

## City of Margate Employees Benefit Trust Fund

### Actuarial Valuation as of June 1, 2015



June 16, 2016



June 16, 2016

Board of Trustees City of Margate Employees Benefit Trust Fund Margate, Florida

#### RE: Actuarial Valuation as of June 1, 2015

**Dear Board Members:** 

We are pleased to present the actuarial valuation as of June 1, 2015 for the City of Margate Employees Benefit Trust Fund (the Plan). This report provides a review of the current funded status of the Plan, establishes the minimum funding requirements for the fiscal year ending May 31, 2016. No analysis of experience since the last valuation has been performed since the last valuation was as of June 1, 2007 and a significant change was made such that there are no new entrants to the plan effective October 1, 2010. In addition to providing the summary and derivation of actuarial findings, this report describes the data, assumptions, and methods used to create these results.

We understand that this valuation is not governed by Part VII, Chapter 112, Florida Statutes. Please notify us as soon as possible if this is not the case.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

We look forward to the presentation of these results to you in person and we are always available to answer any questions you may have.

Sincerely.

Chad M. Little, ASA, EA
Partner, Consulting Actuary

Mulho

Enrollment Number 14-6619

Paula C. Freiman, ASA, EA Partner, Consulting Actuary Enrollment Number 14-5796

#### **Table of Contents**

| Board Summary   | 1  |
|---|----|
| Summary of Principal Valuation Results                | 1  |
| Summary of Significant Events                         | 2  |
| Results Derivation                                    | 4  |
| Financial Information                                 | 4  |
| Present Value of Benefits                             | 7  |
| Accrued Liability                                     | 8  |
| Normal Cost   | 9  |
| Minimum Funding Requirement Calculations June 1, 2007 | 10 |
| Minimum Funding Requirement Calculations June 1, 2015 | 11 |
| Supplementary Information                             | 12 |
| Summary of Participant Data                           | 12 |
| Outline of Plan Provisions                            | 13 |
| Description of Assumptions and Methods                | 15 |
| Glossary of Actuarial Terms                           | 24 |

### 1 Board Summary

#### **Summary of Principal Valuation Results**

This report presents the results of the June 1, 2015 actuarial valuation of the City of Margate Employees Benefit Trust Fund in comparison to the results of the June 1, 2007 actuarial valuation, which we understand was the last valuation performed for the Fund.

#### **Minimum Funding Requirements**

| Fiscal Year Ending May 31,   | 2009  | 2016  |  |  |  |
|--|---|---|--|--|--|
| Total Minimum Required Contribution As a Dollar Amount As a Percent of Pay   | \$228,251<br>0.83%                                    | \$72,377<br>N/A                                     |  |  |  |
| Total Expected Contribution As a Dollar Amount As a Percent of Pay   | \$274,175<br>1.00%                                    | For Discussion                                      |  |  |  |
| Funded Status  |   |   |  |  |  |
| Year Beginning June 1, 2007 2015   |   |   |  |  |  |
| Unfunded Liability   |   |   |  |  |  |
| Accrued Liability Actuarial Value of Assets Unfunded Accrued Liability Funded Percentage   | \$3,325,742<br><u>1,578,623</u><br>1,747,119<br>47%   | N/A<br>N/A<br>N/A<br>N/A                            |  |  |  |
| Present Value of Benefits (PVB) Market Value of Assets Present Value of Benefits - Market Value of Assets Funded Percentage on PVB Basis | \$3,970,708<br><u>1,670,935</u><br>\$2,299,773<br>42% | \$4,487,694<br><u>4,110,692</u><br>\$377,002<br>92% |  |  |  |
|  |   |   |  |  |  |

#### **Key Assumptions**

| Valuation Date June 1,                      | 2007             | 2015             |
|---|------------------|------------------|
| Net Assumed Rate of Investment Return:      | 7.00%            | 7.00%            |
| Inflation:                                  | 3.00%            | 3.00%            |
| Mortality:                                  |                  |                  |
| Base Table                                  | RP-2000 Combined | RP-2000 Combined |
| Mortality Improvements - Fully Generational | Scale AA         | Scale BB         |
| Projection Year                             | 2001             | 2000             |
| Funding Method:                             | Entry Age        | Aggregate        |



#### **Summary of Significant Events**

Determination of the funded status of the Plan and minimum funding requirements are based on participant data, asset information, Plan provisions, actuarial methods and assumptions. Any significant events associated with these items are discussed in the following.

Most notably, we understand the last actuarial valuation was performed June 1, 2007. We recommend valuations be performed at least once every two years.

#### **Participant Data**

We received census data as of June 1, 2015. For members that were in the census data as of June 1, 2007 we used the date of birth provided for the June 1, 2007 valuation. We received only the year of birth for members who were not in the June 1, 2007 valuation and have assumed all were born January 1 of the year provided. There were five retirees with future commencement dates and we assumed that they are due benefits immediately effective June 1, 2015. Any members in DROP are assumed to retire immediately. Since no payroll information was supplied, there are no results provided on a percent of payroll basis.

There is a significant reduction in the number of participants in this June 1, 2015 valuation from that performed as of June 1, 2007 as the plan was closed to future new entrants effective October 1, 2010.

#### **Assets**

In the June 1, 2007 valuation, 96% of the portfolio was invested in stocks with a 15.4% net return achieved in the 12 month period ending May 31, 2007.

In this June 1, 2015 valuation, 86% of the portfolio was invested in stocks with a 7.1% net return achieved in the 12 month period ending May 31, 2015.

We have continued to assume a net investment return at 7.0% but recommend that the investment monitor provide information on the long-term expected net return that may be achieved.

#### **Plan Provisions**

Although the Plan document provided for review did not mention this, we understand that anyone hired after October 1, 2010 is not eligible for benefits under the Plan. We also understand that there are no member contributions and that the City has made annual contributions of 1% of total payroll (including employees not eligible for benefits).

#### Methods

In the June 1, 2007 valuation we computed the contribution payable for the fiscal year ending May 31, 2009. This June 1, 2015 valuation computes the contribution payable for the fiscal year ending May 31, 2016.

In the June 1, 2007 valuation a method was used to smooth asset gains and losses over a five year period. In the current valuation no asset smoothing method was employed.



#### **Assumptions**

We recommend the Board of Trustees obtain input from the investment monitor regarding the net assumed long-term rate of return on Plan investments to assure the 7.0% net assumed return is reasonable.

Any assumption regarding salary increases used in the prior valuation are not employed in the current valuation as no payroll information was provided and this is a level dollar benefit plan.

The mortality table was revised from the RP-2000 Combined Mortality Table with mortality improvements on a fully generational basis from 2001 using Scale AA to RP-2000 Combined Mortality Table with mortality improvements on a fully generational basis from 2000 using Scale BB.



## 2 Results Derivation

In this section, the assets and liabilities of the Plan are shown in detail. Assets and liabilities are then compared to determine the funded status and minimum funding requirements. Finally, analysis is performed to explain movement in results from the prior valuation.

While asset information is based on the fair market value of assets, along with any techniques used to smooth out market fluctuations, liabilities are determined through a combination of the benefit provisions, participant census data which contains information for the members who will receive those benefits, and the methods and assumptions used with regard to how benefits will be paid to members. A summary of participant data, an outline of the benefit provisions, and a description of the methods and assumptions used in this valuation are described in Section 3.

#### Financial Information

Over the life of the Plan, the majority of assets are typically generated from investment return. In this section, we describe how the assets of the Plan are invested, show how the actuarial value of assets is derived, and review the investment results since the prior valuation.

#### **Investment Allocation**

| Year Ending           | May 31, 2007 |           | May 31, 2015   |           |
|-----------------------|--------------|-----------|----------------|-----------|
| Cash                  | 63,859       | 4%        | 163,132        | 4%        |
| Stocks                | 1,607,076    | 96%       | 3,514,150      | 86%       |
| ETFs & CEFs           | 0            | 0%        | 82,135         | 2%        |
| Mutual Funds          | 0            | 0%        | 168,021        | 4%        |
| Alternate Investments | <u>0</u>     | <u>0%</u> | <u>183,254</u> | <u>4%</u> |
| Total Assets          | 1,670,935    | 100%      | 4,110,692      | 100%      |



#### **Reconciliation of Market Value of Assets**

| Year     | Ending May 31,   | 2007   | 2015   |
|----------|--|--|--|
| 1.       | Value as of Beginning of Year  | \$1,300,742  | \$3,708,018  |
| 2.       | Contributions  | \$283,438  | \$324,971  |
| 3.       | Investment Income  a. Realized Gains (Losses)  b. Unrealized Gains (Losses)  c. Interest and Dividends  d. Investment Expenses  e. Net Investment Income | \$94,270<br>117,745<br>25,370<br>(25,406)<br>\$211,979 | \$183,718<br>44,004<br>72,119<br>(30,006)<br>\$269,835 |
| 4.       | Deductions  a. Benefit Payments  b. Administrative Expenses  c. Total Deductions   | \$(117,371)<br>(7,853)<br>\$(125,224)                  | \$(183,760)<br>(8,372)<br>\$(192,132)                  |
| 5.<br>6. | Value as of End of Year  Net Return on Investments   | \$1,670,935<br>15.4%                                   | \$4,110,692<br>7.1%                                    |



#### **Development of Actuarial Value of Assets**

| 1. Market Value of Assets of June 1. 2007 \$ 1.6 | 370,93 | ).93 | 35 |
|--|--------|------|----|
|--|--------|------|----|

2. Phase-In of Gains or (Losses) for Previous Five Years

|    | Year Ending  | Gain or<br>(Loss)                       | Percentage<br>Recognized          | Unrecognize<br>d Gain (Loss) |
|----|--|---|-----------------------------------|------------------------------|
|    | 05/31/2007   | 115,390<br>0<br>0<br>0                  | 20%<br>40%<br>60%<br>80%<br>Total | \$<br>92,312<br>0<br>0<br>   |
| 3. | Preliminary Actuarial Value = (1) - (2)  |   |                                   | \$<br>1,578,623              |
| 4. | Corridor Around Market Value   |   |                                   |                              |
|    | <ul> <li>Minimum Actuarial Value of Assets = 8</li> <li>Maximum Actuarial Value of Assets =</li> </ul> | • |                                   | \$<br>1,336,748              |
|    | . Assets   |   |                                   | \$<br>2,005,122              |
|    | c. Corridor Adjustment   |   |                                   | \$<br>0                      |
| 5. | Actuarial Value of Assets of June 1, 2007  |   |                                   | \$<br>1,578,623              |

Above we show the derivation of the Actuarial Value of Assets as of June 1, 2007.

The Actuarial Value of Assets as of June 1, 2015 was set equal to the Market Value of Assets.



| P                                | Present Value of Benefits |                                   |             |             |  |  |
|----------------------------------|---------------------------|-----------------------------------|-------------|-------------|--|--|
| Year Beginning June 1, 2007 2015 |                           |                                   |             |             |  |  |
| 1.                               | Acti                      | ve Members                        |             |             |  |  |
|                                  | a.                        | Retirement Benefits               | \$2,387,187 | \$2,329,855 |  |  |
|                                  | b.                        | Deferred Benefits                 | 0           | 0           |  |  |
|                                  | C.                        | Survivor Benefits                 | 0           | 0           |  |  |
|                                  | d.                        | Disability Retirement             | <u>0</u>    | <u>0</u>    |  |  |
|                                  | e.                        | Total for Active Members          | \$2,387,187 | \$2,329,855 |  |  |
| 2.                               | DRC                       | OP Members With Deferred Payments | \$380,382   | \$0         |  |  |
| 3.                               | Men                       | nbers in Payment Status           | \$1,203,139 | \$2,157,839 |  |  |
| 4.                               | Present Value of Benefits |                                   | \$3,970,708 | \$4,487,694 |  |  |

#### **Accrued Liability**

| Ye | ar Beginning June 1,  | 2007                                      |
|----|---|---|
| 1. | Active Members  a. Retirement Benefits  b. Deferred Benefits  c. Survivor Benefits  d. Disability Retirement  e. Total for Active Members | \$1,742,221<br>0<br>0<br>0<br>\$1,742,221 |
| 2. | DROP Members With Deferred Payments   | 380,382                                   |
| 3. | Members in Payment Status   | 1,203,139                                 |
| 4. | Accrued Liability   | \$3,325,742                               |

Note: The valuation as of June 1, 2007 used the Entry Age Normal Percent of Pay funding method. The funding method has been revised to the Aggregate method as of June 1, 2015. There is no Accrued Liability under the Aggregate funding method.



#### **Normal Cost**

| Year B | Year Beginning June 1, 2007 |                           |              |  |  |  |
|--------|-----------------------------|---------------------------|--------------|--|--|--|
| 1.     | Active                      | Members                   |              |  |  |  |
|        | a.                          | Retirement Benefits       | \$83,779     |  |  |  |
|        | b.                          | Deferred Benefits         | 0            |  |  |  |
|        | C.                          | Survivor Benefits         | 0            |  |  |  |
|        | d.                          | Disability Retirement     | <u>0</u>     |  |  |  |
|        | e.                          | Preliminary Normal Cost   | 83,779       |  |  |  |
|        | f.                          | Administrative Expenses   | <u>7,853</u> |  |  |  |
|        | g.                          | Total Normal Cost         | \$91,632     |  |  |  |
|        | h.                          | Normal Cost as a % of Pay | 0.34%        |  |  |  |
|        |                             |                           |              |  |  |  |
| 2.     | Valuati                     | ion Payroll               | 26,618,969   |  |  |  |

Note: The valuation as of June 1, 2007 used the Entry Age Normal Percent of Pay funding method. The funding method has been revised to the Aggregate method as of June 1, 2015. The Normal Cost is determined on the table deriving the Minimum Required Contribution under the Aggregate method as of June 1, 2015.



#### Minimum Funding Requirement Calculations June 1, 2007

| Val | uati | on for Year Beginning June 1,              | 2007       |
|-----|------|--|------------|
|     |      |  |            |
| 1.  | No   | rmal Cost                                  | \$91,632   |
| 2.  | Am   | ortization of Unfunded Actuarial Liability | 122,477    |
| 3.  | Tot  | al Minimum Required Contribution BOY       |            |
|     | a.   | As a Dollar Amount                         | \$214,109  |
|     | b.   | As a Percent of Pay                        | 0.80%      |
| 4.  | Tot  | al Minimum Required Contribution           |            |
|     |      | Projected to Beginning of Following Year   |            |
|     | a.   | As a Dollar Amount                         | 220,532    |
|     | b.   | As a Percent of Pay                        | 0.80%      |
| 5.  | Tot  | al Minimum Required Contribution           |            |
|     |      | Including Interest for Periodic Payments   |            |
|     | a.   | As a Dollar Amount                         | 228,251    |
|     | b.   | As a Percent of Pay                        | 0.83%      |
| 6.  | Val  | uation Payroll                             |            |
|     | a.   | As of Valuation Date                       | 26,618,969 |
|     | b.   | Projected to Next Year                     | 27,417,538 |



| Mi | Minimum Funding Requirement Calculations June 1, 2015 |  |              |  |  |  |  |
|----|---|--|--------------|--|--|--|--|
|    |   | or Year Beginning June 1,<br>on for Year Ending May 31,              | 2015<br>2016 |  |  |  |  |
| 1. | Presen  | t Value of Benefits  |              |  |  |  |  |
|    | a.  | Active Members   | \$2,329,855  |  |  |  |  |
|    | b.  | Retired Members  | 2,157,839    |  |  |  |  |
|    | C.  | Total  | \$4,487,694  |  |  |  |  |
| 2. | Market  | Value of Assets  | \$4,110,692  |  |  |  |  |
| 3. | Presen  | t Value of Benefits - Market Value of Assets                         | \$377,002    |  |  |  |  |
| 4. | Presen  | t Value of Future Working Life                                       | 1,476        |  |  |  |  |
| 5. | Numbe   | r of Active Members Included in Present Value of Future Working Life | 241          |  |  |  |  |
| 6. | Minimu  | m Required Contribution for Year Ending May 31, 2016                 |              |  |  |  |  |
|    | a.  | Normal Cost = 3. / (4. / 5.)   | \$61,557     |  |  |  |  |
|    | b.  | Administrative Expense   | 8,372        |  |  |  |  |
|    | C.  | Interest Assuming Periodic Contributions                             | <u>2,448</u> |  |  |  |  |
|    | d.  | Total  | \$72,377     |  |  |  |  |



# Supplementary Information

#### **Summary of Participant Data**

#### **Member Statistics**

| Year Beginning June 1,   | 2007       | 2015  |
|--------------------------|------------|-------|
| Active Participants      |            |       |
| Number                   | 513        | 271   |
| Average Age              | 43.93      | 47.76 |
| Average Credited Service | 9.06       | 15.33 |
| Percent Male             | 71%        | 76%   |
| Average Pay              | 51,889     | N/A   |
| Valuation Payroll        | 26,618,969 | N/A   |
| Members in DROP*         |            |       |
| Number                   | 30         | 0     |
| Average Age              | 61.03      | 0.00  |
| Percent Male             | 70%        | 0%    |
| Average Annual Benefit   | 1,416      | 0     |
| Service Retirements      |            |       |
| Number                   | 75         | 136   |
| Average Age              | 63.96      | 67.00 |
| Percent Male             | 81%        | 74%   |
| Average Annual Benefit   | 1,450      | 1,472 |

<sup>\*</sup>Any members in DROP are assumed to retire immediately for conservatism and are included in the Service Retirement counts.



#### **Outline of Plan Provisions**

Effective Date: July 1, 2000.

Plan Year: From January 1 through December 31.

Covered Person: Eligible Employee who meets Benefit Eligibility Requirements.

<u>Eligible Employee:</u> Persons employed full-time or part-time by the City of Margate on or after July 1, 2000 for whom Contributions have been made to the Fund. Effective October 1, 2010 the plan is closed to new entrants.

<u>Benefit Eligibility Requirements:</u> An Eligible Employee may become entitled to a Benefit on or after the first day of the month following Retirement, provided the Eligible Employee files a Benefit Application, has continuous or continuing health insurance coverage, and timely submits proof thereof annually on an Affidavit of Continued Eligibility form.

Members must have at least 10 Years of Service to be eligible for a Benefit.

Members who become disability retirees under FRS are not eligible for a Benefit.

<u>Termination of Eligibility:</u> Eligibility for a Benefit will terminate on the date the person ceases to be eligible, on the date the person dies, upon termination of the Fund.

<u>Retired or Retirement:</u> Receipt of retirement benefits from the Florida Retirement System (FRS) after the first day of any month following the date an Eligible Employee attains one of the following statuses (as defined in the FRS):

- a. Regular, Senior Management and Elected Officers' Class:
  - (i) Age 62 and at least six years creditable service; or
  - (ii) At least 30 years creditable service (which may include a maximum of 4 years military service credit, as long as such credit is not claimed under any other system), regardless of age.
- b. Special Risk Class:
  - (i) Age 55 and at least six years of creditable service; or
  - (ii) At least 25 years of creditable service, regardless of age; or
  - (iii) Age 52 and at least 25 years of creditable service (which may include a maximum of 4 years of military service credit, as long as such credit is not claimed under any other system).

<u>Years of Service:</u> Cumulative full-time years of employment with the City of Margate, including employment during participation in the DROP where required Contributions have been made to the



Fund from July 1, 2000. Two years of permanent part-time employment count as one year of full-time employment.

<u>Contributions:</u> Any and all Contributions are non-refundable. If a person makes Contributions to the Fund and does not meet Benefit Eligibility Requirements, all Contributions made to the fund are forfeited. We understand members do not contribute to the fund.

Benefit: A monthly amount of \$50 plus \$3.40 per Year of Service up to 25 years, but not more than 100% of the premium cost for health insurance including Medicare. Benefits are payable annually in January.

Upon meeting Benefit Eligibility Requirements, the Fund will calculate the monthly amount payable from the first of the month following Retirement until December 31 of the year of Retirement. This amount is payable with the first annual payment.

Benefits begin January 1, 2002 with no retroactive payments for the period from July 1, 2000 through December 31, 2001.

<u>Survivor Benefit:</u> A one-time lump sum payment is due immediately upon death to the beneficiary of any Covered Person who has been receiving a Benefit. If no beneficiary is named or if the named beneficiary pre-deceases the Covered Person, no Survivor Benefit is payable.

The Survivor Benefit is equal to the monthly Benefit x 12. This Survivor Benefit will have deducted the remaining prepaid monthly amounts for each month following the date of death.



#### **Description of Assumptions and Methods**

Net Assumed Rate of Investment Return: 7.0%, net of investment expenses.

<u>Mortality:</u> In the June 1, 2007 valuation, mortality was assumed under the RP-2000 Combined Mortality table with fully generational mortality improvements from 2001 using Scale AA. For this June 1, 2015 valuation, mortality is assumed under the RP-2000 Combined Mortality table with fully generational mortality improvements from 2000 using Scale BB.

<u>Retirement:</u> Rates of retirement are based on the assumptions for Members first eligible for retirement as used in the valuation of the Florida Retirement System as of July 1, 2007. Linear interpolation was used between the rates shown in the following:

Regular Class Retirement Rates

| regular class real official reason |            |              |                 |            |              |         |  |  |
|------------------------------------|------------|--------------|-----------------|------------|--------------|---------|--|--|
| _                                  |            | Male         | Female          |            |              |         |  |  |
| <u>Age</u>                         | <u>0-9</u> | <u>10-29</u> | <u>&gt;=30*</u> | <u>0-9</u> | <u>10-29</u> | >=30    |  |  |
| <=44                               | 0.00%      | 0.00%        | 0.00%           | 0.00%      | 0.00%        | 0.00%   |  |  |
| 45                                 | 0.00%      | 6.90%        | 100.00%         | 0.00%      | 6.30%        | 100.00% |  |  |
| 50                                 | 0.00%      | 19.90%       | 100.00%         | 0.00%      | 14.30%       | 100.00% |  |  |
| 55                                 | 0.00%      | 19.50%       | 100.00%         | 0.00%      | 16.30%       | 100.00% |  |  |
| 60                                 | 0.00%      | 26.40%       | 100.00%         | 0.00%      | 26.30%       | 100.00% |  |  |
| >=65                               | 0.00%      | 100.00%      | 100.00%         | 0.00%      | 100.00%      | 100.00% |  |  |

Members in the Regular Class who are part-time are assumed to retire at a rate of 100% at 20 years of service.

| <u>Age</u> | <u>Male</u> | <u>Female</u> |  |  |  |  |
|------------|-------------|---------------|--|--|--|--|
| <=44       | 0.0%        | 0.0%          |  |  |  |  |
| 45         | 0.0%        | 3.5%          |  |  |  |  |
| 50         | 2.0%        | 3.5%          |  |  |  |  |
| 55         | 3.5%        | 4.5%          |  |  |  |  |
| 60         | 5.1%        | 6.5%          |  |  |  |  |
| 65         | 14.9%       | 12.4%         |  |  |  |  |
| >=80       | 100.0%      | 100.0%        |  |  |  |  |

Senior Management Class Retirement Rates

| _          |            | Male         |                |          | Female    |                |
|------------|------------|--------------|----------------|----------|-----------|----------------|
| <u>Age</u> | <u>0-9</u> | <u>10-29</u> | <u>&gt;=30</u> | <u>0</u> | <u>10</u> | <u>&gt;=30</u> |
| <=44       | 0.0%       | 0.0%         | 0.0%           | 0.0%     | 0.0%      | 0.0%           |
| 45         | 0.0%       | 5.0%         | 100.0%         | 0.0%     | 3.5%      | 100.0%         |
| 50         | 0.0%       | 16.0%        | 100.0%         | 0.0%     | 10.5%     | 100.0%         |
| 55         | 0.0%       | 14.5%        | 100.0%         | 0.0%     | 11.5%     | 100.0%         |
| 60         | 0.0%       | 20.1%        | 100.0%         | 0.0%     | 20.4%     | 100.0%         |
| 65         | 0.0%       | 26.3%        | 100.0%         | 0.0%     | 20.1%     | 100.0%         |
| >=70       | 0.0%       | 100.0%       | 100.0%         | 0.0%     | 100.0%    | 100.0%         |



Special Risk Class Retirement Rates

|            |            | Male         |                | Female |         |                |  |
|------------|------------|--------------|----------------|--------|---------|----------------|--|
| <u>Age</u> | <u>0-9</u> | <u>10-24</u> | <u>&gt;=25</u> | 0.0%   | 1000.0% | <u>&gt;=25</u> |  |
| <=39       | 0.0%       | 0.0%         | 0.0%           | 0.0%   | 0.0%    | 0.0%           |  |
| 40         | 0.0%       | 2.5%         | 100.0%         | 0.0%   | 2.5%    | 100.0%         |  |
| 45         | 0.0%       | 2.5%         | 100.0%         | 0.0%   | 2.5%    | 100.0%         |  |
| 50         | 0.0%       | 7.5%         | 100.0%         | 0.0%   | 7.0%    | 100.0%         |  |
| 55         | 0.0%       | 7.8%         | 100.0%         | 0.0%   | 7.8%    | 100.0%         |  |
| 60         | 0.0%       | 6.6%         | 100.0%         | 0.0%   | 6.1%    | 100.0%         |  |
| >=65       | 0.0%       | 100.0%       | 100.0%         | 0.0%   | 100.0%  | 100.0%         |  |

<u>Termination:</u> Rates of termination are based on the assumptions used in the valuation of the Florida Retirement System as of July 1, 2007. Linear interpolation was used between the rates shown in the following:

| Regular Class Rates of Termination     |   |  |  |   |  |  |  |   |   |   |   |
|--|---|--|--|---|--|--|--|---|---|---|---|
|  |   |  |  |   | N  | /lale Rate   | s  |   |   |   |   |
| Age                                    | 0   | 1  | 2  | 3   | 4  | 5  | 6  | 7   | 8   | 9   | >=10  |
| <=19                                   | 0.0%  | 0.0%   | 0.0%   | 0.0%  | 0.0%   | 0.0%   | 0.0%   | 0.0%  | 0.0%  | 0.0%  | 0.0%  |
| 20                                     | 32.8%   | 31.8%  | 25.2%  | 18.4%   | 15.8%  | 13.3%  | 12.4%  | 11.7%   | 11.0%   | 10.5%   | 10.9%   |
| 25                                     | 27.2%   | 23.2%  | 19.1%  | 14.6%   | 12.7%  | 11.0%  | 9.4%   | 8.8%  | 7.7%  | 6.6%  | 6.9%  |
| 30                                     | 25.8%   | 19.2%  | 15.5%  | 13.2%   | 11.8%  | 10.0%  | 8.6%   | 7.5%  | 6.4%  | 5.8%  | 5.2%  |
| 35                                     | 25.8%   | 17.9%  | 14.2%  | 12.6%   | 10.9%  | 9.7%   | 8.3%   | 7.2%  | 6.2%  | 5.6%  | 4.7%  |
| 40                                     | 24.4%   | 15.8%  | 12.0%  | 10.7%   | 9.0%   | 8.4%   | 7.5%   | 6.6%  | 5.8%  | 5.5%  | 3.3%  |
| 45                                     | 24.4%   | 15.7%  | 11.6%  | 10.3%   | 8.8%   | 7.7%   | 7.2%   | 6.3%  | 5.7%  | 5.4%  | 3.0%  |
| 50                                     | 23.4%   | 15.2%  | 10.7%  | 9.4%  | 7.9%   | 6.9%   | 6.1%   | 5.6%  | 5.1%  | 4.8%  | 3.3%  |
| 55                                     | 27.4%   | 18.4%  | 14.1%  | 12.4%   | 9.9%   | 8.9%   | 6.4%   | 5.5%  | 4.9%  | 5.0%  | 5.0%  |
| 60                                     | 27.4%   | 18.4%  | 14.1%  | 12.3%   | 9.7%   | 8.8%   | 6.3%   | 5.4%  | 4.8%  | 4.9%  | 5.9%  |
| >=65                                   | 27.4%   | 18.4%  | 14.1%  | 12.3%   | 9.7%   | 8.8%   | 6.3%   | 5.4%  | 4.8%  | 4.9%  | 4.1%  |
|  |   |  |  |   | Fe   | male Rat   | es   |   |   |   |   |
| Age                                    | 0   | 1  | 2  | 3   | 4  | 5  | 6  | 7   | 8   | 9   | >=10  |
|  | •   | •  |  |   |  |  | U  | =   |   |   |   |
| <=19                                   | 0.0%  | 0.0%   | 0.0%   | 0.0%  | 0.0%   | 0.0%   | 0.0%   | 0.0%  | 0.0%  | 0.0%  | 0.0%  |
| <=19<br>20                             |   |  |  |   | 0.0%<br>15.4%  |  |  |   | 0.0%<br>11.6%   | 0.0%<br>11.3%   | 0.0%<br>11.6%   |
|  | 0.0%  | 0.0%   | 0.0%   | 0.0%  |  | 0.0%   | 0.0%   | 0.0%  |   |   |   |
| 20                                     | 0.0%<br>31.9%   | 0.0%<br>28.6%  | 0.0%<br>23.3%  | 0.0%<br>18.3%   | 15.4%  | 0.0%<br>15.3%  | 0.0%<br>12.4%  | 0.0%<br>11.9%   | 11.6%   | 11.3%   | 11.6%   |
| 20<br>25                               | 0.0%<br>31.9%<br>28.0%  | 0.0%<br>28.6%<br>22.0%   | 0.0%<br>23.3%<br>18.0%   | 0.0%<br>18.3%<br>14.7%  | 15.4%<br>12.9%   | 0.0%<br>15.3%<br>12.2%   | 0.0%<br>12.4%<br>10.5%   | 0.0%<br>11.9%<br>9.7%   | 11.6%<br>8.6%   | 11.3%<br>7.9%   | 11.6%<br>5.3%   |
| 20<br>25<br>30                         | 0.0%<br>31.9%<br>28.0%<br>26.7%                                     | 0.0%<br>28.6%<br>22.0%<br>18.8%  | 0.0%<br>23.3%<br>18.0%<br>15.3%  | 0.0%<br>18.3%<br>14.7%<br>13.2%   | 15.4%<br>12.9%<br>11.3%  | 0.0%<br>15.3%<br>12.2%<br>10.7%  | 0.0%<br>12.4%<br>10.5%<br>9.5%   | 0.0%<br>11.9%<br>9.7%<br>8.5%   | 11.6%<br>8.6%<br>7.9%   | 11.3%<br>7.9%<br>7.2%   | 11.6%<br>5.3%<br>5.4%   |
| 20<br>25<br>30<br>35                   | 0.0%<br>31.9%<br>28.0%<br>26.7%<br>26.7%                            | 0.0%<br>28.6%<br>22.0%<br>18.8%<br>17.7%                                     | 0.0%<br>23.3%<br>18.0%<br>15.3%<br>14.2%                                     | 0.0%<br>18.3%<br>14.7%<br>13.2%<br>12.6%                                    | 15.4%<br>12.9%<br>11.3%<br>10.9%                                 | 0.0%<br>15.3%<br>12.2%<br>10.7%<br>10.2%                                 | 0.0%<br>12.4%<br>10.5%<br>9.5%<br>9.2%                                 | 0.0%<br>11.9%<br>9.7%<br>8.5%<br>8.2%                                 | 11.6%<br>8.6%<br>7.9%<br>7.5%                                 | 11.3%<br>7.9%<br>7.2%<br>6.9%                                 | 11.6%<br>5.3%<br>5.4%<br>4.6%                                 |
| 20<br>25<br>30<br>35<br>40             | 0.0%<br>31.9%<br>28.0%<br>26.7%<br>26.7%<br>25.7%                   | 0.0%<br>28.6%<br>22.0%<br>18.8%<br>17.7%<br>15.5%                            | 0.0%<br>23.3%<br>18.0%<br>15.3%<br>14.2%<br>12.1%                            | 0.0%<br>18.3%<br>14.7%<br>13.2%<br>12.6%<br>10.6%                           | 15.4%<br>12.9%<br>11.3%<br>10.9%<br>9.1%                         | 0.0%<br>15.3%<br>12.2%<br>10.7%<br>10.2%<br>8.0%                         | 0.0%<br>12.4%<br>10.5%<br>9.5%<br>9.2%<br>7.2%                         | 0.0%<br>11.9%<br>9.7%<br>8.5%<br>8.2%<br>6.6%                         | 11.6%<br>8.6%<br>7.9%<br>7.5%<br>6.0%                         | 11.3%<br>7.9%<br>7.2%<br>6.9%<br>5.5%                         | 11.6%<br>5.3%<br>5.4%<br>4.6%<br>3.3%                         |
| 20<br>25<br>30<br>35<br>40<br>45       | 0.0%<br>31.9%<br>28.0%<br>26.7%<br>26.7%<br>25.7%                   | 0.0%<br>28.6%<br>22.0%<br>18.8%<br>17.7%<br>15.5%<br>15.4%                   | 0.0%<br>23.3%<br>18.0%<br>15.3%<br>14.2%<br>12.1%<br>11.9%                   | 0.0%<br>18.3%<br>14.7%<br>13.2%<br>12.6%<br>10.6%<br>10.3%                  | 15.4%<br>12.9%<br>11.3%<br>10.9%<br>9.1%<br>8.8%                 | 0.0%<br>15.3%<br>12.2%<br>10.7%<br>10.2%<br>8.0%<br>7.7%                 | 0.0%<br>12.4%<br>10.5%<br>9.5%<br>9.2%<br>7.2%<br>7.0%                 | 0.0%<br>11.9%<br>9.7%<br>8.5%<br>8.2%<br>6.6%<br>6.4%                 | 11.6%<br>8.6%<br>7.9%<br>7.5%<br>6.0%<br>5.8%                 | 11.3%<br>7.9%<br>7.2%<br>6.9%<br>5.5%<br>5.3%                 | 11.6%<br>5.3%<br>5.4%<br>4.6%<br>3.3%<br>3.0%                 |
| 20<br>25<br>30<br>35<br>40<br>45<br>50 | 0.0%<br>31.9%<br>28.0%<br>26.7%<br>26.7%<br>25.7%<br>25.7%<br>24.4% | 0.0%<br>28.6%<br>22.0%<br>18.8%<br>17.7%<br>15.5%<br>15.4%<br>14.8%          | 0.0%<br>23.3%<br>18.0%<br>15.3%<br>14.2%<br>12.1%<br>11.9%<br>11.5%          | 0.0%<br>18.3%<br>14.7%<br>13.2%<br>12.6%<br>10.6%<br>10.3%<br>9.2%          | 15.4%<br>12.9%<br>11.3%<br>10.9%<br>9.1%<br>8.8%<br>8.4%         | 0.0%<br>15.3%<br>12.2%<br>10.7%<br>10.2%<br>8.0%<br>7.7%<br>7.0%         | 0.0%<br>12.4%<br>10.5%<br>9.5%<br>9.2%<br>7.2%<br>7.0%<br>6.5%         | 0.0%<br>11.9%<br>9.7%<br>8.5%<br>8.2%<br>6.6%<br>6.4%<br>5.8%         | 11.6%<br>8.6%<br>7.9%<br>7.5%<br>6.0%<br>5.8%<br>5.5%         | 11.3%<br>7.9%<br>7.2%<br>6.9%<br>5.5%<br>5.3%<br>5.1%         | 11.6%<br>5.3%<br>5.4%<br>4.6%<br>3.3%<br>3.0%<br>3.2%         |
| 20<br>25<br>30<br>35<br>40<br>45<br>50 | 0.0%<br>31.9%<br>28.0%<br>26.7%<br>25.7%<br>25.7%<br>24.4%<br>27.8% | 0.0%<br>28.6%<br>22.0%<br>18.8%<br>17.7%<br>15.5%<br>15.4%<br>14.8%<br>17.6% | 0.0%<br>23.3%<br>18.0%<br>15.3%<br>14.2%<br>12.1%<br>11.9%<br>11.5%<br>13.7% | 0.0%<br>18.3%<br>14.7%<br>13.2%<br>12.6%<br>10.6%<br>10.3%<br>9.2%<br>11.3% | 15.4%<br>12.9%<br>11.3%<br>10.9%<br>9.1%<br>8.8%<br>8.4%<br>9.7% | 0.0%<br>15.3%<br>12.2%<br>10.7%<br>10.2%<br>8.0%<br>7.7%<br>7.0%<br>8.3% | 0.0%<br>12.4%<br>10.5%<br>9.5%<br>9.2%<br>7.2%<br>7.0%<br>6.5%<br>7.0% | 0.0%<br>11.9%<br>9.7%<br>8.5%<br>8.2%<br>6.6%<br>6.4%<br>5.8%<br>6.3% | 11.6%<br>8.6%<br>7.9%<br>7.5%<br>6.0%<br>5.8%<br>5.5%<br>6.0% | 11.3%<br>7.9%<br>7.2%<br>6.9%<br>5.5%<br>5.3%<br>5.1%<br>5.6% | 11.6%<br>5.3%<br>5.4%<br>4.6%<br>3.3%<br>3.0%<br>3.2%<br>5.4% |



Elected Officer Class Termination Rates

|      |      | Male  | !    |      |      | Femal | е    |      |
|------|------|-------|------|------|------|-------|------|------|
| Age  | 0-7  | 8     | 9    | >=10 | 0-7  | 8     | 9    | >=10 |
| <=19 | 0.0% | 0.0%  | 0.0% | 0.0% | 0.0% | 0.0%  | 0.0% | 0.0% |
| 20   | 8.2% | 13.8% | 4.8% | 5.7% | 0.0% | 15.0% | 3.2% | 5.3% |
| 25   | 8.2% | 13.8% | 4.8% | 5.7% | 0.0% | 15.0% | 3.2% | 5.3% |
| 30   | 8.2% | 13.8% | 4.8% | 5.7% | 0.0% | 15.0% | 3.2% | 5.3% |
| 35   | 8.2% | 13.8% | 4.8% | 5.7% | 0.0% | 15.0% | 3.2% | 5.3% |
| 40   | 8.2% | 13.8% | 4.8% | 5.7% | 0.0% | 15.0% | 3.2% | 5.3% |
| 45   | 8.2% | 13.8% | 4.8% | 5.7% | 0.0% | 15.0% | 3.2% | 5.3% |
| 50   | 8.2% | 13.6% | 4.6% | 5.6% | 0.0% | 14.9% | 3.1% | 5.1% |
| 55   | 8.2% | 13.4% | 4.4% | 5.3% | 0.0% | 14.6% | 2.8% | 4.9% |
| 60   | 8.2% | 13.3% | 4.3% | 5.2% | 0.0% | 14.5% | 2.7% | 4.8% |
| >=65 | 8.2% | 11.5% | 2.5% | 3.5% | 0.0% | 12.8% | 1.0% | 3.0% |

#### Senior Management Class Rates of Termination

| _    | Male Rates |       |       |       |       |           |      |      |      |      |      |  |
|------|------------|-------|-------|-------|-------|-----------|------|------|------|------|------|--|
| Age  | 0          | 1     | 2     | 3     | 4     | 5         | 6    | 7    | 8    | 9    | >=10 |  |
| <=19 | 0.0%       | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%      | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |  |
| 20   | 24.3%      | 27.9% | 24.9% | 19.5% | 15.5% | 9.1%      | 8.2% | 7.5% | 6.8% | 5.5% | 4.8% |  |
| 25   | 24.3%      | 23.3% | 21.4% | 18.5% | 14.9% | 8.8%      | 7.9% | 7.3% | 6.8% | 5.5% | 4.8% |  |
| 30   | 24.3%      | 20.7% | 19.3% | 17.7% | 14.5% | 8.4%      | 7.5% | 6.9% | 6.5% | 5.3% | 4.1% |  |
| 35   | 24.3%      | 19.4% | 18.0% | 17.1% | 13.6% | 8.0%      | 7.2% | 6.6% | 6.3% | 5.1% | 3.6% |  |
| 40   | 24.3%      | 18.9% | 17.2% | 16.7% | 12.9% | 7.8%      | 6.9% | 6.3% | 6.1% | 4.9% | 3.2% |  |
| 45   | 24.3%      | 18.8% | 16.9% | 16.4% | 12.6% | 7.1%      | 6.7% | 6.1% | 5.9% | 4.8% | 2.9% |  |
| 50   | 24.3%      | 18.8% | 16.8% | 16.2% | 12.4% | 6.9%      | 6.5% | 5.9% | 5.8% | 4.6% | 3.0% |  |
| 55   | 24.3%      | 18.8% | 16.8% | 16.0% | 12.3% | 6.7%      | 6.3% | 5.8% | 5.7% | 4.5% | 3.6% |  |
| 60   | 24.3%      | 18.8% | 16.8% | 16.0% | 12.2% | 6.7%      | 6.3% | 5.7% | 5.6% | 4.4% | 4.4% |  |
| >=65 | 24.3%      | 18.8% | 16.8% | 16.0% | 12.2% | 6.6%      | 6.2% | 5.7% | 5.6% | 4.4% | 2.6% |  |
| -    |            |       |       |       | Fem   | ale Rates |      |      |      |      |      |  |
| Age  | 0          | 1     | 2     | 3     | 4     | 5         | 6    | 7    | 8    | 9    | >=10 |  |
| <=19 | 0.0%       | 0.0%  | 0.0%  | 0.0%  | 0.0%  | 0.0%      | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |  |
| 20   | 24.3%      | 25.8% | 22.8% | 17.3% | 12.2% | 10.1%     | 8.8% | 8.2% | 7.5% | 6.3% | 4.8% |  |
| 25   | 24.3%      | 21.7% | 20.0% | 16.4% | 11.7% | 9.4%      | 8.5% | 8.1% | 7.4% | 6.3% | 4.9% |  |
| 30   | 24.3%      | 19.6% | 18.3% | 15.7% | 11.2% | 8.8%      | 8.1% | 7.7% | 7.0% | 5.8% | 3.9% |  |
| 35   | 24.3%      | 18.5% | 17.3% | 15.2% | 10.8% | 8.2%      | 7.8% | 7.3% | 6.6% | 5.5% | 3.2% |  |
| 40   | 24.3%      | 18.1% | 16.7% | 14.7% | 10.5% | 7.8%      | 7.5% | 7.1% | 6.4% | 5.2% | 2.7% |  |
| 45   | 24.3%      | 18.0% | 16.5% | 14.5% | 10.3% | 7.5%      | 7.3% | 6.9% | 6.1% | 4.9% | 2.4% |  |
| 50   | 24.3%      | 18.0% | 16.4% | 14.3% | 10.1% | 7.3%      | 7.1% | 6.7% | 5.9% | 4.7% | 2.5% |  |
| 55   | 24.3%      | 18.0% | 16.4% | 14.2% | 10.0% | 7.2%      | 6.9% | 6.6% | 5.8% | 4.5% | 3.3% |  |
| 60   | 24.3%      | 18.0% | 16.4% | 14.1% | 9.9%  | 7.1%      | 6.8% | 6.5% | 5.7% | 4.3% | 5.1% |  |
| >=65 | 24.3%      | 18.0% | 16.4% | 14.1% | 9.8%  | 7.1%      | 6.8% | 6.5% | 5.6% | 4.3% | 1.9% |  |



Special Risk Class Rates of Termination

|      | Male Rates |       |       |       |      |           |      |      |      |      |      |  |
|------|------------|-------|-------|-------|------|-----------|------|------|------|------|------|--|
| Age  | 0          | 1     | 2     | 3     | 4    | 5         | 6    | 7    | 8    | 9    | >=10 |  |
| <=19 | 0.0%       | 0.0%  | 0.0%  | 0.0%  | 0.0% | 0.0%      | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |  |
| 20   | 19.4%      | 12.9% | 10.7% | 9.2%  | 7.9% | 6.0%      | 5.5% | 4.5% | 3.9% | 3.8% | 2.9% |  |
| 25   | 18.7%      | 12.3% | 10.1% | 8.6%  | 7.4% | 6.0%      | 5.5% | 4.5% | 3.9% | 3.8% | 2.9% |  |
| 30   | 18.7%      | 11.8% | 9.7%  | 8.2%  | 7.1% | 6.0%      | 5.5% | 4.5% | 3.9% | 3.8% | 2.7% |  |
| 35   | 18.7%      | 11.5% | 9.3%  | 7.9%  | 6.8% | 6.0%      | 5.3% | 4.5% | 3.9% | 3.8% | 2.4% |  |
| 40   | 18.7%      | 11.2% | 9.1%  | 7.4%  | 6.7% | 6.0%      | 5.0% | 4.5% | 3.9% | 3.8% | 2.3% |  |
| 45   | 18.7%      | 11.1% | 8.9%  | 7.3%  | 6.5% | 6.0%      | 5.0% | 4.5% | 3.9% | 3.8% | 2.4% |  |
| 50   | 18.7%      | 11.0% | 8.8%  | 7.2%  | 6.5% | 6.0%      | 5.0% | 4.5% | 3.9% | 3.8% | 2.7% |  |
| 55   | 18.7%      | 11.0% | 8.8%  | 7.2%  | 6.5% | 6.0%      | 5.0% | 4.5% | 3.9% | 3.8% | 6.2% |  |
| 60   | 18.7%      | 11.0% | 8.8%  | 7.2%  | 6.5% | 6.0%      | 5.0% | 4.5% | 3.9% | 3.8% | 6.2% |  |
| >=65 | 18.7%      | 11.0% | 8.8%  | 7.2%  | 6.5% | 6.0%      | 5.0% | 4.5% | 3.9% | 3.8% | 6.2% |  |
|      |            |       |       |       | Fem  | ale Rates | 3    |      |      |      |      |  |
| Age  | 0          | 1     | 2     | 3     | 4    | 5         | 6    | 7    | 8    | 9    | >=10 |  |
| <=19 | 0.0%       | 0.0%  | 0.0%  | 0.0%  | 0.0% | 0.0%      | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |  |
| 20   | 21.3%      | 15.5% | 12.3% | 10.3% | 9.7% | 6.9%      | 6.6% | 5.5% | 4.7% | 4.8% | 2.4% |  |
| 25   | 21.3%      | 14.2% | 11.7% | 9.8%  | 9.2% | 6.9%      | 6.6% | 5.5% | 4.7% | 4.8% | 2.4% |  |
| 30   | 21.3%      | 13.2% | 11.2% | 9.3%  | 8.7% | 6.9%      | 6.6% | 5.5% | 4.7% | 4.7% | 2.1% |  |
| 35   | 21.3%      | 12.6% | 10.9% | 9.0%  | 8.4% | 6.9%      | 6.6% | 5.5% | 4.6% | 4.7% | 1.8% |  |
| 40   | 21.3%      | 12.2% | 10.7% | 8.7%  | 8.0% | 6.9%      | 6.6% | 5.5% | 4.6% | 4.7% | 3.1% |  |
| 45   | 21.3%      | 12.0% | 10.5% | 8.5%  | 7.8% | 6.9%      | 6.6% | 5.5% | 4.6% | 4.6% | 3.1% |  |
| 50   | 21.3%      | 11.9% | 10.4% | 8.4%  | 7.7% | 6.9%      | 6.6% | 5.5% | 4.5% | 4.6% | 2.0% |  |
| 55   | 21.3%      | 11.9% | 10.4% | 8.4%  | 7.7% | 6.9%      | 6.6% | 5.5% | 4.5% | 4.5% | 5.0% |  |
| 60   | 21.3%      | 11.9% | 10.4% | 8.4%  | 7.7% | 6.9%      | 6.6% | 5.5% | 4.5% | 4.5% | 5.0% |  |
| >=65 | 21.3%      | 11.9% | 10.4% | 8.4%  | 7.7% | 6.9%      | 6.6% | 5.5% | 4.5% | 4.5% | 5.0% |  |

<u>Disability:</u> Rates of disability are based on the sum of line-of-duty and non-duty disability assumptions used in the valuation of the Florida Retirement System as of July 1, 2007. Linear interpolation was used between the rates shown in the following:

Rates of Disability

| rates of Bloading |                    |        |             |               |              |               |  |  |  |  |  |
|-------------------|--------------------|--------|-------------|---------------|--------------|---------------|--|--|--|--|--|
| _                 | Regu               | lar    | EO and Ser  | nior Mgmt     | Special Risk |               |  |  |  |  |  |
| <u>Age</u>        | Male <u>Female</u> |        | <u>Male</u> | <u>Female</u> | <u>Male</u>  | <u>Female</u> |  |  |  |  |  |
| <=19              | 0.000%             | 0.000% | 0.000%      | 0.000%        | 0.000%       | 0.000%        |  |  |  |  |  |
| 20                | 0.004%             | 0.001% | 0.005%      | 0.003%        | 0.049%       | 0.044%        |  |  |  |  |  |
| 25                | 0.034%             | 0.011% | 0.005%      | 0.003%        | 0.049%       | 0.044%        |  |  |  |  |  |
| 30                | 0.064%             | 0.028% | 0.029%      | 0.019%        | 0.060%       | 0.062%        |  |  |  |  |  |
| 35                | 0.083%             | 0.056% | 0.041%      | 0.034%        | 0.084%       | 0.112%        |  |  |  |  |  |
| 40                | 0.120%             | 0.085% | 0.062%      | 0.053%        | 0.138%       | 0.186%        |  |  |  |  |  |
| 45                | 0.217%             | 0.181% | 0.127%      | 0.105%        | 0.227%       | 0.365%        |  |  |  |  |  |
| 50                | 0.357%             | 0.307% | 0.215%      | 0.190%        | 0.430%       | 0.471%        |  |  |  |  |  |
| 55                | 0.592%             | 0.513% | 0.372%      | 0.331%        | 0.661%       | 0.722%        |  |  |  |  |  |
| 60                | 0.782%             | 0.648% | 0.554%      | 0.408%        | 0.929%       | 0.882%        |  |  |  |  |  |
| >=65              | 0.338%             | 0.194% | 0.236%      | 0.133%        | 0.929%       | 0.523%        |  |  |  |  |  |
|                   |                    |        |             |               |              |               |  |  |  |  |  |



<u>Salary Increases:</u> There are no salary increase assumptions used in this June 1, 2015 actuarial valuation of the Plan.

In the June 1, 2007 actuarial valuation, along with the below salary increase assumptions due to merit and longevity used in the valuation of the Florida Retirement System as of July 1, 2007, salary was assumed to increase 3.0% due to inflation. Total payroll was assumed to increase each year by 3.0%. Linear interpolation was used between the rates shown in the following:

|      | Regular Class Salary Increase Due to Merit and Longevity |       |           |            |       |                          |                |           |       |       |       |  |
|------|--|-------|-----------|------------|-------|--------------------------|----------------|-----------|-------|-------|-------|--|
|      |  |       | Regular C | Class Sala | •     | se Due to<br>erit and Lo |                | d Longevi | ty    |       |       |  |
| Age  | 0  | 1     | 2         | 3          | 4     | 5                        | 6              | 7         | 8     | 9     | >=10  |  |
| <=19 | 0.00%  | 0.00% | 0.00%     | 0.00%      | 0.00% | 0.00%                    | 0.00%          | 0.00%     | 0.00% | 0.00% | 0.00% |  |
| 20   | 4.25%  | 4.25% | 3.75%     | 3.75%      | 3.50% | 3.50%                    | 3.50%          | 3.00%     | 3.00% | 3.00% | 3.00% |  |
| 25   | 4.25%  | 4.25% | 3.75%     | 3.75%      | 3.50% | 3.50%                    | 3.50%          | 3.00%     | 3.00% | 3.00% | 3.00% |  |
| 30   | 4.25%  | 4.25% | 3.75%     | 3.75%      | 3.50% | 3.50%                    | 3.50%          | 3.00%     | 3.00% | 3.00% | 3.00% |  |
| 35   | 4.25%  | 4.25% | 3.75%     | 3.75%      | 3.50% | 3.50%                    | 3.50%          | 3.00%     | 3.00% | 3.00% | 3.00% |  |
| 40   | 4.25%  | 4.25% | 3.75%     | 3.75%      | 3.50% | 3.50%                    | 3.50%          | 3.00%     | 3.00% | 3.00% | 2.50% |  |
| 45   | 4.25%  | 4.25% | 3.75%     | 3.75%      | 3.50% | 3.50%                    | 3.50%          | 3.00%     | 3.00% | 3.00% | 2.00% |  |
| 50   | 4.25%  | 4.25% | 3.75%     | 3.75%      | 3.50% | 3.50%                    | 3.50%          | 3.00%     | 3.00% | 3.00% | 1.50% |  |
| 55   | 4.25%  | 4.25% | 3.75%     | 3.75%      | 3.50% | 3.50%                    | 3.50%          | 3.00%     | 3.00% | 3.00% | 0.50% |  |
| 60   | 4.25%  | 4.25% | 3.75%     | 3.75%      | 3.50% | 3.50%                    | 3.50%          | 3.00%     | 3.00% | 3.00% | 0.50% |  |
| >=65 | 4.25%  | 4.25% | 3.75%     | 3.75%      | 3.50% | 3.50%                    | 3.50%          | 3.00%     | 3.00% | 3.00% | 0.50% |  |
| Age  | 0  | 1     | 2         | 3          | 4     | 5                        | Longevity<br>6 | 7         | 8     | 9     | >=10  |  |
| <=19 | 0.00%  | 0.00% | 0.00%     | 0.00%      | 0.00% | 0.00%                    | 0.00%          | 0.00%     | 0.00% | 0.00% | 0.00% |  |
| 20   | 3.50%  | 3.50% | 3.50%     | 3.50%      | 3.50% | 3.50%                    | 3.50%          | 3.25%     | 3.00% | 3.00% | 3.00% |  |
| 25   | 3.50%  | 3.50% | 3.50%     | 3.50%      | 3.50% | 3.50%                    | 3.50%          | 3.25%     | 3.00% | 3.00% | 3.00% |  |
| 30   | 3.50%  | 3.50% | 3.50%     | 3.50%      | 3.50% | 3.50%                    | 3.50%          | 3.25%     | 3.00% | 3.00% | 3.00% |  |
| 35   | 3.50%  | 3.50% | 3.50%     | 3.50%      | 3.50% | 3.50%                    | 3.50%          | 3.25%     | 3.00% | 3.00% | 3.00% |  |
| 40   | 3.50%  | 3.50% | 3.50%     | 3.50%      | 3.50% | 3.50%                    | 3.50%          | 3.25%     | 3.00% | 3.00% | 2.50% |  |
| 45   | 3.50%  | 3.50% | 3.50%     | 3.50%      | 3.50% | 3.50%                    | 3.50%          | 3.25%     | 3.00% | 3.00% | 2.00% |  |
| 50   | 3.50%  | 3.50% | 3.50%     | 3.50%      | 3.50% | 3.50%                    | 3.50%          | 3.25%     | 3.00% | 3.00% | 1.00% |  |
| 55   | 3.50%  | 3.50% | 3.50%     | 3.50%      | 3.50% | 3.50%                    | 3.50%          | 3.25%     | 3.00% | 3.00% | 0.00% |  |
| 60   | 3.50%  | 3.50% | 3.50%     | 3.50%      | 3.50% | 3.50%                    | 3.50%          | 3.25%     | 3.00% | 3.00% | 0.00% |  |



>=65 3.50% 3.50% 3.50% 3.50% 3.50% 3.50% 3.50% 3.50% 3.25% 3.00% 3.00% 0.00%

|      | Elected Officer Class Unisex Salary Increase Due to Merit and Longevity |       |       |       |       |       |       |       |       |       |       |  |  |
|------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|
| Age  | 0   | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | >=10  |  |  |
| <=19 | 0.00%   | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |  |  |
| 20   | 1.50%   | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% |  |  |
| 25   | 1.50%   | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% |  |  |
| 30   | 1.50%   | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% |  |  |
| 35   | 1.50%   | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% |  |  |
| 40   | 1.50%   | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% |  |  |
| 45   | 1.50%   | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.25% |  |  |
| 50   | 1.50%   | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.00% |  |  |
| 55   | 1.50%   | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 0.00% |  |  |
| 60   | 1.50%   | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 0.00% |  |  |
| >=65 | 1.50%   | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 1.50% | 0.00% |  |  |

| Senior Management Class Salary Increase Due to Merit and Longevity |                          |       |       |       |                   |                    |       |       |       |       |       |  |
|--|--------------------------|-------|-------|-------|-------------------|--------------------|-------|-------|-------|-------|-------|--|
|  | Male Merit and Longevity |       |       |       |                   |                    |       |       |       |       |       |  |
| Age  | 0                        | 1     | 2     | 3     | 4                 | 5                  | 6     | 7     | 8     | 9     | >=10  |  |
| <=19   | 0.00%                    | 0.00% | 0.00% | 0.00% | 0.00%             | 0.00%              | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |  |
| 20   | 5.50%                    | 5.50% | 5.00% | 4.75% | 4.50%             | 4.00%              | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |  |
| 25   | 5.50%                    | 5.50% | 5.00% | 4.75% | 4.50%             | 4.00%              | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |  |
| 30   | 5.50%                    | 5.50% | 5.00% | 4.75% | 4.50%             | 4.00%              | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |  |
| 35   | 5.50%                    | 5.50% | 5.00% | 4.75% | 4.50%             | 4.00%              | 3.00% | 3.00% | 3.00% | 3.00% | 3.00% |  |
| 40   | 5.50%                    | 5.50% | 5.00% | 4.75% | 4.50%             | 4.00%              | 3.00% | 3.00% | 3.00% | 3.00% | 2.50% |  |
| 45   | 5.50%                    | 5.50% | 5.00% | 4.75% | 4.50%             | 4.00%              | 3.00% | 3.00% | 3.00% | 3.00% | 2.00% |  |
| 50   | 5.50%                    | 5.50% | 5.00% | 4.75% | 4.50%             | 4.00%              | 3.00% | 3.00% | 3.00% | 3.00% | 1.50% |  |
| 55   | 5.50%                    | 5.50% | 5.00% | 4.75% | 4.50%             | 4.00%              | 3.00% | 3.00% | 3.00% | 3.00% | 1.50% |  |
| 60   | 5.50%                    | 5.50% | 5.00% | 4.75% | 4.50%             | 4.00%              | 3.00% | 3.00% | 3.00% | 3.00% | 1.50% |  |
| >=65   | 5.50%                    | 5.50% | 5.00% | 4.75% | 4.50%<br>Female N | 4.00%<br>Verit and | 3.00% | 3.00% | 3.00% | 3.00% | 1.50% |  |
| Age  | 0                        | 1     | 2     | 3     | 4                 | 5                  | 6     | 7     | 8     | 9     | >=10  |  |
| <=19   | 0.00%                    | 0.00% | 0.00% | 0.00% | 0.00%             | 0.00%              | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |  |
| 20   | 5.75%                    | 5.75% | 5.75% | 5.75% | 5.75%             | 5.00%              | 4.00% | 3.50% | 3.50% | 3.50% | 3.50% |  |
| 25   | 5.75%                    | 5.75% | 5.75% | 5.75% | 5.75%             | 5.00%              | 4.00% | 3.50% | 3.50% | 3.50% | 3.50% |  |
| 30   | 5.75%                    | 5.75% | 5.75% | 5.75% | 5.75%             | 5.00%              | 4.00% | 3.50% | 3.50% | 3.50% | 3.50% |  |
| 35   | 5.75%                    | 5.75% | 5.75% | 5.75% | 5.75%             | 5.00%              | 4.00% | 3.50% | 3.50% | 3.50% | 3.50% |  |
| 40   | 5.75%                    | 5.75% | 5.75% | 5.75% | 5.75%             | 5.00%              | 4.00% | 3.50% | 3.50% | 3.50% | 2.50% |  |
| 45   | 5.75%                    | 5.75% | 5.75% | 5.75% | 5.75%             | 5.00%              | 4.00% | 3.50% | 3.50% | 3.50% | 2.25% |  |
| 50   | 5.75%                    | 5.75% | 5.75% | 5.75% | 5.75%             | 5.00%              | 4.00% | 3.50% | 3.50% | 3.50% | 1.50% |  |
| 55   | 5.75%                    | 5.75% | 5.75% | 5.75% | 5.75%             | 5.00%              | 4.00% | 3.50% | 3.50% | 3.50% | 0.50% |  |
| 60   | 5.75%                    | 5.75% | 5.75% | 5.75% | 5.75%             | 5.00%              | 4.00% | 3.50% | 3.50% | 3.50% | 0.50% |  |



>=65 5.75% 5.75% 5.75% 5.75% 5.75% 5.00% 4.00% 3.50% 3.50% 3.50% 0.50%

| Special Risk Class | Salary | Increase D | ue to Merit | and I or | naevity |
|--------------------|--------|------------|-------------|----------|---------|
|                    |        |            |             |          |         |

|      | Male Merit and Longevity |       |       |       |               |              |                |       |       |       |       |  |
|------|--------------------------|-------|-------|-------|---------------|--------------|----------------|-------|-------|-------|-------|--|
| Age  | 0                        | 1     | 2     | 3     | 4             | 5            | 6              | 7     | 8     | 9     | >=10  |  |
| <=19 | 0.00%                    | 0.00% | 0.00% | 0.00% | 0.00%         | 0.00%        | 0.00%          | 0.00% | 0.00% | 0.00% | 0.00% |  |
| 20   | 5.00%                    | 5.00% | 4.00% | 3.75% | 3.75%         | 3.75%        | 3.50%          | 3.25% | 3.25% | 3.25% | 2.50% |  |
| 25   | 5.00%                    | 5.00% | 4.00% | 3.75% | 3.75%         | 3.75%        | 3.50%          | 3.25% | 3.25% | 3.25% | 2.50% |  |
| 30   | 5.00%                    | 5.00% | 4.00% | 3.75% | 3.75%         | 3.75%        | 3.50%          | 3.25% | 3.25% | 3.25% | 2.50% |  |
| 35   | 5.00%                    | 5.00% | 4.00% | 3.75% | 3.75%         | 3.75%        | 3.50%          | 3.25% | 3.25% | 3.25% | 2.50% |  |
| 40   | 5.00%                    | 5.00% | 4.00% | 3.75% | 3.75%         | 3.75%        | 3.50%          | 3.25% | 3.25% | 3.25% | 2.50% |  |
| 45   | 5.00%                    | 5.00% | 4.00% | 3.75% | 3.75%         | 3.75%        | 3.50%          | 3.25% | 3.25% | 3.25% | 2.00% |  |
| 50   | 5.00%                    | 5.00% | 4.00% | 3.75% | 3.75%         | 3.75%        | 3.50%          | 3.25% | 3.25% | 3.25% | 1.00% |  |
| 55   | 5.00%                    | 5.00% | 4.00% | 3.75% | 3.75%         | 3.75%        | 3.50%          | 3.25% | 3.25% | 3.25% | 0.50% |  |
| 60   | 5.00%                    | 5.00% | 4.00% | 3.75% | 3.75%         | 3.75%        | 3.50%          | 3.25% | 3.25% | 3.25% | 0.50% |  |
| >=65 | 5.00%                    | 5.00% | 4.00% | 3.75% | 3.75%         | 3.75%        | 3.50%          | 3.25% | 3.25% | 3.25% | 0.50% |  |
| Age  | 0                        | 1     | 2     | 3     | Female N<br>4 | /lerit and l | Longevity<br>6 | 7     | 8     | 9     | >=10  |  |
|      |                          |       |       |       |               |              |                |       |       |       |       |  |
| <=19 | 0.00%                    | 0.00% | 0.00% | 0.00% | 0.00%         | 0.00%        | 0.00%          | 0.00% | 0.00% | 0.00% | 0.00% |  |
| 20   | 6.50%                    | 5.50% | 4.00% | 3.50% | 3.50%         | 3.50%        | 3.50%          | 3.25% | 3.00% | 3.00% | 2.50% |  |
| 25   | 6.50%                    | 5.50% | 4.00% | 3.50% | 3.50%         | 3.50%        | 3.50%          | 3.25% | 3.00% | 3.00% | 2.50% |  |
| 30   | 6.50%                    | 5.50% | 4.00% | 3.50% | 3.50%         | 3.50%        | 3.50%          | 3.25% | 3.00% | 3.00% | 2.50% |  |
| 35   | 6.50%                    | 5.50% | 4.00% | 3.50% | 3.50%         | 3.50%        | 3.50%          | 3.25% | 3.00% | 3.00% | 2.50% |  |
| 40   | 6.50%                    | 5.50% | 4.00% | 3.50% | 3.50%         | 3.50%        | 3.50%          | 3.25% | 3.00% | 3.00% | 2.00% |  |
| 45   | 6.50%                    | 5.50% | 4.00% | 3.50% | 3.50%         | 3.50%        | 3.50%          | 3.25% | 3.00% | 3.00% | 1.50% |  |
| 50   | 6.50%                    | 5.50% | 4.00% | 3.50% | 3.50%         | 3.50%        | 3.50%          | 3.25% | 3.00% | 3.00% | 1.25% |  |
| 55   | 6.50%                    | 5.50% | 4.00% | 3.50% | 3.50%         | 3.50%        | 3.50%          | 3.25% | 3.00% | 3.00% | 0.75% |  |
| 60   | 6.50%                    | 5.50% | 4.00% | 3.50% | 3.50%         | 3.50%        | 3.50%          | 3.25% | 3.00% | 3.00% | 0.75% |  |
| >=65 | 6.50%                    | 5.50% | 4.00% | 3.50% | 3.50%         | 3.50%        | 3.50%          | 3.25% | 3.00% | 3.00% | 0.75% |  |

Salaries for part time individuals have were not included.

 $\underline{\text{Inflation:}}\ 3.0\%$  (note this assumption is not explicitly used in the valuation computations as of June 1, 2015)



<u>Marital Assumption:</u> 80% of Members are assumed married. Husbands are assumed to be 3 years older than wives.

<u>Administrative Expenses:</u> Prior year's actual expenses added to Normal Cost.

<u>Funding Method:</u> The June 1, 2007 valuation used the Entry Age Normal (percent of pay) funding method. This June 1, 2015 valuation uses the Aggregate funding method on a level dollar basis.



#### **Glossary of Actuarial Terms**

<u>Present Value of Benefits (PVB):</u> The present value, as of the valuation date, of all benefits that will become payable by the Plan for the current group of members in the census.

<u>Normal Cost (NC):</u> The value of the portion of the total benefit for active members which accrues in the year following the valuation date.

Accrued Liability (AL): This is the portion of the PVB attributable to the past at the valuation date. For active members, AL is the annual NC accumulated from date of entry to the valuation date for each member. For retired and terminated members, the PVB and the AL are equal. The AL is the estimated liability owed by the pension fund at the valuation date.

<u>Unfunded Accrued Liability (UAL):</u> Any excess of the Accrued Liability over the fund assets. A negative UAL indicates fund assets are greater than the Accrued Liability, otherwise known as a surplus.

<u>Actuarial Value of Assets:</u> The value of assets used in the actuarial valuation of the Plan which is compared to the AL to determine the UAL and minimum funding requirements. A method may be used to smooth out short term volatility in the fair market value of assets.

