

# 7 Solutions for Addressing Pension & OPEB Issues

Julio F. Morales

# How we Got Here

# Primary Contributing Factors

## CA League of Cities Pension Sustainability Report (2018)

5 Key factors that impact (unsustainability) CalPERS:

1. Enhanced & Retroactive Benefits

- SB 400 (1999) – Safety
- AB 616 (2001) - General

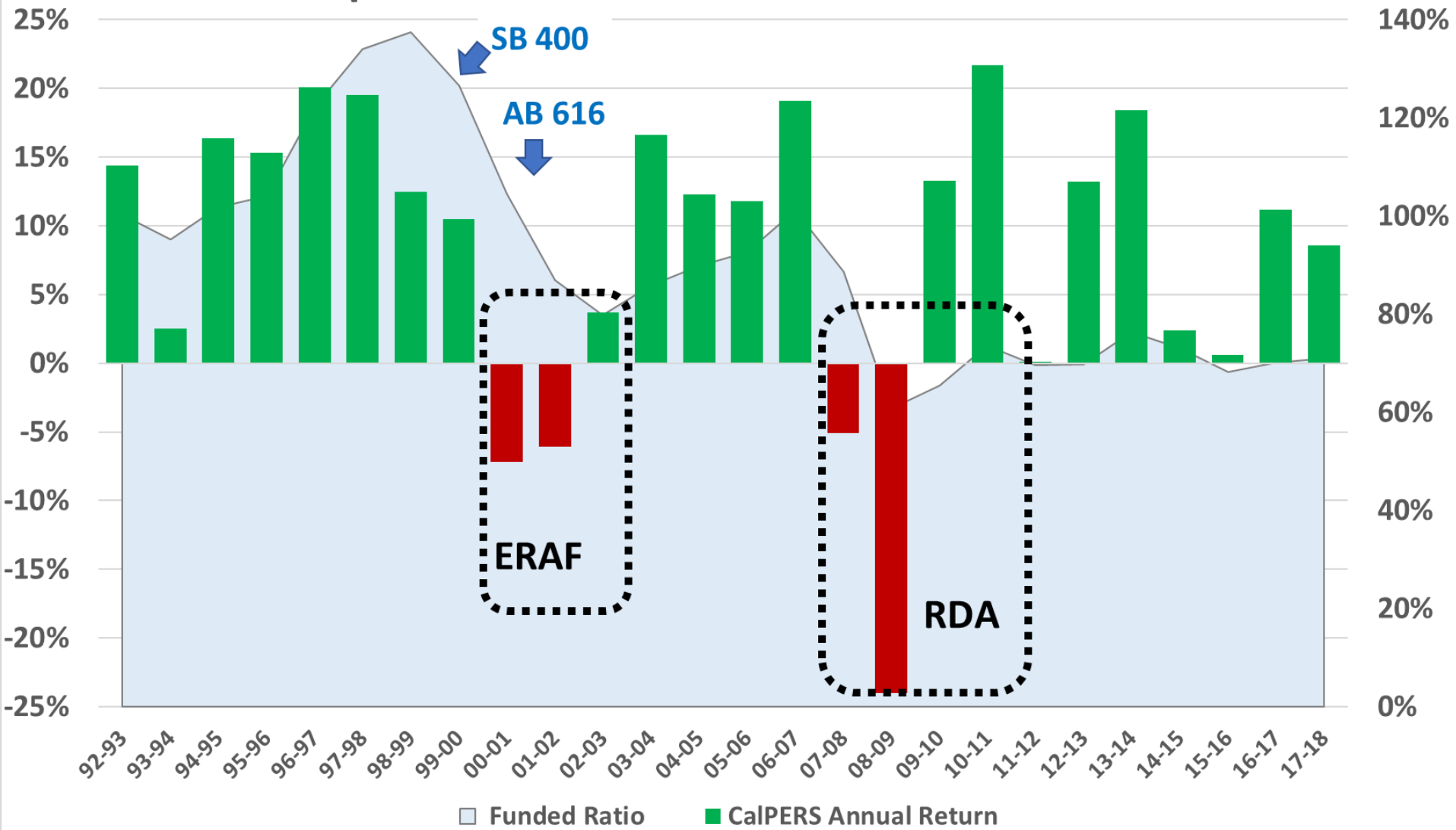
2. Investment Losses

3. Cost of Living Adjustments (COLA)

4. Demographics (life expectancy)

5. CalPERS Contribution Policy

# Impact of Investment Return on Funded Status



# Primer: Understanding Your Pension Liability

# CalPERS Annual Pension Payments

**Normal Costs**

+

**Unfunded Accrued  
Liability (UAL)**

*Benefits earned this year by  
employees*

*Unfunded benefits earned in prior  
years by employees + retirees*

**% of Payroll**

**Fixed \$ Amount**

**\$5 Million**

**\$11 Million**

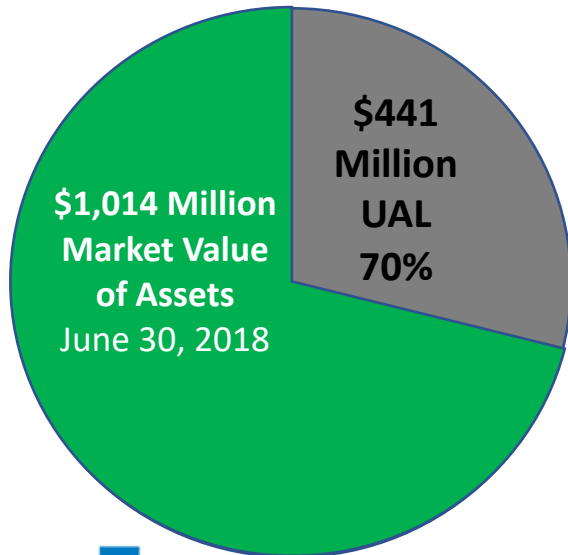
*Current Payment*

*Past Due Payment*

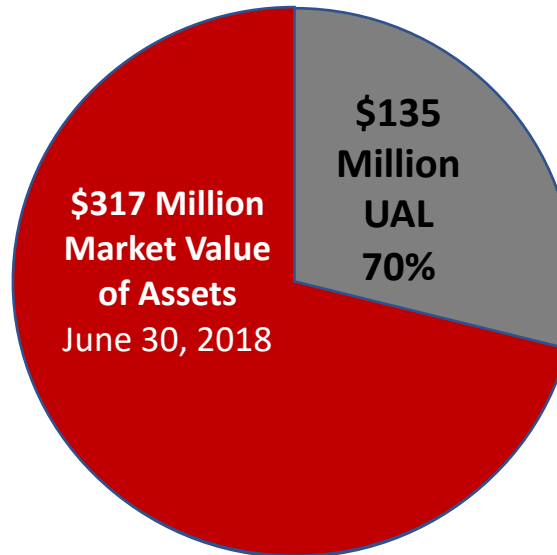
# Unfunded Liability (UAL)

2018 Unfunded Accrued Liability (UAL)				
	MISCELLANEOUS	FIRE	SAFETY	COMBINED
Accrued Liability (AL)	\$ 1,455,034,735	\$ 451,623,081	\$ 809,187,846	\$ 2,715,845,662
Market Value Assets (MVA)	1,014,033,704	316,715,430	567,889,729	1,898,638,863
UAL = AL-MVA	\$ 441,001,031	\$ 134,907,651	\$ 241,298,117	\$ 817,206,799
	69.7%	70.1%	70.2%	69.9%

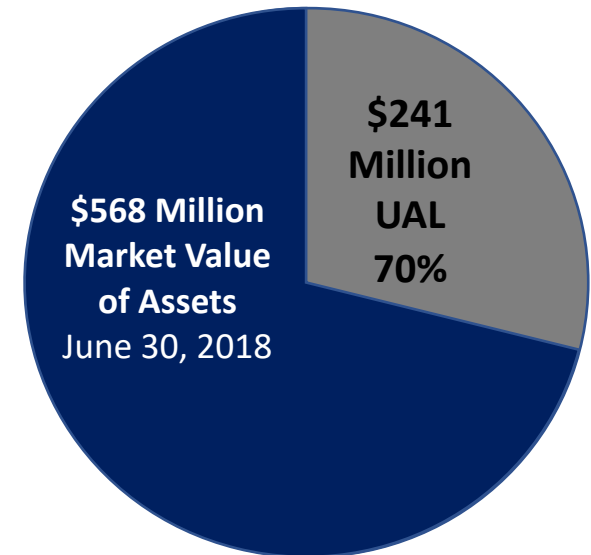
Total Liability (Misc.): \$1.45 Billion



Total Liability (Misc.): \$451 Million



Total Liability (Police): \$2.7 Billion



# Amortization Bases

## MISCELLANEOUS PLAN

	Year	Ramp Up	Term	Balance 6/30/2018	Payment FY 18-19
1	2006	NO	8	\$ 63,867,079	\$ 7,933,551
2	2009	NO	11	45,460,634	4,600,696
3	2009	NO	21	24,356,207	1,671,759
4	2010	NO	22	10,174,782	681,066
5	2011	NO	13	22,198,718	2,021,565
6	2011	NO	23	(35,002,672)	(2,288,553)
7	2012	NO	24	4,748,954	303,731
8	2012	NO	24	44,631,784	2,854,536
9	2013	100%	25	162,716,814	8,627,815
10	2014	100%	16	72,787,584	4,004,364
11	2014	100%	26	(113,580,460)	(4,527,715)
12	2015	80%	27	25,265,838	681,765
13	2016	60%	18	23,370,267	441,005
14	2016	60%	28	78,320,854	1,086,833
15	2017	40%	19	18,235,830	(1,230,621)
16	2017	40%	29	(36,558,829)	-
17	2018	20%	20	7,871,838	(106,209)
18	2018	20%	20	38,693,566	(1,048,505)
19	2018	20%	30	(16,557,756)	-

**MISC. PLAN**      **\$ 441,001,032**    **\$ 25,707,083**

## FIRE PLAN

	Year	Ramp Up	Term	Balance 6/30/2018	Payment FY 18-19
1	2003	NO	20	\$ (10,358,557)	\$ (730,340)
2	2004	NO	11	5,895,547	596,640
3	2007	NO	21	17,688,525	1,214,103
4	2009	NO	22	(3,406,889)	(228,046)
5	2009	NO	13	6,533,408	594,976
6	2010	NO	23	(1,267,179)	(82,851)
7	2011	NO	24	1,164,837	74,500
8	2011	NO	24	50,133,923	3,206,439
9	2011	NO	25	41,047,618	2,176,488
10	2012	NO	16	19,192,747	1,055,877
11	2012	NO	26	(37,062,401)	(1,477,437)
12	2013	100%	27	14,773,174	398,635
13	2014	100%	18	7,144,162	134,813
14	2014	100%	28	17,757,283	246,412
15	2015	80%	19	7,373,112	(240,538)
16	2016	60%	29	(12,294,178)	-
17	2016	60%	20	2,892,077	14,965
18	2017	40%	20	12,059,290	(306,089)
19	2017	40%	30	(4,358,847)	-

**FIRE PLAN**      **\$ 134,907,652**    **\$ 6,648,547**

## POLICE PLAN

	Year	Ramp Up	Term	Balance 6/30/2018	Payment FY 18-19
1	2003	NO	20	\$ (4,849,888)	\$ (341,946)
2	2004	NO	11	9,771,713	988,915
3	2007	NO	21	12,021,266	825,114
4	2009	NO	22	(2,046,621)	(136,994)
5	2009	NO	13	10,940,033	996,273
6	2010	NO	23	(5,460,235)	(357,002)
7	2011	NO	24	1,934,036	123,696
8	2011	NO	24	73,911,318	4,727,181
9	2011	NO	25	75,665,407	4,012,045
10	2012	NO	16	44,093,700	2,425,787
11	2012	NO	26	(73,816,427)	(2,942,582)
12	2013	100%	27	38,051,154	1,026,760
13	2014	100%	18	13,359,495	252,098
14	2014	100%	28	38,770,140	538,001
15	2015	80%	19	13,890,205	(628,058)
16	2016	60%	29	(24,438,291)	-
17	2016	60%	20	3,822,244	(134,902)
18	2017	40%	20	22,544,399	(764,793)
19	2017	40%	30	(6,865,531)	-

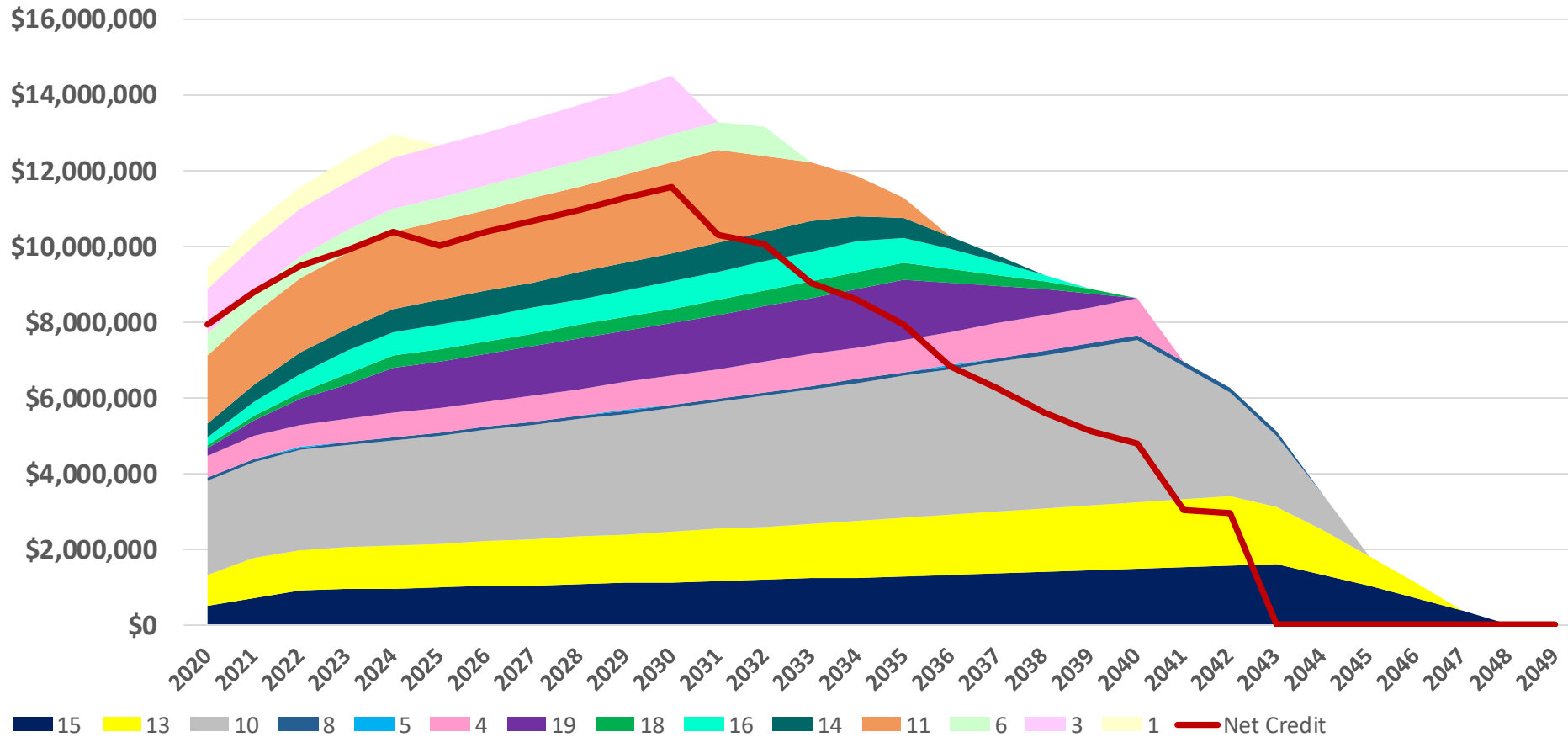
**FIRE PLAN**      **\$ 241,298,117**    **\$ 10,609,593**

**COMBINED UAL**      **\$ 817,206,801**    **\$ 42,965,223**

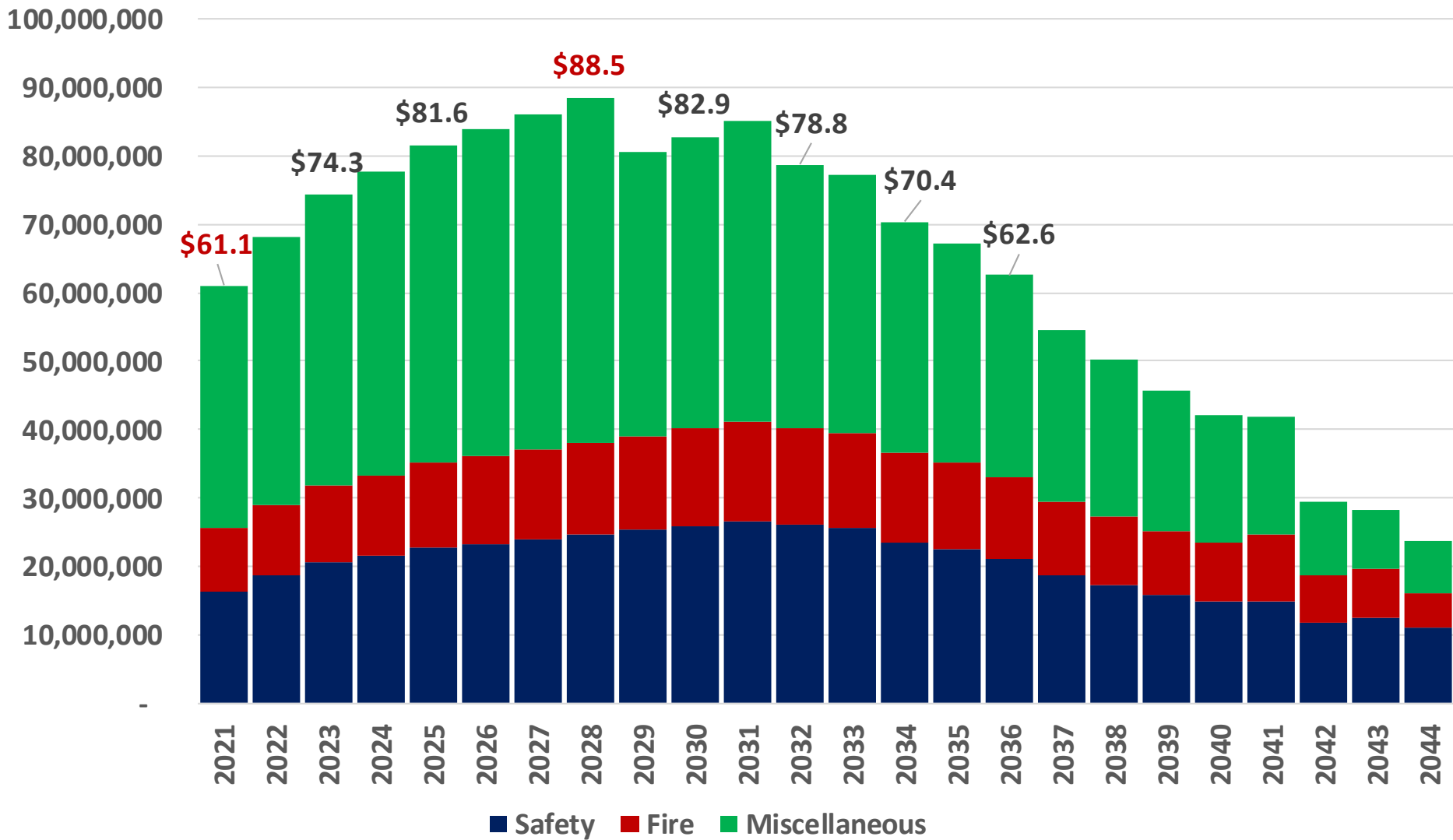


# Layer Cake - Amortization Schedules

## Miscellaneous UAL



## UAL Amortization Payment Schedule



# Comprehensive Management Strategy

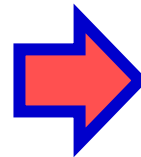
# Comprehensive Management Plan

## Retirement Liabilities are Dynamic and Ever-Changing

- *Must develop a long-term plan*
- *Actively manage liabilities (periodically review )*
- *Long-term, sustained financial discipline*

### Policy & Analysis:

- Pension/OPEB Modeling
- Long-Term Financial Projections
- Recession Scenarios
- Comprehensive Management Plan
- Funding Policy



### Multiple Solutions:

- Reserves / 1-Time Monies
- Tax-Exempt Exchange
- Leveraged Refunding
- Pension Stabilization Fund

# Pension Funding Policy

City Council should adopt formal written policies:

- Full description of plans & liabilities
- Financial metrics/targets:
  - Level of reserve and funding target levels
- How to use excess (1-time monies) & reserves
- Allocation of Additional Resources (ADPs)
- Potential Funding Solutions
  - Funding objectives
  - Minimum Savings Levels
  - Structuring guidelines

*We believe that rating agencies will require agencies to formally adopt written policies to address unfunded pension/OPEB liabilities in the future.*

# 7 Solutions

# Pension/OPEB Management Strategy

## Internal Resource Allocation & Budgeting

1. Allocation Among Funds \*
2. Apply Reserves & 1-time Monies (ADPs)
3. Pension Stabilization Fund - 115 Trust
4. Synthetic Fresh Start

## Financing Mechanisms

5. Leveraged Refunding
6. Tax-Exempt Exchange
7. Pension / OPEB Bonds



*“Bootstrapping”:  
applying savings to pre-  
pay additional liabilities*

# 1. Allocation to Among Funds

UAL: CAFR vs. CalPERS			
	Miscellaneous	Safety	TOTAL
2018 CAFR	100,393,109	164,607,354	\$ 265,000,463
2018 CALPERS	103,838,345	176,739,169	\$ 280,577,514
7.15% Discount Rate (CAFR) vs. 7.00% Discount Rate (CalPERS)			

ALLOCATION AMONG MAJOR FUNDS			
	General Fund	Business Type	TOTAL
Net Pension	\$ 243,918,000	\$ 20,079,000	\$ 263,997,000
Total OPEB	24,956,000	6,318,000	31,274,000
<b>Combined Liability</b>	<b>\$ 268,874,000</b>	<b>\$ 26,397,000</b>	<b>\$ 295,271,000</b>
<i>Pension</i>	<b>92%</b>	<b>8%</b>	
<i>OPEB</i>	<b>80%</b>	<b>20%</b>	

	Labor Costs		Pension		OPEB	
General Fund	<b>\$82,000,000</b>	<b>89.5%</b>	\$243,918,000	92.4%	\$ 24,956,000	79.8%
Water	6,786,770	7.4%	14,055,035	5.3%	4,422,643	14.1%
Sanitation	2,817,866	3.1%	6,023,586	2.3%	1,895,419	6.1%
<b>TOTAL</b>	<b>\$91,604,636</b>	<b>100%</b>	<b>\$263,996,621</b>	<b>100%</b>	<b>\$ 31,274,062</b>	<b>100%</b>

Source: 2018 CAFR p. 28



## 2. Use of Reserves & 1-time Monies

### **GFOA Minimum Reserve Requirements**

2 months of Operating Expenses (17%)

### **Working Capital Reserve**

- Current Assets – Current Liabilities
- Provides cushion against receipt of Revenues and payment of expenses

**LAIF 2.0-2.5% vs  
CalPERS 7.0%**

Short-Term Money  
Market Returns

vs.

Equities/Fixed  
Income  
Bonds/Alternative  
Investments

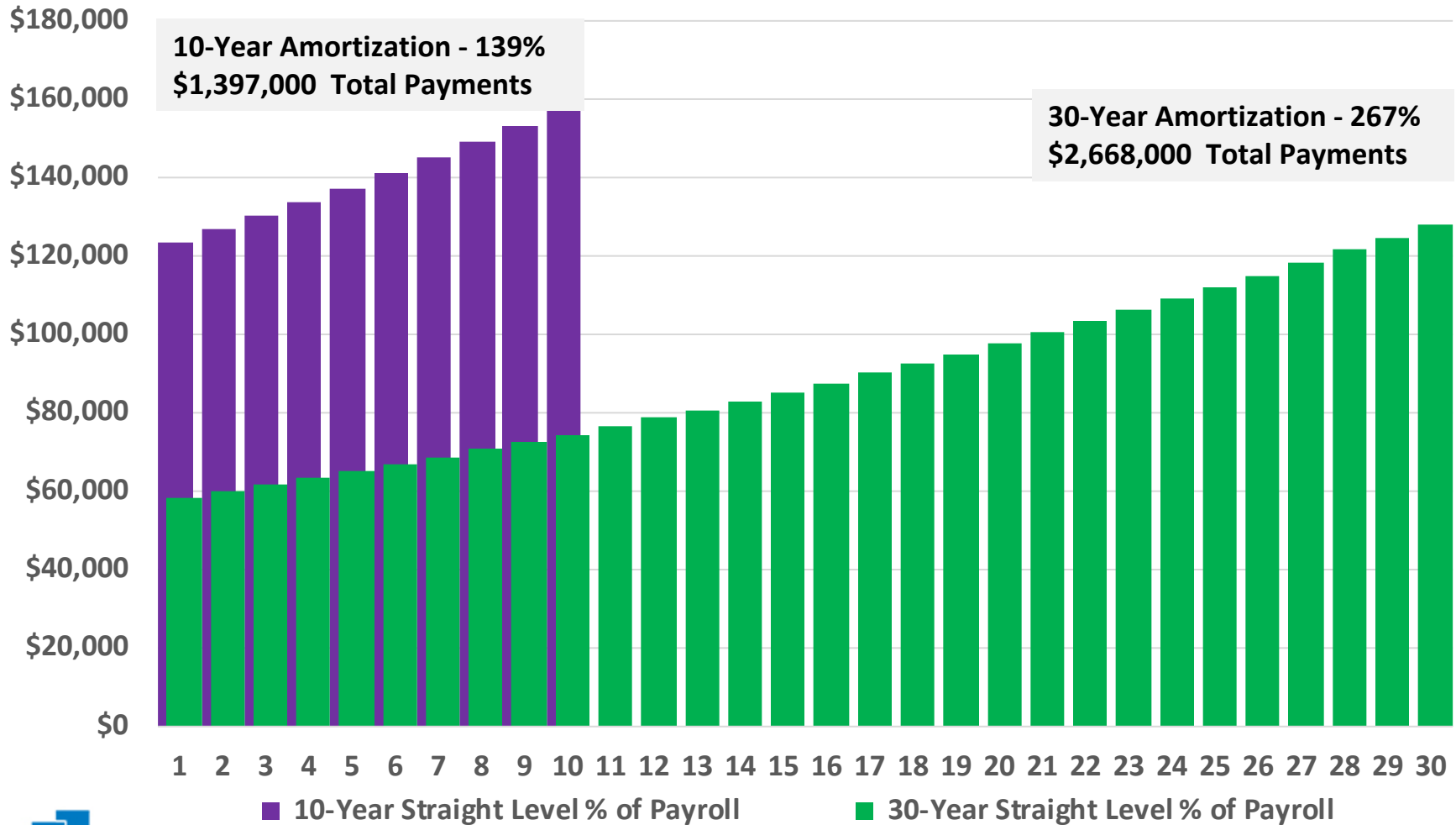
### **1-Time Monies:**

- Construction Projects
- Budget Savings

# Targeting Strategies

## \$1 Million UAL: 10-Year vs. 30-Year Amortization

(Level % of Payroll - No Ramp-Up & Ramp-Down)

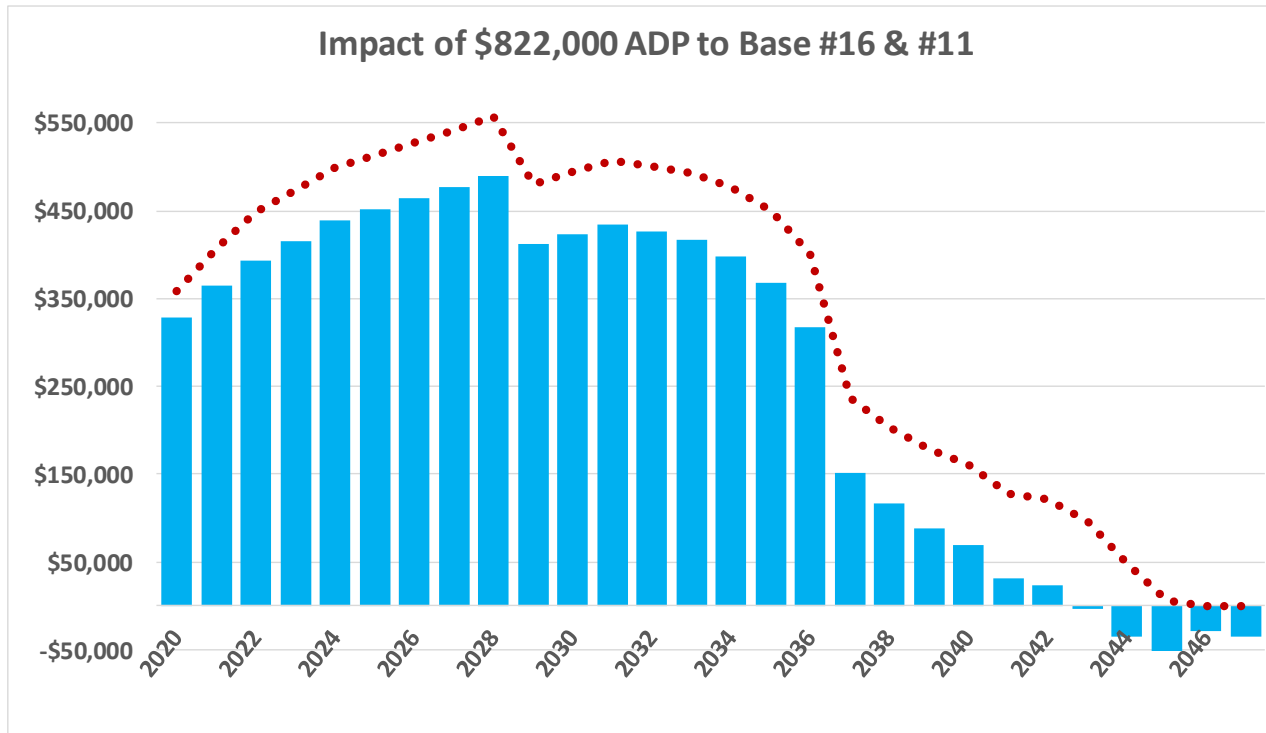


# 2. Additional Discretionary Payments

Apply \$822,000 DSR to #16 & #11

UAL reduced from \$4.9 to \$4.1 million

- \$2.0 million reduction in UAL payments



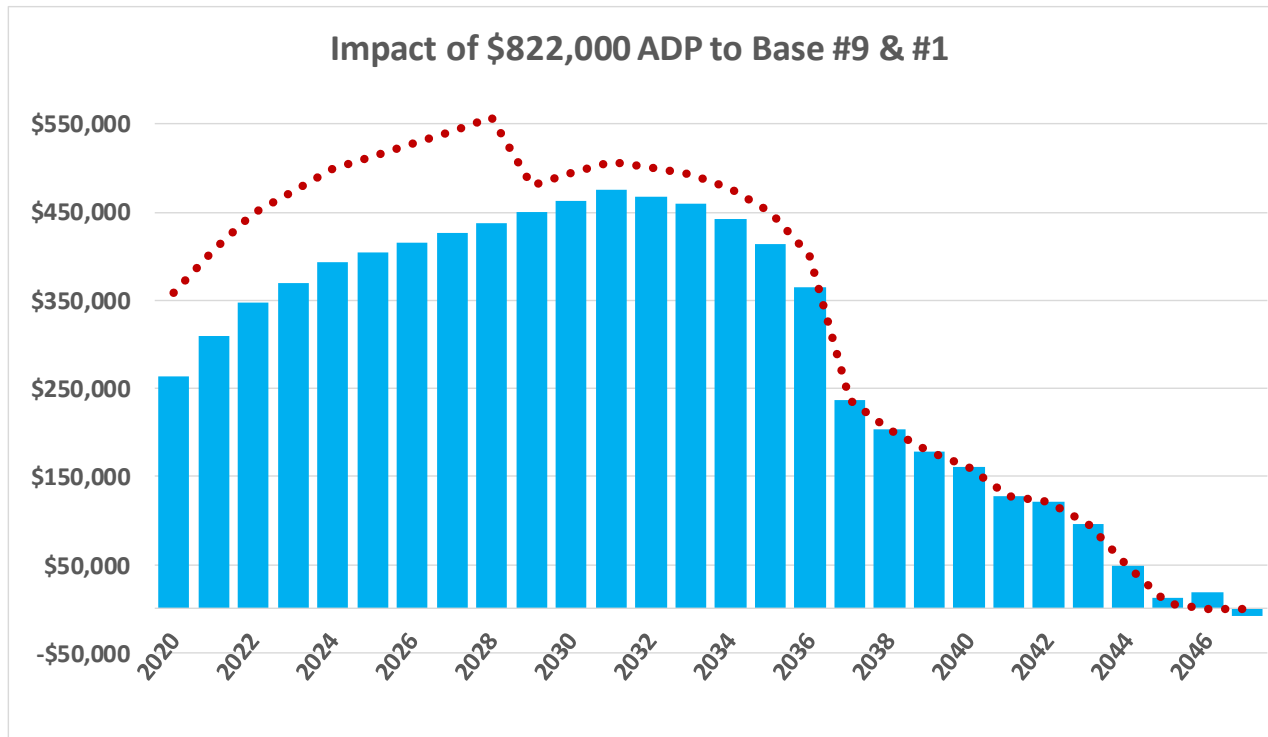
Impact of ADPs #			
	Original UAL Payments	\$822K AD: #11 & #16	Savings
1 2020	358,954	328,516	30,438
2 2021	407,822	365,441	42,381
3 2022	448,946	393,989	54,957
4 2023	473,677	416,130	57,547
5 2024	499,720	439,484	60,236
6 2025	513,463	451,570	61,893
7 2026	527,583	463,988	63,595
8 2027	542,092	476,748	65,344
9 2028	556,999	489,858	67,141
10 2029	480,805	411,818	68,987
11 2030	494,027	423,143	70,884
12 2031	507,613	434,779	72,834
13 2032	500,831	425,994	74,837
14 2033	493,292	416,398	76,895
15 2034	476,735	397,726	79,009
16 2035	449,633	368,451	81,182
17 2036	401,243	317,829	83,414
18 2037	237,287	151,579	85,708
19 2038	204,078	116,012	88,065
20 2039	178,283	87,795	90,487
21 2040	161,522	68,546	92,975
22 2041	127,137	31,605	95,532
23 2042	121,175	23,015	98,159
24 2043	96,829	(4,030)	100,859
25 2044	49,406	(35,405)	84,811
26 2045	5,961	(55,835)	61,797
27 2046	0	(29,037)	29,037
28 2047	0	(35,579)	35,579
29 2048		(21,890)	21,890
29 2049		(4,187)	4,187
30 2050		-	-
	\$9,315,112	\$ 7,314,452	\$2,000,660

# 2. Additional Discretionary Payments

Apply \$822,000 DSR to #9 & #1

UAL reduced from \$4.9 to \$4.1 million

- \$1.2 million reduction in UAL payments



**NPV Savings \$1.2 million vs \$975,000**

Impact of ADPs #9 & #1			
	Original UAL Payments	\$822K AD: #9 & #1	Savings
1 2020	358,954	263,444	95,510
2 2021	407,822	309,685	98,137
3 2022	448,946	348,111	100,835
4 2023	473,677	370,068	103,608
5 2024	499,720	393,263	106,457
6 2025	513,463	404,078	109,385
7 2026	527,583	415,190	112,393
8 2027	542,092	426,608	115,484
9 2028	556,999	438,339	118,660
10 2029	480,805	450,394	30,411
11 2030	494,027	462,779	31,247
12 2031	507,613	475,506	32,107
13 2032	500,831	467,841	32,990
14 2033	493,292	459,396	33,897
15 2034	476,735	441,906	34,829
16 2035	449,633	413,846	35,787
17 2036	401,243	364,472	36,771
18 2037	237,287	237,287	-
19 2038	204,078	204,078	-
20 2039	178,283	178,283	-
21 2040	161,522	161,522	-
22 2041	127,137	127,137	-
23 2042	121,175	121,175	-
24 2043	96,829	96,829	-
25 2044	49,406	49,406	-
26 2045	5,961	11,969	(6,008)
27 2046	0	18,750	(18,750)
28 2047	0	(8,961)	8,961
29 2048		(17,643)	17,643
29 2049		(2,005)	2,005
30 2050			-
	\$9,315,112	\$ 8,082,753	\$1,232,359

# 3. Pension Stabilization Fund - 115 Trust

## Pension Stabilization Fund

- Reserves designed to offset additional future bases
- Provides greater budgetary relief than making ADPs
  - Pension Stabilization applied to the current year UAL payment
  - ADPs pay of base

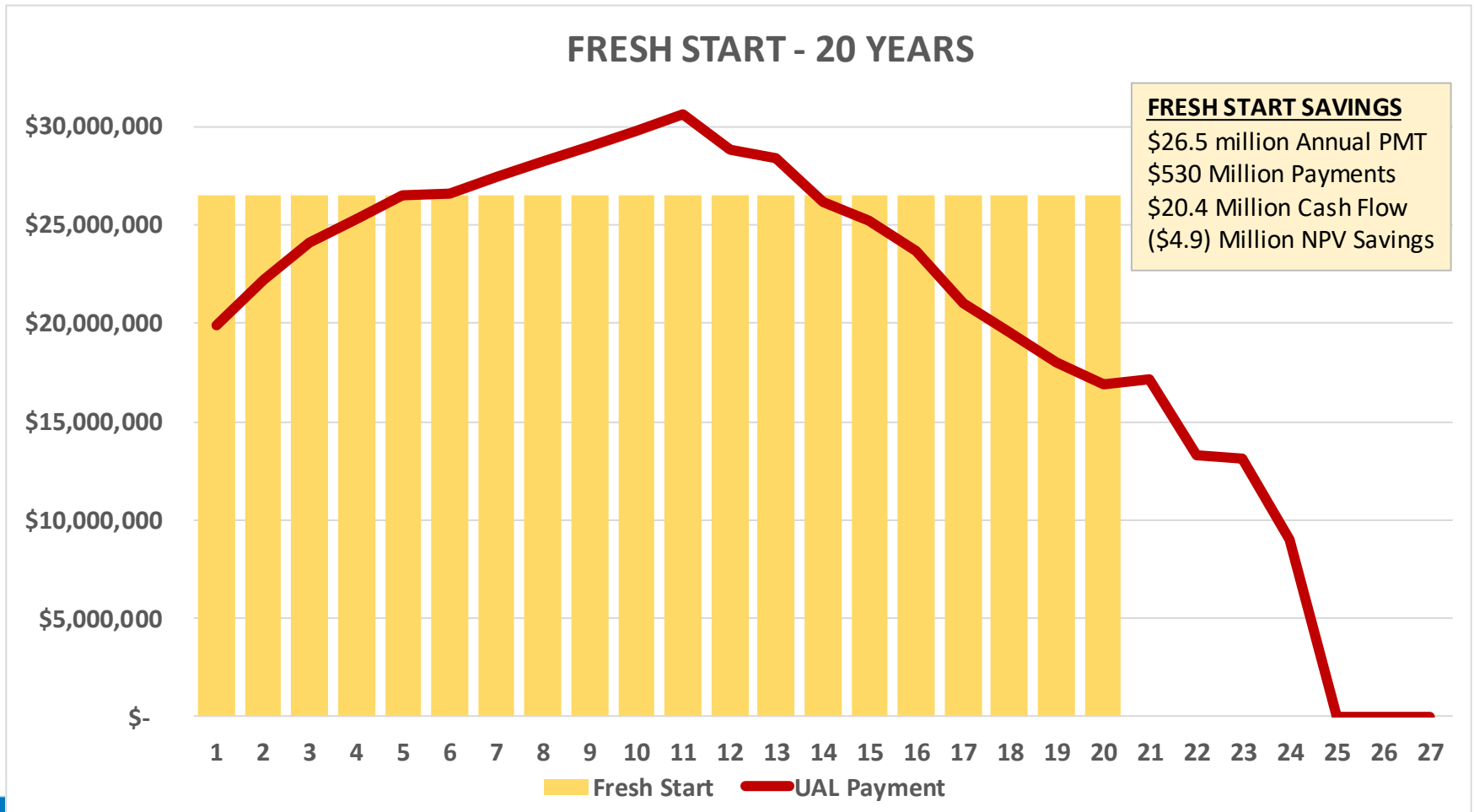
## Section 115 Trust

*IRS legally restricted trust*

1. *Can only use monies to pay for (pension) designated costs*
  2. *Alternative investments outside of limits of CA Investment Code*
- *Tool to manage pension liabilities*
    - *Manage timing risk*
    - *Pension Cost Stabilization Fund*
    - *Make additional annual payments*

# 4. Fresh Start

***Fresh Start “Locks In” Higher UAL Payments over Shorter Period  
Fresh Start cannot be modified afterward - Limits Financial Flexibility***

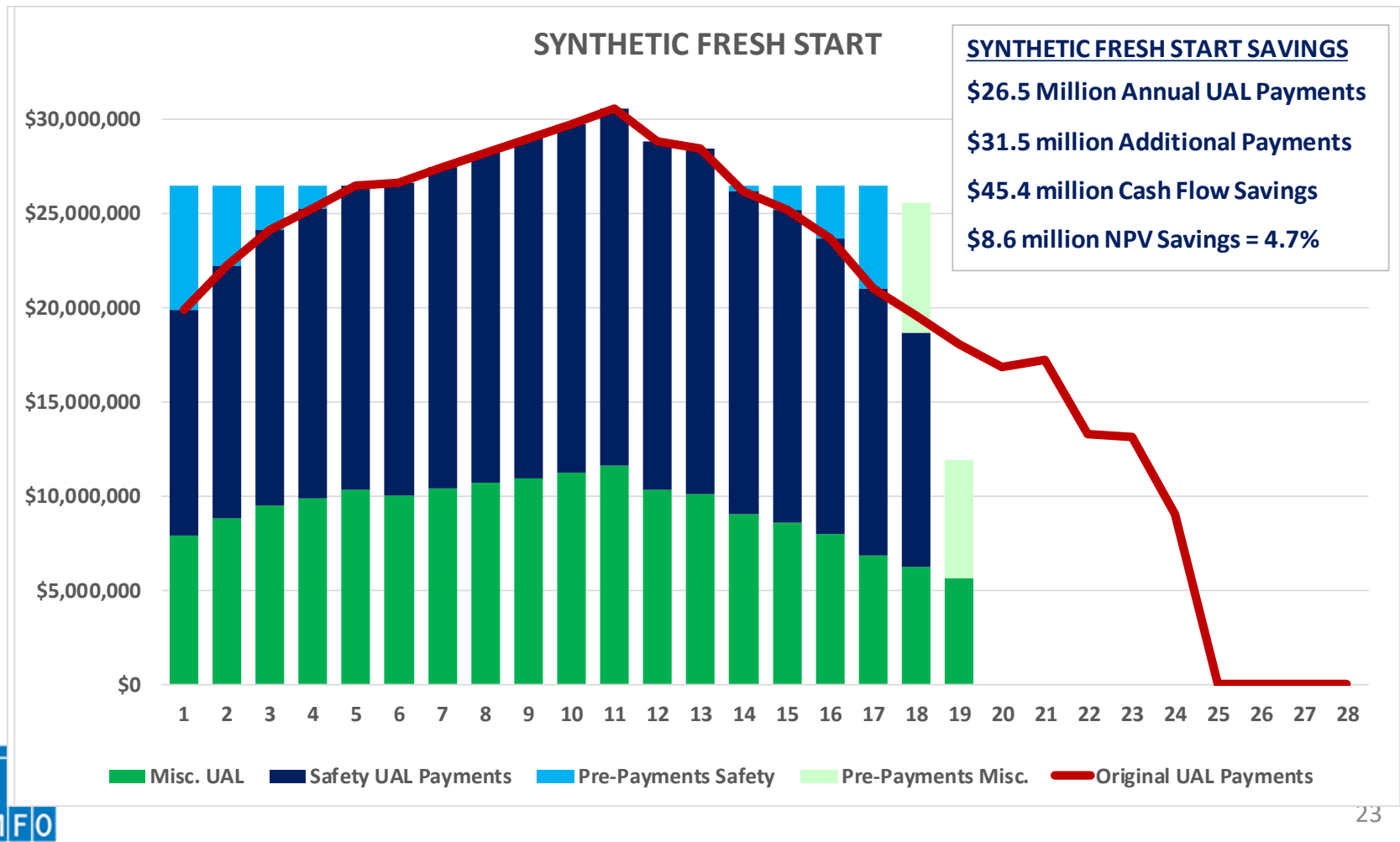


# 4. Soft or Synthetic Fresh Start

*Soft or Synthetic Start retains current UAL payments.*

*City makes “targeted” ADPs at its option.*

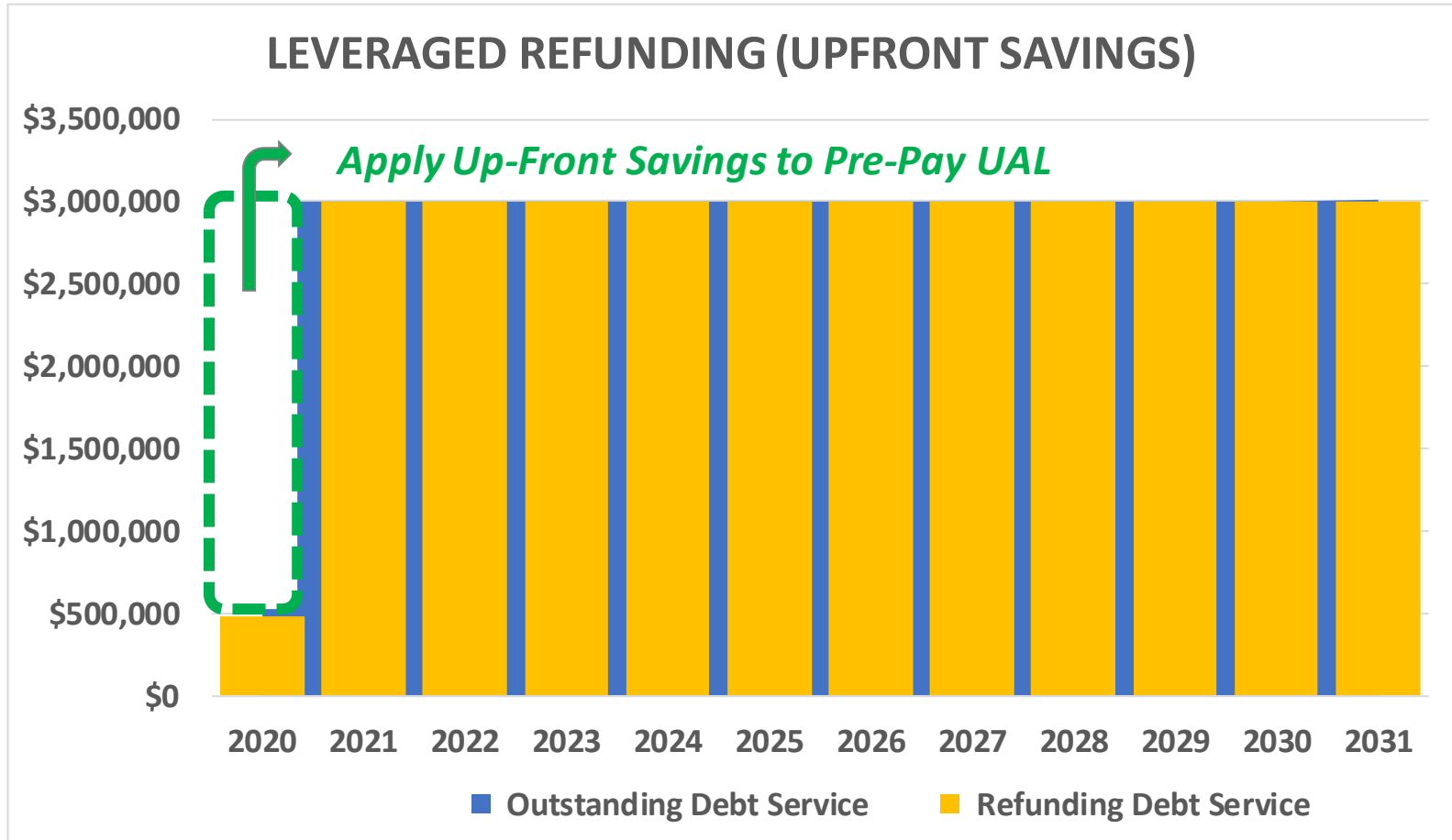
*ADPs eliminate interest costs (greater savings) and retains flexibility.*



# Financing Mechanisms



# 5. Leveraged Refunding



# 6. Tax-Exempt Exchange

## Tax-Exempt Bonds

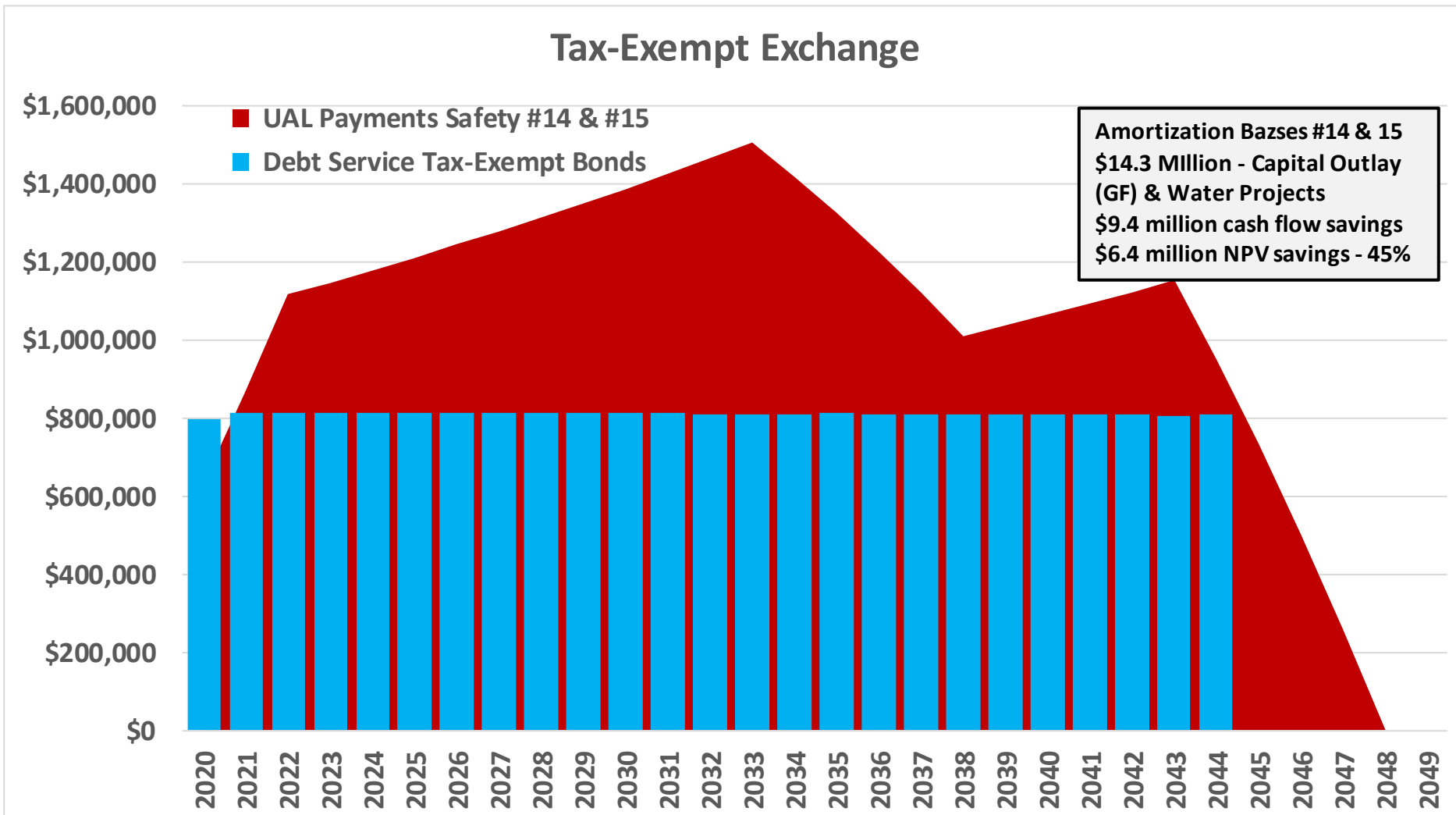
1. Identify “Pay-Go” Capital Project(s)
2. Issue Tax-Exempt Bonds to finance CIP

## Budget Exchange

3. Reallocate Capital Project Budget to UAL
4. Pre-Pay UAL Bases with similar term

- UAL payments pay bond debt service
- 7.0% CalPERS liability refinanced using tax-exempt rates ~2.0%

# 6. Tax-Exempt Exchange



# Key Terms of GFOA POB Advisory

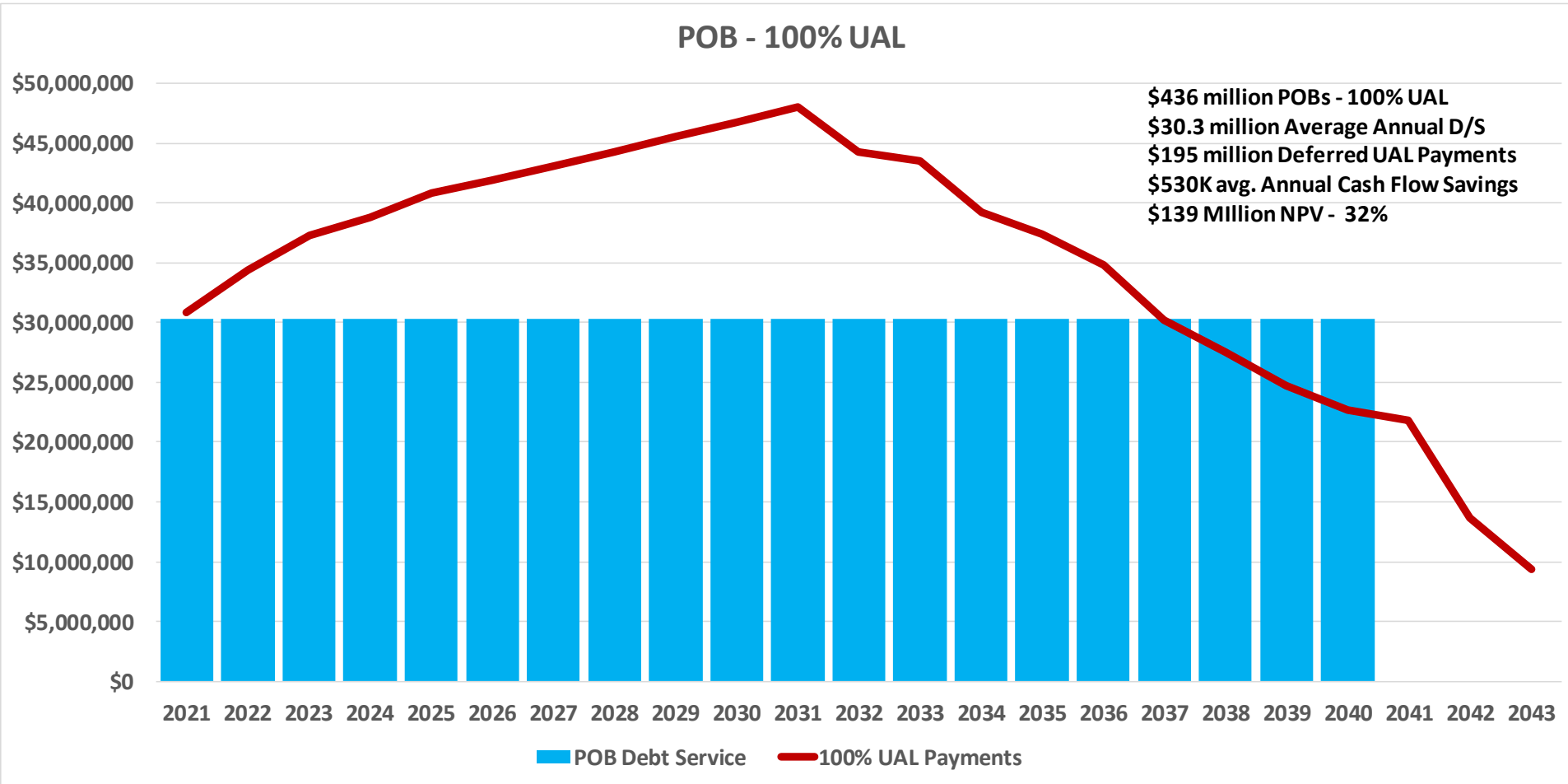
*POBs are complex instruments that carry considerable risk.....*

- 1. Increase debt burden/reduce capacity (flexibility)*
- 2. "Make-whole" call features*
- 3. Finance normal costs or extend repayment period.*
- 4. Part of a comprehensive plan to address pension shortfalls*
- 5. Invested POB proceeds may fail to earn more than interest rate on the bonds*

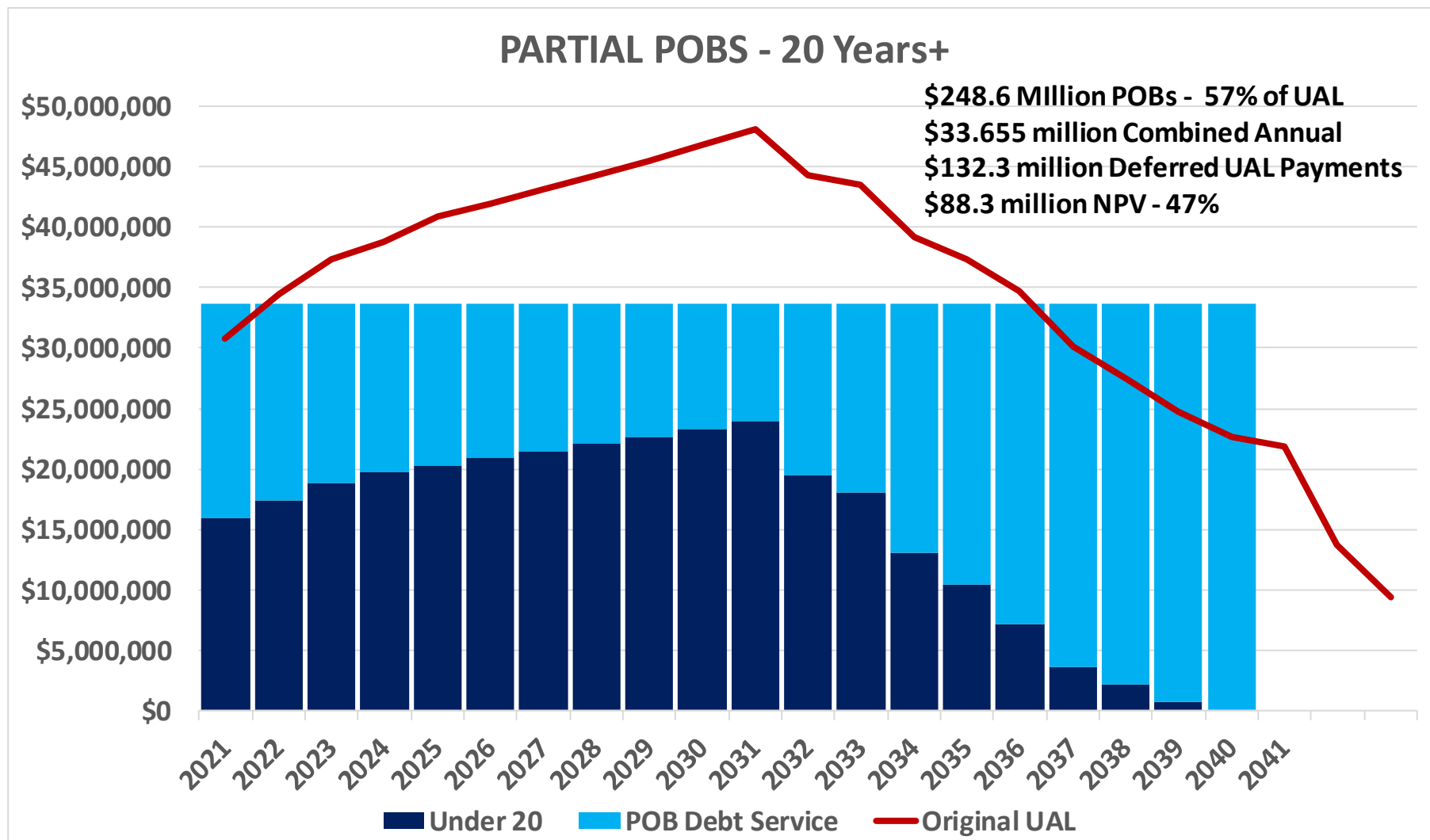
**Only issue plain-vanilla Fixed Rate Bonds (no swaps)**

- 1. POBs refinance existing debt GASB 68 on Balance Sheet.**
- 2. Standard 10-year call**
- 3. Repay UAL same or shorter amortization period**
- 4. Pension Funding Policy with multiple solutions**
- 5. Savings provide cushion.  
Hedging: Floor or Dollar-Cost-Averaging**

# 7. Pension Obligation Bonds



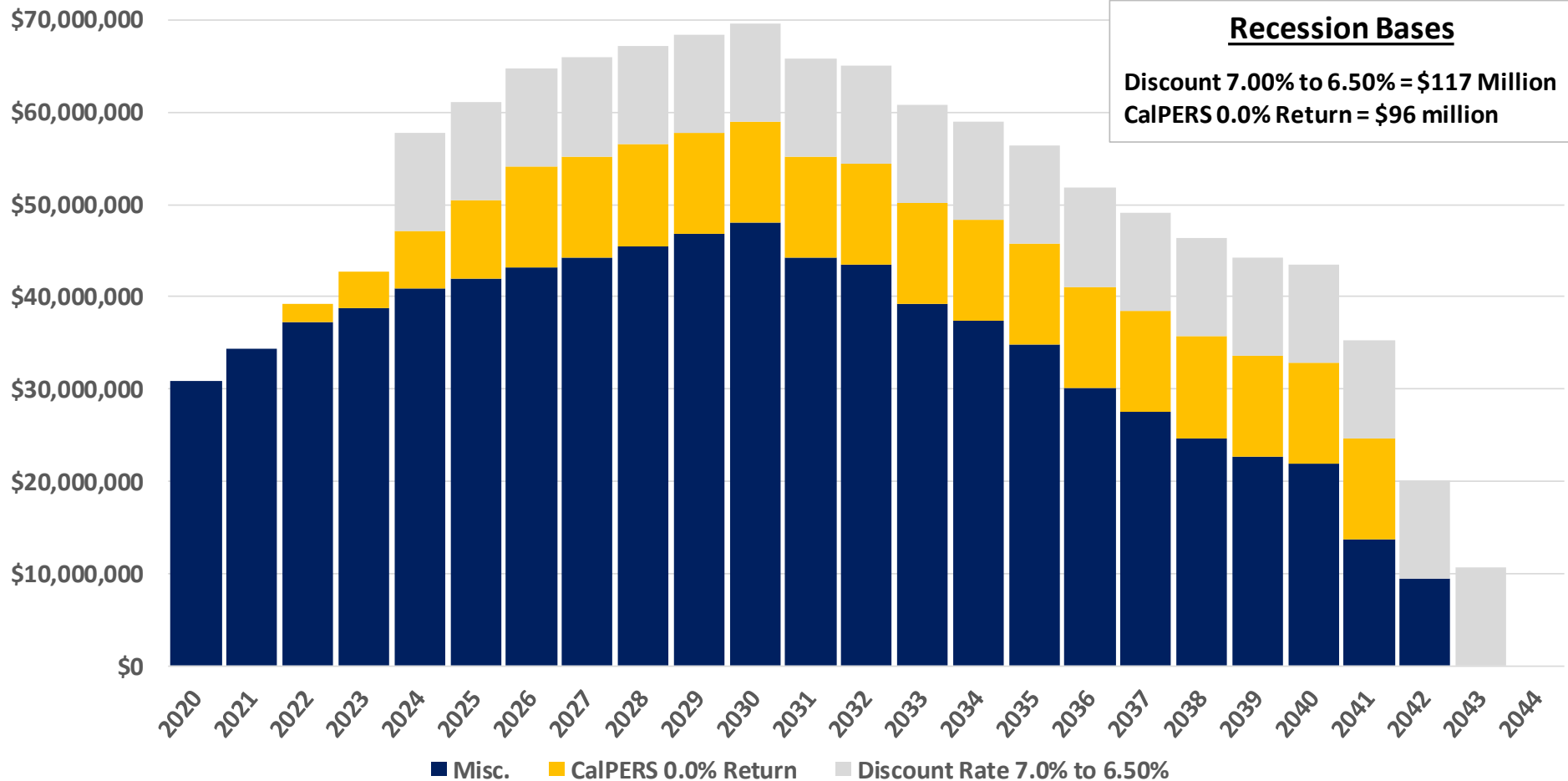
# 7. Partial POBs



# Recession Scenarios

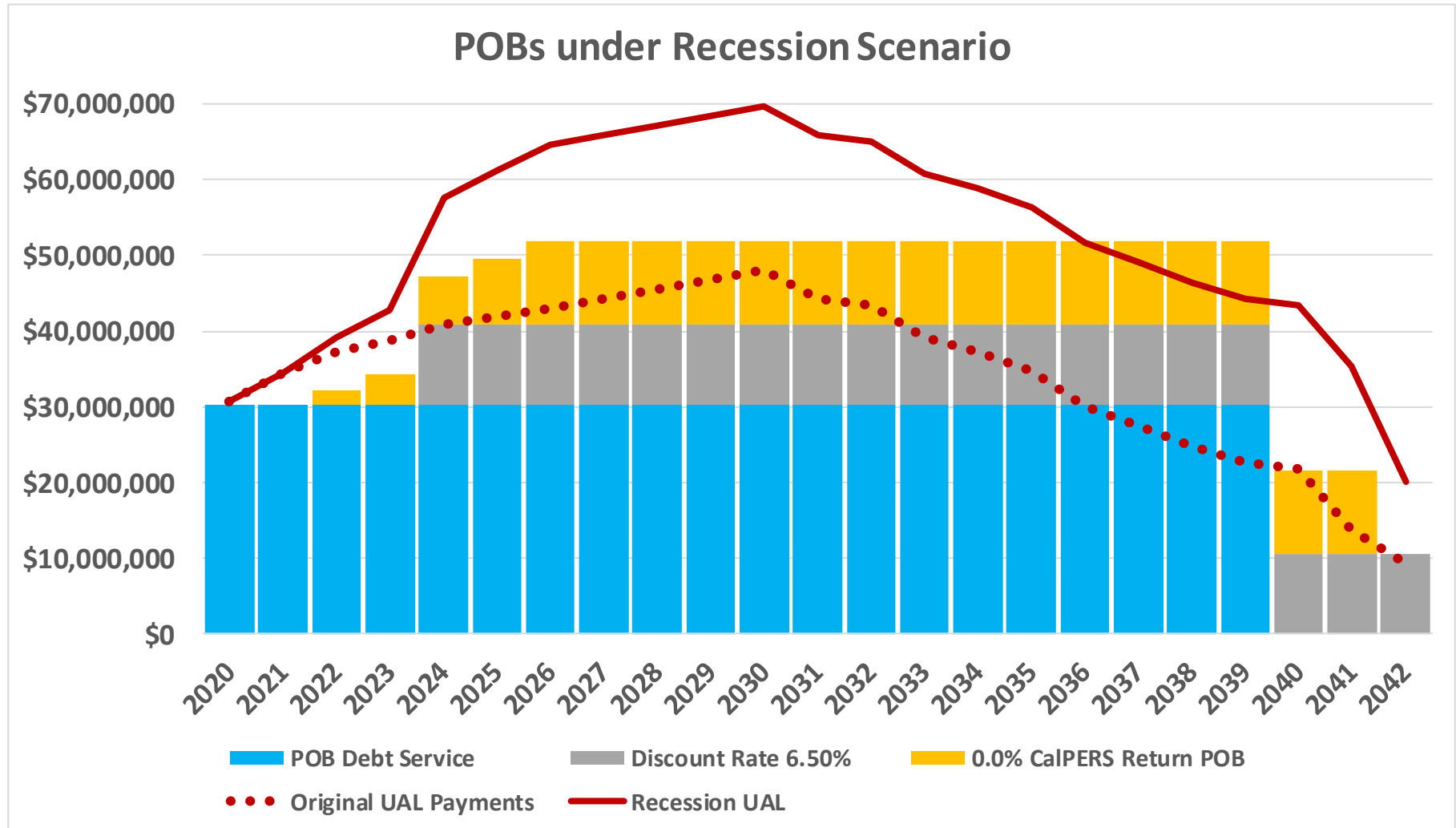
# Recession Scenario

UAL PAYMENTS RECESSION SCENARIOS





# Impact of Recession on POB Savings





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Julio has over twenty-five years of working in the areas of public and corporate finance, city management, municipal budgeting and financial leadership. He is a MSRB Municipal Advisor Qualified Representative (Series 50).

He served as the City Manager and Finance Director for the City of Huntington Park and the Finance Director for the City of El Monte. He guided both cities resolve their “structural deficits”.

Most recently, Julio worked for the Department of the Treasury’s Office of Technical Assistance (OTA), providing financial advice to the Treasurer of Paraguay, helping to streamline and automate their operations. Mr. Morales also has experience in public and corporate finance, having served as an investment banker with Bank of America, a financial advisor at PFM & Fieldman-Rolapp, derivative/GIC for Transamerica, and managed the debt for the City of Oakland.

Julio earned his undergraduate degree from the University of Michigan, a Master of Public Policy (MPP) from the Harvard Kennedy School of Government, and an MBA from UCLA, where he was a Dean’s Fellowship Recipient.