

# Pension & OPEB Presentation

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City of Newark



# Discussion Roadmap

- Review Terminology
- Examination of Amortization Schedules
- Current Plan Status
- Preliminary Staff Recommendations

# Terminology

**Projected Benefits**

**Present Value of Projected Benefits (PVB)**

**Normal Cost (NC)**

**Discount Rate (Investment Returns)**

**Actuarial Accrued Liability (AAL)**

**Market Value of Assets (MVA)**

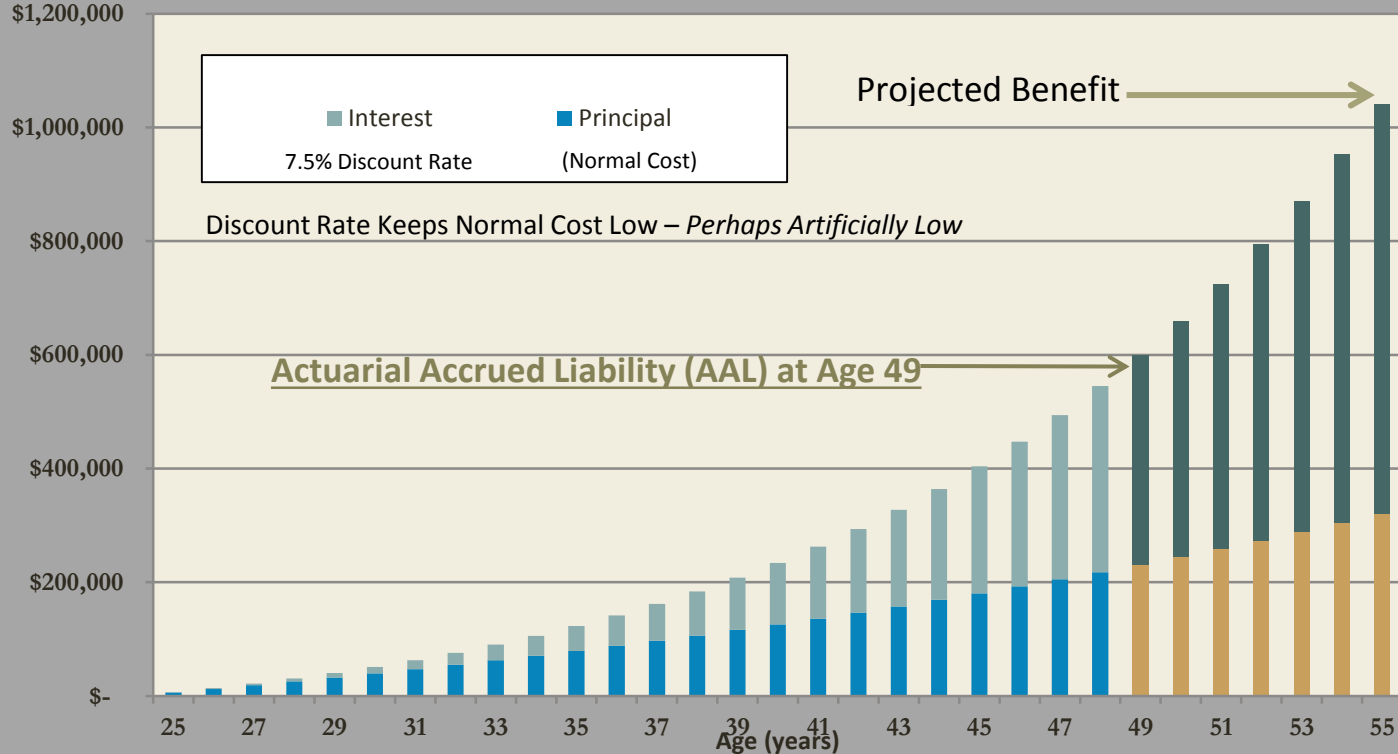
**Unfunded Actuarial Accrued Liability (UAAL )**

**Gains/Losses and Actuarial Assumptions**

**Amortization Schedules**

# Terminology

Example 49 year old employee who started at age 25



Interest  
7.5% Discount Rate

Principal  
(Normal Cost)

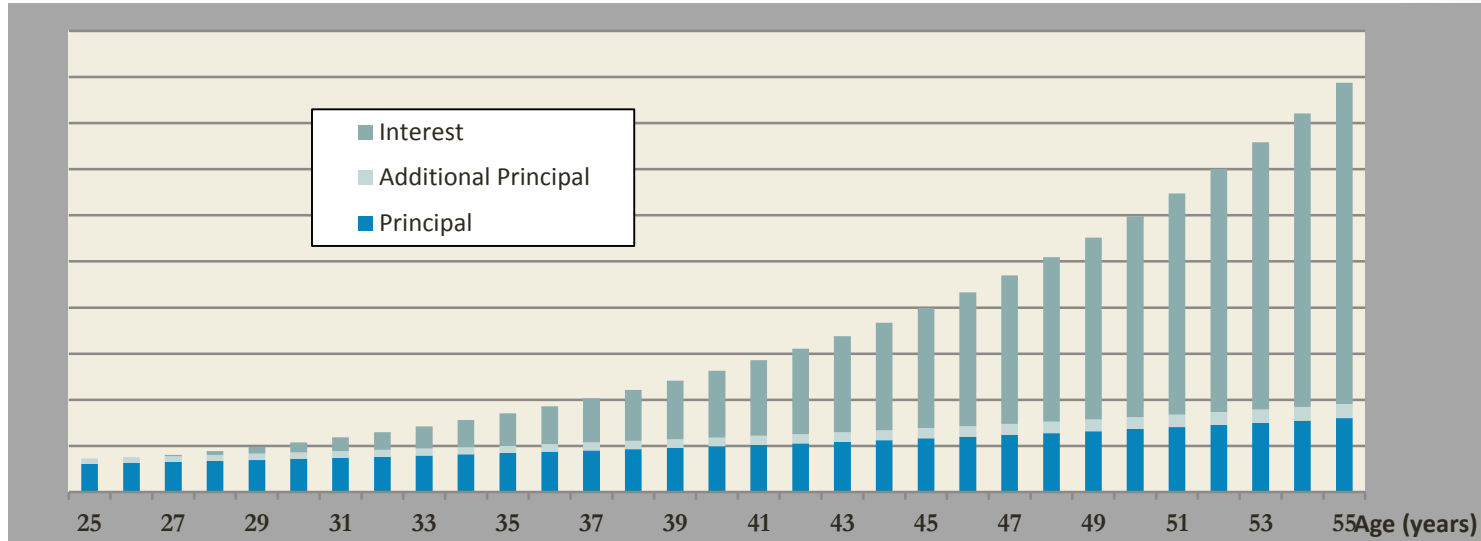
Projected Benefit →

Discount Rate Keeps Normal Cost Low – Perhaps Artificially Low

Actuarial Accrued Liability (AAL) at Age 49 →

# Change in Assumption

If the discount rate decreases...



... additional “normal cost” contributions are needed to fund the predefined benefit

Discount Rate

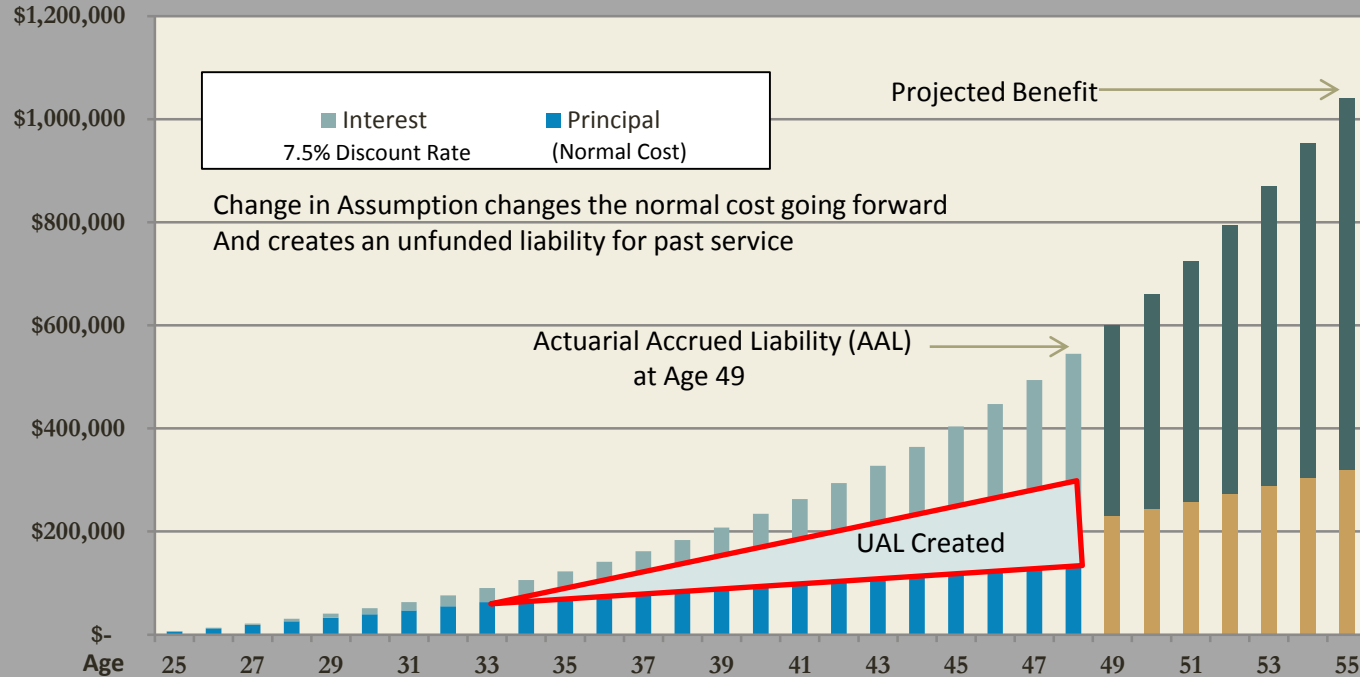


Normal Cost

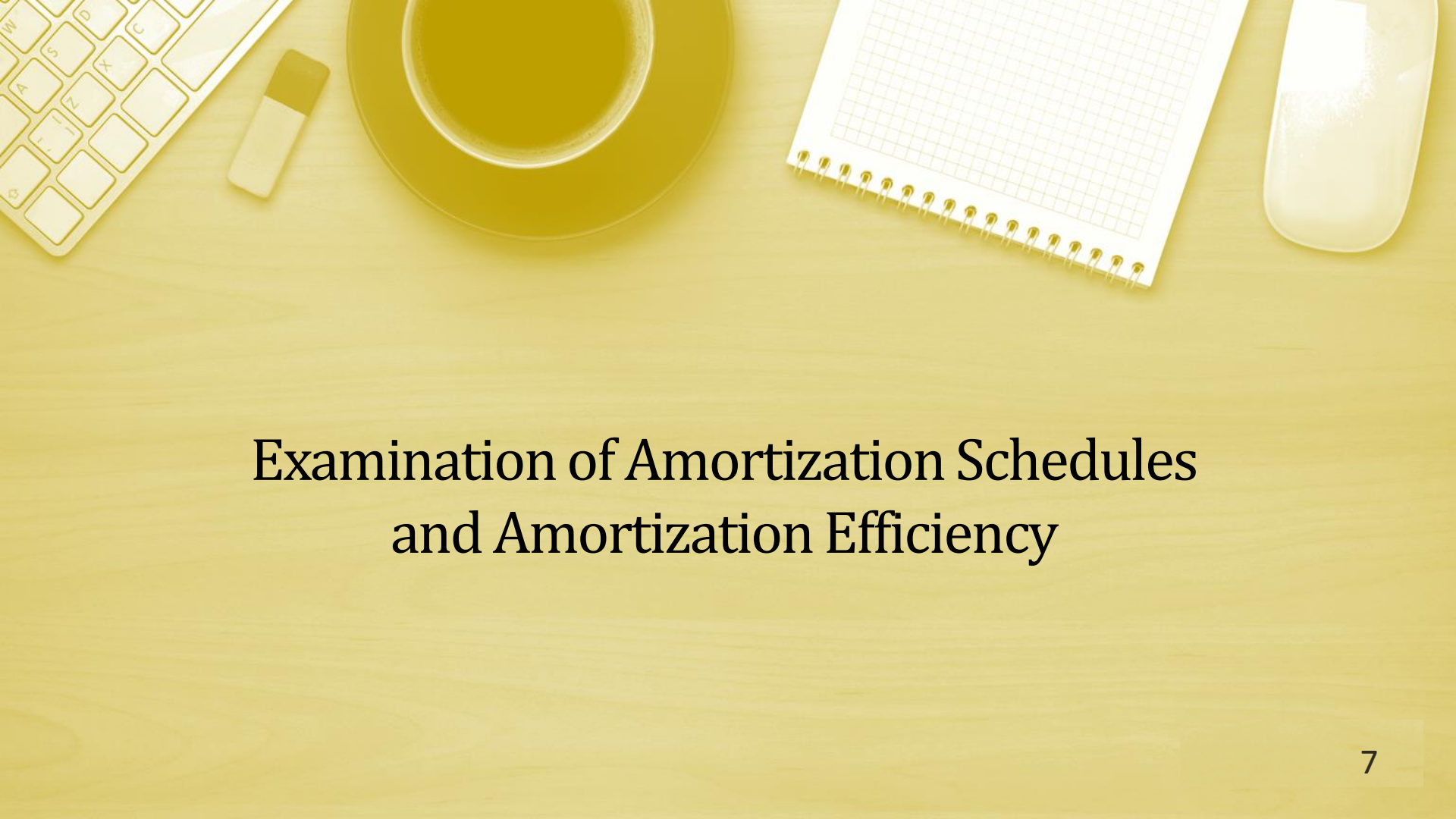


# Change in Assumption

Example 49 year old employee who started at age 25



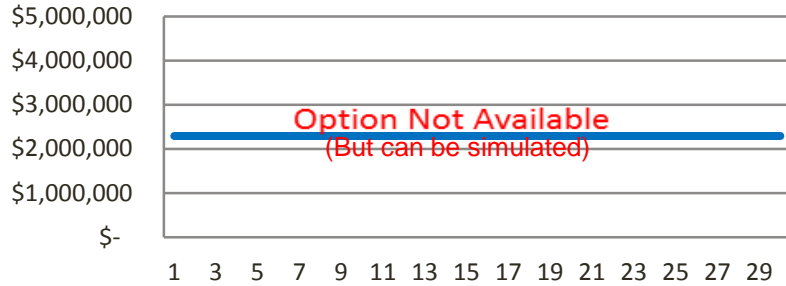
\*More Contributions required to make up for lower assumed investment earnings or other assumption change.

A top-down view of a desk with a keyboard, a coffee cup, a notebook, and a mouse. The desk is light-colored wood. The keyboard is on the left, the coffee cup is in the center, the notebook is on the right, and the mouse is on the far right. The entire image has a yellowish tint.

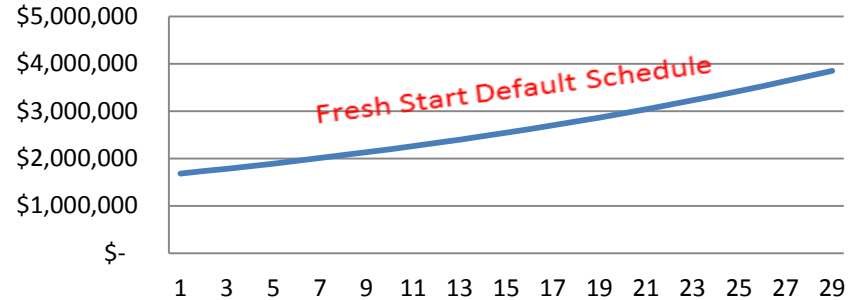
# Examination of Amortization Schedules and Amortization Efficiency

# Amortization schedules

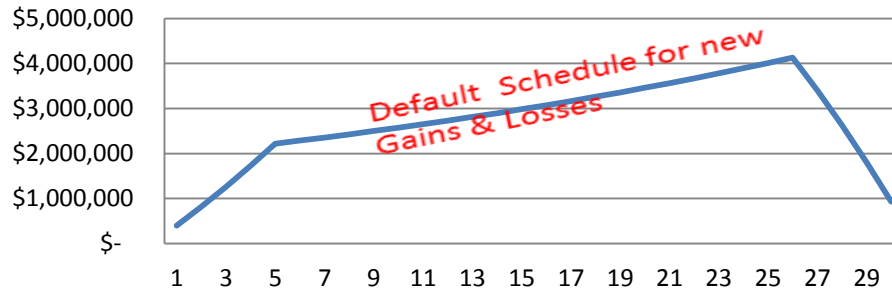
## Level Payment Amortization



## Level % of Pay Amortization



## Level % of Pay - 5Yr Phase-in





# Other City Example

## Schedule of Amortization Bases

Reason for Base	Date Established	Amortization Period	Amounts for				
			Balance 6/30/14	Expected Payment 2014-15	Balance 6/30/15	Expected Payment 2015-16	Balance 6/30/16
FS 30-YEAR AMORTIZATION	06/30/08	24	\$(4,760,389)	\$(307,896)	\$(4,798,185)	\$(317,133)	\$(4,829,238)
ASSUMPTION CHANGE	06/30/09	15	\$10,557,847	\$886,978	\$10,430,047	\$913,587	\$10,265,074
SPECIAL (GAIN)/LOSS	06/30/09	25	\$11,727,208	\$743,250	\$11,836,131	\$765,547	\$11,930,105
SPECIAL (GAIN)/LOSS	06/30/10	26	\$(1,985,365)	\$(123,450)	\$(2,006,272)	\$(127,154)	\$(2,024,906)
ASSUMPTION CHANGE	06/30/11	17	\$11,462,630	\$894,394	\$11,395,000	\$921,226	\$11,294,477
SPECIAL (GAIN)/LOSS	06/30/11	27	\$(5,269,530)	\$(321,832)	\$(5,331,062)	\$(331,487)	\$(5,387,199)
PAYMENT (GAIN)/LOSS	06/30/12	28	\$1,857,636	\$111,552	\$1,881,299	\$114,899	\$1,903,267
(GAIN)/LOSS	06/30/12	28	\$70,991,591	\$4,263,082	\$71,895,902	\$4,390,975	\$72,735,435
(GAIN)/LOSS	06/30/13	29	\$61,329,437	\$(281,811)	\$66,221,333	\$931,405	\$70,222,231
ASSUMPTION CHANGE	06/30/14	20	\$33,710,124	\$(689,286)	\$36,953,050	\$(709,964)	\$40,460,635
(GAIN)/LOSS	06/30/14	30	\$(58,432,251)	\$(322,812)	\$(62,479,971)	\$(406,772)	\$(66,744,219)
<b>TOTAL</b>			<b>\$131,188,938</b>	<b>\$4,852,169</b>	<b>\$135,997,272</b>	<b>\$6,145,129</b>	<b>\$139,825,662</b>

CHANGE IN MORTALITY ASSUMPTION

18.4% INVESTMENT GAIN


# Alternate Amortization Schedules

(For paying off \$66 Million UAL)

	<b>Default:</b> <b>30-Years, 5- Yr Ramp up</b>	<b>Optional:</b> <b>30-Year, Level %</b>	<b>Optional:</b> <b>20-Year, 5-Yr Ramp up</b>	<b>Optional:</b> <b>20-Year, Level %</b>
Sum of all payments made:	\$190 Million	\$189 Million	\$135 Million	\$134 Million
Net Present Value	\$118 Million	\$116 million	\$98 Million	\$134 Million

20 Yr. vs 30 Yr.  
NPV Savings  
\$21M

← Least Cost Effective Most Cost Effective →

A top-down view of a desk with a keyboard, a coffee cup, a notebook, and a mouse. The desk is light-colored wood. The keyboard is on the left, the coffee cup is in the center, the notebook is on the right, and the mouse is on the far right. The entire image has a yellowish tint.

# Newark's Pension Plan Status

# Newark's Participants Data

## Participant Data as of June 30, 2015

	Misc	Safety	Safety Pepra	Total
<b><u>Active Members</u></b>				
Counts	112	53	3	168
Average Years of Service	10.8	11	1	
<b><u>Transferred Members</u></b>				
Counts	92	66	0	158
<b><u>Terminated Members</u></b>				
Counts	88	18	0	106
<b><u>Retired Members and Beneficiaries</u></b>				
Counts	176	140	0	316
Average Retirement Age	59.3	52.2	N/A	
				748
Actuarial Accrued Liabilities	\$100,264,978	\$157,964,702	\$94,601	\$ 258,324,281

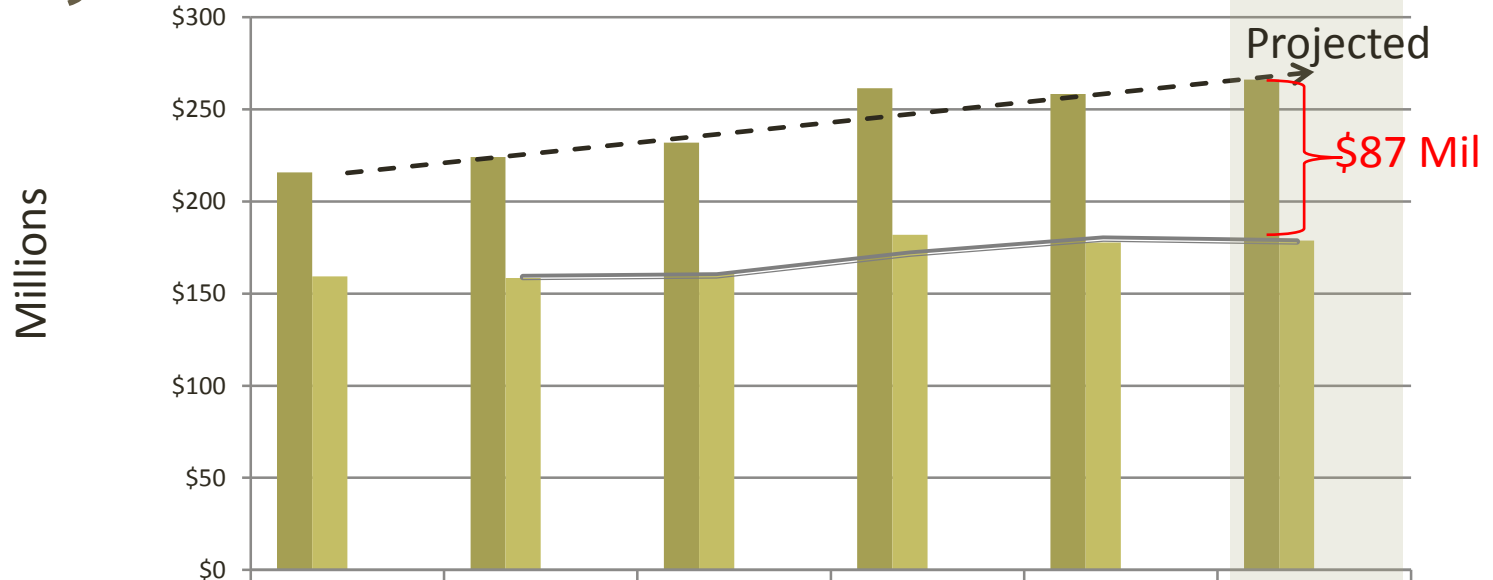
# UAL Status

(Unfunded Accrued Liability)

June 30, 2015

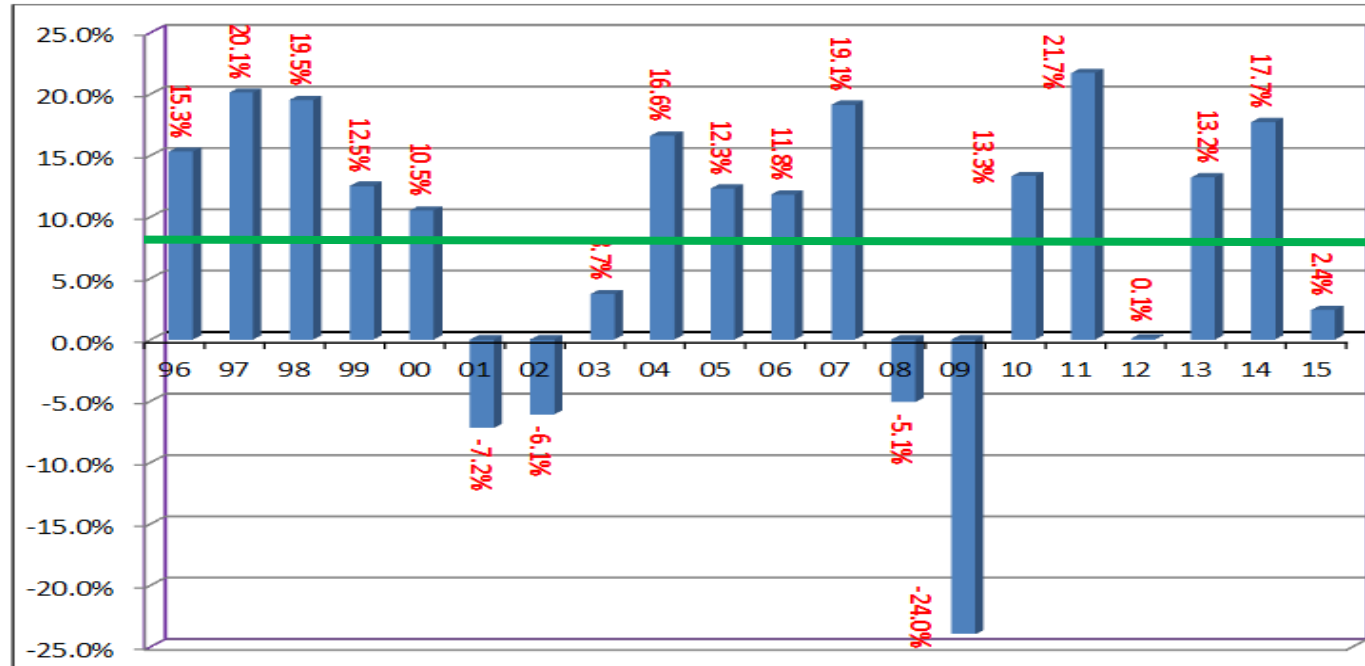
	Miscellaneous	Public Safety	Total
Accrued Liability	\$100,264,978	\$158,059,303	\$258,324,281
Less Market Value of Assets (MVA)	\$68,012,608	\$109,617,746	\$177,630,354
Unfunded Liability	\$32,252,370	\$48,441,557	\$80,639,927
Funded Ratio (MVA/Accrued Liability)	67.8%	69.3%	68.8%

# Projected UAL



	2011	2012	2013	2014	2015	2016
■ Accrued Liability	215.8	224.0	232.0	261.4	258.3	266.1
■ Value of Assets	159.3	158.4	161.3	181.9	177.6	178.7
■ Unfunded Liability	56.4	65.6	70.7	69.1	80.7	87.4
■ CalPERS Return on Investment	20.7%	1.0%	12.5%	18.4%	2.4%	0.6%

# CalPERS History of Investment Returns



	1 year	5 year	10 year	20 year	30 year
Geometric Return	2.4%	10.7%	6.1%	7.7%	9.1%
Volatility	—	9.4%	14.0%	11.8%	10.5%

# What's the problem?

Projected  
2016

Accrued Pension Liability	\$266 million
Market Value of Assets	\$178 million
Unfunded Liability	\$87 million
Funded Status	69%

Accrued Pension Liability	\$266 million
Market Value of Assets	\$266 million
Unfunded Liability	–
Funded Status	100%

Current Projection

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x 7.5% = \$6.5 million just to keep up with the interest lost by the unfunded liability

What if Fully Funded?

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Expected asset volatility +/- ~12% = \$32 million

Assets are currently underfunded and volatile.

Liabilities are large relative to agency payrolls and budget.



# PEPRA Employees

(Employees hired after January 2013)

17 Misc. PEPRA employees

Formula: 2% @ 62

Employer Normal Cost: 6.25% vs. Classic Member 9.412%

Employees Cost Share = 3.468%

7 Safety PEPRA employees

Formula: 2.7% @ 57

Employer Normal Cost: 11.99% vs. Classic Member 19.723%

Employees Cost Share= 1.5% or 4%

# New Way to Provide Rate Information

## Past Method of Presenting Rates

17/18	NC	UAL	Applied Rate
Misc	5.944%	20.827%	26.771%
Safety	15.723%	40.661%	56.384%
Safety Pepra	10.49%	0.601%	11.091%

## New Presentation of Rates

17/18	NC	UAL	Applied Rate
Misc	5.944%	\$2.9 Mil	
Safety	15.723%	\$4.5 Mil	
Safety Pepra	10.49%	\$2,000	

17/18 Lump Sum Payment

# What's on the Horizon?

- Risk Mitigation Strategy Adopted Nov 2015 – Expected to impact employers when investment returns exceed 4% of current discount rate
- New Experience Study – 6/30/17 Val.
- Strategic Asset Allocation Study – 6/30/17 Val.
- State pressure to lower discount rate has started

# Potential Impact of Lowering Discount Rate to 6.5%

	MISCELLANEOUS		SAFETY		Total	
	7.5% Discount Rate	6.5% Discount Rate	7.5% Discount Rate	6.5% Discount Rate	7.5% Discount Rate	6.5% Discount Rate
Plan's Total Normal Cost	17.30%	21.63%	28.70%	36.10%		
Accrued Liability	100,264,978	113,035,381	157,964,702	179,250,880	258,229,680	292,286,261
Unfunded Accrued Liability	32,252,370	45,022,733	48,436,008	69,722,186	80,688,378	114,744,919
Total Normal Cost	1,712,745	2,142,318	2,150,195	2,704,600	3,862,940	4,846,918
<u>Estimated Increase in Normal Cost</u>		<u>429,573</u>		<u>554,406</u>		<u>983,978</u>
<u>Estimated Increase in UAL Payment*</u>		<u>964,200</u>		<u>1,607,200</u>		<u>2,571,400</u>
Estimate Increase in UAL		12,770,363		21,286,178		34,056,541
* 20 Yr Amortization, 6.5%, Level-%-of-Pay						



## Actions that can help

# Already Doing

- Always pay the full Required Contribution
- Lower Benefit Tiers, PEPRAs
- Employees pay part of the employer share

# Additional Actions that can help:

- 1) Re-establish a PERS reserve and commit funds to the reserve
- 2) Use a fresh start Amortization schedule to change to a Level %, 20-year Schedule
- 3) Use the Level %, 20-year Schedule for the 2016 losses.

# Misc Plan Amortization

Reason for Base	Date Established	Amortization Period	Balance 6/30/15	Expected Payment 2015-16	Balance 6/30/16	Expected Payment 2016-17	Balance 6/30/17	Scheduled Payment for 2017-18
ASSUMPTION CHANGE	06/30/03	8	\$1,376,778	\$171,739	\$1,301,974	\$176,891	\$1,216,218	\$182,197
METHOD CHANGE	06/30/04	9	\$(196,202)	\$(22,694)	\$(187,387)	\$(23,375)	\$(177,206)	\$(24,076)
ASSUMPTION CHANGE	06/30/09	14	\$3,724,701	\$326,253	\$3,665,787	\$336,041	\$3,592,307	\$346,122
SPECIAL (GAIN)/LOSS	06/30/09	24	\$31,480	\$2,036	\$31,730	\$2,097	\$31,935	\$2,160
SPECIAL (GAIN)/LOSS	06/30/10	25	\$(559,173)	\$(35,439)	\$(564,367)	\$(36,503)	\$(568,848)	\$(37,598)
ASSUMPTION CHANGE	06/30/11	16	\$1,886,823	\$152,540	\$1,870,178	\$157,116	\$1,847,540	\$161,829
SPECIAL (GAIN)/LOSS	06/30/11	26	\$222,916	\$13,861	\$225,263	\$14,277	\$227,356	\$14,705
PAYMENT (GAIN)/LOSS	06/30/12	27	\$655,129	\$40,011	\$662,779	\$41,212	\$669,758	\$42,448
(GAIN)/LOSS	06/30/12	27	\$13,586,422	\$829,778	\$13,745,071	\$854,671	\$13,889,809	\$880,311
(GAIN)/LOSS	06/30/13	28	\$9,782,644	\$137,593	\$10,373,683	\$283,442	\$10,857,830	\$437,918
ASSUMPTION CHANGE	06/30/14	19	\$4,619,908	\$(35,796)	\$5,003,515	\$95,305	\$5,279,964	\$196,329
(GAIN)/LOSS	06/30/14	29	\$(6,230,342)	\$(72,929)	\$(6,622,003)	\$(93,139)	\$(7,022,085)	\$(191,866)
(GAIN)/LOSS	06/30/15	30	\$3,351,286	\$75,831	\$3,524,009	\$92,485	\$3,692,419	\$51,934
<b>TOTAL</b>			<b>\$32,252,370</b>	<b>\$1,582,784</b>	<b>\$33,030,232</b>	<b>\$1,900,520</b>	<b>\$33,536,997</b>	<b>\$2,062,413</b>

**\$33.5 Million**





# Misc Plan Amortization Alternatives of the Projected 2017 Unfunded Liability of \$33.6 Million\*

	Current Amortization	20-Year Amortization	Payment Difference	15-Year Amortization	Payment Difference
6/30/2017	2,062,413	2,532,225	469,812	3,074,321	1,011,908
6/30/2018	2,330,429	2,608,192	277,763	3,166,551	836,122
6/30/2019	2,612,670	2,686,438	73,768	3,261,547	648,877
6/30/2020	2,750,238	2,767,031	16,793	3,359,393	609,155
6/30/2021	2,891,198	2,850,042	-41,156	3,460,175	568,977
6/30/2022	2,977,936	2,935,543	-42,393	3,563,981	586,045
6/30/2023	3,067,272	3,023,609	-43,663	3,670,900	603,628
6/30/2024	3,159,291	3,114,318	-44,973	3,781,027	621,736
6/30/2025	3,023,266	3,207,747	184,481	3,894,458	871,192
6/30/2026	3,145,378	3,303,980	158,602	4,011,292	865,914
6/30/2027	3,239,739	3,403,099	163,360	4,131,630	891,891
6/30/2028	3,336,930	3,505,192	168,262	4,255,579	918,649
6/30/2029	3,437,041	3,610,348	173,307	4,383,247	946,206
6/30/2030	3,540,151	3,718,658	178,507	4,514,744	974,593
6/30/2031	3,122,815	3,830,218	707,403	4,650,186	1,527,371
6/30/2032	3,063,562	3,945,125	881,563		
6/30/2033	2,738,254	4,063,478	1,325,224		
6/30/2034	2,658,151	4,185,383	1,527,232		
6/30/2035	2,570,776	4,310,944	1,740,168		
6/30/2036	2,475,768	4,440,272	1,964,504		
6/30/2046	122,386				
	76,892,299	68,041,842		57,179,031	
<b>Savings</b>		<b>8,850,457</b>		<b>19,713,268</b>	

\*this does not include recent change to discount rate.

# POSSIBLE POLICIES

- Contribute no less than 100% of actuarially determined contribution (ADC) annually
- Target funding at 90% to 100% of Actuarial Accrued Liability

## *RECOMMENDED*

- Use 20-Year Alternate Amortization Schedule for Current UAL
- As possible, Amortize ALL gains/losses no longer than a 20 year, closed period


## *FOR DISCUSSION/INPUT*

- Establish the PERS reserve with a strategy to avoid phase-in periods and provide economic relief during recessionary cycles
- Dedicate a portion of surplus funds to accelerate payment on unfunded liabilities

# Estimated Termination Liability (Cost to quit CalPERS)

Misc Plan	\$129 Million
Classic Safety Plan	\$220 Million
<b><u>Total</u></b>	<b><u>\$349 Million</u></b>

# End of Pension Section, Questions?

A top-down view of a desk with a keyboard, a coffee cup, a notebook, and a mouse. The desk is light-colored wood. The keyboard is on the left, the coffee cup is in the center, the notebook is on the right, and the mouse is on the far right. The background is a solid light yellow color.

# Retiree Insurance OPEB Plan Status

# Demographics

	Miscellaneous	Safety	Total
<b>No. of Active Employees</b>	112	56	168
Average Age	45.2	39.5	
<b>No. of Retired Employees*</b>	77	45	122
Average Age	71.5	64.8	
Average Retirement Age	59.3	49.5	
*Counts exclude retirees waiving coverage			

# OPEB Status

7.25% Assumed Discount Rate	6/30/2015	Projected 6/30/2016	Remaining Years
Actuarial Accrued Liability (AAL)	3,117,000	3,323,000	
Less: Actuarial Value of Assets	1,259,000	1,485,000	
Unfunded AAL	<b>1,858,000</b>	<b>1,838,000</b>	25
Funded Status	40%	45%	

Annual Required Contribution (ARC)	
2016-17	2017-18
229,000	237,000



Questions?