Exhibit 2 – Technical Information on the Pension Funding Strategies Examined by UFI, including Pension Obligation Bonds

Evaluation of Funding Strategies

Our consultant, UFI, assisted the staff in evaluating and determining the viability of implementing various funding strategies to address its rising pension costs. UFI typically recommends developing a long-term, comprehensive plan that contemplates multiple strategies over time. For most cities such as Alameda, this strategy includes the issuance of POBs.

During this initial evaluation process, City staff and UFI examined four funding strategies, in order of cost-effectiveness:

1. ***Use of Reserves, Surpluses, and One-time Monies* –** The use of cash is the most cost-effective funding strategy since it does not have any financing or interest costs. However, given the City's budget deficit, the City was not able to identify any excess reserves or surplus one-time monies available in the General Fund to utilize for additional payments to CalPERS.

   The enterprise funds (Electric Utility and Sewer funds) comprise $30 million and $2.8 million, respectively, of the UAL. These funds have available reserves that could be used to pay off a portion of their share of the UAL.

   In June 2021, the City Council authorized the payment of $5.00 million to CalPERS with respect to these two enterprise funds, which has resulted in savings of approximately $7.75 million.

   The City has also established a Section 115 Trust with PARS to serve as a Pension Stabilization Fund as well. The current balance in the account is $11,568,872 as of July 31, 2021 and this funding is available to offset additional pension costs in the future.

2. ***Leveraged Refunding*** – This strategy involves refunding one or more existing long-term debt obligations of the City to generate "upfront" savings in the first few years, in order to apply these savings to pay for a portion of the City's existing UAL. The saving from the bond refunding can be leveraged 2.0 to 2.5 times when applied toward a long-term amortization base.

   Currently, there are few current candidates to consider for potential refunding, now and in the near future:
   - 2003 Base Reuse Bonds
   - 2010 Power Revenue Refunding Bonds

- 2012 Sewer Revenue Bonds
- 2014 TABs

Overall, based on an initial evaluation, it appears that each of these refunding opportunities would have a very limited impact on the UAL. However, Staff will continue to evaluate each opportunity individually and consider the viability of each.

3. ***Tax-Exempt Exchange*** – Tax-Exempt Exchange is a hybrid concept that involves budgeting and financing. The concept involves a 4-step process:
    1. Identify capital projects to be funded in the near term using available funds (i.e., "pay go")
    2. Issue tax-exempt long-term bonds to finance these projects using bond proceeds, instead of on a pay go basis
    3. Use pay go cash earmarked for the capital projects to instead make ADPs toward the UAL
    4. Reallocate funds earmarked for UAL payments to instead pay the debt service on the tax-exempt bonds

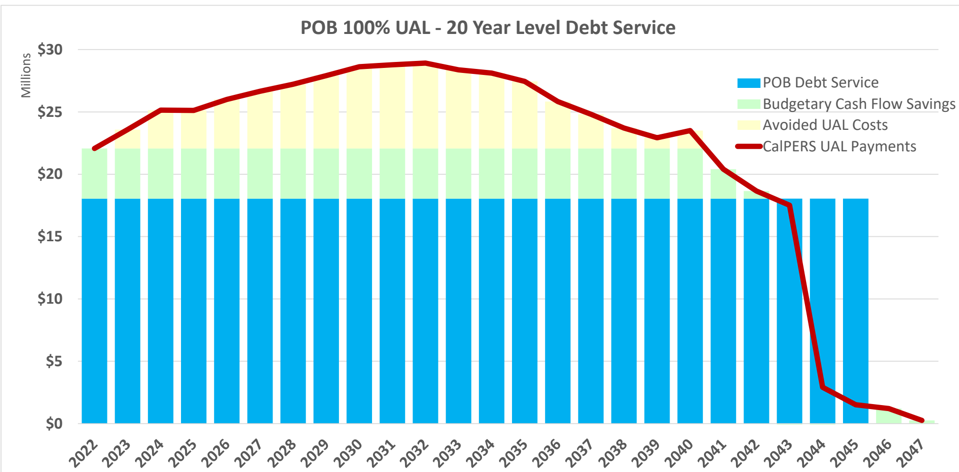
    Given the long-term nature of capital budgeting decisions, there are currently a limited number of cash-funded capital projects that could be considered for the tax-exempt exchange concept. Accordingly, while this could be a very viable strategy for the City to consider in the future, the City does not have sufficient cash-funding capital projects scheduled to be financed through the General Fund over the next few years to offset against the current UAL of $297 million.

4. ***Taxable Pension Obligation Bonds (POBs)*** – POBs are taxable bonds that effectively refinance the City's UAL payments (which are based on a 7.0% interest rate set by CalPERS), at a lower interest rate available in the municipal bond marketplace. Since POBs are taxable bonds, meaning the interest received by the holders of the bonds is subject to federal income tax, they carry a higher interest rate than traditional tax-exempt municipal bonds where such interest is not subject to federal income tax (e.g., 3.0% vs 2.25%). In the current low-interest-rate environment, therefore, POBs provide considerable interest costs savings and a very compelling option to address the City's existing UAL.

    To provide certainty that the City has the legal authority under the California Constitution to issue POBs payable from the General Fund without obtaining voter approval, the City can obtain a judgment to that effect via a judicial validation action. This process is described below.

    Potential Savings – Although the use of reserves, tax-exempt exchange and leveraged refunding offer a greater level of savings, these financing options are limited in scale. Moreover, pays cuts, reduction in service or staffing cuts may also reduce the UAL, they are not politically palatable options. On the other hand, in the current (historically) low-interest-rate environment, POBs present a very compelling level of savings.

As illustrated in the chart below, if the City were to issue 20-year POBs for the entire $297 UAL ($298 million in bonds) with level annual payments, the City could realize significant savings. The bond would require annual debt service payments of approximately $18 million, which is $4 million less than the FY21-22 required UAL payment to CalPERS. More importantly, the City would be able to stem the rising annual pension costs – avoiding $75 million in future UAL payments over the next 20 years.



20-Year POBs Level Debt Service

Par Value	$ 298,215,000
Term (Years)	**24**
POB Debt Service	**$ 18,043,101**
Budgetary Savings	**$ 4,021,804**
Avoided UAL Costs	**$ 75,552,000**
TOTAL UAL Savings	$ 124,223,418
NPV Savings	**$ 98,559,061**
NPV Savings	***33.21%***
TIC %	**3.27%**

The Safety Plan's funding level is a particular point for concern and warrants consideration in any funding plan that the City develops.

Amortization Bases

The City's $297 million UAL can be viewed as a debt portfolio comprised of a series of individual loans, or "amortization bases", with specific repayment terms and corresponding repayment schedules as calculated by CalPERS, all of which currently accrue at an interest rate of 7.0% which is the current "Discount Rate" set by CalPERS and may be changed in the future.

- The Miscellaneous Plan's $91.4 million UAL is comprised of 26 amortization bases, with final maturities ranging from 3 to 28 years.
- The Safety Plan's $203 million UAL is comprised of 21 amortization bases, with final maturities ranging from 17 to 28 years.

	MISCELLANEOUS PLAN					
	Year	**Reason**	**Ramp**	**Years**	**Balance**	**Payment**
1	2003	Assumption Change	NO	3	2,602,545	933,970
2	2004	Method Change	NO	4	(282,542)	(77,566)
3	2006	Benefit Change	NO	6	510,094	97,085
4	2009	Assumption Change	NO	9	3,204,010	430,701
5	2009	Special (Gain)/Loss	NO	19	4,057,582	310,438
6	2009	Golden Handshake	NO	9	113,542	15,264
7	2010	Special (Gain)/Loss	NO	20	(2,818,342)	(208,487)
8	2011	Assumption Change	NO	11	4,221,638	482,202
9	2011	Special (Gain)/loss	NO	21	(2,555,981)	(183,252)
10	2012	Payment (Gain) / Loss	NO	22	1,864,157	129,810
11	2012	CalPERS Loss: 0.1% vs. 7.50%	NO	22	9,814,524	683,432
12	2013	13.2% (Book Value vs. MVA)	100%	23	33,210,282	2,383,943
13	2014	Life Expectancy+2.0/2.5 years	100%	14	12,350,411	1,320,996
14	2014	CalPERS (Gain): 18.40% vs.7.5	100%	24	(23,256,407)	(1,621,308)
15	2015	CalPERS Loss: 2.40% vs. 7.50%	100%	25	17,444,796	1,183,403
16	2016	Discount: 7.50% to 7.375%	100%	16	5,012,707	476,655
17	2016	CalPERS Loss: 0.6% vs. 7.375%	100%	26	18,046,301	1,193,346
18	2017	Discount: 7.375% to 7.25%	80%	17	4,921,963	362,172
19	2017	CalPERS (Gain): 11.2% vs.7.25	80%	27	(10,922,772)	(571,305)
20	2018	Method Change	60%	18	2,435,077	132,577
21	2018	Discount: 7.25% to 7.00%	60%	18	9,821,294	534,718
22	2018	CalPERS Gain - 8.60% vs. 7.0%	60%	28	(4,710,452)	(185,115)
23	2019	(Gain)/Loss	NO	19	(1,627,841)	(152,260)
24	2019	CalPERS Gain - 6.70% vs. 7.0%	40%	19	1,048,643	43,780
25	2020	Non-Investment (Gain)/Loss	NO	20	879,937	80,297
26	2020	Investment (Gain)/Loss	20%	20	6,029,063	131,819
	FY 2022-23				**$ 91,414,228**	**$ 7,927,316**

	SAFETY PLAN					
	Year	**Reason**	**Ramp**	**Years**	**Balance**	**Payment**
1	2008	FS 30-Year Amortization	NO	18	(7,659,591)	(607,691)
2	2009	Special (Gain)/Loss	NO	19	6,573,399	502,918
3	2010	Special (Gain)/Loss	NO	20	1,287,247	95,224
4	2011	Special (Gain)/Loss	NO	21	1,543,283	110,646
5	2012	Payment (Gain)/Loss	NO	22	2,439,973	169,907
6	2012	(Gain)/Loss	NO	22	76,375,701	5,318,409
7	2013	(Gain)/Loss	100%	23	44,483,117	3,193,143
8	*2014*	*Assumption Change*	*100%*	*14*	*9,236,828*	*987,968*
9	2014	(Gain)/Loss	100%	24	(21,626,974)	(1,507,712)
10	2015	(Gain)/Loss	100%	25	20,952,349	1,421,344
11	2016	Assumption Change	100%	16	8,074,530	767,801
12	2016	(Gain)/Loss	100%	26	21,797,859	1,441,425
13	2017	Assumption Change	80%	17	9,452,200	695,519
14	2017	(Gain)/Loss	80%	27	(9,547,233)	(499,360)
15	2018	Method Change	60%	18	4,206,376	229,016
16	2018	Assumption Change	60%	18	16,823,709	915,965
17	2018	(Gain)/Loss	60%	28	2,738,341	107,613
18	2019	Non-Investment (Gain)/Loss	No	19	3,461,052	323,728
19	2019	Investment (Gain)/Loss	40%	19	1,678,944	70,096
20	2020	Non-Investment (Gain)/Loss	No	20	3,109,564	283,757
21	2020	Investment (Gain)/Loss	20%	20	8,053,429	176,080
	FY 2022-23				**$ 203,454,106**	**$ 14,195,795**
	Takes into Account $5.0 Million ADP Base #8				192,291,113	13,735,958
	TOTAL UAL				**$ 294,868,334**	**$ 22,123,111**

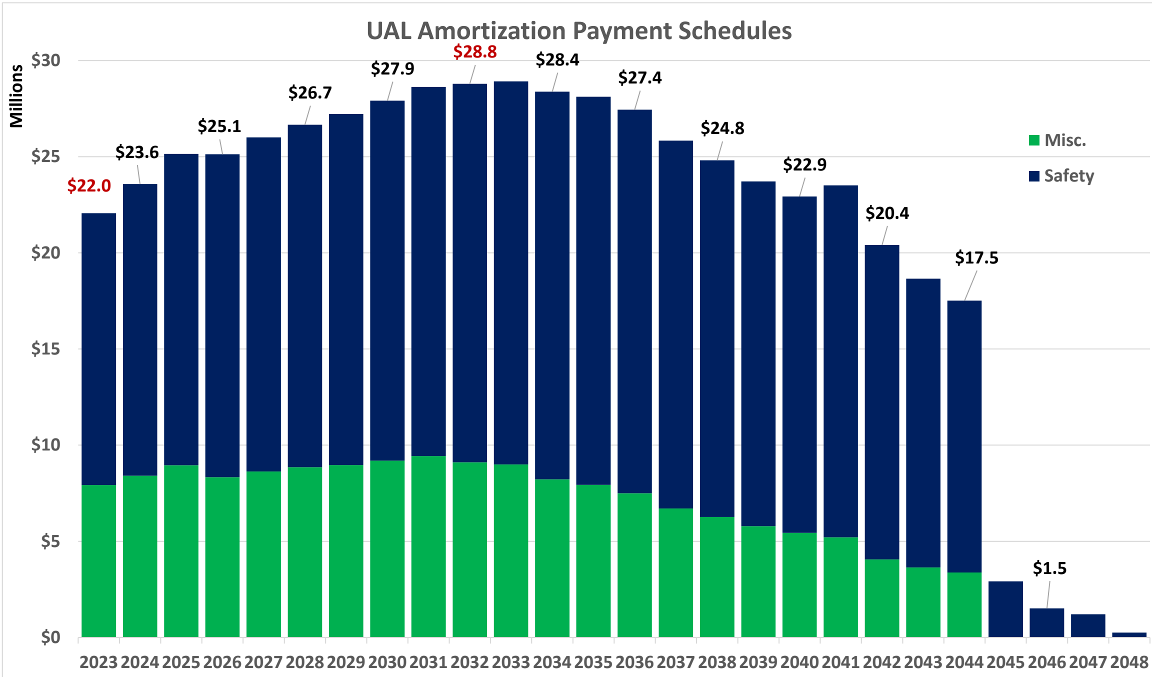
It is important to note that CalPERS actuarial reports have a 2-year delay. Accordingly, the June 30, 2020 reports provide the required UAL payment for FY 22-23. Although CalPERS valued the City's UAL as of June 30, 2020 at $297 million, it is projected to grow to $294.9 million by FY 22-23. This balance reflects the recent payment of $5.0 million Additional Discretionary Payment (ADP) based on the City's Pension Funding Policy.

The values in the list of amortization base are referenced according to the number base listed above (e.g., Safety base #4), for the remainder of the report.

Annual UAL Payments

Each amortization base has a unique amortization schedule, with different repayment terms (some of which have escalating and declining payments), but all carry a 7.0% interest rate. Collectively, the payment schedules of all 47 amortization bases produces a projection of the full impact of UAL payments.

The City's future UAL payments are scheduled to increase from $22.0 million in FY 22-23 to a peak of $28.8 million in FY 32-33, as illustrated in the chart below:

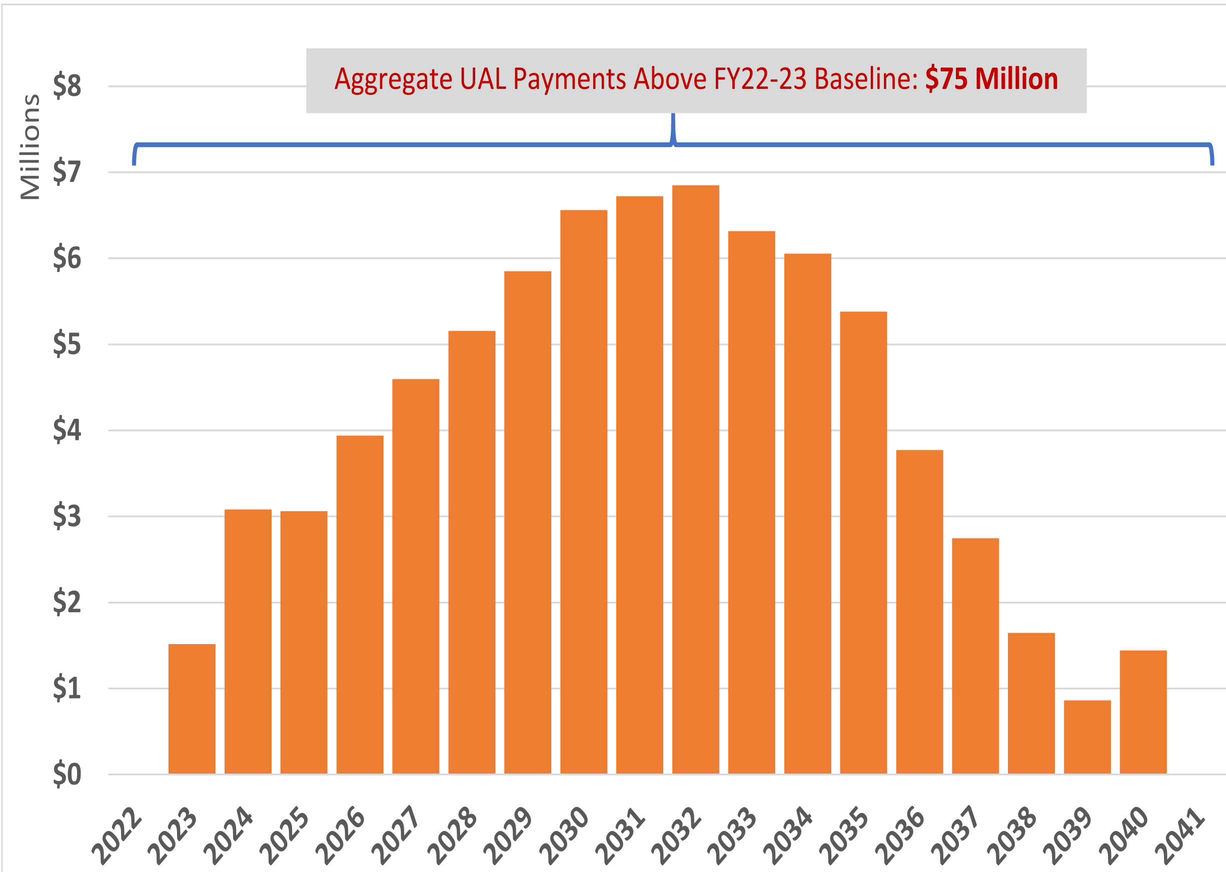


The City's UAL is scheduled to have increasing UAL payments for the next 19 years - these cumulative annual increases add up to $75 million, as illustrated in the chart below:

The increase in UAL payments, which are fixed dollar payments, is a major contributor to the projected deficit in the City's Baseline Forecast.

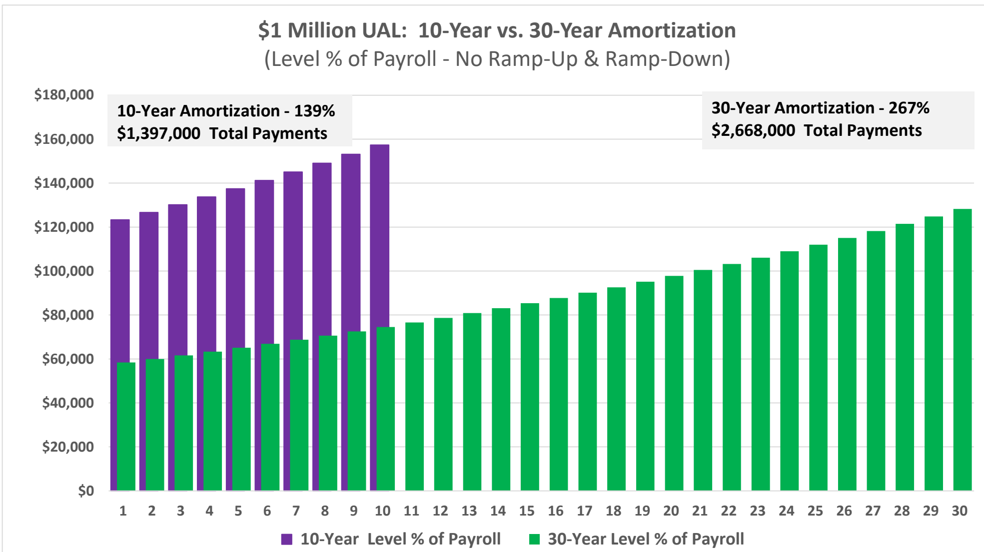
Base Selection Strategies

The decision to implement a pension funding strategy must be accompanied by a decision by the City regarding which of the 47 amortization bases to address. Staff's recommendation is predicated on a Base Selection Strategy (described below) that targets specific amortization bases to meet the City's financial objectives and funding strategy.



Making additional payment to CalPERS, known as Additional Discretionary Payments ("ADPs"), will have a different financial impact depending on which amortization base is selected:

- **Paying off a longer amortization base will result in greater total savings.**
- **Paying off a shorter amortization base provides greater budget/cash flow relief.**



Comprehensive Funding Plan

The City should anticipate that CalPERS will continue to add new amortization baes every year, and therefore, the UAL will fluctuate and adjust over time even if the City chooses to make ADPs at this time. For this reason, the City's consultant, UFI, recommends developing a long-term plan to address its pension liabilities and for the staff and City Council to adopt a formal written pension funding policy.

GFOA Advisory on POBs

In February 2021, the GFOA affirmed its guidance against issuing POBs, regardless of economic cycles. The Advisory notes five key reasons not to issue POBs, each of which are addressed below.

GFOA Advisory on Pension Obligation Bonds	
GFOA Commentary	**Response**
1. **POBs are Complex Structures** – POBs are complex structures that may utilize Guaranteed Investment Contracts (GICs), CABs, and swaps/derivatives.	POBs are now issued as **fixed rate bonds**. POBs are structured with **level annual debt service** (as opposed to escalating annual payments).
2. **POBs are Non-Callable and Increase Debt Burden** – POBs could potentially use up debt capacity and taxable debt is typically issued without call options.	POBs are now issued with a standard 10-year call feature. CalPERS requires **fixed dollar UAL payments** – just like a loan, plus GASB 68 has placed the **UAL on the City's balance sheet.** POBs are refinancing an existing liability*.
3. **POBs are** structured in a manner to defer or **extend payments over a longer period of time, increasing overall costs.**	POBs are now structured to provide budgetary savings due to the lower interest costs. **Financing normal costs or extending repayment periods is a poor financial management practice** and discouraged.
4. **Rating Agencies may not view POBs as a credit positive.**	Majority of POBs in California have been AA-rated. Rating agencies already incorporate UAL costs into ratings. **POBs are generally credit neutral**, however, comprehensive funding plan and policies are a plus.
5. **The invested POB proceeds might fail to earn more than the interest rate owed** over the term of the bonds, **leading to increased overall liabilities for the government.**	POBs are subject to market timing risk. Market timing risk is applicable for all investment decisions. This risk can be addressed with hedging strategies and dollar cost averaging.

*POBs do not eliminate the UAL, they refinance the UAL payments at a lower interest rate. The payment obligation of the City is transferred from CalPERS to bondholders/investors.

Market Timing Risk

The issuance of POBs is a 2-part decision.

1. Issue POBs to refinance the City's existing pension liability: the lower the interest rate, the greater the potential savings. Given the current interest outlook and required 6-month validation timeline, it would not be unreasonable to be able sell POBs with a true interest cost of around **3.50%.**
2. Invest proceeds with CalPERS. Ideally monies are invested when market values are depressed and/or rising. The primary risk to POBs is to suffer a loss after making the investment, especially during the initial years.

Market timing risk is not unique to POBs. All investors are subject to market timing risk - any time an investor makes an additional investment deposit, whether into a 401K or college savings plan, they are increasing or leveraging their position and taking on market timing risk. Many investors offset this timing risk by implementing a couple of basic strategies (or variations thereon): 1. hedging strategy, such as a floor, put or collar; and 2. Dollar cost averaging strategy – investing amounts over time to mitigate the impact of a single large investment. These strategies can be evaluated further in the future, if the issuance of POBs is pursued.

Pension Reform

The State of California adopted pension reform legislation Public Employees' Pension Reform Act - AB 340 “PEPRA”, which was effective on January 1, 2013. The law created a new retirement formula for new employees (2.0% @ 62 for Miscellaneous and 2.7% @ 55), it also required all PEPRA employees to pay 50% of the Normal Cost rate, imposed a cap on pensionable compensation - currently $151,549 and adjusted annual by CPI, and limited the types of pay that can be counted toward pensionable compensation.

	MISC.		SAFETY		COMBINED	
Classic	181	55%	118	67%	299	59%
PEPRA	149	45%	59	33%	208	41%
	330		177		507	

The City’s share of PEPRA employees continues to rise, and they now comprise just over 40% of the total workforce, according to the June 30, 2020 actuarial report (compared to 34% for the prior fiscal year). Nonetheless, it will be several years before PEPRA employees will constitute the majority of the City’s payroll. More importantly, the City’s UAL is effectively a past-due liability for current Classic employees and retirees. A greater percentage of PEPRA employees on the City’s current payroll will lower the City’s annual amount of Normal Costs, but will have no impact on the UAL.

Dynamic Liability

The City’s CalPERS liability is not a static amount. CalPERS adjusts the UAL at the end of each fiscal year. CalPERS typically adds 2 new bases each year to account for the following two issues:

1. **Investment Performance** – relative to the Discount Rate of 7.0%
2. **Non-Investment Performance –** early or extended retirements/death, industrial disability

In some years, CalPERS makes other adjustments to its assumptions or methodology. The City may also change its pay structure (i.e., pay cuts or raises). CalPERS takes into account these changes by adding new bases to true-up the UAL.

- **Change in Assumptions –** Discount Rate or Life Expectance
- **Change in Methodology**
- **Change in Benefits –** higher than expected pay raises/cuts, additional benefits, etc.

CalPERS does not ever remove any amortization bases; instead any adjustments are made prospectively by adding new bases, which can either increase the UAL or serve as "credits" to decrease the UAL.

Good-Faith Estimates regarding POBs

The POB Good-Faith Estimates have been provided by UFI in the exhibit.

Pension Funding Policies

The policy should address the funding strategies that the City will utilize to address its pension liabilities, including how the City will spend excess and one-time monies.

In addition, it is critical for the City to have a strategy regarding which of the 47 amortization bases to prepay with any ADPs. When making an additional payment to CalPERS, CalPERS will require the City to identify the amortization base against which the prepayment should be applied.

Historical Police and Fire Pension Plans

The City sponsors and administers two defined benefit retirement plans for police and fire department retirees who entered service before 1953. Plan 1079, a closed plan consisting of 12 participants with a $4,841,157 total projected liability; and Plan 1082, a closed plan with one (1) retiree participant, with a $866,614 total projected liability. Given their limited scale and participation, this report does not address these two plans.

OPEB

The City also has a significant OPEB (Other Post Employment Benefits) liability for retiree medical expenses, which currently equals approximately $117 million. The City has established a 115 OPEB Trust with Public Agency Retirement Services (PARS); and has begun to make contributions to pre-pay this liability. However, at this point, the City has only funded approximately 13% of the projected liability as of June 30, 2020. Staff will address the City's OPEB benefits in a separate subsequent report.