



STATE OF WISCONSIN  
Department of Employee Trust Funds  
Robert J. Conlin  
SECRETARY

Wisconsin Department  
of Employee Trust Funds  
PO Box 7931  
Madison WI 53707-7931  
1-877-533-5020 (toll free)  
Fax 608-267-4549  
etf.wi.gov

## Correspondence Memorandum

**Date:** November 12, 2018  
**To:** Audit Committee  
**From:** Ramona Yee, Internal Auditor  
Office of Internal Audit  
**Subject:** Annuity Estimate Advisory Review

**This report is for Committee review and discussion. No action is required.**

The Division of Retirement Services (DRS) requested the Office of Internal Audit (OIA) conduct an Advisory Review to evaluate the Wisconsin Retirement System annuity estimate calculation process for accuracy compared to the final annuity.

The business goals for preparing annuity estimates is to be within 90–100% of the final calculated amount and not overstated. The review determined that the DRS goal was met 88.6% of time and not met 11.4% of the time. Of the 11.4% of annuities where the goal was not met, 8.3% were overstated and 3.1% were understated. OIA found 4% of the variances analyzed were due to factors within DRS control.

OIA provided recommendations to help DRS achieve its business goals in the following areas: (1) DRS business goal criteria, and the reporting of progress toward the goal; (2) interest allocation process; (3) ETF system enhancements; (4) form used for annuity estimate calculations; and (5) member corrections to annuity estimate data.

OIA also shared positive results from our advisory work. We observed that DRS trust funds specialists were well trained and demonstrate the ability to understand complex annuity calculation policies and apply them to their work. We also observed staff were committed to ensuring accurate annuity calculations. When errors were identified, the specialists were quick to discuss process improvements to prevent recurring errors.

OIA did not require a formal management response to our recommendations because the work was performed as an Advisory Review; however, the Secretary's Office requested a DRS management response and will monitor progress in addressing the recommendations.

Staff will be at the Audit Committee meeting to answer any questions.

Attachment A: WRS Annuity Estimate Advisory Review PowerPoint presentation

Reviewed and approved by Yikchau Sze, OIA Director

Electronically Signed 11/12/18

Board	Mtg Date	Item #
AUD	12.13.18	4

# WRS Annuity Estimate Advisory Review

Mona Yee, Auditor

Office of Internal Audit



# Background

- DRS provides retirement benefit services to over 622,000 government employees and to over 1,500 state and local units of government.
- The MSB performs approximately 25,000 annuity estimate calculations each year. Estimates are good for one year.
- The Benefit Services Bureau (BSB) performs approximately 12,000 final annuity calculations each year.

# Review Objective

The Advisory Review objective is to:

- Evaluate the WRS annuity estimate calculation process for accuracy compared to the final annuity.
- Analyze variances between the estimate and final calculations to:
  - determine the main factors causing the variances,
  - assess key performance indicators to ensure the achievement of business goal, and
  - propose process improvements.

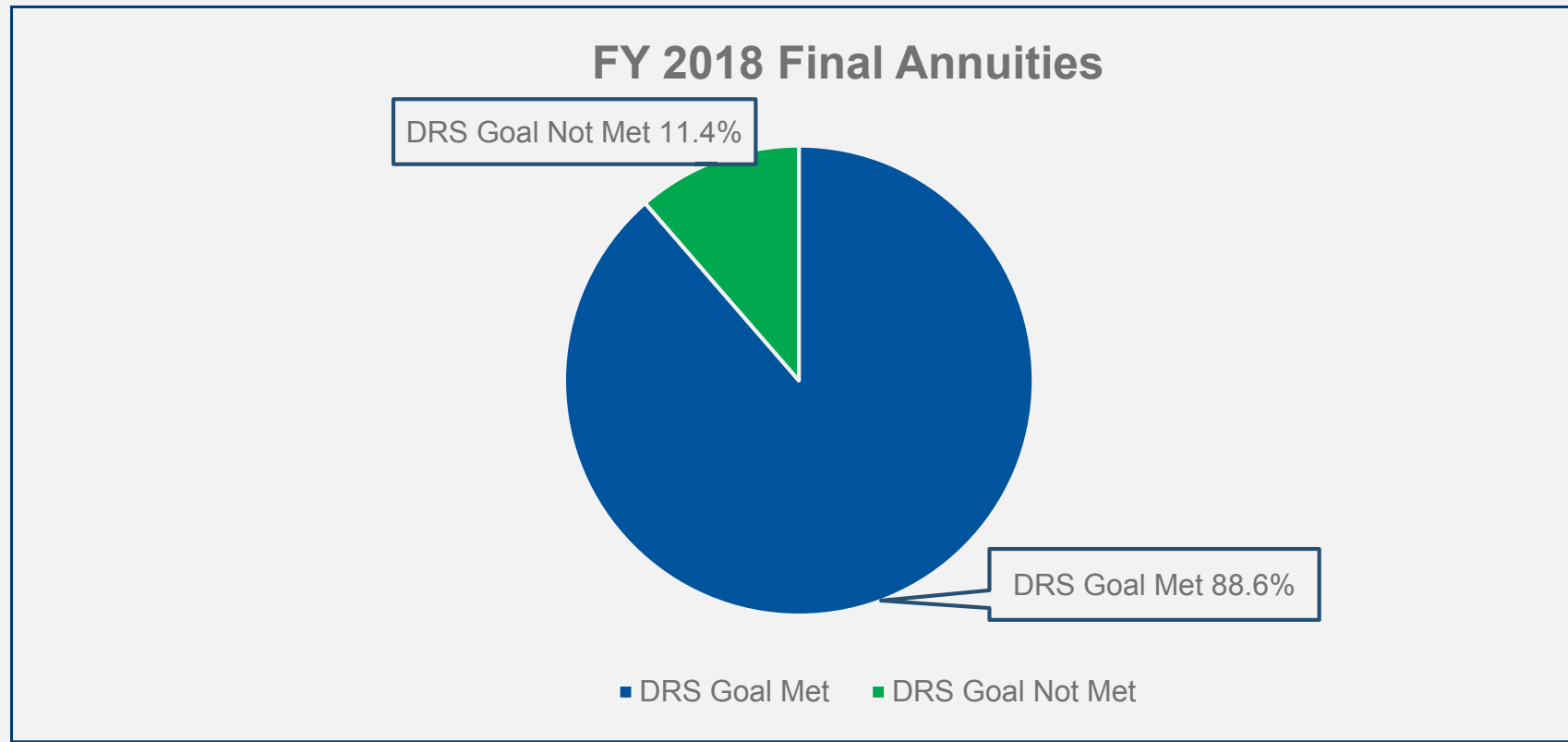
# Scope

- Our review focuses on final WRS annuity calculations, and the related estimate calculations, processed by DRS during fiscal year 2018 (July 1, 2017 through June 30, 2018).
- Lump sum payments are *not* included in audit scope.
- There were 8,451 final annuity calculations processed in fiscal year 2018 that met our review criteria.

# Results

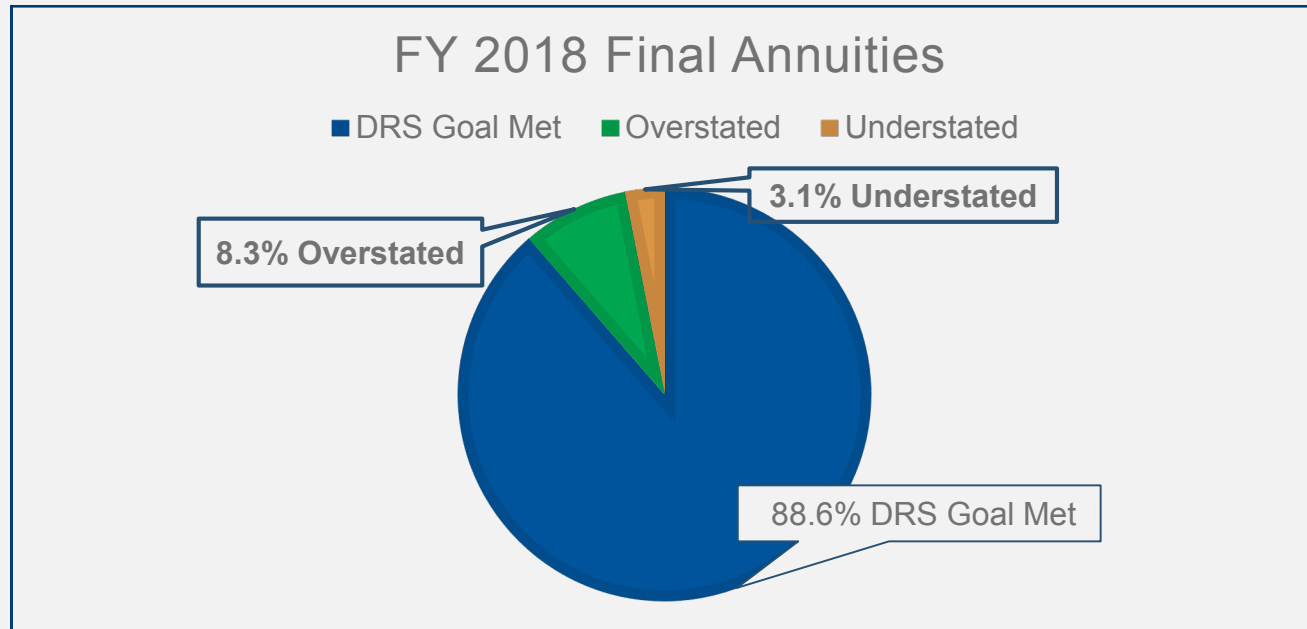
# Results

- DRS goal met 88.6% and not met 11.4% of the time.



# Overstated and Understated Annuities

- Of the 11.4% of annuities where DRS goal not met, 8.3% were overstated and 3.1% were understated.

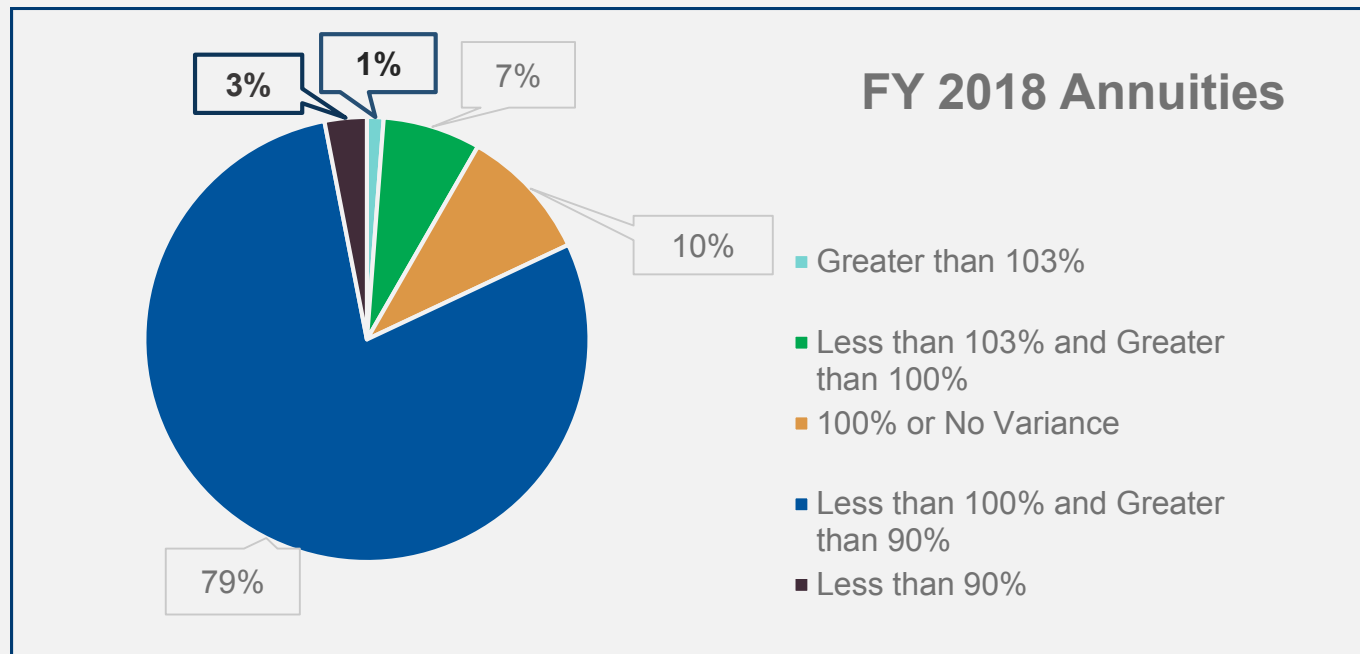


- See Appendix for description of overstated and understated annuities.



# OIA Analyzed Variances

- We analyzed all variances greater than 103% and less than 90% to determine the factor, or cause, of variance.
- This resulted in the review of 361, or 4%, of the FY 2018 annuities



# Positive Results

- Assuming a revised DRS goal of 103%, 1% of estimate calculations were overstated.
  - Only 0.1% of the overstated annuities were within DRS TFS control.
- 3.1% of estimates were understated.
  - Only .02% of the understated annuities were within DRS TFS control.

# Positive Results

- In working sessions with DRS TFSs we observed they are well trained and demonstrate the ability to understand complex annuity calculation policies and apply them to their work.
- We also observed DRS TFSs commitment to ensuring accurate annuity calculations. When errors were identified, TFS's were quick to discuss process improvements to prevent recurring errors.

# Factors Impacting Annuity Calculations

- Identified four main categories of factors impacting annuity calculations.
- Three of the factors were outside of DRS TFS Control

## Factors outside of DRS Trust Fund Specialists Control

### WRS Requirement or Process

- Interest Allocation
- Add-on Service
- Reciprocity
- Military Service
- Statutory Salary
- Actuarial Reduction

### Member

- Change in Payment Option
- Member Corrections
- Service Purchase

### Employer Corrections

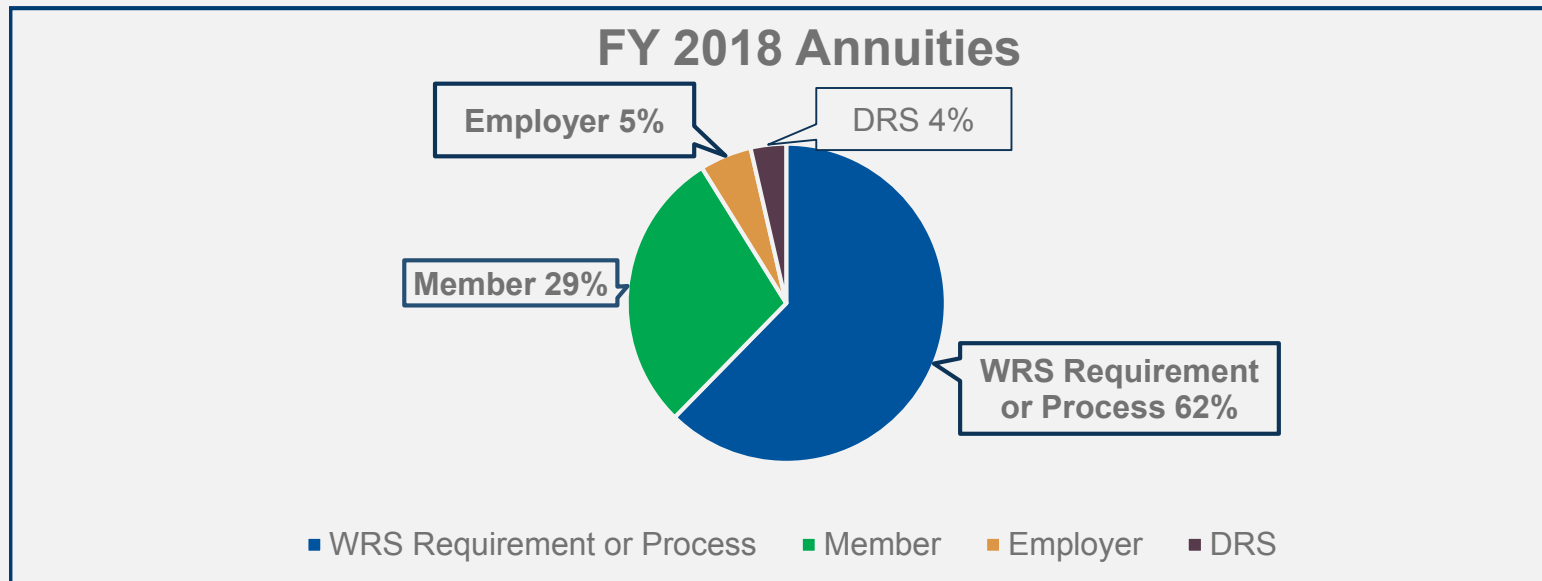
- Earnings
- Years of Service
- Employment Type

### DRS

- Manual Coding Errors
- Accuracy of Data

# OIA Analyzed Variances - Factors

- 96% of OIA analyzed variances were due to factors outside of DRS TFS control:
  - 62% of variances were the result of WRS process requirements
  - 34% of variances were the result of Member or Employer corrections



# Most Frequent Understated Factor Interest Allocation

- 3.1% of FY 2018 annuities were understated
- 83% of understated annuities were the result of DRS interest allocation process.
  - Interest applied based on two dates - *Date of Estimate* and *Effective Date of Annuity*.
  - If dates in same calendar year, a prorated portion of the assumed 5% interest rate is applied to the estimate.
  - If these dates in different years, no interest is applied to the estimate for the current calendar year, but actual interest will be included in the final calculation.

# Recommendations

# Revise Business Goal

*DRS should reassess their business goal to determine if it should include a level of overstatement.*

- DRS goal currently includes a level for understated estimates only.
- Given the manual effort involved in the calculation process it is realistic to expect some level of overstated estimates.
- The majority of the factors impacting the variances are outside of DRS TFSs control, such as interest allocation, and member and employer corrections.
- DRS results would align closer to goal.



# Evaluate and Report Out on Goal

*DRS should implement a process to assess the accuracy of annuity estimate calculations compared to the final calculation to evaluate progress in achieving their business goal.*

- As a result of our audit work, a query has been developed to facilitate periodic analysis.

*DRS should report out on the progress of meeting their business goal periodically on their scorecard.*

- DRS currently only monitors the goal of preparing estimates within 15 days of request and includes on scorecard.

# Reassess Interest Allocation Approach

*DRS should consider reassessing their approach for allocating interest to annuity estimate calculations to reduce understated estimates <sup>(1)</sup>.*

- Interest allocation accounted for 86% of understated variances analyzed.
- The current interest allocation process has been in effect since February, 2003.

<sup>(1)</sup>OIA acknowledges the impact of interest on estimate calculations is dependent on many factors outside of DRS's control, such as interest rates, the economy, timing of estimate request compared to final calculation, and the investment distribution between core and variable funds.

# Other Process Improvements to Consider

- *Implement enhancements to the ETF Extranet Screens to allow TFSs to complete estimate calculations more efficiently and to mitigate the risk of errors.*
- *Design the Data Entry Worksheet for WEBS Estimates Form ET-4555, to pre-populate Member data directly from ETF system and automatically perform mathematical calculations.*
- *Reassess policy which allows Members to provide earnings and years of service data for estimate calculations.*

# Appendix

# Overstated and Understated Annuities

- Explanation of Overstated and Understated Annuity results:

## Overstated Annuity

- Estimate - \$1,000/month
- Final - \$900/month
- Estimate Overstated by \$100, or 11% of Final
- Estimate is 111% of Final Calculation
- Always greater than 100%

## Understated Annuity

- Estimate - \$1,000/month
- Final - \$1,100/month
- Estimate Understated by \$100 or (9%) of Final
- Estimate is 91% of Final Calculation
- Always less than 100%

- A result of 100% means there was no variance between estimate and final calculation



**Questions?**

---

# Thank you

---



[wi\\_etf](#)



[etf.wi.gov](#)



ETF E-mail Updates



608-266-3285  
1-877-533-5020