City Council Study Session
CalPERS Unfunded Pension Liabilities

Jan Mazyck, Chief Financial Officer

June 20, 2021

CALPERS: Section Overview

MEETING OBJECTIVES
HOW CALPERS WORKS
THE CALPERS CHALLENGE

NOTE: ALL DATA AS OF 2019 (LAST VALUATION DATE)

I. High level overview re CalPERS; factors influencing the City's increasing costs

II. Alternatives for addressing the unfunded liability

III. Way forward

Objectives

The unfunded liability payment to CalPERS is 16% of GF FY 22 expenditure budget, increasing each year for the next 10 years, thereby reducing the City's financial and operational flexibility

Frequently used terms

Actuarial Report

- The formal valuation provided by CalPERS every 2 years. The City is required to disclose its funded status in the notes to financial statements on the pension plan. Last valuation date was 2019

Bases

- Investment gains or losses, benefit enhancements, change in assumptions, and actuarial performance – death, late/early retirement, disability, and termination
- Each base has a FIXED DOLLAR payment schedule – such as loan payment -- with terms ranging from 5 to 20 years

Discount Rate

- CalPERS expected Rate of Return, currently 7.0%. Also, serves as the interest rate to calculate annual UAL payments

Funded Status

- Percentage of CalPERS Retirement Costs funded to date (Goal is 100%)

Normal costs

- Benefits earned in the current year and paid to CalPERS as a percentage of payroll

UAL

- Difference between estimated future benefit payments and market value of assets. Represents unfunded amount or "past due amount" for benefits earned by current employees and retirees.

Defining the Problem

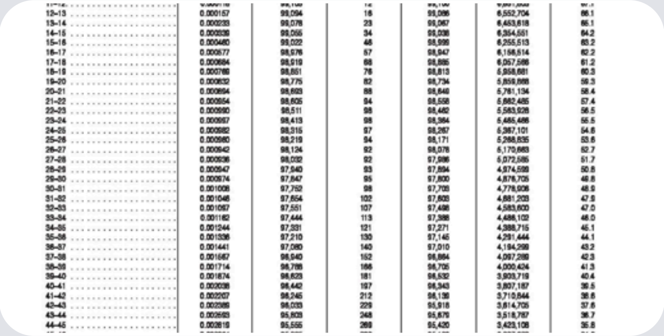
- Unfunded accrued liabilities ("UAL") (past due payments) are driving up costs for governments
- In the State of California, liabilities are rising dramatically over the next 10 years

Increasing costs are crowding out the City's ability to fund other basic and necessary services/improvements

The City is facing ***additional*** increases of $110M over the next 10 years

First such increase of $3.5M (a total of $30M) was paid to CalPERS on July 1

CalPERS expenses



Normal cost rate

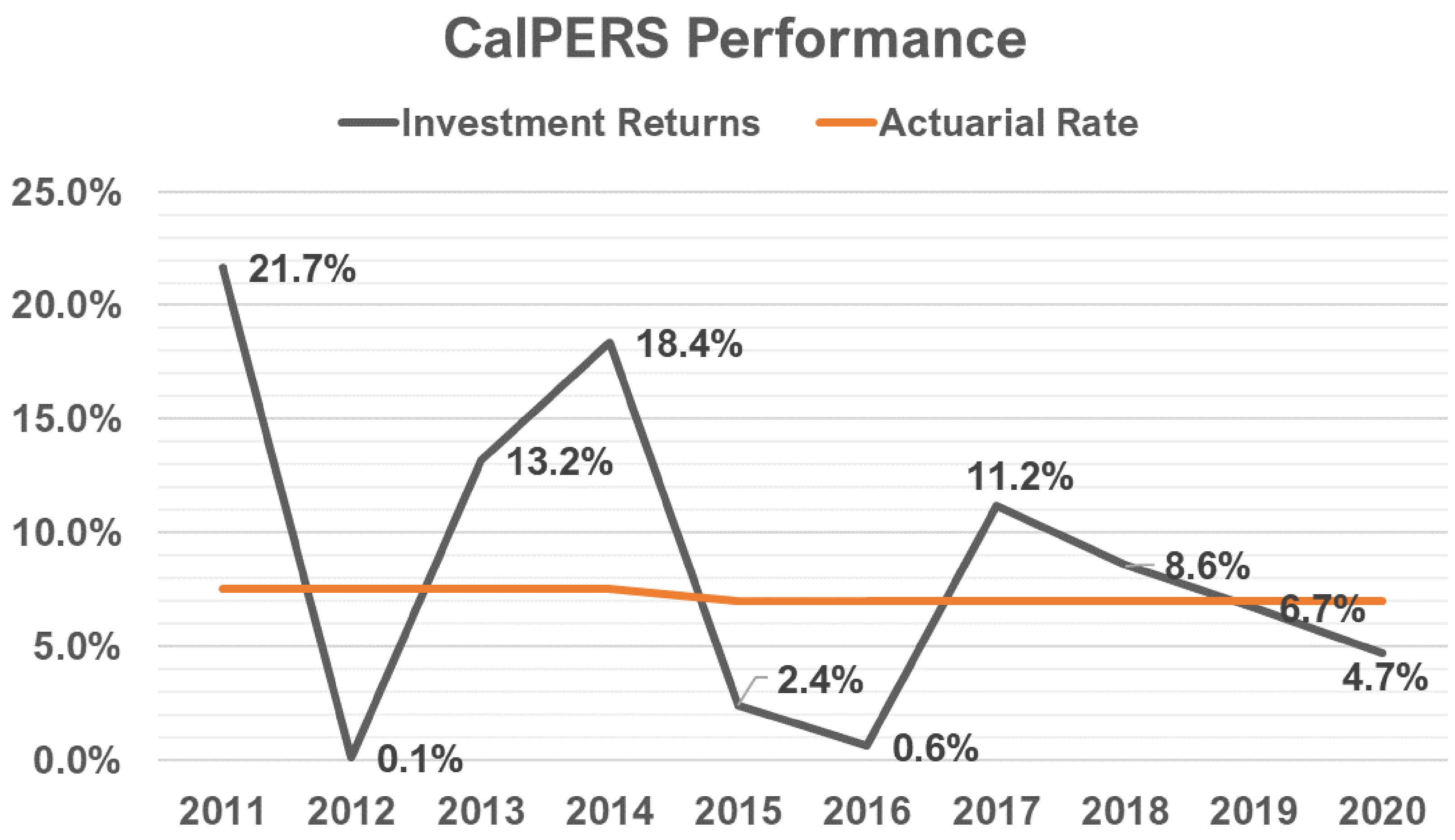
- Amount needed to cover retirement benefits earned (this year) by current employees.
- Calculated as a % of payroll

Actuarial Report

Report generated by CalPERS (each year) that details Normal Costs and Annual UAL payments. June 30, 2021 report will be provided in August, and provide the UAL payments for FY 22-23.

Discount Rate

- Interest rate paid to CalPERS on the UAL: 7%



Recent discount rate history: declined over a period of 3 years from 7.5% to 7.25% to 7.0%: 2016, 2017 & 2018.

May also decline again in 2021 given expected rate performance: 18 – 20%

Bases: 65 loans

Miscellaneous Plan

#	Year	Reason for Base	Term	Amount
1	2003	Assumption Change	4	1,898,544
2	2003	Assets Change	4	(28,582)
3	2004	Method Change	5	849
4	2009	Assumption Change	10	15,577,181
5	2009	Special (Gain)/Loss	20	11,164,259
6	2010	Special (Gain)/Loss	21	4,174,129
7	2011	Assumption Change	12	9,892,204
8	2011	Special (Gain)/Loss	22	(3,253,996)
9	2012	Payment (Gain)/Loss	23	1,525,536
10	2012	(Gain)/Loss	23	8,143,543
11	2013	(Gain)/Loss	24	68,494,480
12	2014	Assumption Change	15	42,707,552
13	2014	(Gain)/Loss	25	(65,287,971)
14	2015	(Gain)/Loss	26	34,349,511
15	2016	Assumption Change	17	12,479,208
16	2016	(Gain)/Loss	27	42,541,66[illegible]
17	2017	Assumption Change	18	11,856,748
18	2017	(Gain)/Loss	28	(20,322,582)
19	2018	Method Change	19	5,286,509
20	2018	Assumption Change	19	24,104,569
21	2018	(Gain)/Loss	29	-5,924,854
22	2019	Non-Asset (Gain)/Loss	20	1,553,273
23	2019	Investment (Gain)/Loss	20	3,223,442
		FY21-22	**$**	**204,155,214**

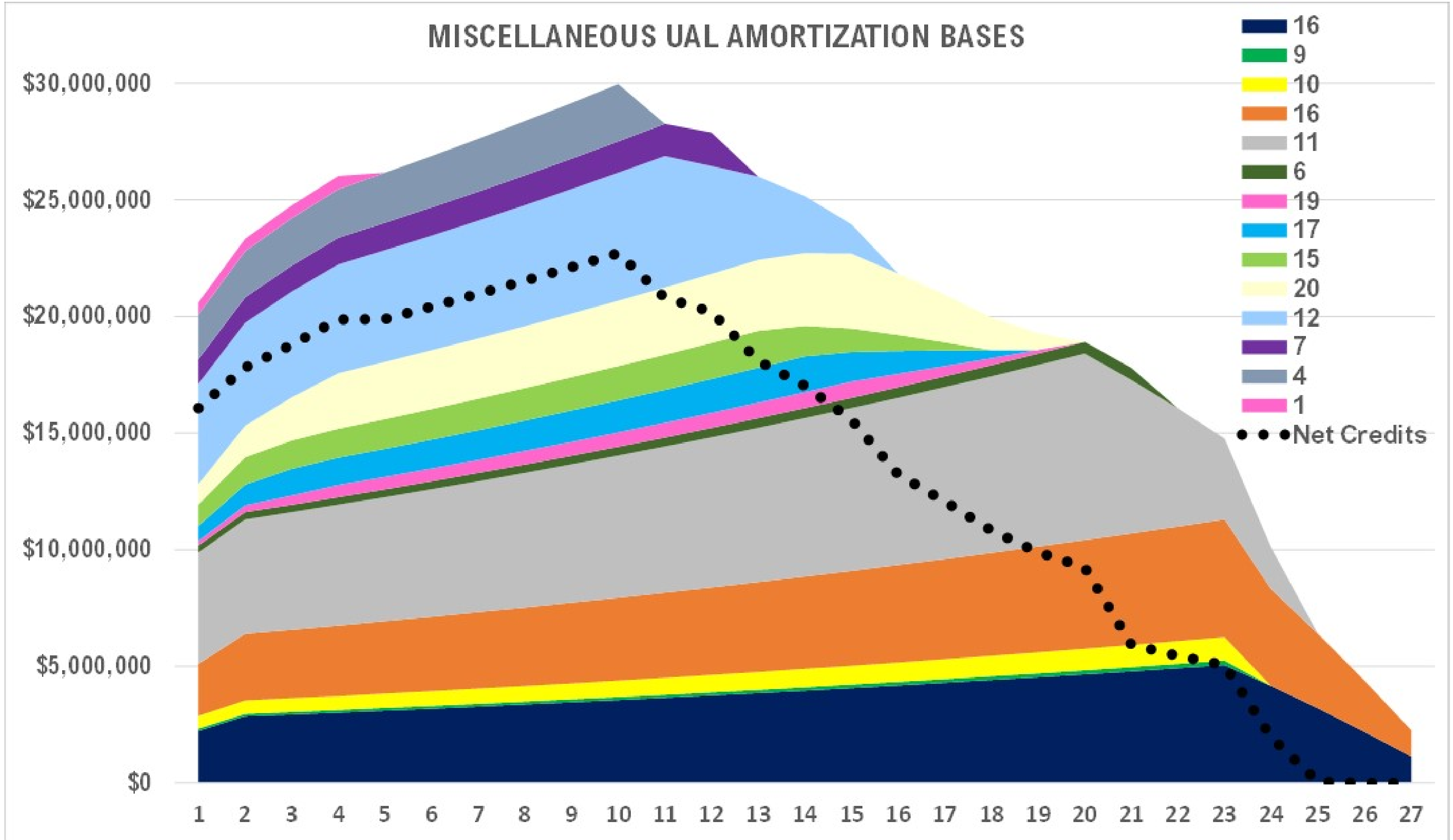
Fire Plan

#	Year	Reason for Base	Term	Amount
1	2008	Fresh Start 30-Year	19	(4,830,800)
2	2009	Assumption Change	10	2,876,403
3	2009	Special (Gain)/Loss	20	6,368,108
4	2010	Special (Gain)/Loss	21	4,098,630
5	2011	Assumption Change	12	3,027,414
6	2011	Special (Gain)/Loss	22	(998,367)
7	2012	Payment (Gain)/Loss	23	9,511,230
8	2012	(Gain)/Loss	23	17,510,413
9	2013	(Gain)/Loss	24	21,586,128
10	2014	Assumption Change	15	9,443,5[illegible]
11	2014	(Gain)/Loss	25	(1[illegible],586,161)
12	2015	(Gain)/Loss	26	8,969,831
13	2016	Assumption Change	17	4,173,240
14	2016	(Gain)/Loss	27	10,402,872
15	2017	Assumption Change	18	5,420,850
16	2017	(Gain)/Loss	28	(6,335,686)
17	2018	Method Change	19	1,780,678
18	2018	Assumption Change	19	8,213,285
19	2018	(Gain)/Loss	29	(5,241,117)
20	2019	Non-Asset (Gain)/Loss	20	(345,967)
21	2019	Investment (Gain)/Loss	20	862,239
		FY21-22	**$**	**77,906,772**

Police Sworn Plan

#	Year	Reason for Base	Term	Amount
1	2008	Fresh Start 30-Year	19	(1,467,906)
2	2009	Assumption Change	10	4,188,576
3	2009	Special (Gain)/Loss	20	4,279,521
4	2010	Special (Gain)/Loss	21	278,302
5	2011	Assumption Change	12	3,888,881
6	2011	Special (Gain)/Loss	22	(1,849,390)
7	2012	Payment (Gain)/Loss	23	14,394,767
8	2012	(Gain)/Loss	23	18,246,424
9	2013	(Gain)/Loss	24	25,794,160
10	2014	Assumption Change	15	15,039,083
11	2014	(Gain)/Loss	25	(24,366,484)
12	2015	(Gain)/Loss	26	16,723,461
13	2016	Assumption Change	17	5,587,478
14	2016	(Gain)/Loss	27	19,727,976
15	2017	Assumption Change	18	7,134,267
16	2017	(Gain)/Loss	28	(8,406,272)
17	2018	Method Change	19	2,493,799
18	2018	Assumption Change	19	11,363,258
19	2018	(Gain)/Loss	29	2,137,983
20	2019	Non-Asset (Gain)/Loss	20	1,402,963
21	2019	Investment (Gain)/Loss	20	1,058,110
		FY21-22	**$**	**117,648,957**

UAL June 30, 2021	**$**	**399,710,943**



Miscellaneous amortization bases: 23 loans: $204.1M

"LAYER CAKE" (Julio Morales, UFI)

Total bases (# of loans through 2019): 65

Source: Actuarial Report dated June 30, 2019

Normal Costs
(Benefits earned in current year)
% of Payroll:
$20.7M

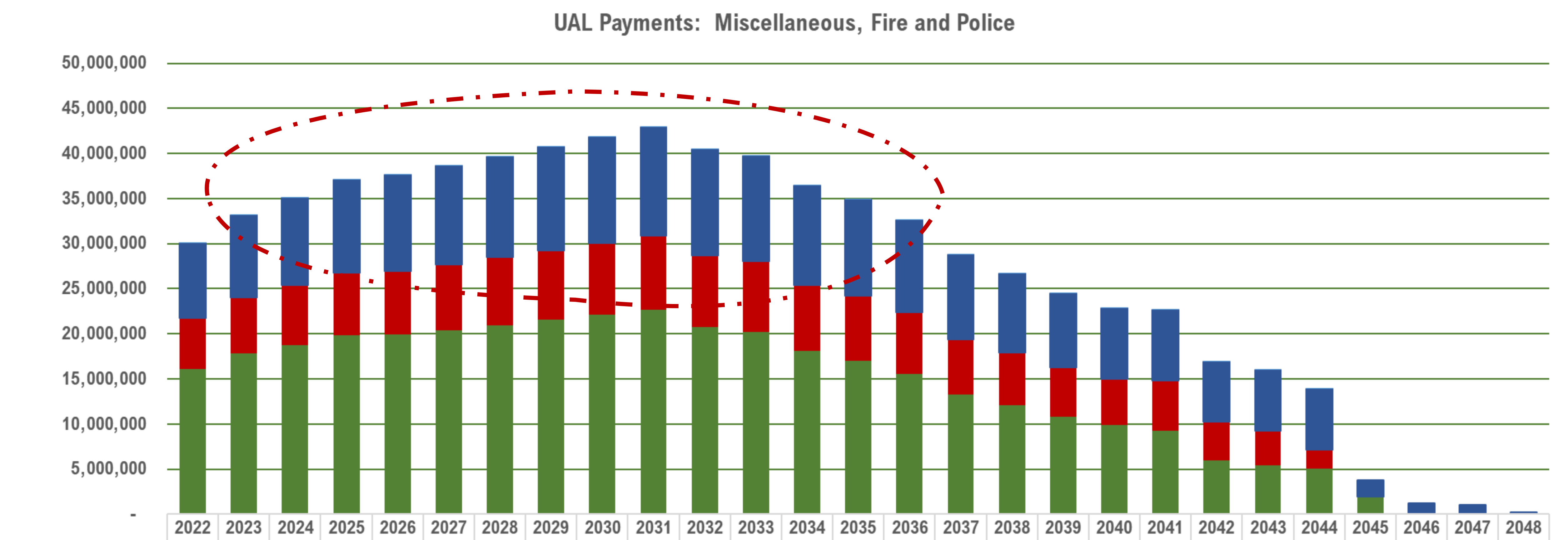
+

Unfunded Accrued Liability (UAL)
% of Payroll:
Fixed $ Amt: $30M

Unfunded Accrued Liability (UAL)				
	Misc	Fire	Police	Combined
Accrued Liability	$ 772,772,883	$ 244,355,621	$ 328,386,793	**$ 1,345,515,297**
Market Value of Assets (MVA)	567,430,303	166,632,267	212,853,832	**946,916,402**
Unfunded Accrued Liability (UAL	**$ 205,342,580**	**$ 77,723,354**	**$ 115,532,961**	**$ 398,598,895**
Funded Ratio	**73.4%**	**68.2%**	**64.8%**	**70.4%**

FY 21-22 UAL	**$ 204,155,214**	**$ 77,906,772**	**$ 117,648,957**	**$ 399,710,943**

$110M fixed UAL payments over FY 21 baseline over next 10 years

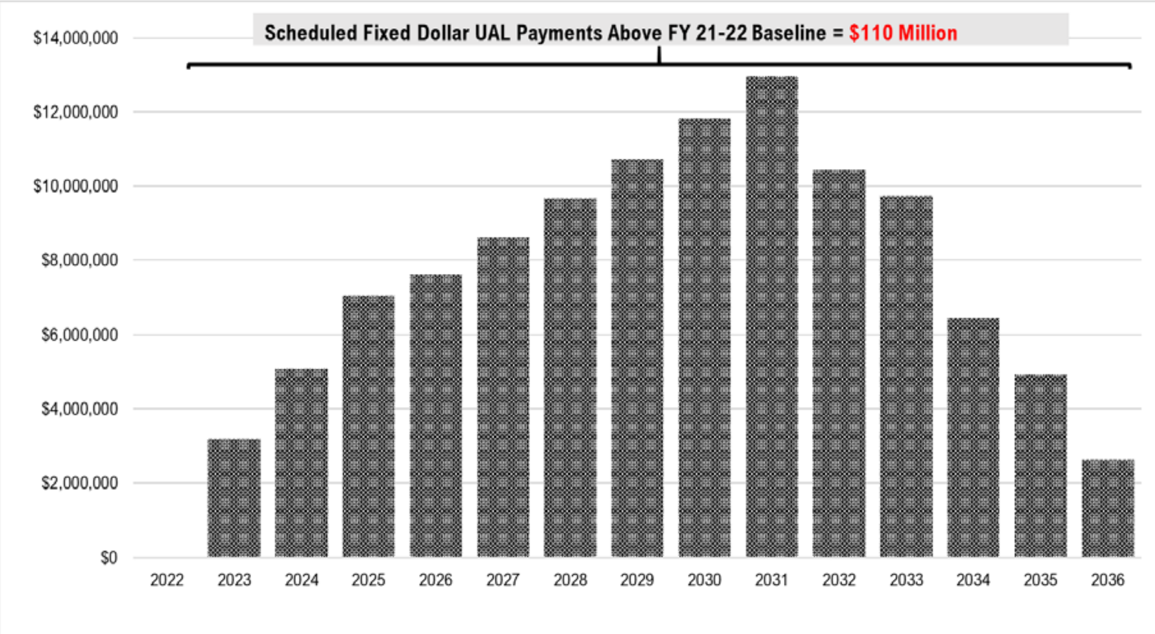


	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
TOTAL (Millions)	30.0	33.2	35.1	37.0	37.6	38.6	39.6	40.7	41.8	42.9	40.4	39.7	36.4	34.9	32.6	28.7	26.7	24.5	22.8	22.6	16.9	16.0	13.9	3.79	1.18	1.03	0.20
Safety	8,21	9,14	9,72	10,3	10,6	10,9	11,1	11,4	11,8	12,1	11,7	11,6	11,0	10,7	10,2	9,32	8,82	8,29	7,89	7,86	6,66	6,76	6,73	1,83	1,12	1,02	198,
Fire	5,73	6,25	6,58	6,90	7,11	7,30	7,50	7,71	7,92	8,13	7,89	7,85	7,35	7,17	6,84	6,20	5,82	5,41	5,10	5,55	4,31	3,82	2,14				
Miscellaneous	16,0	17,8	18,7	19,8	19,8	20,4	20,9	21,5	22,1	22,7	20,7	20,2	18,0	17,0	15,5	13,2	12,0	10,8	9,88	9,24	5,93	5,44	5,05	1,95	57,9		

Amortization Payment Schedule

		Miscellaneous	Fire	Safety	TOTAL	TOTAL PYMT > BASELINE
1	**2022**	16,072,044	5,731,079	8,216,445	30,019,568	
2	**2023**	17,803,380	6,257,998	9,140,730	33,202,108	3,182,540
3	**2024**	18,784,413	6,583,852	9,727,619	35,095,884	5,076,316
4	**2025**	19,857,640	6,905,171	10,317,732	37,080,543	7,060,975
5	**2026**	19,890,352	7,112,712	10,618,536	37,621,600	7,602,032
6	**2027**	20,423,529	7,306,586	10,903,841	38,633,956	8,614,388
7	**2028**	20,971,588	7,505,794	11,197,000	39,674,382	9,654,814
8	**2029**	21,534,722	7,710,479	11,498,214	40,743,415	10,723,847
9	**2030**	22,113,336	7,920,794	11,807,714	41,841,844	11,822,276
10	**2031**	22,707,864	8,136,892	12,125,720	42,970,476	12,950,908
11	**2032**	20,799,508	7,893,745	11,775,078	40,468,331	10,448,763
12	**2033**	20,200,344	7,853,137	11,684,565	39,738,046	9,718,478
13	**2034**	18,091,523	7,357,141	11,005,862	36,454,526	6,434,958
14	**2035**	17,026,716	7,178,276	10,725,221	34,930,213	4,910,645
15	**2036**	15,575,442	6,840,222	10,231,715	32,647,379	2,627,811
16	**2037**	13,226,850	6,204,470	9,323,601	28,754,921	
17	**2038**	12,063,402	5,821,772	8,824,836	26,710,010	
18	**2039**	10,826,333	5,413,380	8,291,768	24,531,481	
19	**2040**	9,886,566	5,103,274	7,890,388	22,880,228	
20	**2041**	9,247,591	5,555,631	7,865,683	22,668,905	
21	**2042**	5,930,298	4,315,740	6,668,198	16,914,236	
22	**2043**	5,441,988	3,828,685	6,764,938	16,035,611	
23	**2044**	5,052,339	2,140,828	6,730,383	13,923,550	
24	**2045**	1,953,233		1,838,921	3,792,154	
25	**2046**	57,900		1,126,131	1,184,031	
26	**2047**			1,025,391	1,025,391	
27	**2048**			198,417	198,417	
TOTAL		**$365,538,901**	**$ 146,677,658**	**$ 227,524,647**	**$ 739,741,206**	**110,828,751**

The challenge to be solved:



Steady increases above baseline over the next several years will continue to crowd out the services we provide to the Santa Rosa community and erode budget flexibility

OPTIONS FOR ADDRESSING CALPERS CHALLENGE

BUDGETARY & FINANCING APPROACHES
PROBLEM SOLVING STRATEGIES
FOCUS: PENSION OBLIGATION BONDS
RISK MANAGEMENT STRATEGIES

Diverse strategies are likely to deliver better results while mitigating against inherent risks

1 **Allocation between funds**
- Sewer Fund; Water Fund

2 **Use of reserves and one-time monies**
- 0.30% LAIF vs 7.0% CalPERS Discount Rate
- $10M one-time payment

3 **Pension Stabilization Fund:**
- Section 115 Trust – Refer to Appendix

Budgeting Approaches

4 **Leveraged Refunding (no current opportunities) (Upfront savings)**

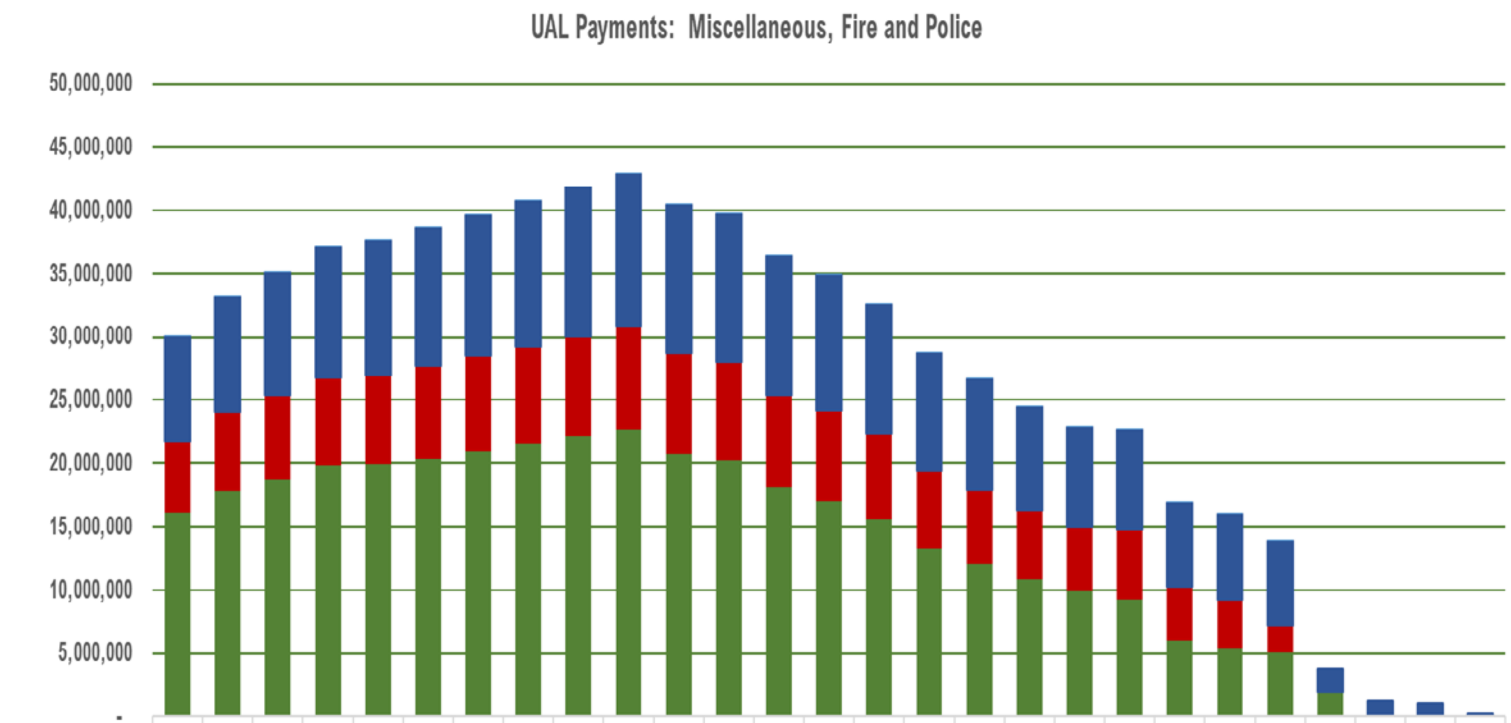
5 **Tax-Exempt Exchange (limited opportunities)**

6 **Pension Obligation Bonds**

Financing Approaches

Solving the Problem

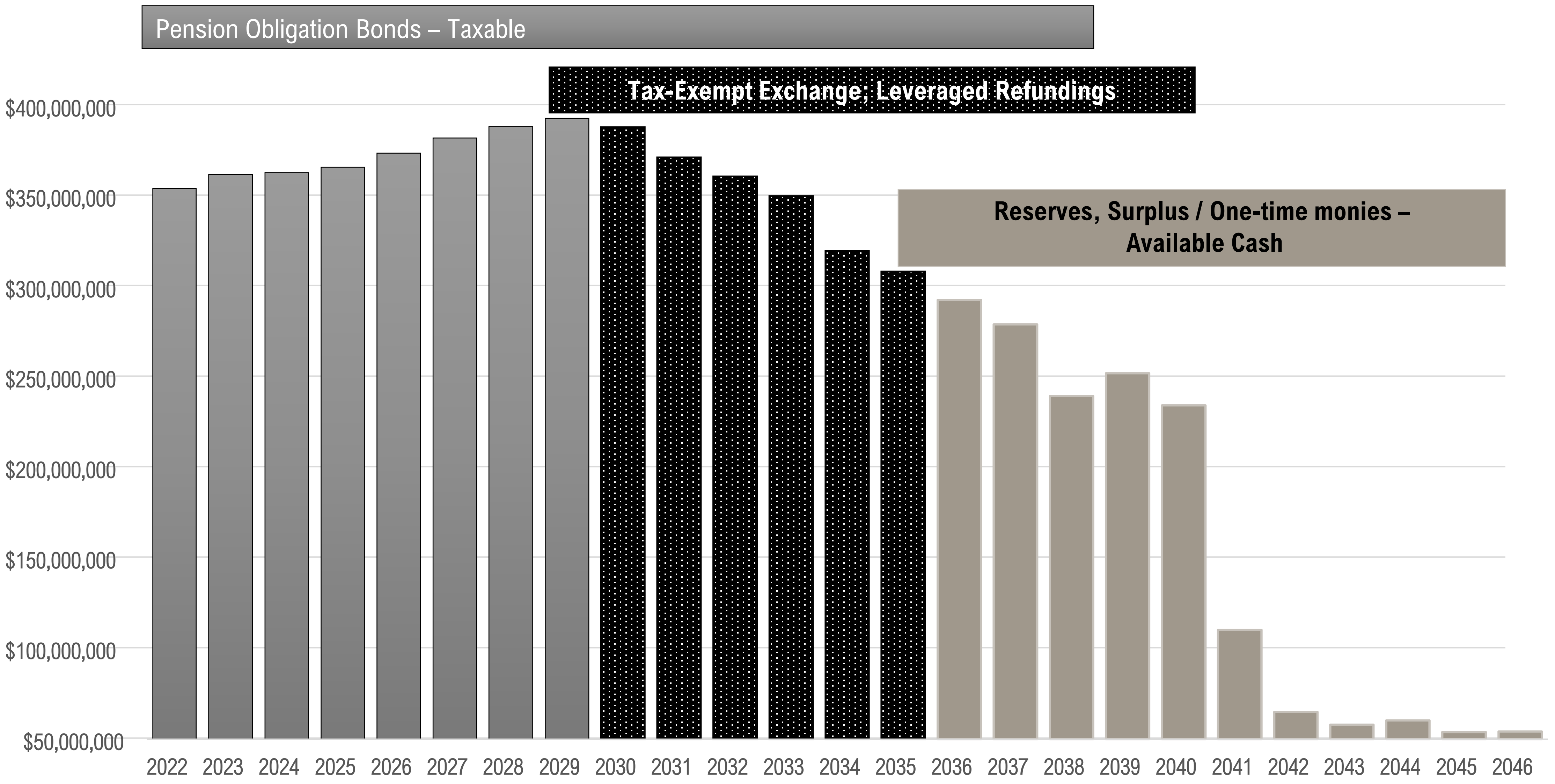
- Reshape UAL Payments, i.e., eliminate the peak
- Develop long-term comprehensive plan with multiple solutions
- Reduce UAL payments significantly through POB issuance
- Address POB Risks



	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
TOTAL (Millions)	30.0	33.2	35.1	37.0	37.6	38.6	39.6	40.7	41.8	42.9	40.4	39.7	36.4
Safety	8,21	9,14	9,72	10,3	10,6	10,9	11,1	11,4	11,8	12,1	11,7	11,6	11,0
Fire	5,73	6,25	6,58	6,90	7,11	7,30	7,50	7,71	7,92	8,13	7,89	7,85	7,35
Miscellaneous	16,0	17,8	18,7	19,8	19,8	20,4	20,9	21,5	22,1	22,7	20,7	20,2	18,0

	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
TOTAL (Millions)	34.9	32.6	28.7	26.7	24.5	22.8	22.6	16.9	16.0	13.9	3.79	1.18	1.03	0.20
Safety	10,7	10,2	9,32	8,82	8,29	7,89	7,86	6,66	6,76	6,73	1,83	1,12	1,02	198,
Fire	7,17	6,84	6,20	5,82	5,41	5,10	5,55	4,31	3,82	2,14				
Miscellaneous	17,0	15,5	13,2	12,0	10,8	9,88	9,24	5,93	5,44	5,05	1,95	57,9		

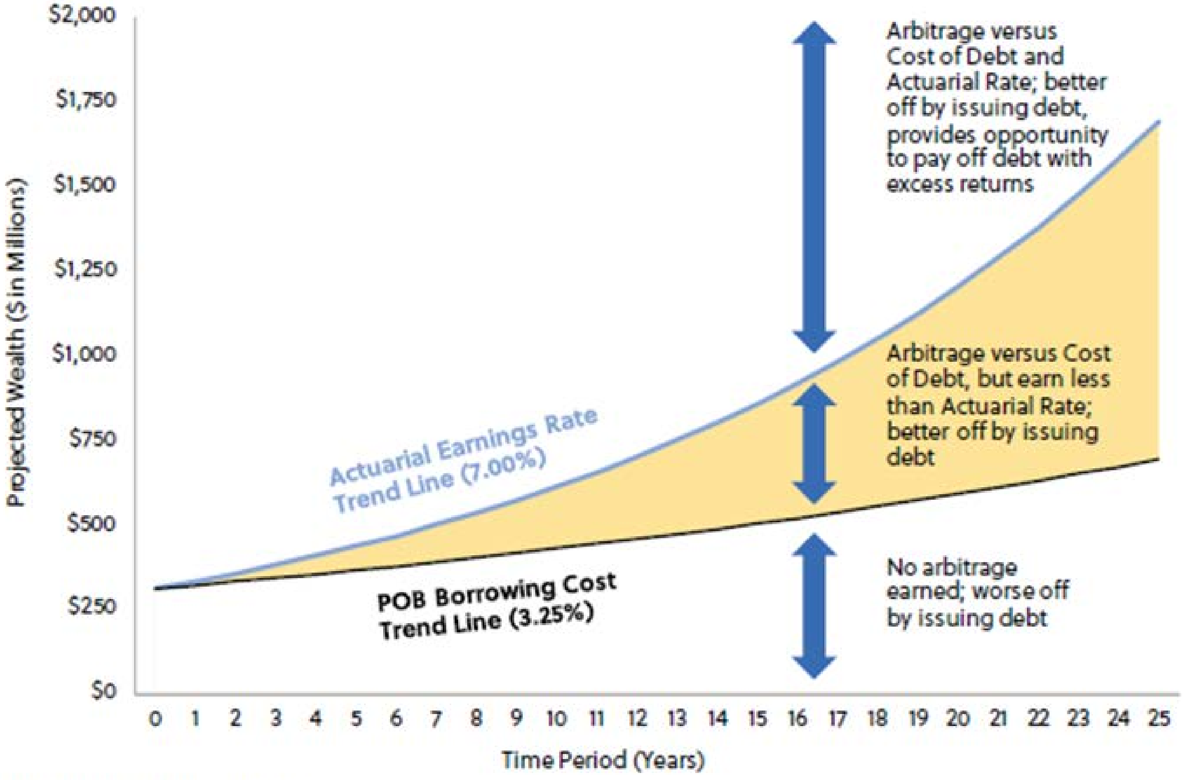
Four potential strategies: By cost of capital



Pension Obligation Bonds

Pension Obligation Bonds

POBs	Taxable obligations issued by state or local government to fund unfunded liabilities
	The City would issue bonds below the CalPERS discount rate of 7% (at current interest rates)
	Goal: reduce the City's CalPERS contributions
	Keep in mind: Savings are never fully quantifiable until maturity of the bonds



For Illustrative Purposes Only.

How POBs potentially create cash flow and budgetary savings

UAL @ 7%

minus

POB *estimated* cost of capital (3.50%)

=

cash flow and budgetary savings

Issued at a rate lower than the CalPERS assumed earnings rate (currently 7%)

Produces cash flow and budgetary savings

By issuing POBs, the City replaces the UAL (unfunded actuarial liability, a higher cost debt) with lower cost debt to bondholders (less than 4% in the current rate environment)

The difference between the UAL and the debt service payment produces savings

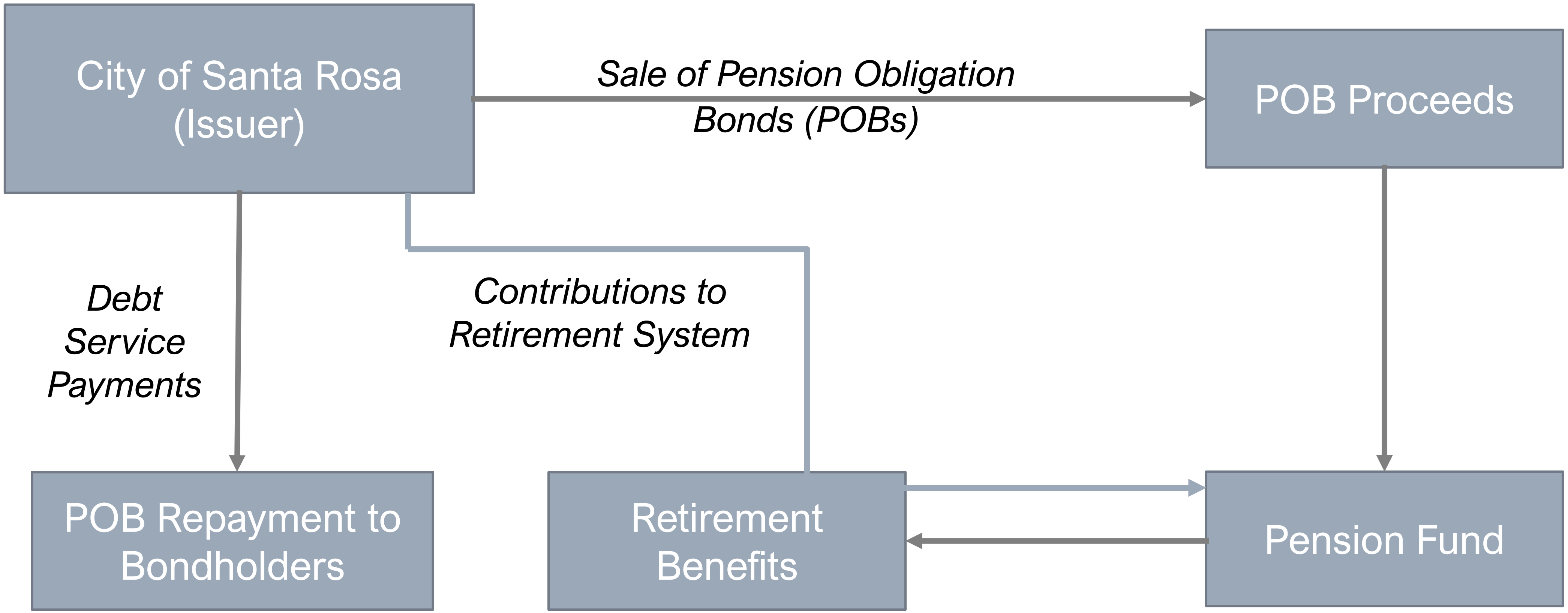
Current POB Landscape: Compelling

Potential Impacts for City

- Opportunity to manage rising contributions through 2031
- Savings able to accelerate UAL liability amortization
- Savings provide budgetary relief

Potential Impacts for Retirement System

- Provide large cash infusion to make new investments
- Can be done all at once or over time by issuing multiple issues of bonds
- Increases funding ratio, a plus for bargaining units
- Reduces reliance on City contributions



POB Mechanics: POB payments will be based on interest rates in 3:00 – 3.5 % range versus payments to CalPERs that are amortized at 7% discount rate (cost of borrowing)

Approximate timeline: 6 months assuming no challenge to validation

- Assemble finance team
- Draft legal dox for CC approval
- Prepare disclosure
- File validation complaint
- Prepare Preliminary Official Statement for CC approval
- Receive credit rating
- Sale of Bonds
- Close transaction

Factors to Consider

Consider addressing portion of UAL only

Deposit of POB proceeds into CalPERS does not bring the UAL to zero . . . Doesn’t necessarily keep it at zero going forward

From a credit perspective, primary concern is around implementation of a comprehensive plan to address unfunded liabilities

Potential benefits to the City

Reduced UAL	Immediate reduction in UAL, the benefit of which will vary depending on the percentage of UAL which we fund with POBs
Budgetary and Cash Flow Savings	Both cash flow and budgetary savings as a result of a lesser payment to bondholders than the amount due to CalPERS for amortization of UAL
Market Timing	May produce an overall positive economic effect on the City's program. Any investment gains in the program will result in a "surplus" able to provide a cushion against any future market declines
Time Value of Money	With increased investment in the fund, POBs accelerate the compounding effect of earnings

GFOA Advisory: Addresses previous risk considerations enumerated in the Appendix. POBs have evolved considerably since 1st generation

1. Complex instruments: swaps, CABs, derivatives, GICs
2. Increase debt burden / reduce flexibility: "soft to hard liability"
3. Not refundable "make-whole" call
4. Extend repayment or finance Normal Costs
5. Stand alone POBs not viewed as credit positive
6. Reinvestment of POB Proceeds: Market & Timing Risk

POBs 2.0

- ***In-depth Study***
- ***Pension Reform***
- ***Market Evolved***

1. Plain Vanilla Fixed Rate Bonds
2. GASB 68 Liability - Balance Sheet
3. 10-year Call
4. Finance UAL Only (same term)
5. Credit Neutral / Plan & Study +
6. Dollar Cost Averaging / Multiple Strategies / Hedge

Risk mitigation strategies: POBs

1

Issue less than the 100% of the current estimate of UAL

2

Consider multiple tranches allowing for dollar cost averaging

3

Time issuances at key market cycles (during low equity market cycles and low interest rate environment

4

Mitigate credit / market risks by ensuring adequate spread between borrowing and earnings rate

5

Avoid adding complexity i.e., variable rate debt and interest rate swaps

6

Be ready to issue when time is right. Have documents and savings target prepared; await favorable market conditions

APPENDICES

POB RISKS

JUDICIAL VALIDATION TIMELINE

Potential risks

Investment Risk

- Most significant risk
- If the retirement plans earn less over the life of the bonds than the interest paid on the POBs, the POB program becomes a net cost to the City
- If plans earn less than the Discount Rate, the UAL continues to grow

Market Timing

- Greatly impacts long-term economics of transaction
- POBs result in a **lump sum investment** that otherwise would have been paid to and invested by the pension system over time
- **Investment 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”

Loss of Flexibility

- While actuarial assumptions can be changed over time, borrowing rates are set for the life of the bonds unless refinanced (if interest rates decline)

Pension Liability

- Never truly extinguished

Potential risks, Cont'd.

Over Funding

- May occur when POBs are sized to eliminate the entire UAL. Above market returns have the potential to create an actuarial "surplus" with resulting pressure to increase benefits, as was the case for some 1st generation POBs

Credit Risk

- Rating agencies may view POB issuance as a mechanism for short-term budget relief thereby resulting as a credit negative

Loss of Flexibility

- POBs have the potential to be viewed as a trade of a soft liability for a hard liability

Judicial Validation Timeline

Validation Step	Timeframe
Bond Counsel Drafts: Resolution, Indenture, & Bond Purchase Agreement	2 weeks
City Council passes a resolution authorizing the sale of POBs & File Validation Proceedings	Agenda Timeline
File Validation Action with County Superior Court	1-2 weeks
Receive Order for Publication of Summons from the Court	3-6 weeks
Publish notice in local publication of general circulation	21 days
Waiting period to file petition – minimum 10 days	2-3 weeks
Clerk enters and schedules hearing for default judgement	15-30 days
Hearing for Default Judgement	
30-day Appeal Period	4 weeks
Return to City Council for Approval of POBs & Sale of POBs	Agenda Timeline

POBs Issued Since 2017

	CA Pension Obligation Bonds: 2017-2021					
	Agency	Date	Rating	Par Value	Underwriter	Municipal Advisor
1	Willows	5/27/2021	A+	8,510,000	Hilltop	Wulff Hansen
2	Cental Marin Police Auth	5/11/2021	AAA	26,505,000	Oppenheimer	Wulff Hansen
3	Corte Madera	4/29/2021	AAA	18,955,000	Oppenheimer	NHA Advisors
4	Manhattan Beach	4/28/2021	AAA	91,275,000	Stifel	KNN
5	Huntington Beach	3/17/2021	AA+	363,645,000	Stifel/BAML	KNN
6	Orange	3/3/2021	AA	285,770,000	Stifel	UFI
7	Chula Vista	2/11/20/21	AA	350,025,000	Stifel	NHA Advisors
8	Downey	2/9/2021	AA	113,585,000	BAML	Fieldman Rolapp
9	Monterey Park	2/2/2021	AA	106,335,000	Ramirez/Stifel	UFI
10	El Cajon	1/13/2021	AA	147,210,000	BAML	UFI
11	Ukiah	12/17/2020	A+	49,875,000	Piper	NHA Advisors
12	Coachella	12/8/2020	AA-	17,590,000	Ramirez	UFI
13	Gardena	11/24/2020	AA-	101,490,000	BAML/Stifel	NHA Advisors
14	Placentia	11/12/2020	BBB+	52,950,000	Stifel	Harrell & Co
15	Arcadia	10/27/2020	AAA	90,000,000	Stifel	UFI
16	Torrance	10/12/2020	AA	349,515,000	Morgan Stanley	NHA Advisors
17	Azusa	9/30/2020	AA-	70,075,000	BAML	UFI
18	Pomona	8/20/2020	AA-	219,890,000	RBC	UFI
19	West Covina	7/30/2020	A+	204,095,000	Hilltop	NHA Advisors
20	San Bernardino	7/23/2020	NR	5,945,000	Hilltop	Columbia Capital
21	San Bernardino	7/23/2020	NR	13,905,000	Hilltop	Columbia Capital
22	El Monte	6/30/2020	AA/A+	21,000,000	Ramirez	NHA Advisors
23	Carson	6/18/2020	AA-	108,020,000	Cabrera	Harrell & Co
24	El Monte	6/18/2020	AA/A+	118,725,000	Ramirez	NHA Advisors
25	North Co FD	6/18/2020	AA-	20,305,000	Brandis Tallman	NHA Advisors
26	Inglewood	6/17/2020	AA/AA-	101,620,000	Cabrera	UFI
27	Riverside	6/11/2020	AA	432,165,000	BAML	NHA Advisors
28	Montebello	6/10/2020	AA/A+	153,425,000	Cabrera	Hilltop
29	Fort Ord	6/10/2020	AA/BBB+	30,405,000	Stifel/Citi	NHA Advisors
30	Ontario	5/21/2020	AA	236,585,000	Hilltop	Harrell & Co
31	Larkspur	5/14/2020	AAA	18,295,000	DA Davidson	Wulff Hansen
32	County of Riverside	5/6/2020	AA	719,995,000	Raymond James	Columbia Capital
33	Pasadena	2/26/2020	AAA	131,805,000	Stifel/BAML	UFI
34	Orange USD	12/19/2019	AA	33,595,000	JP Morgan	Fieldman Rolapp
35	Monterey Co Reg FD	12/5/2019	AA-	20,250,000	Stinson	-
36	Pacifica	10/23/2019	AA+	9,685,000	US Bancorp	Backstrom
37	Hawthorne	10/8/2019	AA-	121,865,000	Ramirez	RDP
38	Marysville	9/24/2019	A	15,000,000	Hilltop	Wulff Hansen
39	Glendora	9/5/2019	AAA	64,420,000	Stifel	UFI
40	Chowchilla	3/21/2019	A+	10,500,000	Brandis Tallman	Wulff Hansen
41	Baldwin Park	3/6/2019	AA-	54,085,000	Ramirez	Harrell & Co
42	Ridgecrest	12/18/2018	AA/A	19,955,000	Hilltop	Wulff Hansen
43	La Verne	8/15/2018	AA+	54,265,000	Hilltop	Harrell & Co
44	County of Tulare	6/25/2018	AA-	251,220,000	Raymond James	KNN
45	Monrovia	12/13/2017	AA-	111,545,000	Hilltop	UFI
46	Inglewood	11/14/2017	AA	52,795,000	Cabrera	UFI
47	Brawley	7/20/2017	A-	16,310,000	Ramirez	Bartle Wells
48	Pomona	6/29/2017	AA/A+	50,475,000	RBC	UFI
49	Riverside	5/31/2017	AA-	31,960,000	BAML	UFI
			Total	**$ 5,697,415,000**		

Section 115 Pre-Funding Trust

Special investment can only be used to cover CalPERS costs

Increases expenditures in the short-term

Investment policy considerations that apply to the General Fund don't apply to a Section 115

Can be used to set off future pension cost volatility