

September 9, 2009

TO: IPERS Benefits Advisory Committee and Investment Board  
FROM: Donna M. Mueller, CEO  
RE: Milliman's Long-Term Funding Presentation

Please find attached Milliman's preliminary presentation on the review of the impact that various plan design changes may have on the funding status of the IPERS Trust Fund. This process started last winter when it became obvious that the current recession was unlike anything the Trust Fund had previously experienced. There was (and still is) concern regarding the recession's impact on the long-term funding of benefits.

In April, IPERS' actuary, Milliman, met with the Benefits Advisory Committee (BAC) to discuss the projected impact of an investment loss in the range of -25 percent for fiscal year 2009. It was clear that no action in response to this market loss would result in an ever increasing unfunded actuarial liability and a decreasing funding status. The BAC discussed the range of maximum contribution rates that would be reasonable to request of members and employers. The next step was to look at a benefit package that could be afforded within the contribution rates, along with a payment on the unfunded actuarial liability that would work towards fully funding the pension system.

The attached presentation includes the preliminary results of modeling the BAC's suggested contribution rates and benefit changes. The modeling used the actual fiscal year investment return of -16.27 percent. The results discussed in the presentation are still subject to further peer review within Milliman. The presentation is intended to assist the BAC and IPERS in determining those particular areas that should proceed to more in-depth study and stochastic modeling. A recommendation on any changes to IPERS plan design can come only after further review and further stress testing. None of the graphs or comments within this presentation should be considered as definitive plan design changes.

# Long-Term Funding Presentation to the IPERS Benefit Advisory Committee

Presented by:  
Patrice A. Beckham, F.S.A.

September 14, 2009



# Background

Unprecedented market losses in last fiscal year

- FY2009 return of -16.27%
- Assumed return of +7.5%
- Significant impact on long-term funding of retirement systems
  - Concern over declining funded ratios coupled with increasing contribution rates
  - Sustainability of current benefit package with no changes
  - Concern is with regular membership, not Special Services

# *Estimated 2009 Valuation Results – Regular Members*

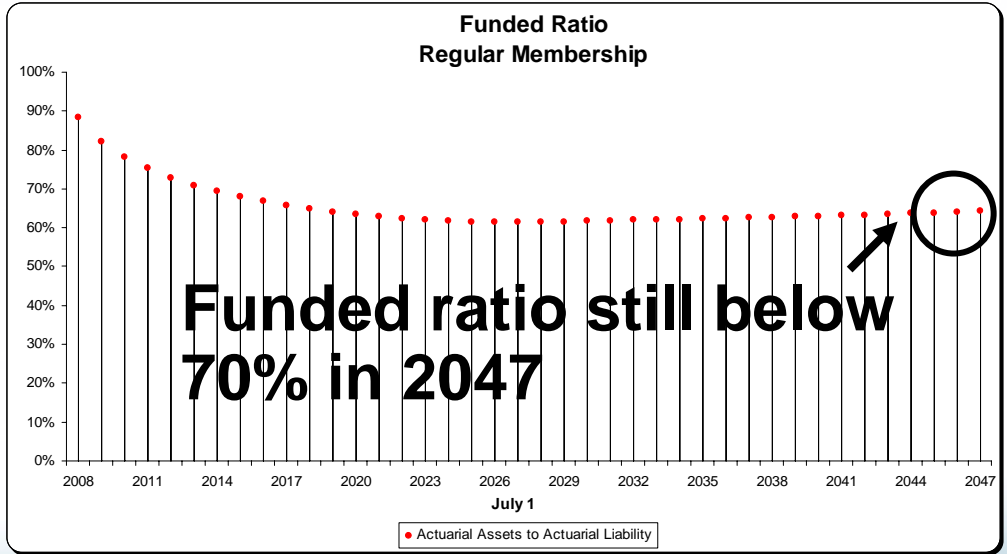
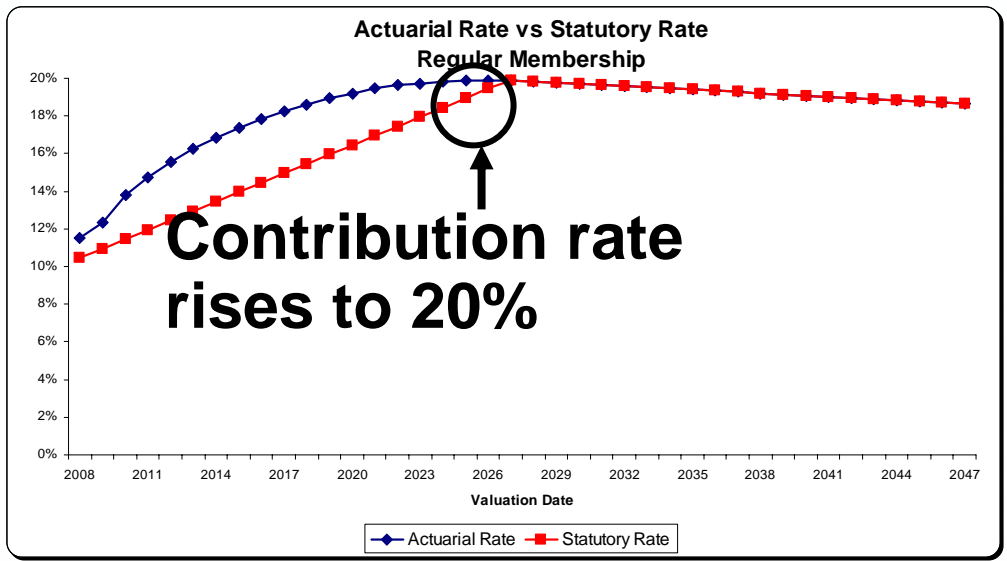
		2009 Estimates	
	<u>2008</u>	<u>Actuarial Value</u>	<u>Market Value</u>
UAL	\$2.7B	\$4.4B	\$7.7B
Normal Cost	9.90%	9.92%	9.92%
UAL Payment	<u>2.44%</u>	<u>3.93%</u>	<u>6.98%</u>
Total	12.44%	13.85%	16.90%
Statutory	10.95%	11.45%	11.45%
Shortfall	1.39%	2.40%	5.45%

# *Long-Term Funding Concerns*

- Impaired ability to weather additional market volatility
  - Decline in funded ratio weakened system's funding
  - Another market downturn could have a significant negative impact
- Cap on contribution rate increase will delay the recovery for the regular membership
- Is current benefit package sustainable with reasonable contributions?
  - No cap in law now
  - Reality is that some maximum level exists

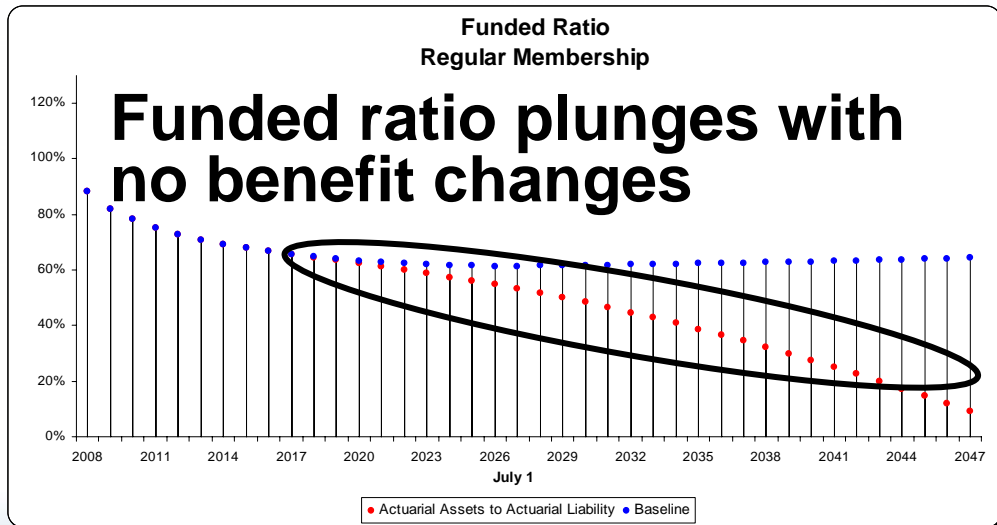
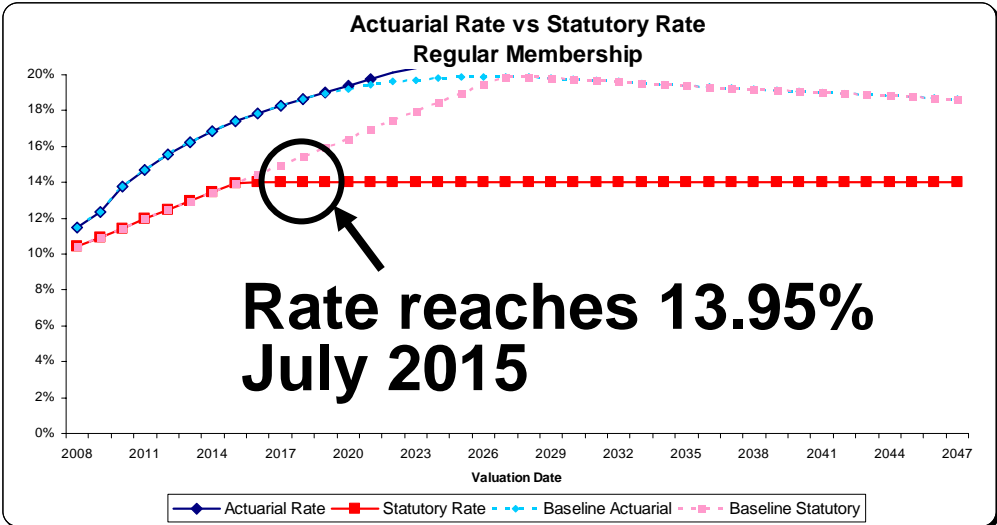
# Current Baseline

- Current benefits
- 30 yr open amortization
- Contribution rate
  - No cap
  - Annual increase limit 0.5 percentage point



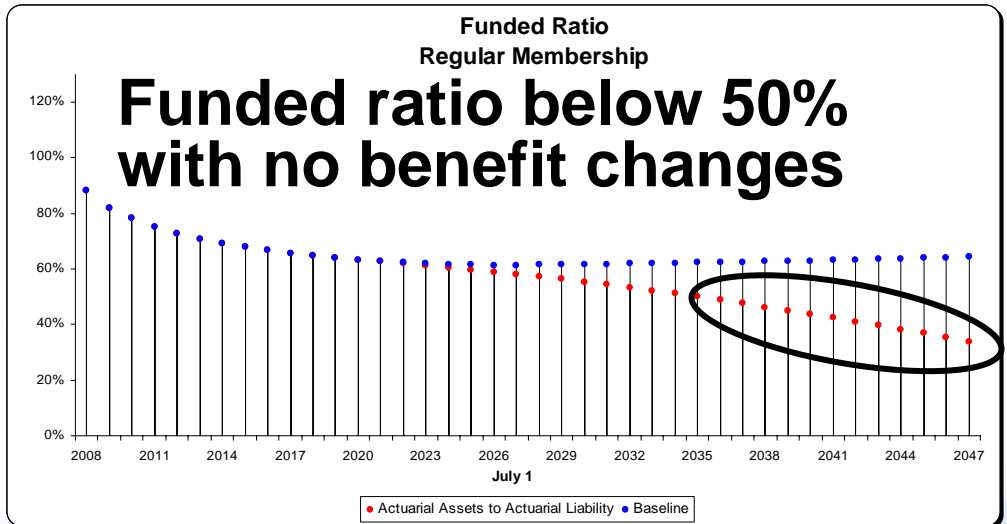
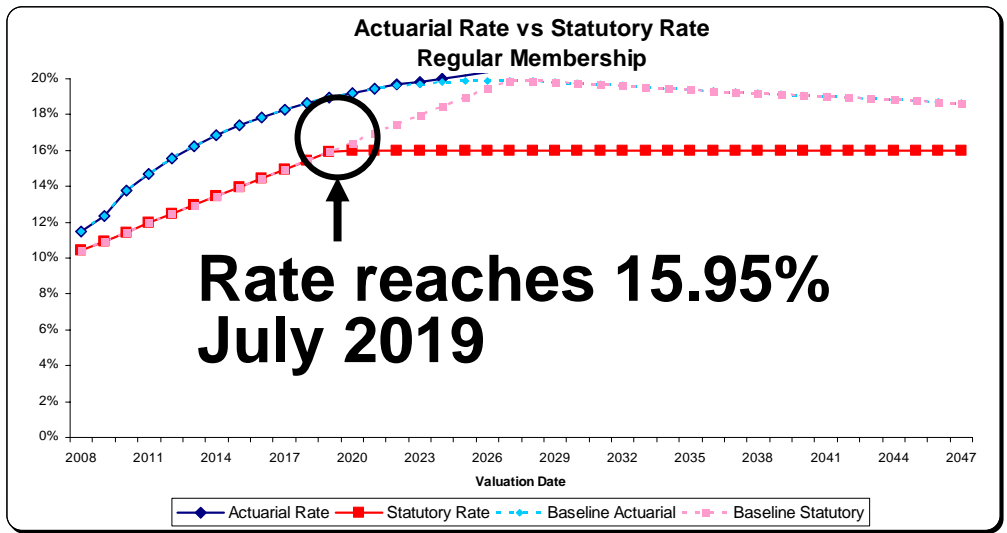
# Baseline 14% Rate

- Current benefits
- 30 yr open amortization
- Contribution rate
  - 14% cap
  - Annual increase limit 0.5 percentage point



# Baseline 16% Rate

- Current benefits
- 30 yr open amortization
- Contribution rate
  - 16% cap
  - Annual increase limit 0.5 percentage point



# Possible Market Rebound?

To make up for lost ground

- 40% return in FY2010 and 7.5% each year after, *or*
- 13% for each of the next 5 years and 7.5% each year after
- Brings IPERS back to where projections were on June 30, 2008

Not impossible, but highly unlikely

Does not appear prudent to rely on future market returns above assumed rate of return to solve problem

# What Can Be Done?

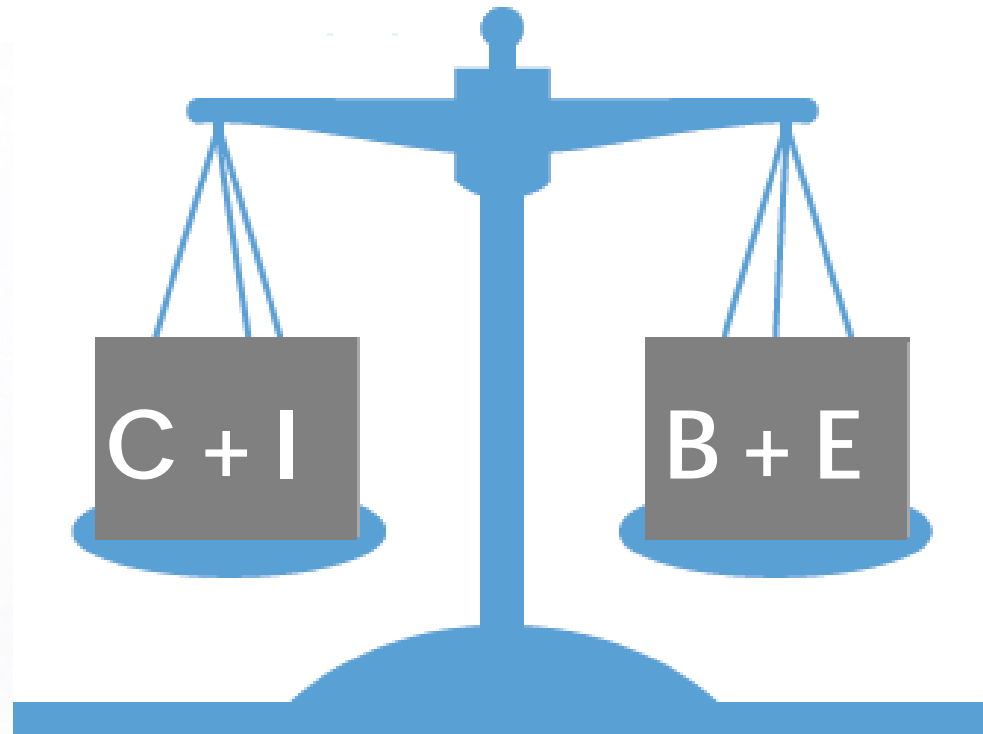
$$C + I = B + E$$

C = contributions

I = investment income

B = benefits

E = expenses



# Considerations

## Increase contributions

- More money sooner = lower future contribution rates
- Recognize practical limit on future contribution rates

## Reduce future benefits

- Key cost factors
  - How much (multiplier)
  - When benefits are paid (retirement eligibility)
- Trend toward later “normal retirement”
  - People living longer
  - Retirement period extended

# Considerations

Applying benefit changes to current members

- Adds complexity

Applying benefit changes to only new members

- Creates inequities in the workplace
- Delays cost impact

# Plan Provisions

## Current

**Alternative**  
Transition rules apply.  
See slides 22–25.

**Normal Retirement (NRA)**  
*Eligible for unreduced  
monthly benefit*

Age 65  
Rule of 88  
Rule of 62/20

Age 65

**Early Retirement (ERA)**  
*Eligible for monthly  
benefit reduced by ERF*

Age 55 with  
4 years of  
service

Age 55 with  
5 years of  
service

**Early Retirement Factor  
(ERF)**

3% per year  
from NRA

Average 6%  
per year from  
NRA

# Plan Provisions

## Current

## Alternative

Transition rules apply.  
See slides 22–25.

Benefit Multiplier

2% yrs 1-30  
1% next 5 yrs  
Max = 65%

X% all yrs  
*(varies by plan design)*  
No Max

Final Average Salary (FAS)

High 3

High 5

Vesting

4 years  
Age 55 and  
active

5 years

# Goals of Study

Develop new plan designs

- Move system toward full funding (closed 30 year amortization period)
- Maximum total contribution rate of 14% or 16% (member and employer)

Highest affordable multiplier with rates of 14% or 16%

- Apply new multiplier and FAS 5 to all members
- Start date of 6/30/12

Other benefit changes

- All changes applied to all new members
- Varying transition rules for current members

# ***Contribution rate 14% (member and employer)***

## Plan Design 14–A

- All: Lower multiplier; FAS 5
- New: Age 65; Vest 5; ERF 6%

## Plan Design 14–B

- All: Lower multiplier; FAS 5
- New and current under age 55 with less than 20 years of services: same as new in 14–A
- Current under age 55 with 20 years of service: transition to later normal retirement. See page 24.
- Current age 55 and older: no changes other than multiplier and FAS

# ***Contribution rate 16% (member and employer)***

## **Plan Design 16–A**

- All: Lower multiplier; FAS 5
- New: Age 65; Vest 5; ERF 6%

## **Plan Design 16–B**

- All: Lower multiplier; FAS 5
- New and current under age 55 with less than 20 years of services: same as new in 16–A
- Current under age 55 with 20 years of service: transition to later normal retirement. See page 24.
- Current age 55 and older: no changes other than multiplier and FAS

# Plan Design 14-A

All

Contribution rate 14%

Multiplier 1.2%

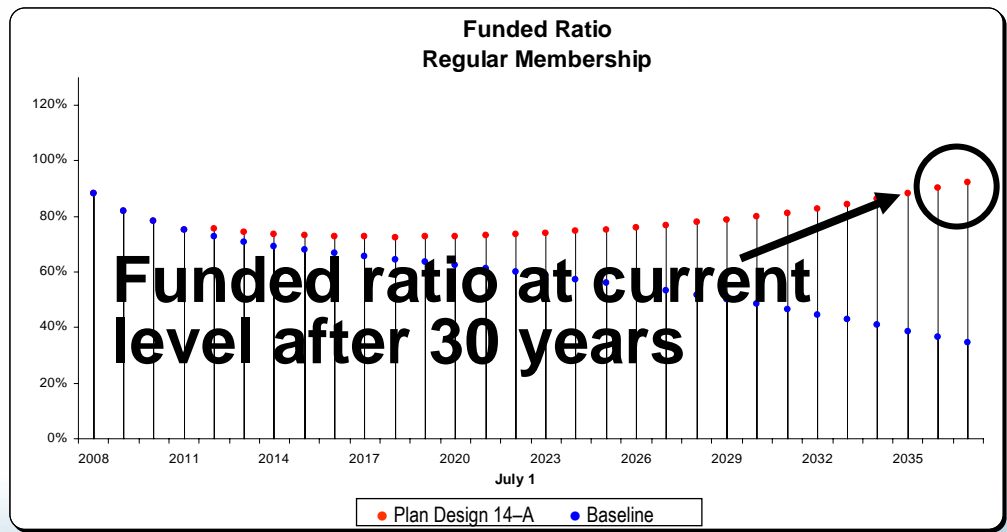
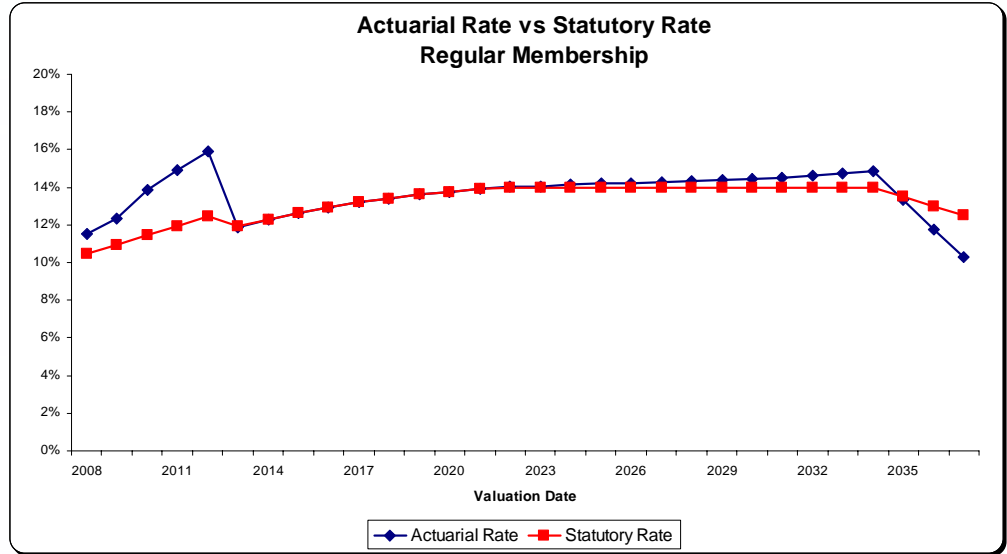
FAS 5

New members

65; Vest 5;

ERF 6%

*Smallest impact on current members*



# Plan Design 14-B

All

Contribution rate 14%  
Multiplier 1.6%; FAS 5

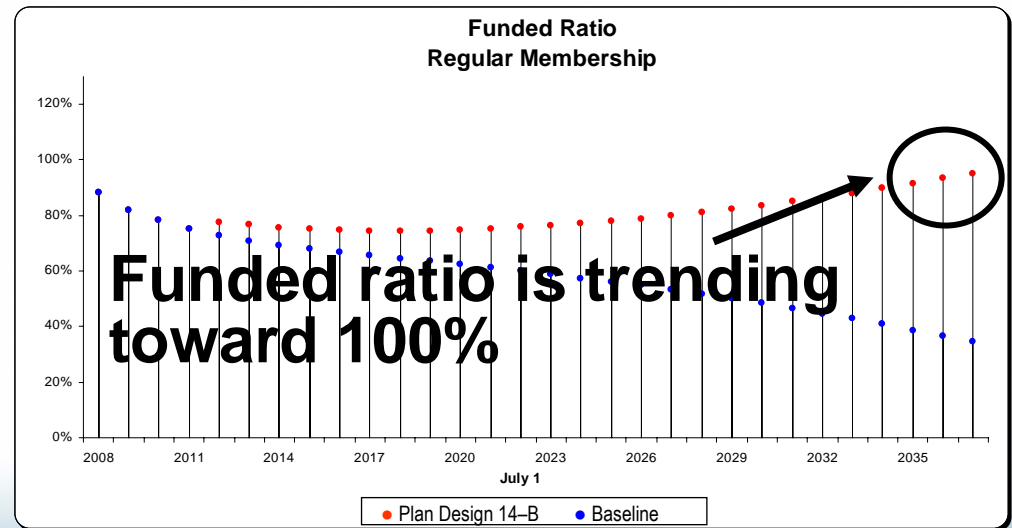
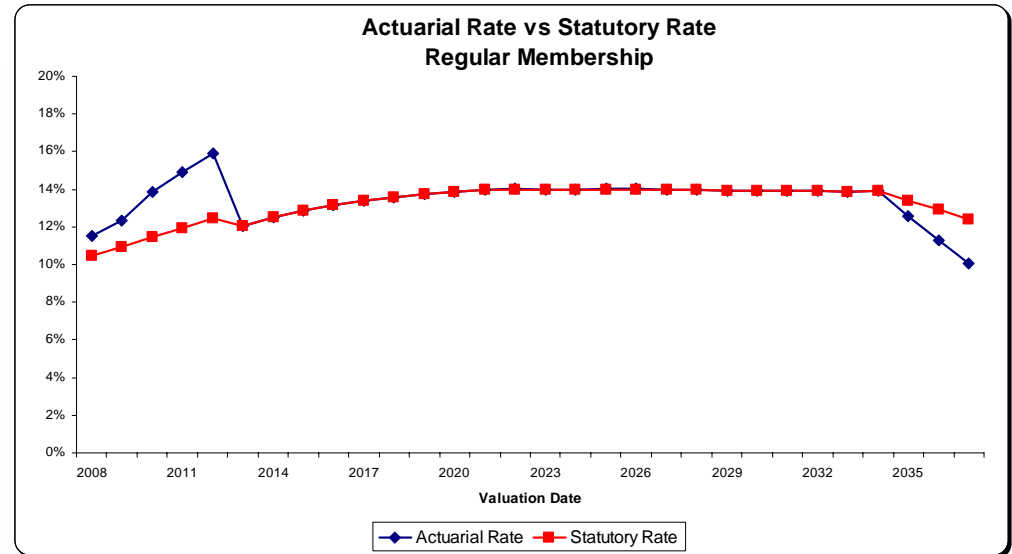
New and current

65; Vest 5; ERF 6%

*Except*

20 YOS transition to  
Rule of 88 and 62/20

Age 55 and older



# Plan Design 16-A

All

Contribution rate 16%

Multiplier 1.4%

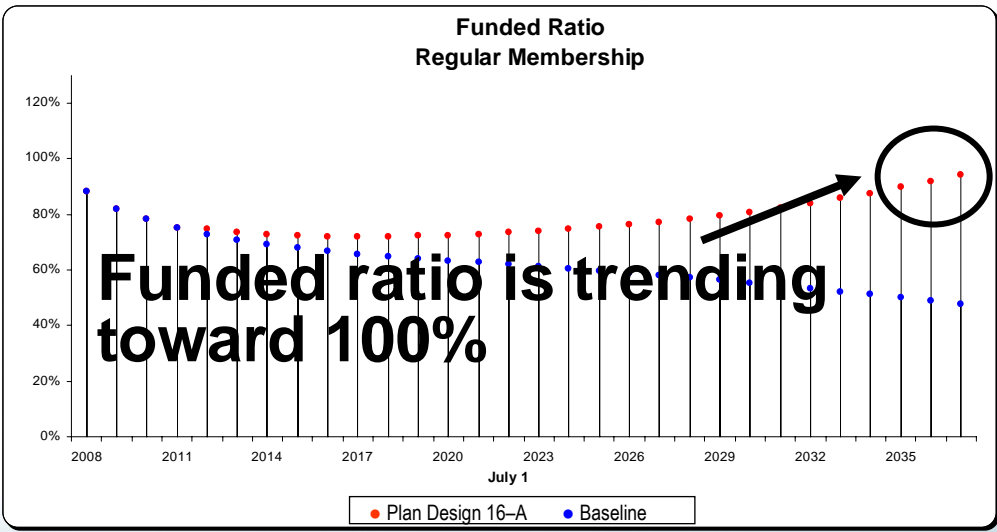
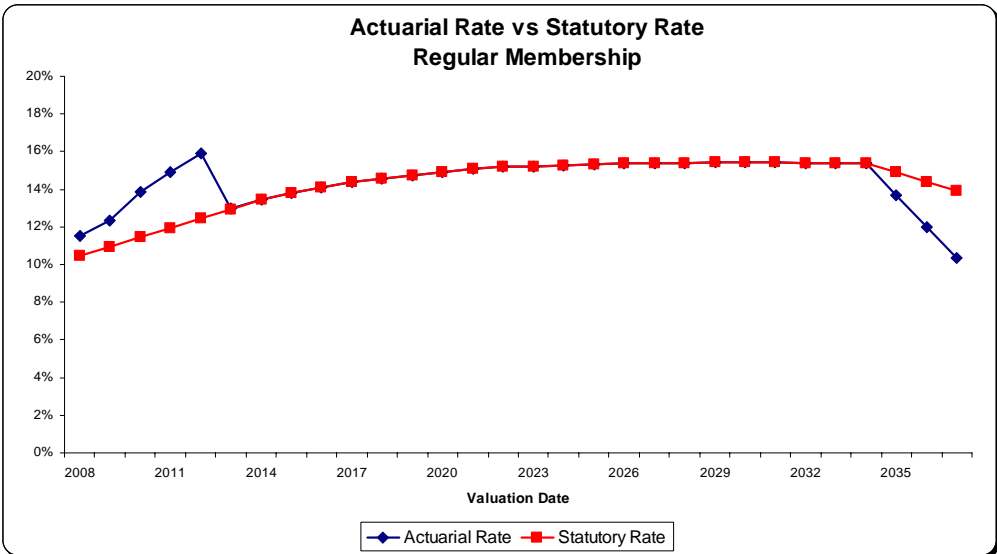
FAS 5

New members

65; Vest 5;

ERF 6%

*Smallest impact on current members*



# Plan Design 16-B

**All**

Contribution rate 16%  
Multiplier 1.8%; FAS 5

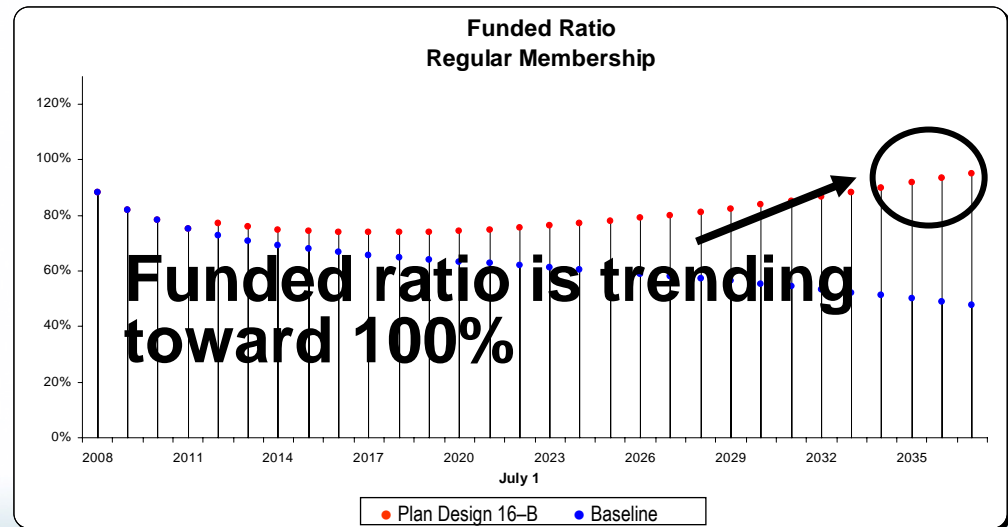
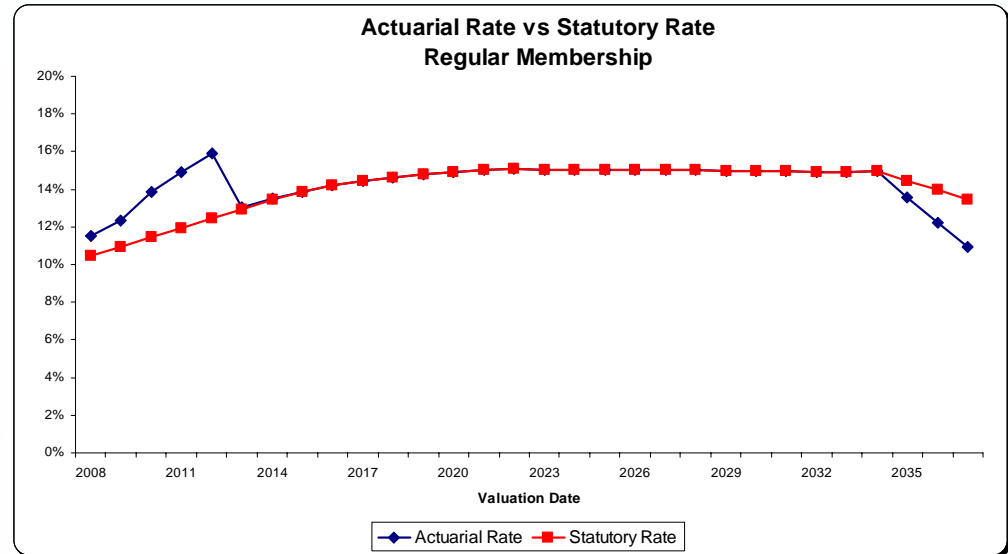
**New and current**

65; Vest 5; ERF 6%

**Except**

20 YOS transition to  
Rule of 88 and 62/20

Age 55 and older



# *Transition for Certain Groups*

## No transition

- New members

## Transition rules

- Current members
- Benefits already earned
- Give current members time to plan

# *Change in Benefit Multiplier*

- Most straightforward and easiest to handle
- Applies to all members, including those protected
- Years before 6/30/2012 at current level  
(2% first 30 years and 1% next 5 years)
- Lower multiplier outlined in new plan design for all years of service earned after 6/30/2012

## ***Change in Vesting***

- If vested on 6/30/12, remain vested
- If not vested under current rules on 6/30/12, must meet new vesting schedule of 5 years

## ***Change in Final Average Salary***

Current member gets greater of:

- 1) High 3 final average salary computed at 6/30/12
- 2) High 5 final average salary computed at retirement/termination

# Transition Normal Retirement Age

## Plan B Transitional Retirement Protection

- New provision (NRA = 65) applies to all *except*:
  - Members age 55 or older have current NRA
  - Members under age 55 with 20 YOS *have*
    - Rule 88 or 62/20 based on YOS at 6/30/2012
    - Service frozen; may “grow” into age requirement
    - Retain 3% ERF if benefits start before NRA

# Impact of Retirement Provision Protection-Examples Transition in Normal Retirement Age (Plan Design B)

	Ex 1	Ex 2	Ex 3	Ex 4
Age at 6/30/12	50	55	50	45
YOS at 6/30/12	30	29	21	10
NRA (old+add YOS)	55	57	59	62
NRA (service frozen)	58	57	62	65

Service frozen at 30 yrs  
Age into Rule of 88 at age 58

No change since age 55  
on 6/30/2012

Service frozen  
at 21 yrs  
Age into Rule  
of 62/20

## *Next Steps*

- Discuss alternatives and reduce options to be studied further
  - Stress testing
  - Stochastic modeling
- Report back at next meeting with those results and re-evaluate plan designs