,095,740	1,042,690	209,574	843,477	4,494,520	2,286,405	449,452	1,758,664	3,147,186	1,617,268	314,719	1,215,200	9,737,446	4,946,362	973,745	3,817,340	2,904,839	5,920,106
6/30/2031	2,151,679	1,038,678	215,168	897,834	4,614,615	2,284,652	461,462	1,868,502	3,231,573	1,618,199	323,157	1,290,217	9,997,867	4,941,528	999,787	4,056,553	2,994,583	5,941,314
6/30/2032	2,209,155	1,038,810	220,916	949,430	4,738,006	2,285,786	473,801	1,978,420	3,099,143	1,617,475	309,914	1,171,754	10,046,304	4,942,070	1,004,630	4,099,604	2,935,885	5,946,700
6/30/2033	2,180,785	1,042,620	218,079	920,087	4,692,888	2,288,889	469,289	1,934,711	3,056,143	1,619,488	305,614	1,131,041	9,929,816	4,950,997	992,982	3,985,838	2,769,075	5,943,978
6/30/2034	2,149,231	1,040,264	214,923	894,044	4,641,801	2,289,478	464,180	1,888,143	2,796,720	1,619,604	279,672	897,445	9,587,752	4,949,345	958,775	3,679,632	2,479,918	5,908,120
6/30/2035	2,081,873	1,041,836	208,187	831,850	4,520,361	2,287,473	452,036	1,780,852	2,685,440	1,617,761	268,544	799,135	9,287,674	4,947,069	928,767	3,411,838	2,230,690	5,875,836
6/30/2036	1,966,194	1,042,166	196,619	727,409	4,302,809	2,287,794	430,281	1,584,735	2,494,058	1,618,901	249,406	625,752	8,763,061	4,948,860	876,306	2,937,895	1,863,396	5,825,166
6/30/2037	1,763,276	1,041,214	176,328	545,735	3,907,144	2,285,215	390,714	1,231,215	2,161,929	1,617,817	216,193	327,920	7,832,349	4,944,245	783,235	2,104,869	1,295,125	5,727,480
6/30/2038	1,040,998	1,040,832	104,100	-103,933	2,180,593	2,287,591	218,059	-325,057	1,954,090	1,619,084	195,409	139,597	5,175,681	4,947,507	517,568	-289,394	-172,740	5,465,075
6/30/2039	901,291	1,039,592	90,129	-228,430	1,899,588	2,287,909	189,959	-578,280	1,733,242	1,618,808	173,324	-58,890	4,534,121	4,946,309	453,412	-865,600	-501,233	5,399,721
6/30/2040	790,335	1,037,495	79,034	-326,194	1,675,204	2,286,169	167,520	-778,485	1,200,615	1,616,989	120,062	-536,435	3,666,154	4,940,653	366,615	-1,641,114	-921,890	5,307,268
6/30/2041	721,935	1,039,541	72,194	-389,799	1,537,394	2,287,371	153,739	-903,716	1,088,522	1,618,626	108,852	-638,956	3,347,851	4,945,537	334,785	-1,932,471	-1,053,104	5,280,322
6/30/2042	521,190	1,040,557	52,119	-571,486	1,113,305	2,286,344	111,331	-1,284,369	537,816	1,618,548	53,782	-1,134,513	2,172,311	4,945,448	217,231	-2,990,368	-1,580,887	5,162,679
6/30/2043	498,899	1,039,670	49,890	-590,660	1,036,551	2,286,097	103,655	-1,353,201	225,725	1,620,245	22,573	-1,417,092	1,761,175	4,946,011	176,118	-3,360,953	-1,723,680	5,122,128
6/30/2044	396,160	1,037,723	39,616	-681,179	805,680	2,288,379	80,568	-1,563,267	0	0	0	0	1,201,840	3,326,102	120,184	-2,244,446	-1,116,661	3,446,286
6/30/2045	203,438	1,039,718	20,344	-856,623	391,190	2,288,013	39,119	-1,935,942	0	0	0	0	594,628	3,327,731	59,463	-2,792,565	-1,347,825	3,387,193
6/30/2046	19,518	1,040,477	1,952	-1,022,910	0	0	0	0	0	0	0	0	19,518	1,040,477	1,952	-1,022,910	-478,945	1,042,428
TOTAL	**36,187,218**	**26,001,925**	**3,618,722**	**6,566,572**	**77,662,524**	**54,889,436**	**7,766,252**	**15,006,836**	**51,071,540**	**35,607,801**	**5,107,154**	**10,356,585**	**164,921,282**	**116,499,161**	**16,492,128**	**31,929,993**	**28,549,044**	132,991,289

AAA rates as of 9/4/2020 plus 25 basis point cushion; PV Savings at Arbitrage Yield

Illustrative Pension Obligation Bonds – 90%

- 90% UALs and level debt service



Illustrative Pension Obligation Bonds – 80%

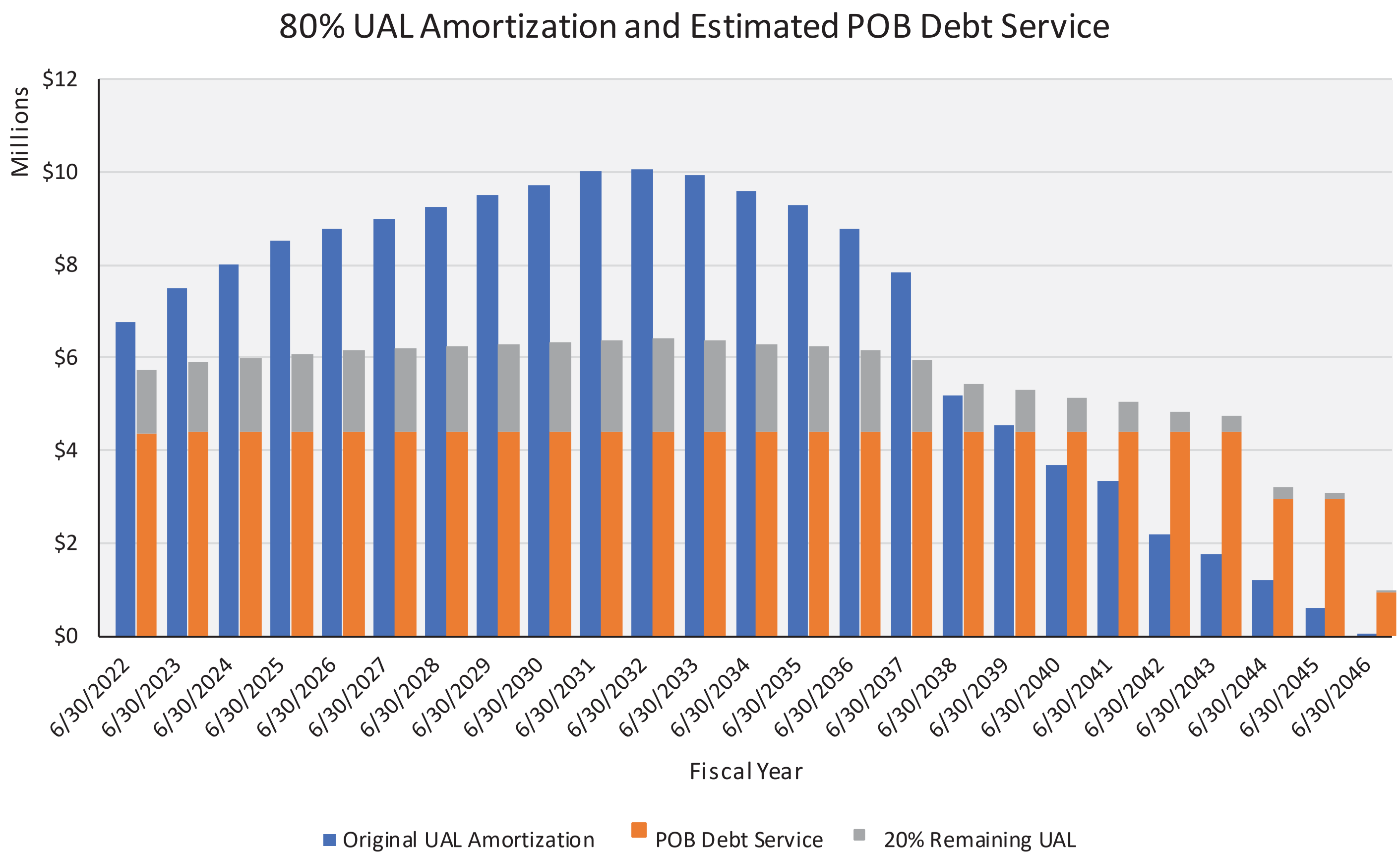
- 80% UALs and level debt service

		80% Fire UAL 15,953,826	20% Fire UAL 3,988,456			80% Police UAL 34,272,958	20% Police UAL 8,568,239			80% Misc. UAL 23,045,780	20% Misc. UAL 5,761,445			80% Total UAL 73,272,563	20% Total UAL 18,318,141		arb yld 3.1%	
Required Contribution In	Original Payment	POB Debt Service	Remaining UAL Pymt	Savings	Original Payment	POB Debt Service	Remaining UAL Pymt	Savings	Original Payment	POB Debt Service	Remaining UAL Pymt	Savings	Original Payment	POB Debt Service	Remaining UAL Pymt	Savings	PV Savings	Remaining UAL pymt +POB
6/30/2022	1,455,513	922,988	291,103	241,423	3,146,788	2,026,367	629,358	491,064	2,152,306	1,435,583	430,461	286,262	6,754,607	4,384,937	1,350,921	1,018,749	988,291	5,735,858
6/30/2023	1,623,787	927,296	324,757	371,734	3,488,182	2,033,452	697,636	757,094	2,401,557	1,437,153	480,311	484,093	7,513,526	4,397,900	1,502,705	1,612,921	1,517,920	5,900,605
6/30/2024	1,728,325	925,975	345,665	456,686	3,707,817	2,034,133	741,563	932,121	2,569,628	1,441,317	513,926	614,385	8,005,770	4,401,424	1,601,154	2,003,192	1,828,843	6,002,578
6/30/2025	1,833,254	923,995	366,651	542,608	3,927,876	2,033,270	785,575	1,109,031	2,746,690	1,439,262	549,338	758,091	8,507,820	4,396,527	1,701,564	2,409,730	2,134,224	6,098,091
6/30/2026	1,888,281	926,195	377,656	584,430	4,045,461	2,035,486	809,092	1,200,883	2,831,629	1,440,768	566,326	824,536	8,765,371	4,402,449	1,753,074	2,609,848	2,242,358	6,155,523
6/30/2027	1,936,747	922,729	387,349	626,669	4,153,200	2,036,230	830,640	1,286,330	2,907,340	1,441,160	581,468	884,713	8,997,287	4,400,119	1,799,457	2,797,711	2,331,902	6,199,576
6/30/2028	1,988,314	923,202	397,663	667,450	4,263,904	2,034,400	852,781	1,376,723	2,985,128	1,439,602	597,026	948,500	9,237,346	4,397,204	1,847,469	2,992,673	2,419,829	6,244,673
6/30/2029	2,041,300	927,702	408,260	705,339	4,377,647	2,035,400	875,529	1,466,718	3,065,060	1,441,402	613,012	1,010,646	9,484,007	4,404,504	1,896,801	3,182,702	2,496,545	6,301,305
6/30/2030	2,095,740	926,038	419,148	750,555	4,494,520	2,033,940	898,904	1,561,676	3,147,186	1,441,314	629,437	1,076,435	9,737,446	4,401,292	1,947,489	3,388,665	2,578,635	6,348,781
6/30/2031	2,151,679	923,608	430,336	797,736	4,614,615	2,035,690	922,923	1,656,002	3,231,573	1,439,844	646,315	1,145,414	9,997,867	4,399,142	1,999,573	3,599,152	2,656,926	6,398,715
6/30/2032	2,209,155	925,392	441,831	841,933	4,738,006	2,035,482	947,601	1,754,923	3,099,143	1,441,952	619,829	1,037,362	10,046,304	4,402,826	2,009,261	3,634,218	2,602,604	6,412,086
6/30/2033	2,180,785	925,959	436,157	818,669	4,692,888	2,032,601	938,578	1,721,709	3,056,143	1,436,978	611,229	1,007,937	9,929,816	4,395,538	1,985,963	3,548,315	2,465,115	6,381,501
6/30/2034	2,149,231	925,560	429,846	793,825	4,641,801	2,032,627	928,360	1,680,814	2,796,720	1,440,486	559,344	796,890	9,587,752	4,398,673	1,917,550	3,271,529	2,204,873	6,316,223
6/30/2035	2,081,873	924,165	416,375	741,334	4,520,361	2,035,365	904,072	1,580,924	2,685,440	1,437,167	537,088	711,186	9,287,674	4,396,696	1,857,535	3,033,444	1,983,293	6,254,230
6/30/2036	1,966,194	926,743	393,239	646,213	4,302,809	2,035,603	860,562	1,406,644	2,494,058	1,437,100	498,812	558,147	8,763,061	4,399,445	1,752,612	2,611,004	1,656,061	6,152,057
6/30/2037	1,763,276	923,119	352,655	487,502	3,907,144	2,033,263	781,429	1,092,453	2,161,929	1,440,090	432,386	289,454	7,832,349	4,396,471	1,566,470	1,869,409	1,150,247	5,962,940
6/30/2038	1,040,998	925,652	208,200	-92,854	2,180,593	2,031,984	436,119	-287,510	1,954,090	1,441,159	390,818	122,113	5,175,681	4,398,795	1,035,136	-258,250	-154,151	5,433,931
6/30/2039	901,291	927,328	180,258	-206,295	1,899,588	2,033,991	379,918	-514,320	1,733,242	1,440,857	346,648	-54,263	4,534,121	4,402,175	906,824	-774,878	-448,700	5,308,999
6/30/2040	790,335	923,147	158,067	-290,879	1,675,204	2,034,111	335,041	-693,947	1,200,615	1,439,182	240,123	-478,690	3,666,154	4,396,439	733,231	-1,463,516	-822,125	5,129,670
6/30/2041	721,935	923,279	144,387	-345,731	1,537,394	2,032,344	307,479	-802,429	1,088,522	1,441,136	217,704	-570,318	3,347,851	4,396,759	669,570	-1,718,478	-936,488	5,066,329
6/30/2042	521,190	927,554	104,238	-510,602	1,113,305	2,033,691	222,661	-1,143,047	537,816	1,441,546	107,563	-1,011,293	2,172,311	4,402,791	434,462	-2,664,942	-1,408,848	4,837,253
6/30/2043	498,899	925,020	99,780	-525,901	1,036,551	2,036,210	207,310	-1,206,969	225,725	1,439,067	45,145	-1,258,487	1,761,175	4,400,297	352,235	-2,991,357	-1,534,131	4,752,532
6/30/2044	396,160	926,604	79,232	-609,676	805,680	2,036,435	161,136	-1,391,891	0	0	0	0	1,201,840	2,963,038	240,368	-2,001,566	-995,823	3,203,406
6/30/2045	203,438	927,128	40,688	-764,378	391,190	2,034,365	78,238	-1,721,413	0	0	0	0	594,628	2,961,493	118,926	-2,485,790	-1,199,760	3,080,418
6/30/2046	19,518	926,594	3,904	-910,979	0	0	0	0	0	0	0	0	19,518	926,594	3,904	-910,979	-426,537	930,497
TOTAL	**36,187,218**	**23,132,965**	**7,237,444**	**5,816,809**	**77,662,524**	**48,816,436**	**15,532,505**	**13,313,583**	**51,071,540**	**31,674,120**	**10,214,308**	**9,183,113**	**164,921,282**	**103,623,521**	**32,984,256**	**28,313,505**	**25,331,103**	136,607,777

AAA rates as of 9/4/2020 plus 25 basis point cushion; PV Savings at Arbitrage Yield

Illustrative Pension Obligation Bonds – 80%

- 80% UALs and level debt service



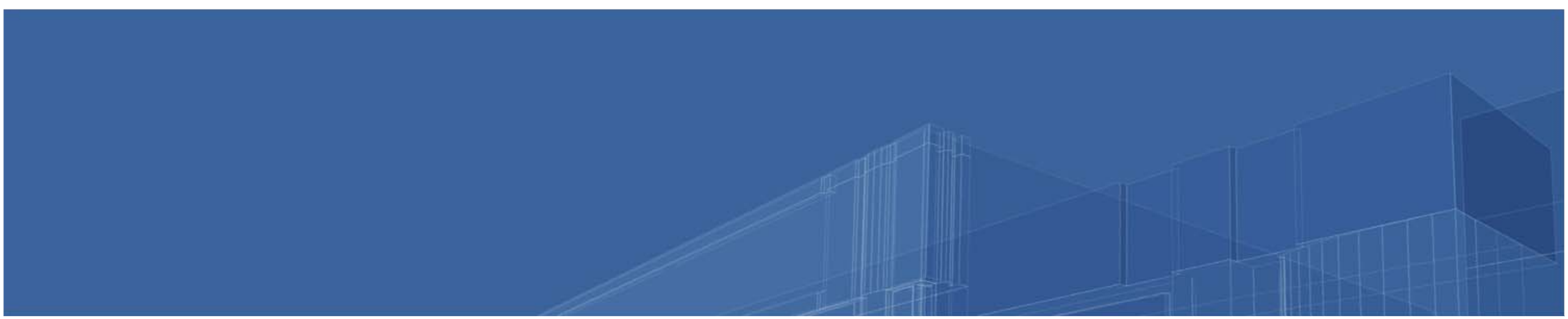
Development of a UAL Policy

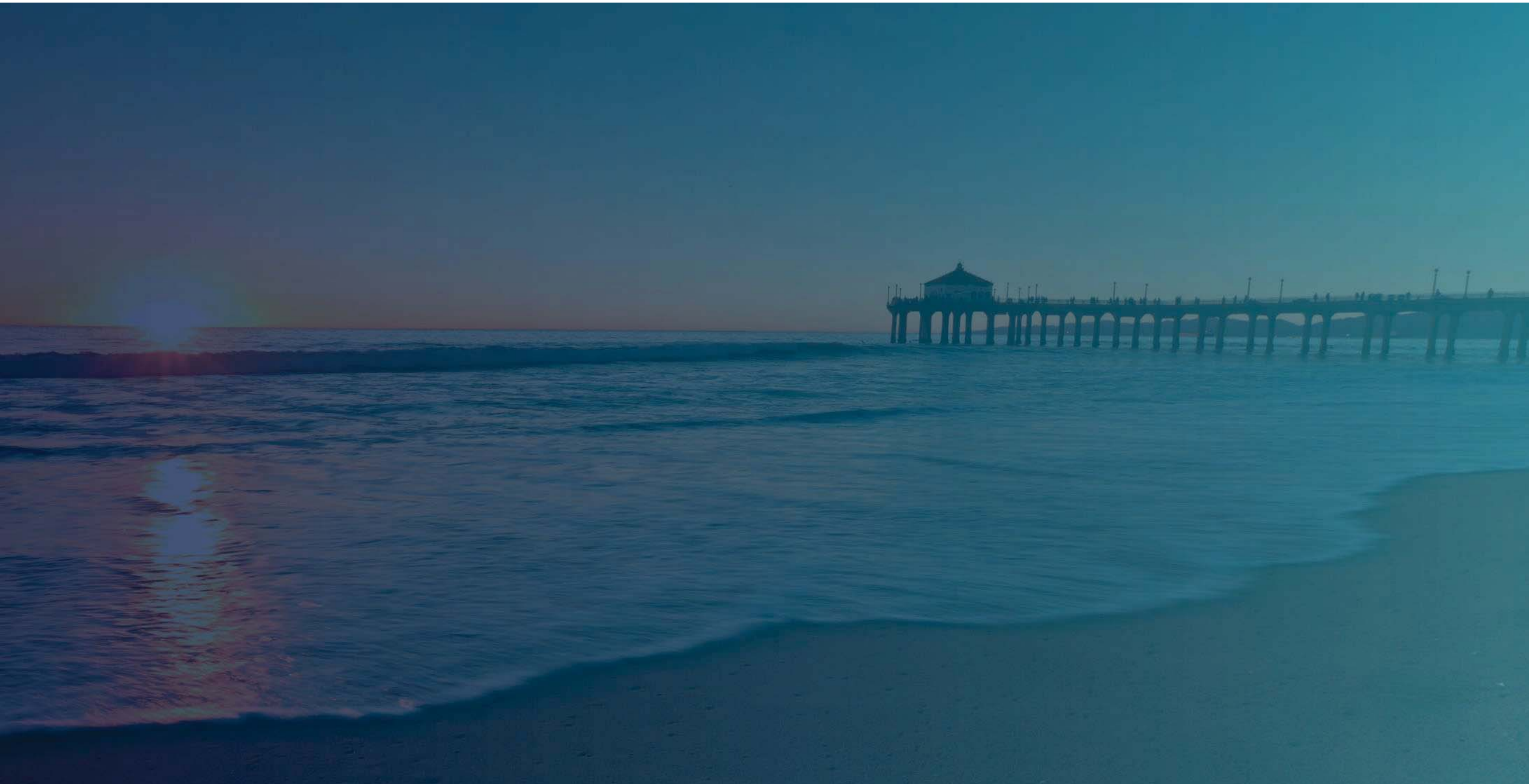
- In conjunction with a POB issuance, The City is developing a UAL policy as "best practice" to provide guidance on the development and adoption of a funding plan for any UAL
- Overall objective is to fund the CalPERS pension plan near 100% of the total accrued liability and no less than 80%, whenever possible
- The table below lays out the parameters for paying off / funding the UAL in a designated amount of time, based on the amount of the UAL

New Unfunded Accrued Liability (Any new liability incurred after the June 30, 2019 valuation report)	Payoff / Funding Time Period
$0 to $5,000,000	Within 1 to 6 years
$5,000,001 to $10,000,000	Within 7 to 11 years
$10,000,001 to $15,000,000	Within 12 to 16 years
Over $15,000,0001	Within 17 to 20 years

- Funding plan will utilize prepayment discounts, a Section 115 Trust, additional discretionary payments, allocated reserves, and POBs
- 40-60% savings from POBs will be used to offset any future UAL costs that arise and 40-60% of savings will be used to offset General Fund operational costs - (Allocation will be determined annually during the Budget process)
- No offers of any enhanced pension benefits to City employees while POBs are outstanding

Questions





Options for Long-Term CalPERS Pension Liabilities

October 20, 2020 City Council Meeting

Pension Benefits Background

- City contracts with CalPERS to offer defined benefit retirement plans
  - Benefit formulas are based on years of service, age at retirement and final compensation
  - Benefit formulas vary by
    - Classification (Miscellaneous or Public Safety)
    - Date employee entered into CalPERS membership (Classic or PEPRA)

- Benefits are funded by City *(employer)* and Employee contributions, as well as CalPERS investment earnings

CalPERS Funding Status

- After the Great Recession, CalPERS implemented changes to stabilize the fund
  - CalPERS Assets impacted by lower investment returns
  - Resulted in significant impacts to City Funded Status – as a consequence funded ratio declined

$$\frac{\text{Assets}}{\text{Accrued Liabilities}} \rightarrow \text{Funded Status (\%)}$$

- If Liabilities are greater than Assets, then City has an "Unfunded Actuarial Liability" (UAL)

CalPERS Funding Status

- If CalPERS Investment Earnings do not meet expected return *"discount rate"* of 7% the City's UAL will continue to grow.
  - Based on 2019-2020 returns the City will see an increase in the UAL of approxamently $7.0 million
  - Any UAL payments less than minimum interest costs would result in negative amortization

- Understanding risks of rising pension costs, City Council added Work Plan item in FY 2018-2019 directing staff to provide options to address pension liabilities and impacts to the City's financial future and structural deficit

Addressing Pension Liabilities

- October 2017 – City initiated a PARS 115 Trust to put aside funds for future pension payments
  - Pension Rate Stabilization Policy - $250,000 (*minimum*) annually
  - Current balance of $1.67 million

- September 2019 – Options introduced at Finance Subcommittee (FSC) meeting
  - Reviewed funding options, including Additional Discretionary Payments (ADPs)
  - FSC asked staff to explore Pension Obligation Bonds (POBs)

Addressing Pension Liabilities

- February 2020 - Staff hired independent actuary *(Bartel & Associates)* to assist with pre-funding pay down scenario analysis
- July 6 & July 22, 2020 – FSC reviewed options for POBs funded at 80-100% of current UAL
  - Approved Draft Pension Policy / 40%-60% of savings to offset future UAL costs / GF operational cost.
  - FSC - Directed staff to bring POB recommendation to full City Council
- October 6, 2020 Council meeting - Staff presented the Consideration to Issue POBs
  - Council requested to revisit topic at the October 20, 2020 meeting to allow additional time for questions

CalPERS Funding Status

- Annual UAL payments to amortize an estimated $91.5 million increasing significantly over next ten years
  - Impacted by changes in actuarial assumptions (e.g. demographics), low investment returns, earlier retirement, etc.

Date	Jul-20		Jul-20		Jul-20			
Valuation as of	6/30/2019		6/30/2019		6/30/2019			
Plan	TOTAL FIRE		TOTAL Police		Miscellaneous Plan		TOTAL UAL	
Required Contribution In	Balance	Payment	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2022	19,942,282	1,455,513	42,841,197	3,146,788	28,807,225	2,152,306	91,590,704	6,754,607
6/30/2023	19,832,648	1,623,787	42,585,018	3,488,182	28,597,370	2,401,557	91,015,036	7,513,526
6/30/2024	19,541,273	1,728,325	41,957,766	3,707,817	28,114,995	2,569,628	89,614,034	8,005,770
6/30/2025	19,121,369	1,833,254	41,059,413	3,927,876	27,425,002	2,746,690	87,605,784	8,507,820
6/30/2026	18,563,532	1,888,281	39,870,544	4,045,461	26,503,553	2,831,629	84,937,629	8,765,371
6/30/2027	17,909,727	1,936,747	38,476,824	4,153,200	25,429,741	2,907,340	81,816,292	8,997,287
6/30/2028	17,160,021	1,988,314	36,874,093	4,263,904	24,202,448	2,985,128	78,236,562	9,237,346
6/30/2029	16,304,495	2,041,300	35,044,663	4,377,647	22,808,779	3,065,060	74,157,937	9,484,007
6/30/2030	15,334,275	2,095,740	32,969,516	4,494,520	21,234,871	3,147,186	69,538,662	9,737,446
6/30/2031	14,239,826	2,151,679	30,628,215	4,614,615	19,465,835	3,231,573	64,333,876	9,997,867
6/30/2032	13,010,899	2,209,155	27,998,795	4,738,006	17,485,678	3,099,143	58,495,372	10,046,304

CalPERS Interest Rate Calculation

- City is charged 7% interest rate by CalPERS on the UAL
- On $91.5 million UAL, total Interest paid will be $73.3 million over amortization period

CalPERS Actuarial Valuation - June 30, 2019
Miscellaneous Plan of the City of Manhattan Beach
CalPERS ID: 3161990216

(Gain)/Loss Analysis 6/30/18 – 6/30/19

To calculate the cost requirements of the plan, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year, actual experience is compared to the expected experience based on the actuarial assumptions. This results in actuarial gains or losses, as shown below.

PERS 7% Interest Charge

1. Total (Gain)/Loss for the Year

a) Unfunded Accrued Liability (UAL) as of 6/30/18	$26,808,864
b) Expected Payment on the UAL during 2018-19	1,056,304
c) Interest through 6/30/19 [.07 x (1a) - ((1.07)^{½} - 1) x (1b)]	1,840,276
d) Expected UAL before all other changes [(1a) - (1b) + (1c)]	27,592,836
e) Change due to plan changes	0
f) Change due to assumption change	0
g) Change due to method change	0
h) Expected UAL after all other changes [(1d) + (1e) + (1f) + (1g)]	27,592,836
i) Actual UAL as of 6/30/19	28,256,013
j) Total (Gain)/Loss for 2018-19 [(1i) - (1h)]	$663,177

Excerpt from CalPERS Annual Report as of June 30, 2019 – Received Aug/2020

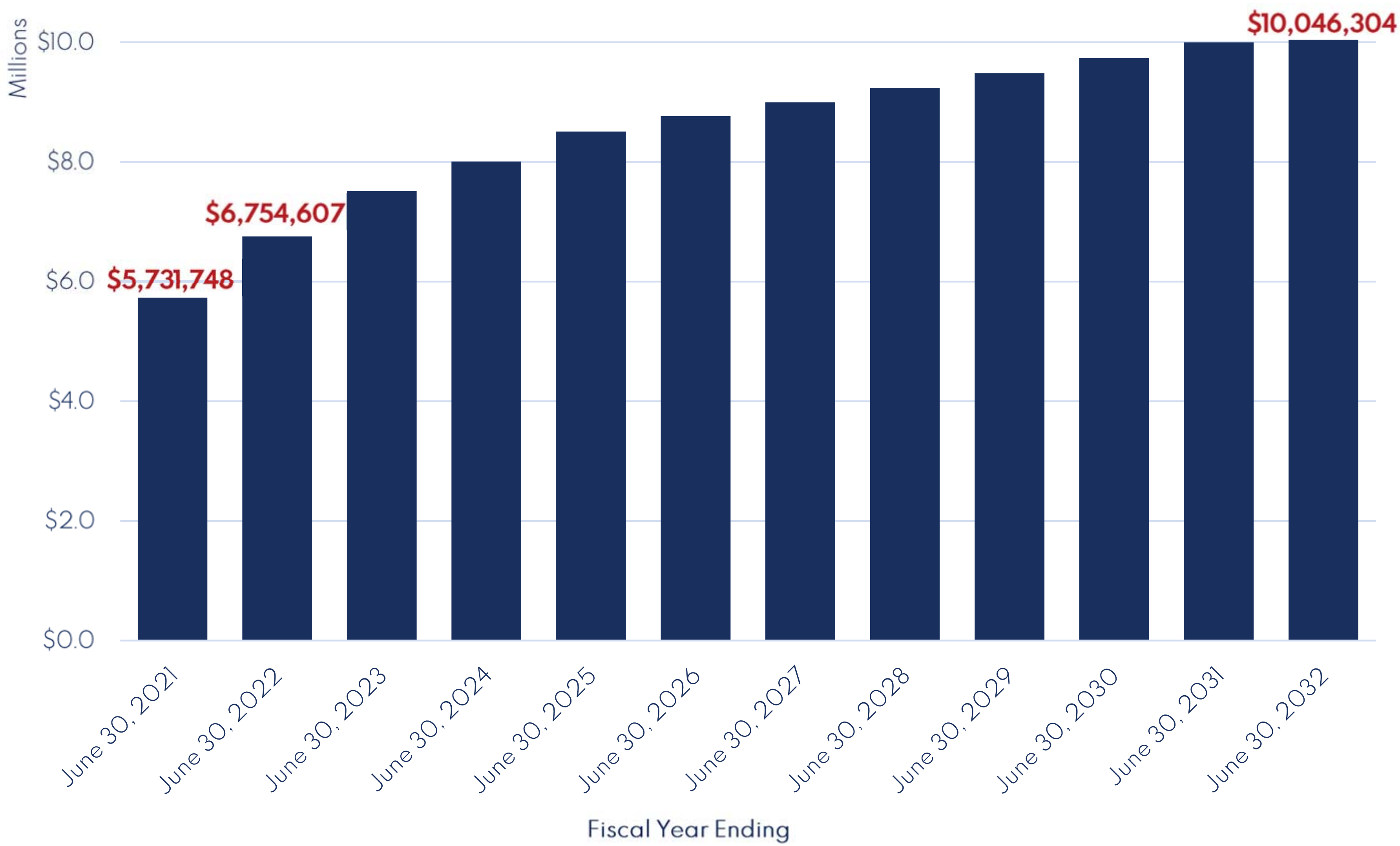
Sample City Plan – Amortization Schedule

CalPERS Actuarial Valuation - June 30, 2019
Miscellaneous Plan of the City of Manhattan Beach
CalPERS ID: 3161990216

Amortization Schedule and Alternatives

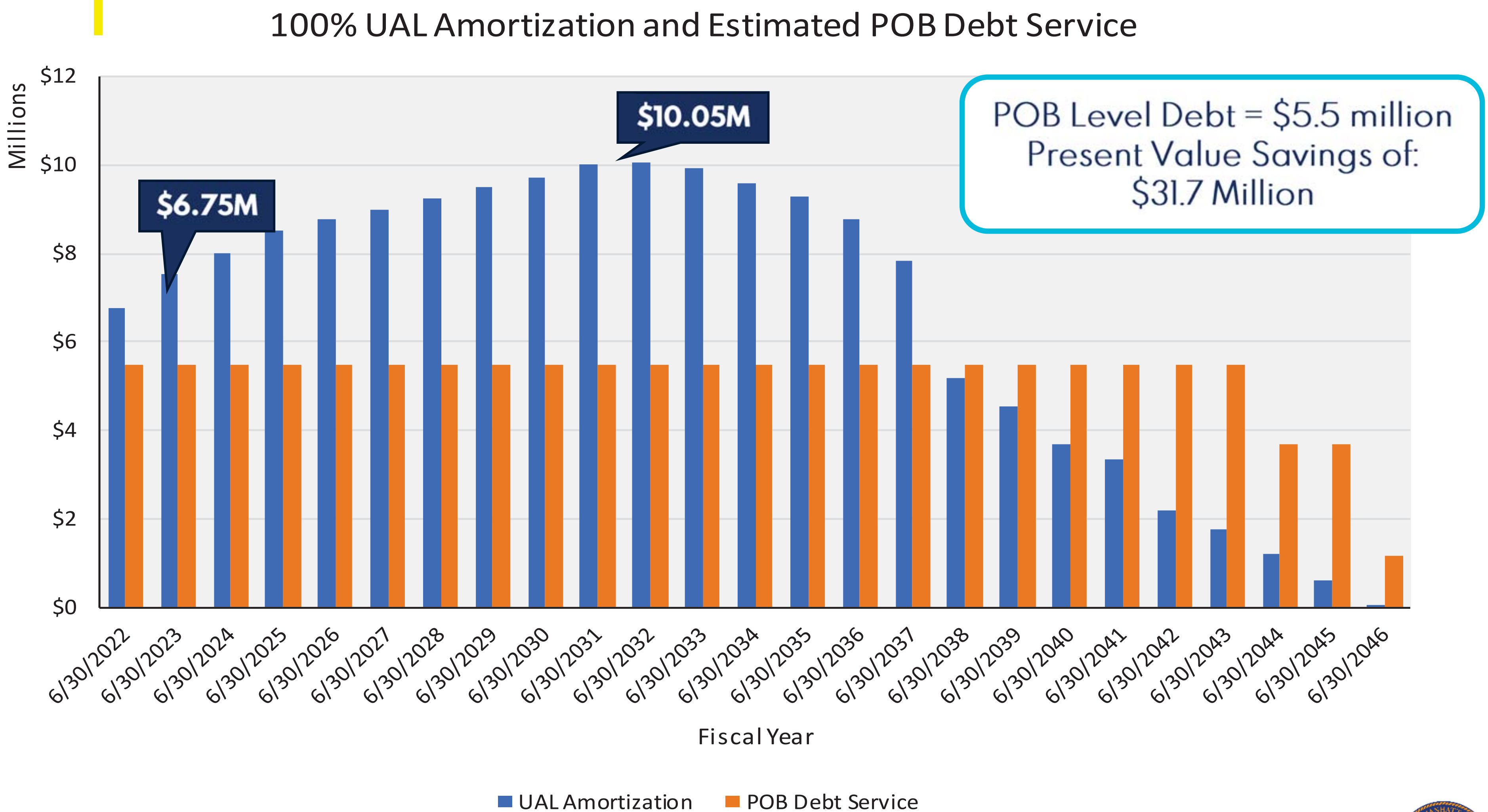
	Current Amortization Schedule	
Date	Balance	Payment
6/30/2021	28,807,225	2,152,306
6/30/2022	28,597,370	2,401,557
6/30/2023	28,114,995	2,569,628
6/30/2024	27,425,002	2,746,690
6/30/2025	26,503,553	2,831,629
6/30/2026	25,429,741	2,907,340
6/30/2027	24,202,448	2,985,128
6/30/2028	22,808,779	3,065,060
6/30/2029	21,234,871	3,147,186
6/30/2030	19,465,835	3,231,573
6/30/2031	17,485,678	3,099,143
6/30/2032	15,503,897	3,056,143
6/30/2033	13,427,870	2,796,720
6/30/2034	11,474,871	2,685,440
6/30/2035	9,500,271	2,494,058
6/30/2036	7,585,417	2,161,929
6/30/2037	5,880,078	1,954,090
6/30/2038	4,270,356	1,733,242
6/30/2039	2,776,403	1,200,615
6/30/2040	1,728,825	1,088,522
6/30/2041	723,867	537,816
6/30/2042	218,217	225,725
Total		**51,071,540**
Interest Paid		**22,264,315**

UAL Payments – Ramping Up

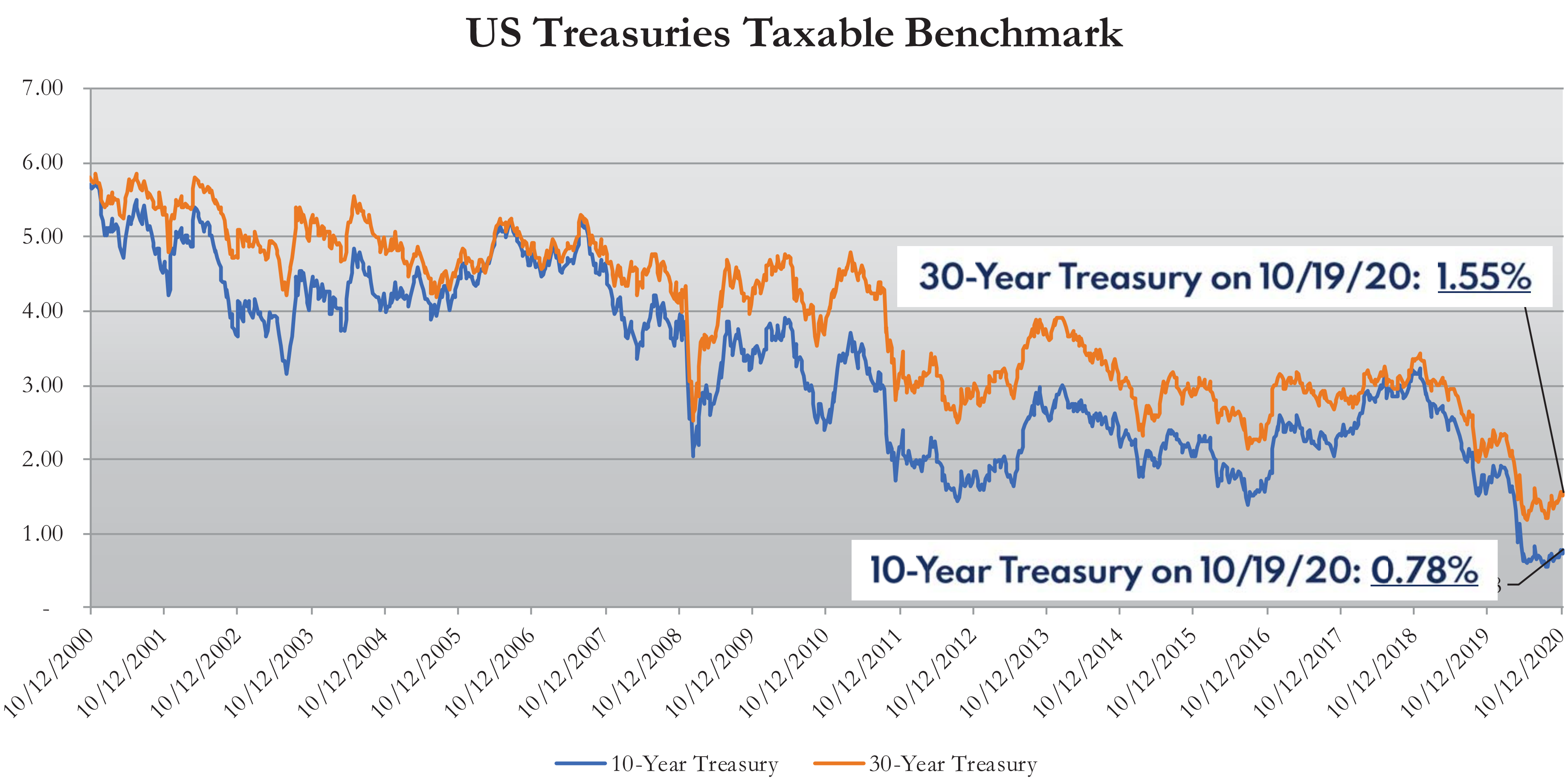


Staff Recommendation: POBs Illustrative – 100%

- 100% POB Payment is $5.5 million



US Treasury Rates



Pension Obligation Bonds

- POBs replace CalPERS current UAL debt of 7.0% interest rate with POB debt of 3.1% fixed interest rate
- UAL payment of $91.5 million would go into CalPERS $400 billion fund *(not side fund)*
- As of June 30, 2020 CalPERS earned 4.7% which will add about $7.0 million dollars to the current UAL
- Based on the current UAL schedule POBs result in long term budgetary savings and annual level debt payments

Pension Obligation Bonds

- Instead of current UAL payment costs ramping up, POB debt payments will be set at level annual payments
- Pension Policy gives Council flexibility in how to allocate savings on an annual basis concurrent with the budget and fund Council and community priorities
- Similar to PD/Fire Facility & Metlox Refunding
  - Reduce City's borrowing cost
  - Refinancing is not additional debt and not new debt– replaces our current debt at a lower cost

Conclusion

- Staff recommends:
  - Issuing POBs at 100% of the UAL (currently estimated at $91.5 million) to yield the highest present value savings and take advantage of historically low borrowing rates
  - The recommendation of issuing POBs does not eliminate our future UAL
  - Adopt the Pension Policy

Questions

CITY OF MANHATTAN BEACH
PENSION OBLIGATION BONDS – OCTOBER 2020
FREQUENTLY ASKED QUESTIONS

What are City pension costs?

The City contracts with CalPERS to offer a defined benefit retirement plan to full-time City employees. Benefit formulas are based on years of service, age at retirement, and final actual annual compensation. Benefit formulas vary by Classification (“Miscellaneous” or “Public Safety”) and by the date an employee entered into CalPERS membership (“Classic” or “PEPRA”, if 2013 or later).

Who contributes to the cost of the City’s employee pension benefits?

Pension benefits are funded by City and Employee contributions, as well as investment earnings achieved by CalPERS. The City and active employees pay annual contributions as a percent of payroll. These contributions are referred to as “normal” annual service costs.

City and Employee contributions are calculated by CalPERS, however, the City may negotiate with employees to pay higher contribution rates. Currently, public safety employees pay an additional 3% over the required normal cost rate required by CalPERS.

Contributions to amortize unfunded actuarial liability (UAL) are by law, the sole responsibility of the City

How are the City’s pension costs calculated?

There is a base cost contribution - “normal cost or service cost” which is the accrued liability generated by active employees in the current fiscal year. The contribution is based on a percent of payroll and are made by both employee and employer. Normal Pension contributions are calculated by CalPERS and based on demographic and financial information as of a certain date. The calculations include demographic and economic assumptions for the future, such as how much CalPERS will earn on its investment portfolio of $400 billion. CalPERS actuaries assume the discount rate will remain at 7% going forward and that the realized rate of return on assets for subsequent fiscal years is also 7%. When actual investment returns are below the assumed rate of return, an unfunded accrued actuarial liability (UAL) is created and future required contributions are necessary to amortize the UAL. When actual investment returns are above the assumed rate of return, a negative UAL is generated and is amortized by reduction in employer normal contribution rate. future required contributions will decrease.

CITY OF MANHATTAN BEACH
PENSION OBLIGATION BONDS – OCTOBER 2020
FREQUENTLY ASKED QUESTIONS

What is an Unfunded Accrued Liability (UAL)?

In addition to City and Employee "normal cost" pension contributions, the third component to funding long-term pension liabilities is investment returns. CalPERS invests contribution payments with the goal of earning sufficient returns over the long-term to pay defined benefits as promised and cover CalPERS' expenses. When investment earnings do not meet expectations over extended periods - an unfunded-accrued actuarial liability is generated.

When the market value of assets is less than the City's accrued liability (debt), the difference is called an Unfunded Accrued Liability (UAL). If the City has an unfunded liability, then the City must pay additional contributions.

What are Pension Obligation Bonds?

A public finance strategy and tool that state and local governments can use to issue taxable debt that extinguishes some or all of the public agency's unfunded accrued liability ("UAL"). Pension Obligation Bond proceeds would be deposited with the City's pension system, CalPERS, and invested along with other pension system assets. Debt service payments to bondholders would replace the City's UAL payments to CalPERS.

POBs are only advisable when the all-in interest rate of the bond issue is significantly below the actuarial rate of interest factored into the calculation of the UAL (currently 7%).

Pension Obligation Bonds do involve investment risk. If invested bond proceeds yield high returns, the pension system could be "overfunded". In that case City normal cost rate would be adjusted downward. However, should the City's assets ever exceed liabilities, those funds will stay in the City's CalPERS account and be used to cover future UAL shortfalls.

Is there a "good time" and a "bad time" to issue POBs? Does the economic cycle factor in?

Yes. The economic cycle can be a deciding factor on whether POBs should be issued. Long-term POB savings depend on long-term investment returns. POBs "make sense" if the investment earnings exceed the cost of borrowing over the long-term.

If POBs are issued with an interest rate higher than the interest rate that CalPERS charges the City (currently 7%), then no savings would result.-However, if the City issued POBs with a fixed interest rate lower than CalPERS' 7% rate, then the difference in how much the City will repay bondholders will be less than what the City would have paid to CalPERS. With the City's AAA rating, the City could issue POBs at an all-in interest cost as low as 3.1%, which would save the City roughly $31 million in present value savings (interest costs) over the next twenty-five years.

What about stories in the news of cities issuing POBs but then owing money to bondholders and CalPERS?

There are examples of governmental agencies running into financial trouble even after issuing POBs. Examples often cited in the news are the cities of Oakland and Stockton. When comparing to the City of Manhattan Beach's current financial position, key differences to these historical references include the timing of their bond issues to the economic cycle.

Both Stockton and Oakland issued POBs to prepay their current UAL. After the issuance Cal PERS experienced significant market losses on its investment portfolio. If Stockton and Oakland had not issued POBs, they would have accrued the same additional UAL to their existing balance to CalPERS.

Are Pension Obligation Bonds "new debt" for the City?

No, the current UAL is a debt already owed by the City to CalPERS and is recognized in our Balance Sheet. With the issuance of POBs, the current UAL debt owed to CalPERS is exchanged for debt to bondholders. POBs are not new debt or additional debt, they replace our current debt at a lower cost.

Can the City's UAL increase in the future?

Yes. Due to timing lags in the preparation and release of CalPERS Actuarial Valuation Reports, the UAL amount of $91.5 million is projected as of June 30, 2021 based on the City's June 30, 2019 Valuation Reports. Therefore, it does not include a factor for the most recent fiscal year ending June 30, 2020, when CalPERS earned 4.7% instead of the expected rate of return of 7%. The Actuarial Valuation Reports that the City will receive in July 2021, which will be "as of June 30, 2020", will indicate a higher projected June 30, 2021 UAL due to the lower investment return. The determination of the new UAL requires complex actuarial calculations based on a set of actuarial assumptions, which can be divided into two categories:

- Demographic assumptions (e.g. mortality rates, retirement rates, disability rates, etc.)
- Economic assumptions (e.g. future investment earnings, inflation, salary growth rates, etc.).

How much will the City pay in interest on the UAL debt to CalPERS?

On the projected current UAL of $91.5 million, the City expects to pay $164.9 million from FY 2021-2022 through FY 2025-2046. Total interest is $164.9 million less the $91.5 million = 73.5 million

CITY OF MANHATTAN BEACH
PENSION OBLIGATION BONDS – OCTOBER 2020
FREQUENTLY ASKED QUESTIONS

Assuming the City issued POB's at an all-in interest cost of 3.1%, how much would the City pay in interest over the life of the bonds?

On the current debt of $91.5 million, the City's estimated interest costs are $38 million, thus saving the City approximately $35.5 ($73.5 million -$38 million) million over 25 years. Present value savings are $31.7 million. Please refer to Power Point chart from the October 10, 2020 City Council meeting titled "Illustrative Pension Obligation Bonds – 100%"

What if City does not issue bonds and pays annual amortization amounts to PERS?

The City will forego interest savings as indicated above. The cash flow comparison shows the current method of payments to CalPERS will ramp up on the amortization payments over the next 11 years compared with level debt payments. The ramp up in payments will go from $5.7 million in fiscal year 2021 to over $10 million in fiscal year 2032. With no General Fund relief from issuing POBs there will be additional stress on the General Fund for the next 11 years.

What if PERS earns less than 7.00% in the future?

The 7.00% PERS discount rate used in these calculations is based on assumptions made PERS. Staff realizes that future events are subject to uncertainty, but these assumptions are made by professionals and our decisions are based on information provided by CalPERS. We can expect some variability in earnings, one year may be 6.8%, next year 7.5%, but in the long run, the return is expected to be 7.00%. With variability in returns, we can expect increases and decreases in UAL. However, proposed City pension policy provides for set aside of savings in case UAL is trending upward and for additional discretionary payments to more quickly amortize any future UAL.

If POB bonds are approved by City Council when will bonds be issued?

The Pension Obligation Bonds would be issued in the Spring of 2021. Once the Resolution and Indenture are approved by City Council it takes approximately 16-20 months for the completion of the process

Is it important to have a Pension Policy as best practice? What do other Cities do?

Rating agencies have highlighted as a credit positive the approval of a Pension Policy. KNN has advised all of our cities who have issued or are considering issuing POBs to adopt a pension policy consistent with the form that Manhattan Beach is considering.