# Core Fund Annuity Adjustment Projections 

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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 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 | $\$ 1,083$ | $1.6 \%$ | $\$ 1,228$ | $4.2 \%$ | $1.5 \%$ |
| 2006 | $\$ 1,083$ | $0.8 \%$ | $\$ 1,061$ | $0.6 \%$ | $1.9 \%$ |
| 2001 | $\$ 1,083$ | $0.5 \%$ | $\$ 917$ | $(0.6 \%)$ | $2.1 \%$ |
| 1996 | $\$ 1,575$ | $2.3 \%$ | $\$ 1,489$ | $2.0 \%$ | $2.2 \%$ |
| 1991 | $\$ 1,990$ | $2.8 \%$ | $\$ 2,339$ | $3.5 \%$ | $2.3 \%$ |

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## Annuity Liability by Year of Inception



## Annuity Adjustment Projections

## Assumptions

- Based on 2015 actual Core Trust Fund investment returns.
- Includes 2012-2015 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 used for administrative expenses, primarily SWIB investment expenses
- $0.5 \%$ 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 $\$ 3.4$ billion investment loss to be recognized in future years

|  | Year to Be Recognized <br> (millions \$) |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Year <br> Earned | 2015 | 2016 | 2017 | 2018 | 2019 |
| 2016 |  | ??? | ??? | ??? | ??? |
| 2015 | $(1,346)$ | $(1,346)$ | $(1,346)$ | $(1,346)$ | $(1,346)$ |
| 2014 | $(243)$ | $(243)$ | $(243)$ | $(243)$ |  |
| 2013 | 953 | 953 | 953 |  |  |
| 2012 | 793 | 793 |  |  |  |
| 2011 | $(936)$ |  |  |  |  |
| Totals | $(779)$ | 157 | $(636)$ | $(1,589)$ | $(1,346)$ |

The deferred investment gains and losses 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 2016 will result in an annuity adjustment between 1.2\% and 1.6\%

|  | 2015 | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | 2019 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SWIB Net Investment <br> Return | $(0.4 \%)$ | $7.2 \%$ | $7.2 \%$ | $7.2 \%$ | $7.2 \%$ |
| Effective Rate | $6.4 \%$ | $7.4 \%$ to <br> $7.8 \%$ | $6.4 \%$ to <br> $6.8 \%$ | $5.3 \%$ to <br> $5.7 \%$ | $5.6 \%$ to <br> $6.0 \%$ |
| Annuity Adjustment | $2.9 \%$ | $1.2 \%$ to <br> $1.6 \%$ | $0 \%$ to <br> $0.8 \%$ | $0 \%$ | $0 \%$ to |
|  |  |  |  |  | $0.5 \%$ |

## A 0\% investment return in 2016 will result in a 0\% annuity adjustment

|  | 2015 | 2016 | 2017 | 2018 | 2019 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SWIB Net Investment <br> Return | $(0.4 \%)$ | $0 \%$ | $7.2 \%$ | 7.2\% | 7.2\% |
| Effective Rate | $6.4 \%$ | 6.0\% to <br> $6.4 \%$ | $4.9 \%$ to <br> $5.3 \%$ | $3.7 \%$ to <br> $4.1 \%$ | $3.9 \%$ to <br> $4.3 \%$ |
| Annuity Adjustment | $0.5 \%$ | $0 \%$ | (0.5\%) <br> to <br> $(0.9 \%)$ | (1.2\%) <br> to | (1.1\%) <br> (1.6\%) |
| (1.5\%) |  |  |  |  |  |

## A -3.8\% investment return in 2016

 will result in a negative annuity adjustment|  | 2015 | 2016 | 2017 | 2018 | 2019 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SWIB Net Investment Return | (0.4\%) | (3.8\%) | 7.2\% | 7.2\% | 7.2\% |
| Effective Rate | 6.4\% | $\begin{gathered} 5.2 \% \text { to } \\ 5.6 \% \end{gathered}$ | $\begin{gathered} \text { 4.1\% to } \\ \text { 4.5\% } \end{gathered}$ | $\begin{gathered} 2.8 \% \text { to } \\ 3.2 \% \end{gathered}$ | $\begin{gathered} 3.0 \% \text { to } \\ 3.4 \% \end{gathered}$ |
| Annuity Adjustment | 0.5\% | (0.5\%) | $\begin{gathered} (1.3 \%) \\ \text { to } \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} (2.0 \%) \\ \text { to } \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} \text { (2.0\%) } \\ \text { to } \\ \text { (2.4\%) } \end{gathered}$ |

## Questions?


[^0]:    * Including annuity adjustments to be made effective April 1, 2016

