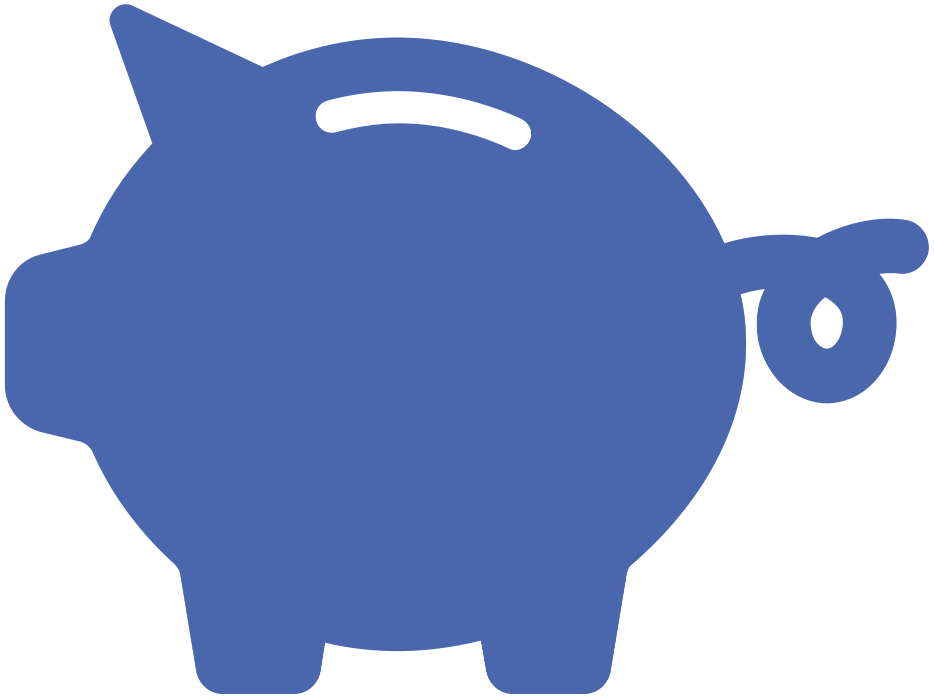
Pension 101

IFPTE Local 21 City of San Jose, 2018



What is a Pension?

Defined BENEFIT

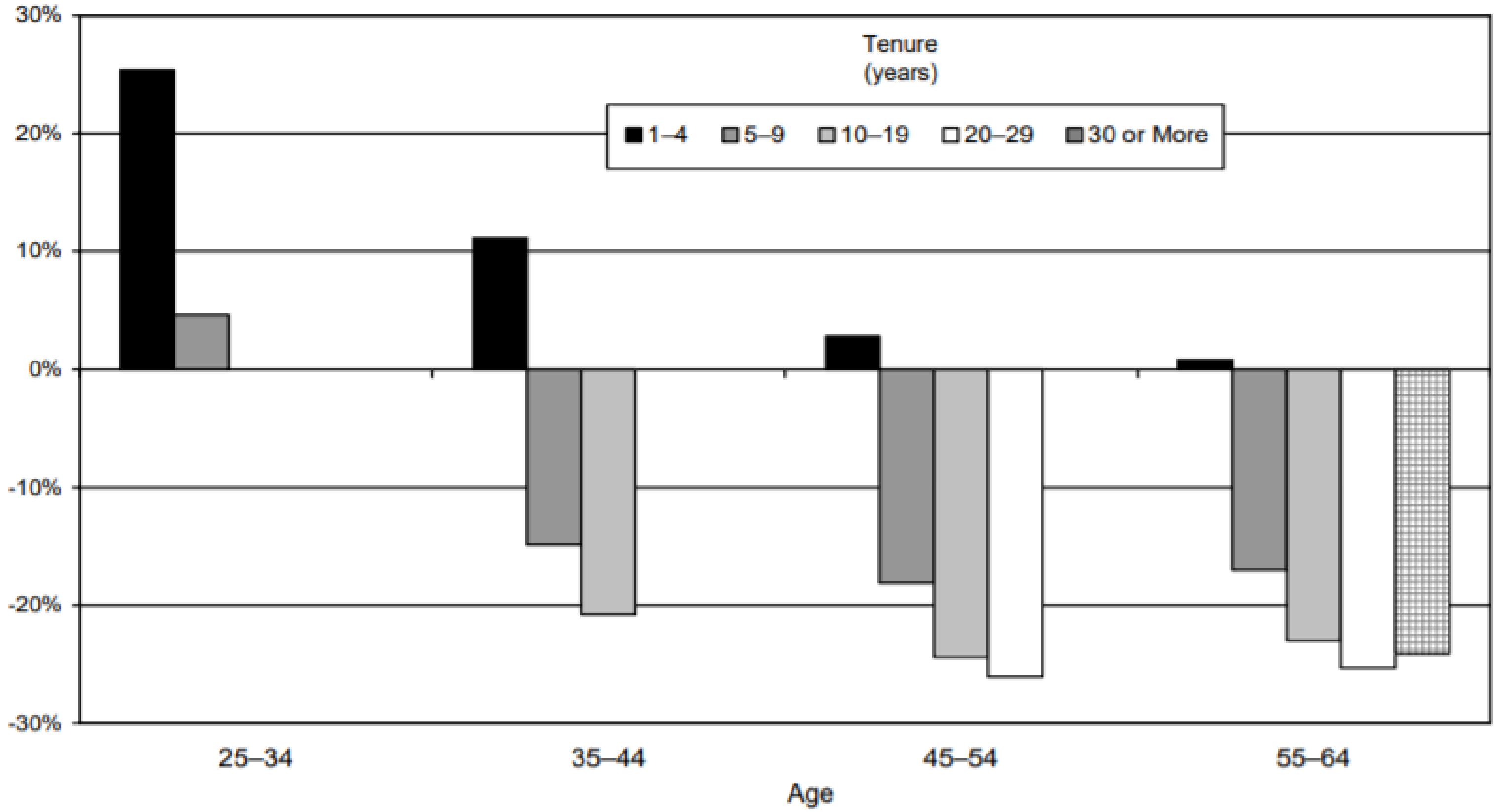
You and the employer pay into a fund throughout your career

When you retire, you get a guaranteed stipend, set according to a formula.

Defined Contribution	VS	Defined Benefit
RISK Individual fund means more volatility & low risk tolerance		**RISK** Pooled investments means less volatility & higher risk tolerance.
MANAGEMENT You manage the fund on your own, paying fees to Wall Street investment managers		**MANAGEMENT** Professionally managed by fund managers
COST Defined Contributions plans cost 2x as much as pensions to administer		**COST** Lower fees and overall higher investment returns.
BENEFIT No guaranteed benefit, what you have is what you get		**BENEFIT** Guaranteed benefit, secure form of retirement.

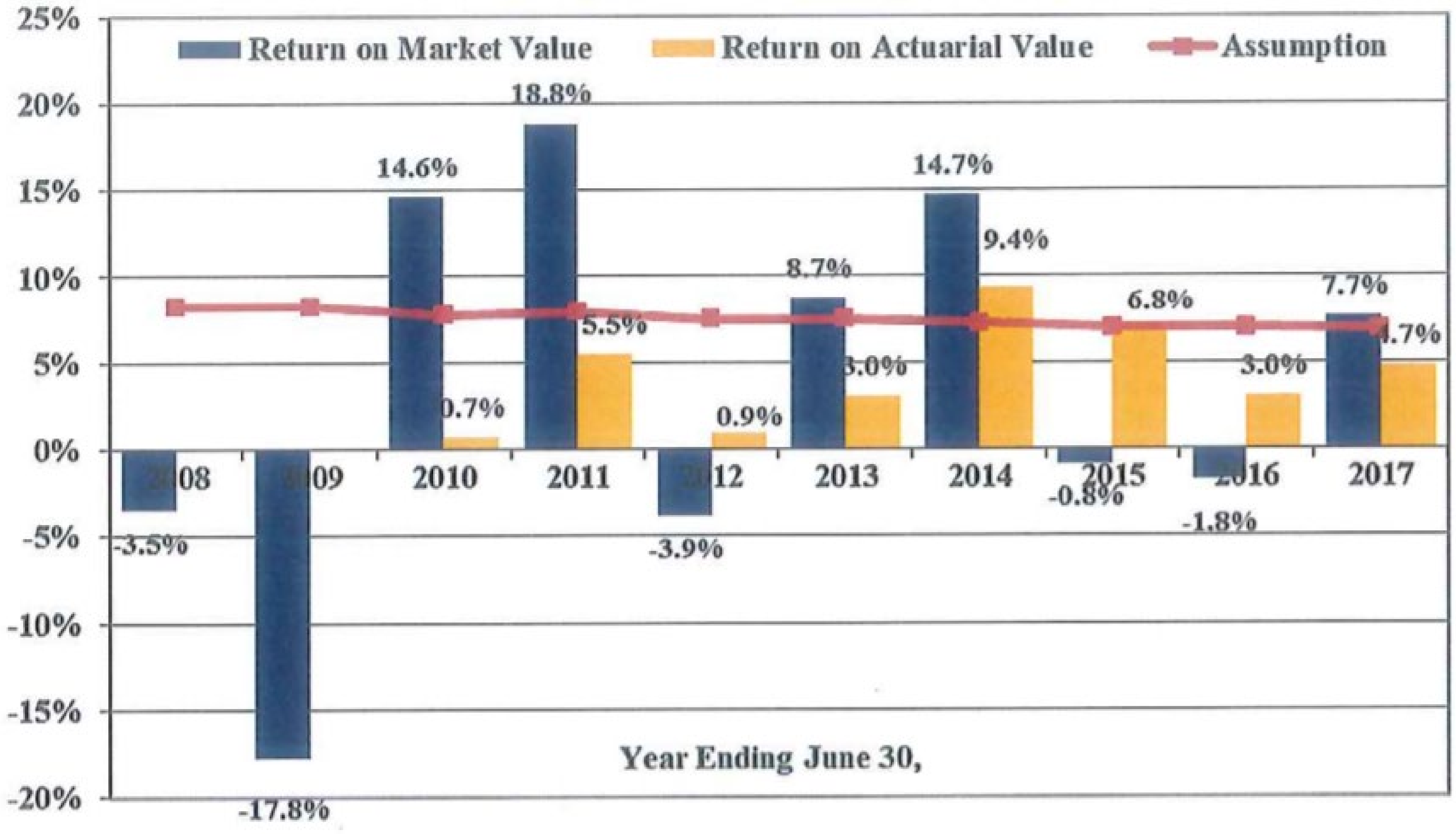
Figure 2

Change in Average Account Balances From Jan. 1, 2008–Jan. 20, 2009, by Age and Tenure, Among 401(k) Participants With Account Balances as of Dec. 31, 2007



Sources: 2007 Account Balances: Tabulations from EBRI/ICI Participant-Directed Retirement Plan Data Collection Project; 2008 and 2009 account balances: EBRI estimates. The analysis is based on all participants with account balances at the end of 2007 and contribution information for that year.

Historical Rates of Return



How does it work?

Step One
You're Hired!

- You've started a great career at a union job. Congratulations!
- Each month, you see a bit of money coming out of your check for your pension

Employees hired before 2013	Employees Hired After 2013
• 3/11ths of Normal Cost	• 50% of Normal Cost

Step Two
Building Years of Service

- Each year, as you win better wages and regular step increases through collective power, your pension benefit will go up.
- As you accumulate years of service, this will also increase your potential benefit.
- Both Tier 1 and Tier 2 require 5 years to “vest”

Pension Formulas

Tier 1

- 2.5% x Years of Service x Final Year's Salary (75% cap) at age 55

Tier 2

- 2.0% x Years of Service x Final Three Years Average Salary (70% cap) at age 62

Tier 1 Example

You reach age 55 with 30 years of service in the city

Your final salary is $100,000

2.5% x 30 x $100,000 =

$75,000 per year

Tier 2 Example

You reach age 62 with 30 years of service

Your compensation for your last three years

- $100,000
- $103,000
- $106,090

Average: $103,030

2.0% x 30 x $103,030 =

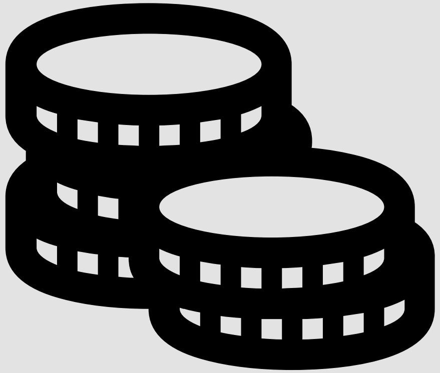
$61,818 per year

Step Three RETIREMENT

Once you officially retire, you begin receiving benefits according to the formula we just described

Step Four

- You enjoy a happy, work-free life with your family
- You also enjoy cost of living adjustment so that your pension keeps pace with inflation:
  - Tier 1 – 3% COLA
  - Tier 2 – Either CPI-U or 2%, whichever is lower. Those with less than 26 years of service will have a pro-rated maximum COLA (1.25%-2.0%)



How do you Fund a Pension?

MARKETS

The Pension Hole for U.S. Cities and States Is the Size of Germany's Economy

Many retirement funds could face insolvency unless governments increase taxes, divert funds or persuade workers to relinquish money they are owed

Opinion

Walters: Pension fund earnings keep rising — so why still crushing debts?

Schools, local governments are stressed despite California's booming economy and tax revenues surpassing projections.

Pension costs are threatening public services all over California. It has to stop.

BY CHUCK REED
Special to The Bee

What you've Probably Heard about Pensions…

California teacher pension debt swamps school budgets

By Jessica Calefati | July 22, 2018 | K-12 EDUCATION

News

Will San Jose's pension costs consume revenue from new taxes?

Start with the Basics…

What is in the pension fund?

- Employer contributions
- Employee Contributions
- Investment Returns

		2017
Receivables	$	68,585
Investments at fair value		1,918,487
Capital assets		1,448
Total Assets		**1,988,520**
Current liabilities		15,728
Total Liabilities		**15,728**
Plan Net Position	**$**	**1,972,792**

Numbers in Thousands

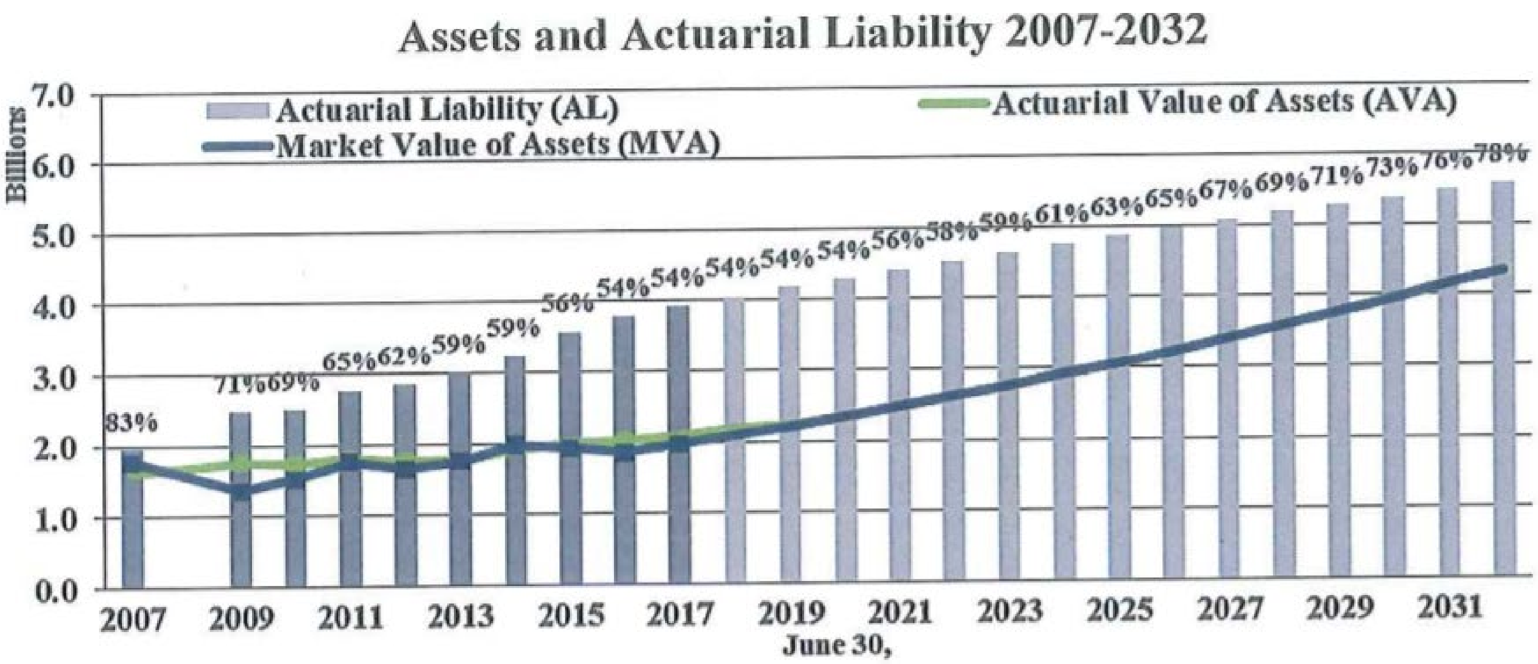
Important Pension Terms

- Funded Ratio
- Normal Cost
- Discount Rate
- Unfunded Actuarial Liability (UAL)
- Annual Required Contribution (ARC)

Funded Ratio

Value of Assets over *Actuarial Liabilities*

What it is NOT: an indication of the health of the fund



Normal Cost

- Projected cost of providing retirement benefits for a current, active employee in one year, minus expected investment earnings
- To make an estimate of future benefit costs, need to make assumptions about:
  - Years of service at retirement
  - Age at retirement
  - Final salary
  - Investment returns
  - Mortality
- Normal Cost + Investment Returns = Total Cost of future Benefits for One Year

Discount Rate

Table I-3
Changes in Unfunded Actuarial Liability

	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
Discount Rate	7.75%	7.95%	7.50%	7.50%	7.25%	7.00%	7.00%	6.875%	6.875%	
Source										
AVA (G)/L	$ 86.5	$ 124.1	$ 82.2	$ 119.3	$ 76.5	$ (39.7)	$ 3.6	$ 81.5	$ 44.6	$ 578.7
Liability (G)/L	62.2	(60.4)	(98.0)	(6.5)	(0.1)	16.9	38.2	36.0	16.6	4.8
Assumption Changes	228.8	(59.4)	187.5	0.0	63.7	103.4	191.5	60.2	(15.6)	760.2
Benefit Changes	0.0	0.0	0.0	(43.1)	0.0	0.0	0.0	0.0	13.8	(29.3)
Contributions	14.0	47.0	28.9	26.8	12.4	12.2	8.8	8.8	11.1	170.0
Total UAL Change	$391.5	$ 51.4	$200.6	$ 96.5	$152.5	$ 92.8	$242.1	$186.6	$ 70.5	$1,484.4

Dollar amounts in millions

- Used to "Discount" the Normal Cost Calculation and the Unfunded Liability
- When the Discount rate is lowered, Normal Cost and Unfunded Liability go up
- Discount Rate should be based on historical experience


Historical Membership Counts
In Pay Status
Vested Terminated
Tier 2 Actives
Tier 1 Actives
In Pay per Active
Count
Number of In Pay Members per Active Member
Valuation Year
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2,426
2,691
2,930
3,111
3,428
3,602
3,711
3,800
3,901
4,003
4,115
438
673
719
732
869
967
1,001
1,071
1,145
1,206
1,352
238
528
873
1,135
1,419
4,148
3,942
4,079
3,818
3,274
3,076
2,856
2,593
2,363
2,162
1,991

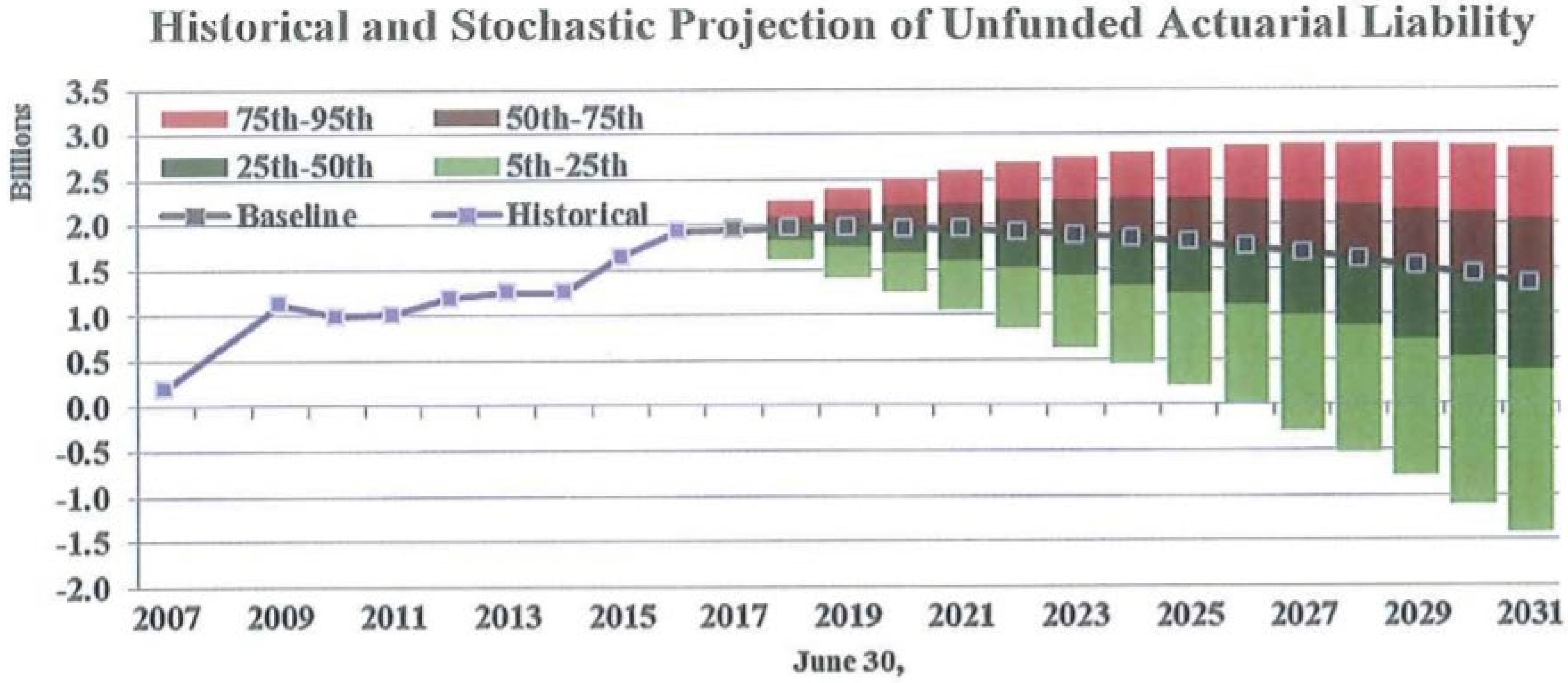
Unfunded Actuarial Accrued Liability (UAAL or UAL)

UAL occurs when the projected cost of future benefits for active employees surpasses projected fund assets

If Normal Cost calculations were exactly correct, we would have no unfunded liabilities

What creates UAL?

- Unexpected changes in investment performance
- Changes in retiree life expectancy
- Selling investments at inopportune times to meet obligations


Historical and Stochastic Projection of Unfunded Actuarial Liability
Billions
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
75th-95th
50th-75th
25th-50th
5th-25th
Baseline
Historical
2007
2009
2011
2013
2015
2017
2019
2021
2023
2025
2027
2029
2031
June 30,

Annual Required Contribution

- In order to pay off UAL, Actuaries an fund managers create a schedule to pay off the unfunded debt
  - This is called “amortization”
- Total amount isn’t the most important thing: having a plan to pay it off is
- When calculating the total Employer Contribution, actuaries add an additional amount to pay off the unfunded liability over time
- **Employer Portion of Normal Cost + Amortized Payment of UAL = Annual Required Contribution**

Any Questions?