# Core Fund Annuity Adjustment Projections Joint Meeting 

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## Current Value of Annuities*

| If You <br> Retired <br> in | A \$1,000 <br> Core <br> Annuity is <br> Receiving | The <br> Annual <br> Rate of <br> Increase is | A \$1,000 <br> Variable <br> Annuity is <br> Receiving | The <br> Annual <br> Rate of <br> Increase is | The <br> Annual <br> Change in <br> CPI is |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2009 | $\$ 1,047$ | $0.9 \%$ | $\$ 1,716$ | $11.4 \%$ | $2.1 \%$ |
| 2004 | $\$ 1,047$ | $0.4 \%$ | $\$ 1,207$ | $1.9 \%$ | $2.4 \%$ |
| 1999 | $\$ 1,237$ | $1.4 \%$ | $\$ 1,020$ | $0.1 \%$ | $2.4 \%$ |
| 1994 | $\$ 1,653$ | $2.5 \%$ | $\$ 1,755$ | $2.9 \%$ | $2.4 \%$ |
| 1989 | $\$ 2,219$ | $3.2 \%$ | $\$ 2,408$ | $3.6 \%$ | $2.8 \%$ |

[^0]
## Change in Value of 1989 Annuity

(3,257 annuitants)


## Change in Value of 1994 Annuity (3,908 annuitants)



Change in Value of 1999 Annuity (6,032 annuitants)


## Change in Value of 2004 Annuity

 (7,337 annuitants)

## Change in Value of 2009 Annuity

 (7,990 annuitants)

## Annuity Liability by Year of Inception



## Annuity Adjustment Projections

## Assumptions

- Based on 2013 actual Core Trust Fund investment returns.
- Includes 2010-2013 investment gains and losses carried forward in the Market Recognition Account (MRA).
- Annuities will be increased if annuity reserve surplus provides at least a $0.5 \%$ increase.
- Annuities will be reduced if annuity reserve shortfall would require at least a $-0.5 \%$ adjustment.


## Assumptions (cont.)

- $0.4 \%$ per year is reserved for mortality improvement and other actuarial adjustments and is not available for annuity adjustments.
- Negative adjustments can only reduce increases granted in prior years. A core annuity cannot be reduced below the original value.


## Market Recognition Account

- Investment gains / losses are "smoothed" through the Market Recognition Account (MRA):
- The MRA is intended to give recognition to long-term changes in asset values while minimizing the impact of short-term fluctuations in the capital markets;
- Investment gains equal to the assumed rate (7.2\%) are recognized;
- The difference between actual gains or losses and the assumed rate is spread equally over 5 years.


## There is a $\$ 4.7$ billion investment

 gain to be recognized in future years, $\$ 1.2$ billion of it in 2014|  | Year to Be Recognized <br> (millions \$) |  |  |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Year <br> Earned | 2013 |  |  |  |  |  | 2014 | 2015 | 2016 | 2017 |
| 2014 |  | ??? | ??? | ??? | ??? |  |  |  |  |  |
| 2013 | 955 | 955 | 955 | 955 | 955 |  |  |  |  |  |
| 2012 | 793 | 793 | 793 | 793 |  |  |  |  |  |  |
| 2011 | $(936)$ | $(936)$ | $(936)$ |  |  |  |  |  |  |  |
| 2010 | 399 | 399 |  |  |  |  |  |  |  |  |
| 2009 | 1,288 |  |  |  |  |  |  |  |  |  |
| Totals | 2,499 | 1,211 | 812 | 1,748 | 955 |  |  |  |  |  |

The deferred investment gains will be allocated approximately $55 \%$ to the annuity reserve, $27 \%$ to the employer reserve and $18 \%$ to the member reserve.

## Annuity Adjustment Projections

- Projections...not predictions
- Only an actuarial valuation can accurately calculate the annuity adjustments
- Useful for anticipating the magnitude, not exact amount, of future adjustments


## A 7.2\% investment return in 2014 will result in an annuity adjustment between $3.1 \%$ and $3.5 \%$

|  | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SWIB Net Investment <br> Return | $13.6 \%$ | $7.2 \%$ | $7.2 \%$ | $7.2 \%$ | $7.2 \%$ |
| Effective Rate | $10.9 \%$ | $8.9 \%$ to <br> $9.3 \%$ | $8.4 \%$ to <br> $8.8 \%$ | $9.5 \%$ to <br> $9.9 \%$ | $8.5 \%$ to <br> $8.9 \%$ |
| Annuity Adjustment | $4.7 \%$ | $3.1 \%$ to <br> $3.5 \%$ | $2.6 \%$ to <br> $3.0 \%$ | $3.7 \%$ to <br> $4.1 \%$ | $2.8 \%$ to |

## Annuity Liability by Year of Inception <br> Projected to $12 / 31 / 2014$



## A 0\% investment return in 2014 will result in an annuity adjustment between 1.7\% and 2.1\%

|  | 2013 | $\mathbf{2 0 1 4}$ | 2015 | 2016 | 2017 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SWIB Net Investment <br> Return | $13.6 \%$ | $0 \%$ | $7.2 \%$ | $7.2 \%$ | $7.2 \%$ |
| Effective Rate | $10.9 \%$ | $7.3 \%$ to <br> $7.7 \%$ | $6.8 \%$ to <br> $7.2 \%$ | $7.9 \%$ to <br> $8.3 \%$ | $7.0 \%$ to <br> Annuity Adjustment |
| 4.7\% | $1.7 \%$ to <br> $2.1 \%$ | $1.2 \%$ to <br> $1.6 \%$ | $2.2 \%$ to <br> $2.6 \%$ | $1.3 \%$ to <br> A.7\% |  |

## Annuity Liability by Year of Inception <br> Projected to $12 / 31 / 2014$



## A -11.7\% investment return in 2014 will result in a negative annuity adjustment

|  | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SWIB Net Investment <br> Return | $13.6 \%$ | $-11.7 \%$ | $7.2 \%$ | $7.2 \%$ | $7.2 \%$ |
| Effective Rate | $10.9 \%$ | $4.7 \%$ to <br> $5.1 \%$ | $4.1 \%$ to <br> $4.5 \%$ | $5.2 \%$ to <br> $5.6 \%$ | $4.1 \%$ to <br> $4.5 \%$ |
| Annuity Adjustment | $4.7 \%$ | $-0.3 \%$ <br> to | $-0.9 \%$ <br> to | 0.0 | $-1.0 \%$ <br> to |
|  |  | $-0.7 \%$ | $-1.3 \%$ |  | $-1.2 \%$ |

## Annuity Liability by Year of Inception <br> Projected to $12 / 31 / 2014$



## Questions?


[^0]:    * Including annuity adjustments to be made effective April 1, 2014

