# Retreneni Plan for the general Enplovets Of the Southerw Mavatee Frie \& Resue Distact 

Actuaral Valuation<br>As of Octoberl, 2016

Detirmines the Contribution<br>For rite $2016 / 7$ Fiscal Year $^{\text {Eas }}$

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## Introduction

This report presents the results of the October 1, 2016 actuarial valuation for the Retirement Plan for the General Employees of the Southern Manatee Fire \& Rescue District. The report is based on the participant data and asset information provided by the pension plan administrator and, except for a cursory review for reasonableness including a comparison to the data provided for the previous valuation, we have not attempted to verify the accuracy of this information.

The primary purpose of this report is to provide a summary of the funded status of the plan as of October 1, 2016 and to determine the minimum required contribution under Chapter 112, Florida Statutes, for the 2016/17 plan year. In addition, this report provides a projection of the long-term funding requirements of the plan, statistical information concerning the assets held in the trust, statistical information concerning the participant population, and a summary of any recent plan changes.

The liabilities and cost presented in this report are based on numerous assumptions concerning the cost of benefits to be provided in the future, long-term investment returns, and the future demographic experience of the current participants. Anyone referring to this report should remember that the cost developed herein is only an estimate of the true cost of providing post-employment pension benefits. No one can predict with certainty whether the true cost will be higher or lower than the cost presented in this report. The calculated cost is entirely dependent upon the assumptions that are described in Table IV-A. If any of the assumptions is changed, then the cost shown in this report will change accordingly. Likewise, if any of the assumptions is not completely realized, then the cost shown in this report will change in the future.

Certain assumptions play a bigger role than others in determining the cost of the post-employment pension benefits. In some cases, relatively small changes in a particular assumption can have a dramatic impact on the anticipated cost of benefits. Although a thorough analysis of the impact of such changes is beyond the scope of this report, Table I-B illustrates the impact that alternative long-term investment returns would have on the normal cost rate.

## Minimum Required Contribution

Table 1-A shows the development of the minimum required contribution for the 2016/17 plan year. The minimum required contribution rate is $46.81 \%$ of covered payroll, which represents an increase of $11.12 \%$ of payroll from the prior valuation.

The normal cost rate is $45.20 \%$, which is $10.74 \%$ higher than the normal cost rate that was developed in the prior valuation. Table I-C provides a breakdown of the sources of change in the normal cost rate. Significantly, the rate decreased by $1.08 \%$ of payroll due to investment gains, increased by $0.34 \%$ of payroll due to demographic experience, and increased by another $11.48 \%$ due to the assumption change that is described below. The market value of assets
earned $8.18 \%$ during the 2015/16 plan year, whereas a $7.00 \%$ annual investment return was required to maintain a stable contribution rate.

Chapter 112, Florida Statutes, sets forth the rules concerning the minimum required contribution for public pension plans within the state. Essentially, the District must contribute an amount equal to the annual normal cost of the plan plus an adjustment as necessary to reflect interest on any delayed payment of the contribution beyond the valuation date. On this basis, the District's 2016/17 minimum required contribution will be equal to $46.81 \%$ multiplied by the total pensionable earnings for the 2016/17 fiscal year for the active employees who are covered by the plan.

Based on the current assets, participant data, and actuarial assumptions and methods that are used to value the plan, the present-day value of the total long-term funding requirement is $\$ 3,391,190$. As illustrated in Table I-A, current assets are sufficient to cover $\$ 2,309,516$ of this amount, the employer's 2016/17 expected contribution will cover $\$ 198,547$ of this amount, and future employee contributions are expected to cover $\$ 77,742$ of this amount, leaving $\$ 805,385$ to be covered by future employer funding beyond the 2016/17 fiscal year. Again, demographic and investment experience that differs from that assumed will either increase or decrease the future employer funding requirement.

## Advance Employer Contribution

The District has made contributions to the plan in excess of the minimum amount that was required to be contributed pursuant to Chapter 112. In this report, the excess contributions are referred to as an "advance employer contribution." As of October 1, 2016, the advance employer contribution is $\$ 4,695$, which is equal to the $\$ 12,395$ advance contribution as of the prior year less $\$ 7,700$ that was applied to cover the shortfall between the actual District contribution and the minimum required contribution for the 2015/16 fiscal year as shown in Table II-F.

The District may apply all or any portion of the advance employer contribution towards the minimum required contribution for the 2016/17 plan year or for any later plan year. The minimum required contribution for that plan year will be reduced dollar-for-dollar by the amount of the advance employer contribution that is applied in this manner.

Alternatively, at any time, the District may apply all or any portion of the advance employer contribution as an extra contribution in excess of the minimum required contribution. In this case, the immediate application of the entire balance of the advance employer contribution as of October 1, 2016 would reduce the minimum required contribution for the 2016/17 plan year to $44.99 \%$ of payroll.

## Contents of the Report

Tables I-D through I-G provide a detailed breakdown of various liability amounts by type of benefit and by participant group. Tables II-A through II-F provide information concerning the assets of the trust fund. Tables III-A through III-G provide statistical information concerning the plan's participant population. In particular, Table III-G gives a 10 -year projection of the cash that is expected to be required from the trust fund in order to pay benefits to the current group of participants. Finally, Tables IV-A through V-B provide a summary of the actuarial assumptions and methods that are
used to value the plan's benefits and of the relevant plan provisions as of October 1, 2016, as well as a summary of the changes that have occurred since the previous valuation report was prepared.

## Assumption Change

Pursuant to the requirements of State law, the mortality basis has been changed from a 2015 projection of the RP2000 Mortality Table for annuitants to a full generational projection using Scale BB of the RP-2000 Combined Mortality Table. This change increased the normal cost rate by $11.48 \%$ of payroll.

## Certification

This actuarial valuation was prepared by me or under my direct supervision and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate and, in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material change in plan costs or required contribution rates have been taken into account in the valuation.

For the firm,
 $\mathrm{C}_{n}$

Charles T. Carr
Consulting Actuary
Southern Actuarial Services Company, Inc.
Enrolled Actuary No. 14-04927

The individual above is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Minimum Required Contribution


For the 2016/17 Plan Year

| Present Value of Future Benefits | \$3,308,478 |
| :---: | :---: |
| Present Value of Future Administrative Expenses | \$82,712 |
| Actuarial Value of Assets | (\$2,309,516) |
| Present Value of Future Employee Contributions | (\$77,742) |
| Present Value of Future Normal Costs | \$1,003,932 |
| Present Value of Future Payroll | $\div$ \$2,221,231 |
| Normal Cost Rate | = $45.1971 \%$ |
| Expected Payroll | x \$424,163 |
| Normal Cost | \$191,709 |
| Adjustment to Reflect Semi-Monthly Employer Contributions | \$6,838 |
| Preliminary Employer Contribution for the 2016/17 Plan Year | \$198,547 |
| Expected Payroll for the 2016/17 Plan Year | $\div \$ 424,163$ |
| Minimum Required Contribution Rate | 46.81\% |

# Funding Results 

Sensitivity Analysis

## Current



The line above illustrates the sensitivity of the normal cost rate to changes in the long-term investment return.

## Gain and Loss Analysis

Previous normal cost rate ..... $34.46 \%$
Increase (decrease) due to investment gains and losses ..... -1.08\%
Increase (decrease) due to demographic experience ..... 0.34\%
Increase (decrease) due to plan amendments ..... 0.00\%
Increase (decrease) due to actuarial assumption changes ..... 11.48\%
Increase (decrease) due to actuarial method changes ..... 0.00\%
Current normal cost rate ..... 45.20\%

## Present Value of Future Benefits

Old Assumptions
w/o Amendment

## Old Assumptions w/ Amendment <br> New Assumptions w/ Amendment

Actively Employed Participants Retirement benefits
Termination benefits Disability benefits Death benefits Refund of employee contributions Sub-total

## Deferred Vested Participants

Retirement benefits
Termination benefits
Disability benefits
Death benefits
Refund of employee contributions Sub-total

Due a Refund of Contributions

Deferred Beneficiaries
Retired Participants
Service retirements
Disability retirements
Beneficiaries receiving
DROP participants
Sub-total

Grand Total

Present Value of Future Payroll
Present Value of Future Employee Contribs.
Present Value of Future Employer Contribs.
\$2,422,758
\$18,812
\$39,248
\$35,621
\$19,736
\$2,536,175

| $\$ 2,422,758$ | $\$ 2,632,278$ |
| ---: | ---: |
| $\$ 18,812$ | $\$ 20,035$ |
| $\$ 39,248$ | $\$ 41,946$ |
| $\$ 35,621$ | $\$ 32,402$ |
| $\$ 19,736$ | $\$ 19,800$ |
| $\$ 2,536,175$ | $\$ 2,746,461$ |

\$0
\$0
\$0
\$0
$\$ 0$
\$0
\$0
\$0
\$521,734
\$0
\$0
\$0
\$521,734
\$3,057,909
\$521,734
\$562,017
\$0
\$0

## $\$ 0$

## \$0

\$521,734
\$0
\$562,017
$\underline{\underline{\$ 3,057,909}}$
$\underline{\$ 3,308,478}$

| $\$ 2,216,533$ | $\$ 2,216,533$ | $\$ 2,221,231$ |
| ---: | ---: | ---: |
| $\$ 77,579$ | $\$ 77,579$ | $\$ 77,742$ |
| $\$ 747,262$ | $\$ 747,262$ | $\$ 1,003,932$ |

## Present Value of Accrued Benefits

Old Assumptions
w/o Amendment

Actively Employed Participants
Retirement benefits
Termination benefits
Disability benefits
Death benefits
Refund of employee contributions
Sub-total

## Deferred Vested Participants

Retirement benefits
Termination benefits
Disability benefits
Death benefits
Refund of employee contributions Sub-total

Due a Refund of Contributions
Deferred Beneficiaries

Retired Participants
Service retirements
Disability retirements
Beneficiaries receiving
DROP participants
Sub-total

Grand Total

Funded Percentage
\$0
\$1,544,421
$\$ 10,825$
\$27,390
\$22,975
\$14,860
\$1,620,471
$\$ 0$

## \$0

\$0

## \$0

\$0

SO
\$0
\$521,734
\$0

## \$0

\$0
\$521,734
\$2,142,205
Old Assumptions w/ Amendment

New Assumptions w/ Amendment

## Present Value of Vested Benefits

Old Assumptions
who Amendment

Old Assumptions w/ Amendment

New Assumptions w/ Amendment

## Actively Employed Participants

Retirement benefits
Termination benefits
Disability benefits
Death benefits
Refund of employee contributions Sub-total

Deferred Vested Participants
Retirement benefits
\$0
Termination benefits
Disability benefits
Death benefits
Refund of employee contributions Sub-total

Due a Refund of Contributions

Deferred Beneficiaries

Retired Participants
Service retirements
Disability retirements
Beneficiaries receiving DROP participants

Sub-total

Grand Total
\$1,513,837
\$10,825
\$27,390
\$19,130
\$16,002
\$1,587,184
\$1,513,837 \$10,825
\$27,390 \$19,130
\$16,002
\$1,587,184
\$1,636,237 \$11,520
\$29,240
\$16,431
\$16,086
\$1,709,514
$\$ 0$
\$0
\$0
\$0
\$0
\$0
\$0
\$0
\$521,734
\$0
\$0
\$0
\$521,734
$\underline{\underline{\$ 2,108,918}}$
\$2,271,531

## Entry Age Normal Accrued Liability

Old Assumptions w/o Amendment

Actively Employed Participants
Retirement benefits
Termination benefits
Disability benefits
Death benefits
Refund of employee contributions
Sub-total

## Deferred Vested Participants

Retirement benefits
Termination benefits
Disability benefits
Death benefits
Refund of employee contributions Sub-total

Due a Refund of Contributions
Deferred Beneficiaries
Retired Participants
Service retirements
Disability retirements
Beneficiaries receiving DROP participants Sub-total

Grand Total
\$2,002,273
\$14,656 \$33,256
\$29,199
\$15,800
\$2,095,184
\$2,002,273
\$14,656
\$33,256
\$29,199
\$15,800
\$2,095,184
\$2,170,762
w/ Amendment

New Assumptions w/ Amendment

## Actuarial Value of Assets

Market Value of Assets as of October 1, $2016 \quad \$ 2,314,211$
Minus DROP account balances\$0
Minus advance employer contributions

Actuarial Value of Assets as of October 1, 2016 \$2,309,516

## Historical Actuarial Value of Assets

October 1, 2007
\$785,284
October 1, 2008
\$749,500
October 1, 2009
October 1, 2010
October 1, 2011
October 1, 2012
October 1, 2013
October 1, 2014
October 1, 2015
October 1, 2016
\$847,230
\$1,015,163
\$1,120,735
\$1,436,085
\$1,690,602
\$1,916,144
\$2,007,307
\$2,309,516

Market Value of Assets


## Historical Market Value of Assets

October 1, 2007
\$812,700
October 1, 2008
\$780,077
October 1, 2009
October 1, 2010
October 1, 2011
October 1, 2012
October 1, 2013
October 1, 2014
October 1, 2015
October 1, 2016
$\qquad$
\$880,491
\$1,015,691
\$1,127,172
\$1,436,085
\$1,697,452
\$1,928,539
\$2,019,702
\$2,314,211

Investment Return
Table II-C


|  |  |  |  |
| :--- | ---: | ---: | ---: |
| Plan | Market <br> Value | Actuarial <br> Value <br> Year | Return |
| Return | Return |  |  |
| 2006/07 | $12.12 \%$ | $12.59 \%$ | $7.50 \%$ |
| $2007 / 08$ | $-12.84 \%$ | $-13.30 \%$ | $7.50 \%$ |
| $2008 / 09$ | $3.06 \%$ | $3.19 \%$ | $7.50 \%$ |
| $2009 / 10$ | $9.18 \%$ | $9.35 \%$ | $7.50 \%$ |
| $2010 / 11$ | $0.62 \%$ | $0.62 \%$ | $7.50 \%$ |
| $2011 / 12$ | $16.93 \%$ | $16.98 \%$ | $7.50 \%$ |
| $2012 / 13$ | $11.94 \%$ | $11.97 \%$ | $7.50 \%$ |
| $2013 / 14$ | $8.48 \%$ | $8.53 \%$ | $7.00 \%$ |
| $2014 / 15$ | $-0.20 \%$ | $-0.20 \%$ | $7.00 \%$ |
| $2015 / 16$ | $8.18 \%$ | $8.21 \%$ | $7.00 \%$ |
|  |  |  |  |
| $10 y r$. Avg. | $5.43 \%$ | $5.46 \%$ | $7.35 \%$ |
|  |  |  |  |

## Asset Reconciliation

Actuarial Value
\$2,007,307

Increases Due To:
$\begin{array}{lll}\text { Employer Contributions } & \$ 161,687 & \$ 161,687\end{array}$
Employee Contributions $\$ 16,611$
Service Purchase Contributions
Total Contributions

Interest and Dividends
Realized Gains (Losses)
Unrealized Gains (Losses)
Total Investment Income
Other Income
Market Value
As of October 1, 2015

Total Income

Decreases Due To:

Monthly Benefit Payments
Refund of Employee Contributions
DROP Credits
Total Benefit Payments
Investment Expenses
Administrative Expenses
Advance Employer Contribution

Total Expenses
As of October 1, 2016
$(\$ 54,018)$

| $\$ 2,314,211$ |
| ---: |

\$2,314,211
$(\$ 46,318)$

Income

|  |  |  | Service |  | Realized | Unrealized |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plan | Employer | Employee | Purchase | Interest/ | Gains / | Gains / | Other |
| Year | Contribs. | Contribs. | Contribs. | Dividends | Losses | Losses | Income |
| 2006/07 | \$90,174 | \$11,196 | \$0 | \$0 | \$0 | \$83,748 | \$0 |
| 2007/08 | \$93,568 | \$11,617 | \$0 | \$0 | \$0 | -\$109,299 | \$0 |
| 2008/09 | \$93,957 | \$11,745 | \$0 | \$0 | \$0 | \$25,045 | \$0 |
| 2009/10 | \$92,770 | \$11,596 | \$0 | \$0 | \$0 | \$83,202 | \$0 |
| 2010/11 | \$137,306 | \$12,687 | \$0 | \$0 | \$0 | \$6,583 | \$0 |
| 2011/12 | \$139,775 | \$13,095 | \$0 | \$0 | \$0 | \$200,050 | \$0 |
| 2012/13 | \$119,945 | \$12,794 | \$0 | \$0 | \$0 | \$176,601 | \$0 |
| 2013/14 | \$119,977 | \$13,572 | \$0 | \$0 | \$0 | \$147,511 | \$0 |
| 2014/15 | \$131,597 | \$15,608 | \$0 | \$0 | \$0 | -\$3,978 | \$0 |
| 2015/16 | \$161,687 | \$16,611 | \$0 | \$0 | \$0 | \$170,229 | \$0 |

Expenses


Note: Information was not available to separate the investment expenses from the investment income nor was information available to separate the investment income by source.

## Other Reconciliations

Advance Emplover Contribution
Advance Employer Contribution as of October 1, 2015 ..... \$12,395
Additional Employer Contribution ..... \$161,687
Minimum Required Contribution ..... $(\$ 169,387)$
Net Increase in Advance Employer Contribution ..... $(\$ 7,700)$
Advance Employer Contribution as of October 1, 2016 ..... $\$ 4,695$
DROP Account Reconciliation
DROP Balance as of October 1, 2015 ..... \$0
DROP Benefit Credits ..... \$0
DROP Investment Credits ..... \$0
DROP Benefits Paid Out ..... $\$ 0$
$\$ 0$
DROP Balance as of October 1, 2016 ..... \$0

Summary of Participant Data


Table III-A

As of October 1, 2016

Acively Employed Participants

- Active Participants ..... 8

DROP Participants ..... 0
Inactive ParticipantsDeferred Vested Participants0
Due a Refund of Contributions ..... 0
Deferred Beneficiaries ..... 0
Participants Receiving a Benefit
Service Retirements ..... 3
Disability Retirements ..... 0
Beneficiaries Receiving ..... 0Total Participants11

Participant Distribution by Status

## Number of Participants Included in Prior Valuations

October 1, 2007
October 1, 2008
October 1, 2009
October 1, 2010
October 1, 2011
October 1, 2012
October 1, 2013
October 1, 2014
October 1, 2015
October 1, 2016

| Active | DROP | Inactive | Retired | Total |
| ---: | ---: | ---: | ---: | ---: |
| 7 | 0 | 1 | 1 | 9 |
| N/A | N/A | N/A | N/A | N/A |
| 6 | 0 | 0 | 3 | 9 |
| 7 | 0 | 0 | 3 | 10 |
| 7 | 0 | 0 | 3 | 10 |
| 7 | 0 | 0 | 3 | 10 |
| 7 | 0 | 0 | 3 | 10 |
| 7 | 0 | 0 | 3 | 10 |
| 8 | 0 | 0 | 3 | 11 |
| 8 | 0 | 0 | 3 | 11 |

## Data Reconciliation

Deferred Due a Def. Service Disabled Benef.Active DROP Vested Refund Benef. Retiree Retiree Rec'v. Total
October 1, 2015 ..... 80 ..... 0 ..... 0 ..... 0 ..... 3 ..... 0
0 ..... 11
Change in Status
Re-employed
Terminated
Retired
Participation Ended
Transferred OutCashed Out Died
Participation Began
Newly Hired
Transferred In
New Beneficiary
Other Adjustment

| October 1,2016 | 8 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 11 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Active Participant Data

As of October 1, 2016


\# Male

- Female



## Actual vs. Expected Salary Increases

## Active Participant Statistics From Prior Valuations

October 1, 2007
October 1, 2008
October 1, 2009
October 1, 2010
October 1, 2011
October 1, 2012
October 1, 2013
October 1, 2014
October 1, 2015
October 1, 2016

| Average |  |  | Average Expected Salary | Average Actual Salary |
| :---: | :---: | :---: | :---: | :---: |
| Age | Service | Salary | Increase | Increase |
| 47.4 | 7.7 | \$45,697 | N/A | N/A |
| N/A | N/A | N/A | 5.20\% | 4.33\% |
| 48.5 | 7.8 | \$49,982 | 5.00\% | 0.59\% |
| 52.6 | 6.4 | \$50,309 | 5.33\% | 12.94\% |
| 53.6 | 7.4 | \$51,782 | 6.00\% | 1.96\% |
| 54.6 | 8.4 | \$53,448 | 5.64\% | 2.81\% |
| 55.6 | 9.4 | \$52,218 | 5.29\% | -1.19\% |
| 56.6 | 10.4 | \$55,396 | 4.00\% | 6.59\% |
| 57.8 | 10.1 | \$55,743 | 4.00\% | 7.11\% |
| 58.8 | 11.1 | \$59,326 | 4.00\% | 7.27\% |

## Active Age-Service Distribution



## $\triangle$ Eligible to retire

$\triangle$ May be eligible to retire
$\Delta$ Not eligible to retire

| Attained Age | Completed Years of Service |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 1 | 1 to 4 | 5 to 9 | 10 to 14 | 15 to 19 | 20 to 24 | 25 to 29 | 30 to 34 | 35 to 39 | 40 \& up | Total |
| Under 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avg.Pay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 to 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avg.Pay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 to 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avg.Pay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35 to 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avg.Pay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40 to 44 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Avg.Pay | 0 | 0 | 0 | 46,442 | 0 | 0 | 0 | 0 | 0 | 0 | 46,442 |
| 45 to 49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Avg.Pay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 50 to 54 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Avg.Pay | 0 | 0 | 0 | 0 | 0 | 78,794 | 0 | 0 | 0 | 0 | 78,794 |
| 55 to 59 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Avg.Pay | 0 | 0 | 0 | 0 | 71,495 | 0 | 0 | 0 | 0 | 0 | 71,495 |
| 60 to 64 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| Avg.Pay | 0 | 37,585 | 53,958 | 0 | 0 | 99,137 | 0 | 0 | 0 | 0 | 63,560 |
| 65 \& up | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Avg.Pay | 0 | 0 | 43,597 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43,597 |
| Total | 0 | 1 | 3 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 8 |
| Avg.Pay | 0 | 37,585 | 47,051 | 46,442 | 71,495 | 88,966 | 0 | 0 | 0 | 0 | 59,326 |

## Inactive Participant Data



## Age at Retirement

\author{

- Service Retirements <br> misability Retirements <br> - DROP Participants
}

Average Monthly Benefit

| Service Retirements | \$1,109.58 |
| ---: | ---: |
| Disability Retirements | Not applicable |
| Beneficiaries Receiving | Not applicable |
| DROP Participants | Not applicable |
|  |  |
| Not applicable |  |
| Deferred Beneficiaries | Not applicable |

Projected Benefit Payments


Actual
For the period October 1, 2015 through September 30, 2016 \$44,192

## Projected

For the period October 1, 2016 through September 30, 2017
\$73,229
For the period October 1, 2017 through September 30, 2018 \$85,732
For the period October 1, 2018 through September 30, 2019 \$100,743
For the period October 1, 2019 through September 30, 2020 \$138,963
For the period October 1, 2020 through September 30, 2021
\$154,046
For the period October 1, 2021 through September 30, 2022 \$169,693
For the period October 1, 2022 through September 30, 2023
\$195,617
For the period October 1, 2023 through September 30, 2024
\$220,557
For the period October 1, 2024 through September 30, 2025
\$235,325
For the period October 1, 2025 through September 30, 2026 \$260,882

## Summary of Actuarial Methods and Assumptions

## 1. Actuarial Cost Method

Aggregate cost method. Under this actuarial cost method, a funding cost is developed for the plan as a level percentage of payroll. The level funding percentage is calculated as the excess of the total future benefit liability over accumulated assets and future employee contributions, with this excess spread over the expected future payroll for current active participants. The normal cost is equal to the level funding percentage multiplied by the expected payroll for the year immediately following the valuation date. The actuarial accrued liability is equal to the accumulated assets. Therefore, under the aggregate cost method, no unfunded accrued liability is developed.
2. Asset Method

The actuarial value of assets is equal to the market value of assets.
3. Interest (or Discount) Rate
$7.00 \%$ per annum
4. Salary Increases

Plan compensation is assumed to increase at the rate of $4.00 \%$ per annum, unless actual plan compensation is known for a prior plan year.
5. Decrements

- Pre-retirement mortality: Sex-distinct rates set forth in the RP-2000 Combined Mortality Table, with full generational improvements in mortality using Scale BB
- Post-retirement mortality: Sex-distinct rates set forth in the RP-2000 Combined Mortality Table, with full generational improvements in mortality using Scale BB
- Disability: Age- and gender-based rates of disability were assumed, ranging from $0.067 \%$ for males and $0.040 \%$ for females at age $25,0.119 \%$ for males and $0.118 \%$ for females at age $35,0.462 \%$ for males and $0.435 \%$ for females at age 45, and $1.000 \%$ for males and $0.840 \%$ for females at age 55.


## Summary of Actuarial Methods and Assumptions

- Termination:

With respect to participants with less than 10 years of service, the termination rates are both gender- and service-based, ranging from $15.00 \%$ for males and $10.01 \%$ for females with less than two years of service to $4.30 \%$ for males and $4.75 \%$ for females with between eight and 10 years of service; with respect to participants with at least 10 years of service, the termination rates are both gender- and age-based, ranging from $4.28 \%$ for males and $5.41 \%$ for females at age 25 to $0.00 \%$ for both genders at age 55 .

- Retirement:

For those participants who have met the age and service requirements to retire, retirement is assumed to occur at the rate of $10 \%$ per year during each of the three years prior to normal retirement age; alternatively, $40 \%$ of participants who reach their normal retirement age are assumed to retire immediately, with $20 \%$ assumed to retire during each of the next two years after the attainment of normal retirement age and $100 \%$ assumed to retire three years after the attainment of normal retirement age. No early retirements are assumed to occur prior to age 50.

## 6. Form of Payment

Future retirees have been assumed to select the 10-year certain and life annuity, except that participants who are under age 40 or who have earned less than 15 years of service are assumed to receive a refund of their employee contributions.
7. Expenses

The total projected benefit liability has been loaded by $2.50 \%$ to account for anticipated administrative expenses. In addition, the interest rate set forth in item 3. above is assumed to be net of investment expenses and commissions.

## Changes in Actuarial Methods and Assumptions

Since the completion of the previous valuation, the following assumption has been changed:
The mortality basis was changed from a 2015 projection of the RP-2000 Mortality Table for annuitants to a full generational projection using Scale BB of the RP-2000 Combined Mortality Table as required by State law.

## Summary of Plan Provisions

## 1. Monthly Accrued Benefit

$2.50 \%$ of Average Final Compensation multiplied by Credited Service
2. Normal Retirement Age and Benefit

- Age

Age 62 with at least 10 years of Credited Service; or Any age with at least 30 years of Credited Service

- Amount

Monthly Accrued Benefit

- Form of Payment

Actuarially increased single life annuity (optional);
10-year certain and life annuity (normal form of payment);
Actuarially reduced $50 \%$ joint and contingent annuity (optional);
Actuarially reduced $662 / 3 \%$ joint and contingent annuity (optional);
Actuarially reduced $75 \%$ joint and contingent annuity (optional);
Actuarially reduced 100\% joint and contingent annuity (optional);
Any other actuarially equivalent form of payment approved by the Board; or
Actuarially equivalent lump sum distribution (automatic if the single sum value of the participant's benefit is less than or equal to $\$ 5,000$ or the monthly annuity is less than $\$ 100$ )
(Note: A participant may change his joint annuitant up to two times after retirement.)

## 3. Early Retirement Age and Benefit

- Age

Any age with at least 10 years of Credited Service

- Amount

Monthly Accrued Benefit (payable at Normal Retirement Age); or
Monthly Accrued Benefit reduced by 5\% for each year by which the participant's Early Retirement Date precedes his Normal Retirement Date (payable at Early Retirement Age)

- Form of Payment

Same as for Normal Retirement

## Summary of Plan Provisions

## 4. Disability Eligibility and Benefit

- Eligibility

The participant must have earned at least 10 years of Credited Service.

- Condition

The Board must find that the participant has a physical or mental condition resulting from bodily injury, disease, or a mental disorder which renders him incapable of employment.

- Amount Payable

A monthly 10-year certain and life annuity equal to the larger of (a) or (b), as follows, but offset as necessary to preclude the total of the participant's worker's compensation, disability benefit, and other District-provided disability compensation from exceeding his Average Final Compensation:
(a) Monthly Accrued Benefit; or
(b) $25 \%$ of Average Final Compensation

## 5. Delayed Retirement Age and Benefit

- Age

After Normal Retirement Age

- Amount

Monthly Accrued Benefit

- Form of Payment

Same as for Normal Retirement

## 6. Deferred Vested Benefit

- Age

Any age with at least 10 years of Credited Service

- Amount

Monthly Accrued Benefit (payable at Normal Retirement Age); or
Monthly Accrued Benefit reduced by 5\% for each year by which the participant's Early Retirement Date precedes his Normal Retirement Date (payable at Early Retirement Age)

- Form of Payment

Same as for Normal Retirement

## Summary of Plan Provisions

## 7. Pre-Retirement Death Benefit

In the case of the death of a vested participant prior to retirement, his beneficiary will receive the participant's Monthly Accrued Benefit payable for 10 years beginning on the participant's early or normal retirement date. In the case of the death of a non-vested participant prior to retirement, his beneficiary will receive the participant's Accumulated Contributions in lieu of any other benefits payable from the plan.

## 8. Average Final Compensation

Average of the highest three years of Compensation out of the last 10 years of employment (or career average, if higher).

## 9. Compensation

Compensation includes regular earnings, incentive pay, merit pay, vacation pay, and sick pay, plus all taxdeferred and tax-exempt items of income, but excludes lump sum payments; annual compensation in excess of $\$ 200,000$ (as indexed) is excluded in accordance with IRC $\$ 401(\mathrm{a})(17)$.

## 10. Credited Service

The elapsed time from the participant's date of hire until his date of termination, retirement, or death, provided that the participant made all required contributions. In addition, Credited Service includes prior service with the Oneco-Tallevast and Somoset Fire Districts.

## 11. Participation Requirement

All full-time general employees of the Southern Manatee Fire \& Rescue District automatically become a participant in the plan on their date of hire.

## 12. Accumulated Contributions

The Employee Contributions accumulated with no interest; if the participant terminates his employment with less than 10 years of Credited Service, he receives his Accumulated Contributions in lieu of any other benefits payable from the plan.

## 13. Participant Contribution

$3.50 \%$ of earnings

## Summary of Plan Provisions

14. Definition of Actuarially Equivalent

- Interest Rate
7.00\% per annum
- Mortality Table

Unisex mortality table promulgated by the Internal Revenue Service (IRS) for purposes of calculating lump sum distributions pursuant to Internal Revenue Code (IRC) 417(e)(3)
15. Plan Effective Date

October 1, 1999
16. Automatic Annual Cost-of-Living Adjustment (COLA)

All retirement and disability benefits, other than the retiree health supplement, include an automatic annual 3\% cost-of-living adjustment.
17. Retiree Health Supplement

Participants receive a monthly post-retirement health supplement equal to $\$ 15$ for each year of service, with a minimum monthly benefit of $\$ 50$ and a maximum monthly benefit of $\$ 450$.
18. Deferred Retirement Option Plan (DROP)

A participant who reaches his Normal Retirement Age is eligible to participate in the DROP for a period of up to 60 months. Interest is credited on the DROP accounts at the rate of $6.50 \%$ per annum.

## Summary of Plan Amendments

Table V-B

No significant plan changes have been adopted since the completion of the previous valuation.

# Retireneni Plan for the General Emploveses Of the Southern Manatee Fire \& Rescue District 

Actuarial Valuation<br>As of October I, 2015

GASB 67/68 SUPPLEMENT As of September 30, 2016

## NET PENSION LIABILITY AS OF SEPTEMBER 30, 2016

| Total pension liability | $\$ 2,568,485^{*}$ |
| :--- | :--- |
| Less fiduciary net position | $\underline{(2,314,211)}$ |
| Net pension liability | $\underline{\underline{\$ 254,274}}{ }^{*}$ |

- This amount has been rolled forward from October 1, 2015.
" This amount is recognized on the employer's balance sheet.


## PENSION EXPENSE FOR THE 2015/16 FISCAL YEAR

| Service cost | $\$ 104,615$ |
| :--- | ---: |
| Other recognized changes in net pension liability: |  |
| Expected interest growth | $(12,673)$ |
| Investment gainloss | 30,035 |
| Demographic gain/oss | $(1,877)$ |
| Employee contributions | $\left(\begin{array}{rl}6,611) \\ \text { Administrative expenses } & 9,826 \\ \text { Changes in benefitterms } & 0 \\ \text { Assumption changes } & \underline{52,996} \\ \text { Pension expense } & \underline{\$ 166,311}\end{array}\right.$. |

* This amount is recognized on the employer's income statement, along with the employer contribution for the 2015/16 fiscal year.


## DEFERRED INFLOW AND OUTFLOW OF RESOURCES

|  | Deferred Outlows <br> Of Resources | Deferred Inflows <br> Of Resources |
| :--- | :---: | :---: |
| Balance as of September 30, 2015 | $\$ 146,192$ | $\$ 226,362$ |
| Change due to: |  |  |
| Amortization payments | $\$(125,803)$ | $\$(44,649)$ |
| Investment gain/loss | $\$ 0$ | $\$ 24,574$ |
| Demographic gain/loss | $\$ 31,751$ |  |
| Assumption changes | $\$ 521,628$ | $\$ 0$ |
| $\quad$ Total change | $\$ 427,576$ | $\$ 0$ |
| Balance as of September 30, 2016 | $\$ 573,768 ~ *$ | $\$(20,075)$ |

- These amounts are recognized on the employer's balance sheet.

BALANCE EQUATION

| Net pension liability as of September 30, 2015 | $\$(198,001)$ |
| :--- | ---: |
| Plus pension expense for the 2015/16 fiscal year | $\$ 166,311$ |
| Minus employer contribution for the 2015/16 fiscal year | $\$(161,687)$ |
| Plus change in balance of deferred outflows of resources | $\$ 427,576$ |
| Minus change in balance of deferred inflows of resources | $\$ 20,075$ |
| Net pension liability as of September 30,2016 | $\$ 254,274$ |

## DEFERRED INFLOW AND OUTFLOW OF RESOURCES (continued)

Amortization schedule for deferred outtiows and inflows of resources:

|  | Deferred Outflows Of Resources | Deferred Inflows Of Resources |
| :---: | :---: | :---: |
| Balance as of September 30, 2016 | \$573,768 | \$206,287 |
| Amount recognized in the |  |  |
| 2016/17 pension expense: |  |  |
| Investment gain/loss | \$36,548 | \$6,513 |
| Demographic gain/loss | \$5,121 | \$6,998 |
| Assumption changes | \$84,134 | \$31,138 |
| Total | \$125,803 | \$44,649 |
| Balance as of September 30, 2017 | \$447,965 | \$161,638 |
| Amount recognized in the |  |  |
| 2017/18 pension expense: |  |  |
| Investment gain/loss | \$36,548 | \$6,515 |
| Demographic gain/oss | \$5,121 | \$6,998 |
| Assumption changes | \$84,134 | \$31,138 |
| Total | \$125,803 | \$44,651 |
| Balance as of September 30, 2018 | \$322,162 | \$116,987 |
| Amount recognized in the |  |  |
| 2018/19 pension expense: |  |  |
| Investment gain/loss | \$36,548 | \$4,915 |
| Demographic gain/loss | \$5,121 | \$6,998 |
| Assumption changes | \$84,134 | \$31,138 |
| Total | \$125,803 | \$43,051 |
| Balance as of September 30, 2019 | \$196,359 | \$73,936 |
| Amount recognized in the |  |  |
| 2019/20 pension expense: |  |  |
| Investment gain/loss | \$0 | \$4,914 |
| Demographic gain/loss | \$5,121 | \$6,998 |
| Assumption changes | \$84,134 | \$31,138 |
| Total | \$89,255 | \$43,050 |
| Balance as of September 30, 2020 | \$107,104 | \$30,886 |
| Amount recognized in the |  |  |
| 2020/21 pension expense: |  |  |
| Investment gain/loss | \$0 | \$0 |
| Demographic gain/oss | \$5,121 | \$5,667 |
| Assumption changes | \$84,134 | \$25,219 |
| Total | \$89,255 | \$30,886 |
| Balance as of September 30, 2021 | \$17,849 | \$0 |

## CHANGES IN THE NET PENSION LIABILITY

|  | Total Pension Liability | Fiduciary Net Position | Net Pension Liability |
| :--- | :---: | :---: | :---: |
| Balance as of September 30, 2015 | $\$ 1,821,701$ | $\$(2,019,702)$ | $\$(198,001)$ |
| Change due to: |  |  |  |
| $\quad$ Service cost | $\$ 104,615$ | $\$ 0$ | $\$ 104,615$ |
| Expected interest growth | $\$ 132,982$ | $\$ 0$ | $\$(145,655)$ |
| Unexpected investment income | $\$ 0$ | $\$(24,574)$ | $\$(12,673)$ |
| Demographic experience | $\$ 31,751$ | $\$ 0$ | $\$ 31,751$ |
| Employer contributions | $\$ 0$ | $\$(161,687)$ | $\$(161,687)$ |
| Employee contributions | $\$ 0$ | $\$(16,611)$ | $\$(16,611)$ |
| Benefitpayments \& refunds | $\$(44,192)$ | $\$ 44,192$ | $\$ 0$ |
| Administrative expenses | $\$ 0$ | $\$ 9,826$ | $\$ 0$ |
| Changes in benefitterms | $\$ 0$ | $\$ 0$ | $\$ 0$ |
| Assumption changes | $\$ 521,628$ | $\$ 0$ | $\$ 521,628$ |
| Balance as of September 30, 2016 | $\$ 2,568,485$ | $\$(2,314,211)$ | $\$ 254,274$ |

COMPARISON OF NET PENSION LIABILITY USING ALTERNATIVE DISCOUNT RATES

|  | Discount Rate Minus 1.00\% | 7.00\% Discount Rate | Discount Rate Plus $1.00 \%$ |
| :--- | :---: | :---: | :---: |
| Total pension liability | $\$ 2,892,788$ | $\$ 2,568,485$ | $\$ 2,295,406$ |
| Less fiduciary net position | $\underline{(2,314,211)}$ | $\underline{(2,314,211)}$ | $\underline{\$ 254,274})$ |
| Net pension liability |  |  | $\$(18,811)$ |

HISTORICAL TREND INFORMATION

| Measurement <br> Date | Total Pension <br> Liability | Fiduciary <br> Net Position | Net Pension <br> Liability | Funded <br> Percentage | Covered <br> Payroll | Net Pension <br> Liability as a \% of <br> Covered Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| September 30, 2016 | $\$ 2,568,485$ | $\$ 2,314,211$ | $\$ 254,274$ | $90.10 \%$ | $\$ 429,316$ | $59.23 \%$ |
| September 30,2015 | $\$ 1,821,701$ | $\$ 2,019,702$ | $\$(198,001)$ | $110.87 \%$ | $\$ 375,841$ | Not applicable |
| September 30, 2014 | $\$ 1,896,350$ | $\$ 1,916,144$ | $\$(19,794)$ | $101.04 \%$ | $\$ 351,865$ | Not applicable |
| September 30,2013 | $\$ 1,727,284$ | $\$ 1,690,602$ | $\$ 36,682$ | $97.88 \%$ | $\$ 351,865$ | $10.43 \%$ |
| October 1,2012 | $\$ 1,706,809$ | $\$ 1,436,085$ | $\$ 270,724$ | $84.14 \%$ | $\$ 378,881$ | $71.45 \%$ |
| October 1,2011 | $\$ 1,596,407$ | $\$ 1,120,735$ | $\$ 475,672$ | $70.20 \%$ | $\$ 363,761$ | $130.76 \%$ |
| October 1,2010 | $\$ 1,423,371$ | $\$ 1,015,163$ | $\$ 408,208$ | $71.32 \%$ | $\$ 351,483$ | $116.14 \%$ |
| October 1,2009 | $\$ 1,306,730$ | $\$ 847,230$ | $\$ 459,500$ | $64.84 \%$ | $\$ 300,430$ | $152.95 \%$ |

## DISCLOSURES RELATED TO THE GENERAL EMPLOYEES' PENSION PLAN (continued)

HISTORICAL TREND INFORMATION (continued)
Changes in the net pension liability by source

| Fiscal Year | Service Cost | Expected Interest Growth | Unexpected Investment Income | Demographic Experience | Employer Contributions | Employee Contributions | Benefit Payments \& Refunds | Administrative Expenses | $\begin{gathered} \hline \text { Changes In } \\ \text { Benefit } \\ \text { Terms } \end{gathered}$ | Assumption Changes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2015/16 | \$104,615 | \$(12,673) | \$(24,574) | \$31,751 | \$ $(161,687)$ | \$(16,611) | \$0 | \$9,826 | \$0 | \$521,628 |
| 2014/15 | \$60,938 | \$(3,320) | \$182,740 | \$(47,655) | \$(143,992) | \$(15,608) | $\$(8,265)$ | \$9,002 | \$0 | \$ 212,047$)$ |
| 2013/14 | \$76,142 | \$4,015 | \$ $(7,992)$ | \$0 | \$(114,432) | \$(13,572) | \$(8,645) | \$8,008 | \$0 | \$0 |

NOTE: The amortization period for demographic experience and assumption changes was 6.81 years for the 2014/15 fiscal year and 6.20 years for the 2015/16 fiscal year.

## DISCLOSURES RELATED TO THE GENERAL EMPLOYEES' PENSION PLAN (continued)

HISTORICAL TREND INFORMATION (continued)

| Fiscal Year End | (1) <br> Actuarially <br> Determined <br> Contribution | (2) <br> Contributions Recognized By the Plan | (3) <br> Difference Between <br> (1) and (2) | Covered Payroll | Column (2) <br> as a \% of Covered Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: |
| September 30, 2016 | \$169,387 | \$161,687 | \$(7,700) | \$429,316 | 37.66\% |
| September 30, 2015 | \$131,597 | \$143,992 | \$12,395 | \$375,841 | 38.31\% |
| September 30, 2014 | \$114,432 | \$114,432 | \$0 | \$351,865 | 32.52\% |
| September 30, 2013 | \$113,095 | \$113,095 | \$0 | \$378,881 | 29.85\% |
| September 30, 2012 | \$146,212 | \$146,212 | \$0 | \$363,761 | 40.19\% |
| September 30, 2011 | \$131,397 | \$131,397 | \$0 | \$351,483 | 37.38\% |
| September 30, 2010 | \$125,503 | \$125,503 | \$0 | \$300,430 | 41.77\% |
| September 30, 2009 | \$91,273 | \$91,273 | \$0 | Not available | Not available |
| September 30, 2008 | \$90,407 | \$90,407 | \$0 | Not available | Not available |
| September 30, 2007 | \$86,745 | \$86,745 | \$0 | \$288,571 | 30.06\% |

## INFORMATION USED TO DETERMINE THE NET PENSION LIABILITY

Employer's reporting date:
Measurement date:
Actuarial valuation date:
Actuarial assumptions
Discount rate:
Salary increases:
Cost-of-living increases:
Mortality basis:

Retirement:

Other decrements:

Non-investment expenses:
Future contributions:
Changes:

September 30, 2016
September 30, 2016
October 1, 2015
7.00\% per annum (2.92\% per annum is attributable to long-term inflation); this rate was used to discount all future benefit payments.
4.00\% per annum
$3.00 \%$ per annum for all benefits other than the health supplement
Sex-distinct rates set forth in the RP-2000 Mortality Table for annuitants, projected to 2015 by Scale AA, as published by the Internal Revenue Service (IRS) for purposes of Internal Revenue Code (IRC) section 430; future generational improvements in mortality have not been reflected.
$10 \%$ of eligible employees are assumed to retire during each of the three years prior to normal retirement age, $40 \%$ are assumed to retire at normal retirement age, $20 \%$ are assumed to retire during each of the two years following normal retirement age, and 100\% are assumed to retire three years after normal retirement age; no retirements are assumed prior to age 50 .
Assumed employment termination is based on gender, age, and service; for participants with less than 10 years of service, termination rates range from $15.00 \%$ for males and $10.01 \%$ for females with less than two years of service to $4.30 \%$ for males and $4.75 \%$ for females with between eight and 10 years of service; for participants with at least 10 years of service, termination rates range from $4.28 \%$ for males and $5.41 \%$ for females at age 25 to $0.00 \%$ at age 55 .
Assumed disability is based on gender and age and ranges from $0.067 \%$ for males and $0.040 \%$ for females at age 25 to $1.00 \%$ for males and $0.84 \%$ for females at age 55 .
All liabilities have been loaded by $2.50 \%$ to account for non-investment expenses.
Contributions from the employer and employees are assumed to be made as legally required.
Since the prior measurement date, the discount rate was decreased from $9.08 \%$ per annum to $7.00 \%$ per annum.

## DETERMINATION OF THE LONG-TERM EXPECTED RATE OF RETURN ON PLAN ASSETS

| Investment Category | Target Allocation | Expected Long-Term Real Return |
| :--- | :---: | :---: |
| Core bonds | $16.00 \%$ | $0.58 \%$ per annum |
| Multi-sector | $24.00 \%$ | $1.08 \%$ per annum |
| U.S. large cap equity | $39.00 \%$ | $6.08 \%$ per annum |
| U.S. small cap equity | $11.00 \%$ | $6.83 \%$ per annum |
| Non-U.S. equity | $10.00 \%$ | $6.83 \%$ per annum |
| Total or weighted arithmetic average | $100.00 \%$ | $4.08 \%$ per annum |

## PENSION PLAN DESCRIPTION

Name of the pension plan:
Legal plan administrator:
Plan type:
Number of covered individuals:
Contribution requirement:

Pension plan reporting:

Retirement Plan for the General Employees of the Southern Manatee Fire \& Rescue District
Board of Trustees of the Retirement Plan for the General Employees of the Southern Manatee Fire \& Rescue District
Single-employer defined benefit pension plan
11 (three inactive employee or beneficiary currently receiving benefits; no inactive employees entitled to but not yet receiving benefits; eight active employees)
Employer contributions are actuarially determined; employees must contribute $3.50 \%$ of pensionable earnings; employee contribution requirement may be amended by City ordinance, but employer contribution requirement is subject to State minimums.
The plan issues a stand-alone financial report each year, which contains information about the plan's fiduciary net position. The plan's fiduciary net position has been determined on the same basis used by the pension plan and is equal to the market value of assets calculated under the accrual basis of accounting. This report is available to the public at the plan's administrative office: Retirement Department, Florida League of Cities, Inc., P. O. Box 1757, Tallahassee, FL 32302, (800) 342-8112.

## Description of the benefit terms

 years of service)Disability benefits are offset as necessary to preclude the total of the disability benefit, worker's compensation, and other District-provided disability compensation from exceeding average earnings.
Pre-retirement death benefit: Basic pension formula payable for 10 years at early or normal retirement age (payable to the beneficiary of a vested participant)
Return of accumulated employee contributions (payable to the beneficiary of a non-vested participant)
Normal retirement age: Age 62 with at least 10 years of service, or
Any age with at least 30 years of service
Early retirement age:
Vesting requirement:
Form of payment:

Average earnings:
Cost-of-living adjustment:
Health supplement:
DROP:

Legal authority:
Changes:

Employees covered:
Types of benefits offered:
Basic pension formula:
Early retirement adjustment: Early retirement pension is reduced by $5 \%$ for each year by which the early retirement date precedes the normal retirement date.
Disability pension: Larger of basic pension formula or $25 \%$ of average earnings (if the participant has earned at least 10
Full-time general employees of the Southern Manatee Fire \& Rescue District
Retirement, disability, and pre-retirement death benefits
$2.50 \%$ of average earnings $x$ service

Any age with at least 10 years of service
$100 \%$ vesting after 10 years of service
Actuarially increased single life annuity
10 -year certain and life annuity
Actuarially equivalent $50 \%, 662 / 3 \%, 75 \%$, or $100 \%$ joint and contingent annuity Any other actuarially equivalent form of payment approved by the Board of Trustees Average of the highest three years of pensionable earnings out of the last 10 years $3.00 \%$ per annum for all benefits other than the health supplement
$\$ 15 \times$ service, minimum benefit of $\$ 50.00$ per month, maximum benefit of $\$ 450.00$ per month
A deferred retirement option plan (DROP) is available to those participants who have attained their normal retirement age and individuals may participate in the DROP for up to 60 months; DROP accounts are credited with interest at the rate of $6.50 \%$ per annum.
The plan was established effective October 1, 1999 pursuant to District resolution and has been amended several times since that date.
The benefit terms did not change from the prior measurement date.

|  |  |  | Benefit | Administrative | Investment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | BOY Balance | Contributions | Payments | Expenses | Earnings | EOY Balance |
| October 1, 2015 | \$2,019,702 | \$178,298 | \$44,192 | \$9,826 | \$170,229 | \$2,314,211 |
| October 1, 2016 | \$2,314,211 | \$174,979 | \$76,166 | \$16,935 | \$164,812 | \$2,560,901 |
| October 1, 2017 | \$2,560,901 | \$181,978 | \$87,449 | \$19,444 | \$181,847 | \$2,817,833 |
| October 1, 2018 | \$2,817,833 | \$189,257 | \$101,004 | \$22,458 | \$199,512 | \$3,083,140 |
| October 1, 2019 | \$3,083,140 | \$196,827 | \$134,753 | \$29,962 | \$216,925 | \$3,332,177 |
| October 1, 2020 | \$3,332,177 | \$204,700 | \$148,554 | \$33,031 | \$234,048 | \$3,589,340 |
| October 1, 2021 | \$3,589,340 | \$212,888 | \$162,826 | \$36,204 | \$251,731 | \$3,854,929 |
| October 1, 2022 | \$3,854,929 | \$221,404 | \$187,525 | \$41,696 | \$269,576 | \$4,116,688 |
| October 1, 2023 | \$4,116,688 | \$31,452 | \$210,443 | \$46,792 | \$280,399 | \$4,171,304 |
| October 1, 2024 | \$4,171,304 | \$0 | \$223,788 | \$49,759 | \$282,579 | \$4,180,336 |
| October 1, 2025 | \$4,180,336 | \$0 | \$246,882 | \$54,894 | \$282,240 | \$4,160,800 |
| October 1, 2026 | \$4,160,800 | \$0 | \$255,020 | \$56,703 | \$280,530 | \$4,129,607 |
| October 1, 2027 | \$4,129,607 | \$0 | \$266,104 | \$59,168 | \$277,881 | \$4,082,216 |
| October 1, 2028 | \$4,082,216 | \$0 | \$288,687 | \$64,189 | \$273,613 | \$4,002,953 |
| October 1, 2029 | \$4,002,953 | \$0 | \$286,775 | \$63,764 | \$268,145 | \$3,920,559 |
| October 1, 2030 | \$3,920,559 | \$0 | \$286,237 | \$63,644 | \$262,400 | \$3,833,078 |
| October 1, 2031 | \$3,833,078 | \$0 | \$288,752 | \$64,203 | \$256,171 | \$3,736,294 |
| October 1, 2032 | \$3,736,294 | \$0 | \$289,845 | \$64,446 | \$249,350 | \$3,631,353 |
| October 1, 2033 | \$3,631,353 | \$0 | \$288,710 | \$64,194 | \$242,052 | \$3,520,501 |
| October 1, 2034 | \$3,520,501 | \$0 | \$296,714 | \$65,974 | \$233,956 | \$3,391,769 |
| October 1, 2035 | \$3,391,769 | \$0 | \$295,087 | \$65,612 | \$225,013 | \$3,256,083 |
| October 1, 2036 | \$3,256,083 | \$0 | \$294,998 | \$65,592 | \$215,519 | \$3,111,012 |
| October 1, 2037 | \$3,111,012 | \$0 | \$301, 358 | \$67,006 | \$205,096 | \$2,947,744 |
| October 1, 2038 | \$2,947,744 | \$0 | \$291,907 | \$64,905 | \$194,065 | \$2.784,997 |
| October 1, 2039 | \$2,784,997 | \$0 | \$285,339 | \$63,445 | \$182,949 | \$2,619,162 |
| October 1, 2040 | \$2,619,162 | \$0 | \$277,631 | \$61,731 | \$171,665 | \$2,451,465 |
| October 1, 2041 | \$2,451,465 | \$0 | \$268,418 | \$59,682 | \$160,313 | \$2,283,678 |
| October 1, 2042 | \$2,283,678 | \$0 | \$258,109 | \$57,390 | \$149,002 | \$2,117,181 |
| October 1, 2043 | \$2,117,181 | \$0 | \$246,641 | \$54,840 | \$137,829 | \$1,953,529 |
| October 1, 2044 | \$1,953,529 | \$0 | \$233,318 | \$51,878 | \$126,934 | \$1,795,267 |
| October 1, 2045 | \$1,795,267 | \$0 | \$219,981 | \$48,912 | \$116,417 | \$1,642,791 |
| October 1, 2046 | \$1,642,791 | \$0 | \$206,200 | \$45,848 | \$106,323 | \$1,497,066 |
| October 1, 2047 | \$1,497,066 | \$0 | \$190,334 | \$42,320 | \$96,789 | \$1,361,201 |
| October 1, 2048 | \$1,361,201 | \$0 | \$176,320 | \$39,204 | \$87,868 | \$1,233,545 |
| October 1, 2049 | \$1,233,545 | \$0 | \$162,530 | \$36,138 | \$79,512 | \$1,114,389 |
| October 1, 2050 | \$1,114,389 | \$0 | \$149,071 | \$33,146 | \$71,737 | \$1,003,909 |
| October 1, 2051 | \$1,003,909 | \$0 | \$135,931 | \$30,224 | \$64,557 | \$902,311 |
| October 1, 2052 | \$902,311 | \$0 | \$123,561 | \$27,474 | \$57,965 | \$809,241 |
| October 1, 2053 | \$809,241 | \$0 | \$111,876 | \$24,875 | \$51,942 | \$724,432 |
| October 1, 2054 | \$724,432 | \$0 | \$101,133 | \$22,487 | \$46,457 | \$647,269 |
| October 1, 2055 | \$647,269 | \$0 | \$91,205 | \$20,279 | \$41,473 | \$577,258 |
| October 1, 2056 | \$577,258 | \$0 | \$82,298 | \$18,299 | \$36,947 | \$513,608 |
| October 1, 2057 | \$513,608 | \$0 | \$74,286 | \$16,517 | \$32,828 | \$455,633 |
| October 1, 2058 | \$455,633 | \$0 | \$67,043 | \$14,907 | \$29,075 | \$402,758 |
| October 1, 2059 | \$402,758 | \$0 | \$60,568 | \$13,467 | \$25,646 | \$354,369 |
| October 1, 2060 | \$354,369 | \$0 | \$54,645 | \$12,150 | \$22,508 | \$310,082 |
| October 1, 2061 | \$310,082 | \$0 | \$49,103 | \$10,918 | \$19,641 | \$269,702 |
| October 1, 2062 | \$269,702 | \$0 | \$44,000 | \$9,783 | \$17,029 | \$232,948 |
| October 1, 2063 | \$232,948 | \$0 | \$39,146 | \$8,704 | \$14,660 | \$199,758 |
| October 1, 2064 | \$199,758 | \$0 | \$34,299 | \$7,626 | \$12,541 | \$170,374 |
| October 1, 2065 | \$170,374 | \$0 | \$30,104 | \$6,694 | \$10,660 | \$144,236 |
| October 1, 2066 | \$144,236 | \$0 | \$26,168 | \$5,818 | \$8,996 | \$121,246 |
| October 1, 2067 | \$121,246 | \$0 | \$22,407 | \$4,982 | \$7,545 | \$101,402 |

## PROJECTION OF THE FIDUCIARY NET POSITION (continued)

| Date | BOY Balance | Contributions | Benefit Payments | Administrative Expenses | Investment Earnings | EOY Balance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October 1, 2068 | \$101,402 | \$0 | \$19,192 | \$4,267 | \$6,291 | \$84,234 |
| October 1, 2069 | \$84,234 | \$0 | \$16,342 | \$3,634 | \$5,209 | \$69,467 |
| October 1, 2070 | \$69,467 | \$0 | \$13,884 | \$3,087 | \$4,279 | \$56,775 |
| October 1, 2071 | \$56,775 | \$0 | \$11,773 | \$2,618 | \$3,479 | \$45,863 |
| October 1, 2072 | \$45,863 | \$0 | \$10,094 | \$2,244 | \$2,786 | \$36,311 |
| October 1, 2073 | \$36,311 | \$0 | \$7,433 | \$1,653 | \$2,229 | \$29,454 |
| October 1, 2074 | \$29,454 | \$0 | \$6,169 | \$1,372 | \$1,802 | \$23,715 |
| October 1, 2075 | \$23,715 | \$0 | \$5,125 | \$1,140 | \$1,444 | \$18,894 |
| October 1, 2076 | \$18,894 | \$0 | \$4,258 | \$947 | \$1,143 | \$14,832 |
| October 1, 2077 | \$14,832 | \$0 | \$3,560 | \$792 | \$888 | \$11,368 |
| October 1, 2078 | \$11,368 | \$0 | \$2,911 | \$647 | \$673 | \$8,483 |
| October 1, 2079 | \$8,483 | \$0 | \$2,375 | \$528 | \$494 | \$6,074 |
| October 1, 2080 | \$6,074 | \$0 | \$1,925 | \$428 | \$344 | \$4,065 |
| October 1, 2081 | \$4,065 | \$0 | \$1,536 | \$342 | \$220 | \$2,407 |
| October 1, 2082 | \$2,407 | \$0 | \$1,185 | \$263 | \$119 | \$1,078 |
| October 1, 2083 | \$1,078 | \$0 | \$883 | \$196 | \$38 | \$37 |
| October 1, 2084 | \$37 | \$0 | \$0 | \$0 | \$3 | \$40 |

NOTES: The fiduciary net position is projected to be sufficient to cover all future benefit payments when due. The plan requires only a $7 \%$ average investment return per year to avoid a crossover date. The projection shown above does not reflect future new entrants into the pension plan.
(a) City/District

Southern Manatee FD
(b) Plan Name
(c) Plan Type
(d) Valuation Date Defined Benefit
(e) Interest Rate:
(1) Discount Rate, net of investment fees 7.00\%
(2) Long-Term Expected Rate of Return, net of investment fees 7.00\%

With respect to the reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were prepared and completed by me or under my direct supervision and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, meet the requirements of Section $112.664(1)$, F.S., and Section 60T-1.0035, F.A.C.
(f) Certification Statement:
(1) Signature
(2) Actuary's Name

(3) Enrollment Number
(4) Signature Date
(5) Cover letter attached (pdf)? N

## Section 112.664 (1)(a), F.S.

(g) Total pension liability:
(1) Service cost $\quad \$ 101,095$
(2) Interest \$139,481
(3) Benefit changes \$0
(4) Difference between expected and actual experience \$38,078
(5) Changes in assumptions \$33,586
(6) Benefit payments $(\$ 44,192)$
(7) Contribution refunds \$0
(8) Net change in total pension liability \$268,048
(9) Total pension liability - beginning of year \$1,913,213
(10) Total pension liability - ending of year \$2,181,261
(h) Plan fiduciary net position:
(1) Contributions - Employer \$169,387
(2) Contributions - State \$0
(3) Contributions - Member \$16,611
(4) Net investment income \$174,924
(5) Benefit payments (\$44,192)
(6) Contribution refunds \$0
(7) Administrative expenses (\$9,826)
(8) Other \$0
(9) Net change in plan fiduciary net position \$306,904
(10) Plan fiduciary net position - beginning of year $\$ 2,007,307$
(11) Plan fiduciary net position - ending of year \$2,314,211
(i) Net pension liability/(asset) [(g)(10) minus (h)(11)]
(\$132,950)

## Section 112.664 (1)(b). F.S.

(j) Total pension liability:
(1) Service cost
(2) Interest ..... \$127,253
(3) Benefit changes ..... \$0
(4) Difference between expected and actual experience ..... \$43,368
(5) Changes in assumptions ..... \$172,584
(6) Benefit payments ..... $(\$ 44,192)$
(7) Contribution refunds ..... \$0
(8) Net change in total pension liability ..... $\$ 450,891$
(9) Total pension liability - beginning of year ..... \$2,415,000
(10) Total pension liability - ending of year ..... \$2,865,891
(k) Plan fiduciary net position:
(1) Contributions - Employer ..... \$169,387
(2) Contributions - State ..... \$0
(3) Contributions - Member ..... \$16,611
(4) Net investment income ..... \$174,924
(5) Benefit payments$(\$ 44,192)$
(6) Contribution refunds ..... \$0
(7) Administrative expenses ..... $(\$ 9,826)$
(8) Other ..... \$0
(9) Net change in plan fiduciary net position ..... \$306,904
(10) Plan fiduciary net position - beginning of year ..... \$2,007,307
(11) Plan fiduciary net position - ending of year ..... \$2,314,211
(I) Net pension liability/(asset) [(j)(10) minus (k)(11)] ..... $\$ 551,680$
Section 112.664(1)(c), F.S. (on last valuation basis)
(m) Number of Years, and fractional parts of Years, for which the Market Value of Assets are adequate to sustain expected retirement benefits ..... 20.87
Section 112.664(1) (c), F.S. (on Section 112.664(1) (a), F.S. basis)
(n) Number of Years, and fractional parts of Years, for which the Market Value of Assets are adequate to sustain expected retirement benefits ..... 21.25
Section 112.664(1)(c), F.S. (on Section 112.664(1)(b), F.S. basis)
(0) Number of Years, and fractional parts of Years, for which the Market Value of Assets are adequate to sustain expected retirement benefits ..... 17.09
Section $112.664(1)$ (d), F.S. (on last valuation basis)
(p) Recommended Plan contributions in Annual Dollar Value ..... \$213,392
(q) Recommended Plan contributions as a Percentage of Valuation Payroll ..... 50.31\%
Section $112.664(1)$ (d), F.S. (on Section $112.664(1)$ (a), F.S. basis)
(r) Recommended Plan contributions in Annual Dollar Value ..... \$187,004
(s) Recommended Plan contributions as a Percentage of Valuation Payroll ..... 44.09\%
Section $112.664(1)$ (d), F.S. (on Section 112.664(1)(b), F.S. basis)
(t) Recommended Plan contributions in Annual Dollar Value ..... \$374,073
(u) Recommended Plan contributions as a Percentage of Valuation Payroll ..... 88.19\%

