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## Staff Report

## City of Manhattan Beach

TO: Members of the Finance Subcommittee
FROM: $\quad \begin{aligned} & \text { Steve S. Charelian, Finance Director } \\ & \text { Henry Mitzner, Controller }\end{aligned}$ Henry Mitzner, Controller
Libby Bretthauer, Senior Financial Analyst $y B$ Julie Bondarchuk, Senior Accountant of or

DATE: September 26, 2019

## SUBJECT: Funding of CalIPERS 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 CalIPERS 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 CalIPERS in FY 2019-20 and closing the fund.

## FISCAL IMPLICATION:

Paying at least the interest due on the City's CalIPERS 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 CaIPERS 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 CaIPERS 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, CaIPERS 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:

CaIPERS 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 CaIPERS and will be updated annually as more current information is available.

## PENSION PAYMENT SAVINGS PLAN OPTIONS

Attachment \#1 includes the following pension payment savings plan options:

|  | Payment Structure | Sum of Payments (Undiscounted) |
| :---: | :---: | :---: |
| Default | Default Payment Contribution <br> -Payments ramp up and ramp down over a 25 year amortization period | \$169,953,607 |
| Option \#1 | Three Year Ramp Up to Level Dollar <br> -Discretionary payments for 3 years: <br> FY 2019-20 \$1,500,000 <br> FY 2020-21 \$1,000,000 <br> FY 2021-22 \$1,000,000 <br> -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 <br> -Level debt payments of $\$ 8.1$ million for 20 years. | $\begin{array}{r} \$ 161,516,600 \\ \text { (\$8.4 million) } \\ \text { below default } \end{array}$ |

Each of the options has its advantages and disadvantages. The default payment plan provided by CaIPERS 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 CaIPERS 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 CaIPERS UAL significantly outweighs the City's PRSF portfolio returns.
- The City's relatively small trust balance is unlikely to outperform CaIPERS 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 CaIPERS 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

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


> To avoid negative amortization that adds to the City's Unfunded Liability, additional discretionary payments are recommended: FY $20+\$ 1.5 M$ (PARS+GF) FY $21+\$ 1.0 M$ (GF) FY $22+\$ 1.0 M$ (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)
*Payments Over/Under the minimum default plan paymentsBalance 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

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


> General Fund impact will be mitigated by using the PARS Trust balance of $\$ 1.0 \mathrm{M}$ and budgeted allocations to PARS of $\$ 250,000 / y r$ 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

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. |  |  |  |  |  |  |
| CaIPERS 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. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| CaIPERS Payments (Gen Fund) |  | \$5,068,271 | \$6,605,007 | \$7,392,312 | \$7,833,939 | \$7,833,939 |
| CaIPERS 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. |  |  |  |  |  |  |
| CaIPERS Payments (Gen Fund) |  | \$6,542,825 | \$7,542,825 | \$7,542,825 | \$7,542,825 | \$7,542,825 |
| CaIPERS 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 | - | - | - |

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# City of Manhattan Beach 

Pros and Cons of Pension Obligation Bonds
September 19, 2019

## 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.


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

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

|  |  | UNFUNDED ACCRUED LIABILITIES |  |  |  | UNFUNDED ACCRUED LIABILITIES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Default Payment Plan |  |  |  | 3 Year Ramp Up to Level Dollar |  |  |
|  |  | Mixed Amortization Bases |  |  |  | Mixed Amortization Bases |  |  |
|  | FY | UAL, Beg of FY | Payment |  | FY | UAL, Beg of FY | Payment | Pmt Difference* |
| 1 | 2020 | - \$88,500,000 | \$4,997,078 | 1 | 2020 | \$88,500,000 | \$6,497,078 | \$1,500,000 |
| 2 | 2021 | 89,525,939 | 6,071,742 | 2 | 2021 | 87,974,314 | 7,071,742 | 1,000,000 |
| 3 | 2022 | 89,512,044 | 6,914,681 | 3 | 2022 | 86,817,388 | 7,914,681 | 1,000,000 |
| 4 | 2023 | - $88,625,226$ | 7,592,907 | 4 | 2023 | 84,707,528 | 8,387,515 | 794,608 |
| 5 | 2024 | - $86,974,762$ | 7,979,389 | 5 | 2024 | 81,960,869 | 8,387,515 | 408,126 |
| 6 | 2025 | -84,808,983 | 8,370,176 | 6 | 2025 | 79,021,945 | 8,387,515 | 17,339 |
| 7 | 2026 | - 82,087,362 | 8,600,558 | 7 | 2026 | 75,877,296 | 8,387,515 | $(213,043)$ |
| 8 | 2027 | 78,936,917 | 8,837,399 | 8 | 2027 | 72,512,521 | 8,387,515 | $(449,884)$ |
| 9 | 2028 | 75,320,948 | 9,079,623 | 9 | 2028 | 68,912,212 | 8,387,515 | $(692,108)$ |
| 10 | 2029 | 71,201,301 | 9,329,382 | 10 | 2029 | 65,059,882 | 8,387,515 | $(941,867)$ |
| 11 | 2030 | 66,534,924 | 9,586,678 | 11 | 2030 | 60,937,888 | 8,387,515 | $(1,199,163)$ |
| 12 | 2031 | 61,275,750 | 9,850,433 | 12 | 2031 | 56,527,355 | 8,387,515 | $(1,462,918)$ |
| 13 | 2032 | 55,375,600 | 9,883,806 | 13 | 2032 | 51,808,085 | 8,387,515 | $(1,496,291)$ |
| 14 | 2033 | 49,027,919 | 9,740,624 | 14 | 2033 | 46,758,465 | 8,387,515 | $(1,353,109)$ |
| 15 | 2034 | 42,384,009 | 9,355,220 | 15 | 2034 | 41,355,373 | 8,387,515 | $(967,705)$ |
| 16 | 2035 | 35,673,695 | 9,013,953 | 16 | 2035 | 35,574,063 | 8,387,515 | $(626,438)$ |
| 17 | 2036 | 28,846,670 | 8,430,463 | 17 | 2036 | 29,388,062 | 8,387,515 | $(42,948)$ |
| 18 | 2037 | 22,145,326 | 7,493,865 | 18 | 2037 | 22,769,041 | 8,387,515 | 893,650 |
| 19 | 2038 | 15,943,720 | 4,703,447 | 19 | 2038 | 15,686,689 | 8,387,515 | 3,684,068 |
| 20 | 2039 | - 12,194,457 | 4,087,660 | 20 | 2039 | 8,108,572 | 8,387,515 | 4,299,855 |
| 21 | 2040 | - 8,819,725 | 3,230,727 | 21 | 2040 | - | - | $(3,230,727)$ |
| 22 | 2041 | 6,095,188 | 2,595,562 | 22 | 2041 |  |  | $(2,595,562)$ |
| 23 | 2042 | 3,836,959 | 1,597,600 | 23 | 2042 |  |  | $(1,597,600)$ |
| 24 | 2043 | 2,452,961 | 1,485,639 | 24 | 2043 |  |  | $(1,485,639)$ |
| 25 | 2044 | - 1,087,899 | 1,109,923 | 25 | 2044 |  |  | $(1,109,923)$ |
| 26 | 2045 | 1 15,929 | 15,072 | 26 | 2045 |  |  | (15,072) |
|  |  | Sum of Payments | \$169,953,607 |  |  | of Payments | \$164,071,256 | \$ $(5,882,351)$ |
|  |  | NPV Pmts@3\% | \$123,655,1 38 |  |  | V Pmts @ 3\% | \$121,276,715 |  |

> To avoid negative amortization that adds to the City's Unfunded Liability, additional discretionary payments are recommended: FY $20+\$ 1.5 M$ (PARS+GF) FY $21+\$ 1.0 M$ (GF) FY $22+\$ 1.0 M$ (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)
*Payments Over/Under the minimum default plan payments
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

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

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


> General Fund impact will be mitigated by using the PARS Trust balance of $\$ 1.0 \mathrm{M}$ and budgeted allocations to PARS of $\$ 250,000 / \mathrm{yr}$ 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)
*Payments Over/Under the minimum default plan payments
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

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. |  |  |  |  |  |  |
| CaIPERS 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.

| CaIPERS Payments (Gen Fund) |  | \$5,068,271 | \$6,605,007 | \$7,392,312 | \$7,833,939 | \$7,833,939 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CaIPERS 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 $\quad$ FY 2020-21 $\quad$ FY 2021-22 $\quad$ 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.

| CaIPERS Payments (Gen Fund) |  | \$6,542,825 | \$7,542,825 | \$7,542,825 | \$7,542,825 | \$7,542,825 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CaIPERS 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 | - | - | - |

[^1]City of Manhattan Beach
Pros and Cons of Pension Obligation Bonds
September 19, 2019

## 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.


[^0]:    *Including PARS Trust held in reserve.

[^1]:    *Including PARS Trust held in reserve.

