October 14, 2016
Ms. Mayte D. Gamiotea
Pension Administrator
Retirement Plan for Employees of the
Town of Surfside
9293 Harding Avenue
Surfside, Florida 33154

## Re: Retirement Plan for Employees of the Town of Surfside

Dear Mayte:
As requested, we are pleased to enclose twenty (20) copies of the October 1, 2015 Chapter 112.664 Compliance Report for the Retirement Plan for Employees of the Town of Surfside (Plan).

As required, we will timely upload the required data to the State's online portal prior to the filing deadline.

Please note we understand the following items must be posted on the Plan's website and must be posted on any website containing budget information relating to the Town or actuarial or performance information relating to the Plan:

- this compliance report
- the most recent financial statement
- the most recent actuarial valuation report
- a link to the Division of Retirement Actuarial Summary Fact Sheet
http://www.dms.myflorida.com/workforce_operations/retirement/local_retirement_plans/ local_retirement_section/actuarial_summary_fact_sheets
- for the previous five years - a side-by-side comparison of the Plan's assumed rate of return compared to the actual rate of return as well as the percentages of cash, equity, bond and alternative investments in the Plan's portfolio
- the Plan's funded ratio as determined in the most recent actuarial valuation $-85.1 \%$ on a market value of assets basis as of October 1, 2015.

We appreciate the opportunity to work with the Board on this important assignment.
If you should have any questions concerning the above, please do not hesitate to contact us.
Sincerest regards,


Lawrence F. Wilson, A.S.A.
Senior Consultant and Actuary

## Enclosures

## GRS <br> Gabriel Roeder Smith \& Company Consultants \& Actuaries

 CHAPTER 112.664, F.S. COMPLIANCE REPORTIn Connection with the October 1, 2015 Funding Actuarial Valuation Report and the Plan's Financial Reporting for the Year Ended September 30, 2015

GRS

October 14, 2016

Pension Board
Retirement Plan for Employees of the Town of Surfside
c/o Ms. Mayte Gamiotea
9293 Harding Avenue
Surfside, Florida 33154

## Re: October 1, 2015 Chapter 112.664 Compliance Report

Dear Board Members:
Gabriel, Roeder, Smith \& Company (GRS) has been engaged by the Board of Trustees (Board) of the Retirement Plan for Employees of the Town of Surfside (Plan) to prepare a disclosure report to satisfy the requirements set forth in Chapter 112.664, F.S. and as further required pursuant to Chapter 60T-1.0035, F.A.C.

This report was prepared at the request of the Board and is intended for use by the Board and those designated or approved by the Board. This report may be provided to parties other than the Board only in its entirety and only with the permission of the Board.

The purpose of the report is to provide the required information specified in Chapter 112.664, F.S. and to supplement this information with additional exhibits. This report should not be relied on for any purpose other than the purpose described above.

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. The scope of this engagement does not include an analysis of the potential range of such measurements.

This report was based upon information furnished by the Town and the Board concerning Plan benefits, Plan provisions and Plan members as used in the corresponding Actuarial Valuation Reports for the Valuation Dates indicated. Financial information was provided by the Town and Board as of September 30, 2015. We reviewed the information provided for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the Town and Board.

Pension Board
October 14, 2016
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Except where specific assumptions are required by Chapter 112.664, F.S, this report was prepared using actuarial assumptions adopted by the Board as described in Section C. The Board's assumptions are based on the results of an actuarial Experience Study for the five-year period ended September 30, 2014. The assumptions represent an estimate of future Plan experience.

The investment return assumption of $2 \%$ higher than the investment return assumption utilized in the Actuarial Valuation Report does not represent an estimate of future Plan experience nor observation of the estimates inherent in market data. This assumption is provided as a counterpart to the Chapter 112.664, F.S. requirement to utilize an investment return assumption of $2 \%$ lower than the investment return assumption utilized in the Actuarial Valuation Report. The inclusion of the additional $2 \%$ higher assumption shows a more complete assessment of the range of potential results as opposed to the one-sided range required by statute.

If all actuarial assumptions are met and if all current and future minimum required contributions are paid Plan assets will be sufficient to pay all Plan benefits. Plan minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee Retirement Benefits Act with normal cost determined as a level percent of covered payroll and a level dollar amortization payment using an initial amortization period of 30 years.

The Plan's funded ratio as of October 1, 2015 is $85.1 \%$ defined as the ratio of the market value of Plan assets to the actuarial accrued liability.

The Plan's funded ratio and the GASB Net Pension Liability may not be appropriate for assessing the sufficiency of Plan assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions.

The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the Plan sponsor.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and presents the actuarial position of the Plan as of the valuation date as required by statute. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

Pension Board
October 14, 2016
Page 3

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.

Respectfully submitted,
GABRIEL, ROEDER, SMITH AND COMPANY



Date: October 14, 2016

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## SECTION A

CHAPTER 112.664, F.S. RESULTS

## GRS

## Retirement Plan for Employees of the Town of Surfside, Florida

## Net Pension Liability <br> Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68

Measurement Date
September 30, 2015
A. Total Pension Liability (TPL)

Service Cost
\$
901,998
Interest
1,336,817
Benefit Changes
Difference Between Actual and Expected Experience
100,031
Assumption Changes
Benefit Payments
Contribution Refunds $(577,500)$

Other
Net Change in Total Pension Liability
Total Pension Liability (TPL) - (beginning of year)
Total Pension Liability (TPL) - (end of year)
$(87,521)$
B. Plan Fiduciary Net Position

Contributions - Town 727,022
Contributions - State 0
Contributions - Member 391,213
Net Investment Income
Benefit Payments
$(132,329)$

Contribution Refunds
Administrative Expenses
Other
Net Change in Plan Fiduciary Net Position
Plan Fiduciary Net Position - (beginning of year)
Plan Fiduciary Net Position - (end of year)
C. Net Pension Liability (NPL) - (end of year): (A) - (B)
\$ 2,518,720

Valuation Date
October 1, 2014

## Certain Key Assumptions

Investment Return Assumption
Mortality Table:
Healthy Members: General Employees - RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 15 years generational projection from valuation date for actives and 7 years generational projection from valuation date for inactives with Scale AA. Police Officers - RP-2000 Combined Healthy Participant Mortality Tables with Blue Collar Adjustment, separate rates for males and females, with 15 years generational projection from valuation date for actives and 7 years generational projection from valuation date for inactives with Scale AA. Disabled Members: RP-2000 Disabled Mortality Tables, separate rates for males and females, with 15 years generational projection from valuation date for actives and 7 years generational projection from valuation date for inactives with Scale AA.

## Retirement Plan for Employees of the Town of Surfside, Florida

## Net Pension Liability <br> Using Assumptions Required Under 112.664(1)(a), F.S.

Measurement Date
September 30, 2015

| A. Total Pension Liability (TPL) |  |  |
| :---: | :---: | :---: |
| Service Cost | \$ | 955,579 |
| Interest |  | 1,373,153 |
| Benefit Changes |  | 0 |
| Difference Between Actual and Expected Experience |  | 37,984 |
| Assumption Changes |  | 0 |
| Benefit Payments |  | $(577,500)$ |
| Contribution Refunds |  | $(87,521)$ |
| Other |  | 0 |
| Net Change in Total Pension Liability | \$ | 1,701,695 |
| Total Pension Liability (TPL) - (beginning of year) |  | 17,831,326 |
| Total Pension Liability (TPL) - (end of year) | \$ | 19,533,021 |

B. Plan Fiduciary Net Position

Contributions - Town \$ 727,022
Contributions - State 0
Contributions - Member 391,213
Net Investment Income $\quad(132,329)$
Benefit Payments
$(577,500)$
Contribution Refunds
$(87,521)$
Administrative Expenses
$(85,426)$
Other
Net Change in Plan Fiduciary Net Position
Plan Fiduciary Net Position - (beginning of year)
Plan Fiduciary Net Position - (end of year)

|  |
| :--- |
| $\$ \quad 16,258,030$ |

C. Net Pension Liability (NPL) - (end of year): (A) - (B)

Valuation Date

October 1, 2014

## Certain Key Assumptions

Investment Return Assumption
Mortality Table:
RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

## Retirement Plan for Employees of the Town of Surfside, Florida

## Net Pension Liability <br> Using Assumptions Require d Under 112.664(1)(b), F.S.

Measurement Date
September 30, 2015

| A. Total Pension Liability (TPL) |  |  |
| :---: | :---: | :---: |
| Service Cost | \$ | 1,455,110 |
| Interest |  | 1,345,629 |
| Benefit Changes |  | 0 |
| Difference Between Actual and Expected Experience |  | 144,019 |
| Assumption Changes |  | 0 |
| Benefit Payments |  | $(577,500)$ |
| Contribution Refunds |  | $(87,521)$ |
| Other |  | 0 |
| Net Change in Total Pension Liability | \$ | 2,279,737 |
| Total Pension Liability (TPL) - (beginning of year) |  | 23,400,417 |
| Total Pension Liability (TPL) - (end of year) | \$ | 25,680,154 |
| B. Plan Fiduciary Net Position |  |  |
| Contributions - Town | \$ | 727,022 |
| Contributions - State |  | 0 |
| Contributions - Member |  | 391,213 |
| Net Investment Income |  | $(132,329)$ |
| Benefit Payments |  | $(577,500)$ |
| Contribution Refunds |  | $(87,521)$ |
| Administrative Expenses |  | $(85,426)$ |
| Other |  | 0 |
| Net Change in Plan Fiduciary Net Position | \$ | 235,459 |
| Plan Fiduciary Net Position - (beginning of year) |  | 16,258,030 |
| Plan Fiduciary Net Position - (end of year) | \$ | 16,493,489 |
| C. Net Pension Liability (NPL) - (end of year): (A) - (B) | \$ | 9,186,665 |

Valuation Date
October 1, 2014

## Certain Key Assumptions

Investment Return Assumption 5.5\%
Mortality Table:
RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

## Retirement Plan for Employees of the Town of Surfside, Florida

## Net Pension Liability

## Using Assumptions Required Under 112.664(1)(a), F.S. Plus 2\% on Investment Return Assumption

Measurement DateSeptember 30, 2015
A. Total Pension Liability (TPL)
Service Cost ..... \$ ..... 656,313
Interest ..... 1,348,949
Benefit Changes ..... 0
Difference Between Actual and Expected Experience ..... $(24,275)$
Assumption Changes ..... 0
Benefit Payments
Contribution Refunds
Other
Net Change in Total Pension Liability
Total Pension Liability (TPL) - (beginning of year) ..... $(577,500)$
Total Pension Liability (TPL) - (end of year) ..... $(87,521)$

|  | 0 |
| :--- | ---: |
| $\$$ | $1,315,966$ |
|  | $14,073,543$ |
| $\$$ | $15,389,509$ |

B. Plan Fiduciary Net Position
Contributions - Town\$727,022
Contributions - State ..... 0
Contributions - Member ..... 391,213
Net Investment Income ..... $(132,329)$
Benefit Payments$(577,500)$
Contribution Refunds ..... $(87,521)$
Administrative Expenses$(85,426)$
Other
Net Change in Plan Fiduciary Net PositionPlan Fiduciary Net Position - (beginning of year)Plan Fiduciary Net Position - (end of year)
C. Net Pension Liability (NPL) - (end of year): (A) - (B)Valuation Date\$

|  | 0 |
| :--- | ---: |
| $\$$ | 235,459 |
|  | $16,258,030$ |
| $\$$ | $16,493,489$ |

$(1,103,980)$

October 1, 2014

## Certain Key Assumptions

Investment Return Assumption $9.5 \%$
Mortality Table:
RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

## Retirement Plan for Employees of the Town of Surfside, Florida

## Asset and Benefit Payment Projection Not Reflecting Any Future Contributions Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68

| FYE | Market Value of <br> Assets (BOY) | Expected Investment <br> Return | Projected Benefit <br> Payments | Market Value of <br> Assets (EOY) |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 2016 | $\$$ | $16,326,334$ | $\$$ | $1,156,243$ | $\$$ |
| 2017 | $16,776,895$ | $1,185,436$ | 705,682 | $\$$ | $16,776,895$ |
| 2018 | $17,167,267$ | $1,213,731$ | 795,064 | $17,167,267$ |  |
| 2019 | $17,585,762$ | $1,241,284$ | 795,236 | $17,585,762$ |  |
| 2020 | $17,960,046$ | $1,267,133$ | 867,000 | $17,960,046$ |  |
| 2021 | $18,327,057$ | $1,292,319$ | 900,122 | $18,327,057$ |  |
| 2022 | $18,682,653$ | $1,316,201$ | 936,723 | $18,682,653$ |  |
| 2023 | $19,013,265$ | $1,338,910$ | 985,589 | $19,013,265$ |  |
| 2024 | $19,334,135$ | $1,361,252$ | $1,018,040$ | $19,334,135$ |  |
| 2025 | $19,653,641$ | $1,382,932$ | $1,041,746$ | $19,653,641$ |  |
| 2026 | $19,956,627$ | $1,402,372$ | $1,079,946$ | $19,956,627$ |  |
| 2027 | $20,214,030$ | $1,418,297$ | $1,144,969$ | $20,214,030$ |  |
| 2028 | $20,416,911$ | $1,430,138$ | $1,215,416$ | $20,416,911$ |  |
| 2029 | $20,557,808$ | $1,437,230$ | $1,289,241$ | $20,557,808$ |  |
| 2030 | $20,625,420$ | $1,438,670$ | $1,369,618$ | $20,625,420$ |  |
| 2031 | $20,605,366$ | $1,435,552$ | $1,458,724$ | $20,605,366$ |  |
| 2032 | $20,539,347$ | $1,429,916$ | $1,501,571$ | $20,539,347$ |  |
| 2033 | $20,445,826$ | $1,422,731$ | $1,523,437$ | $20,445,826$ |  |
| 2034 | $20,334,718$ | $1,414,610$ | $1,533,839$ | $20,334,718$ |  |
| 2035 | $20,213,797$ | $1,406,053$ | $1,535,531$ | $20,213,797$ |  |
| 2036 | $20,089,708$ | $1,397,407$ | $1,530,142$ | $20,089,708$ |  |
| 2037 | $19,966,010$ | $1,388,683$ | $1,521,105$ | $19,966,010$ |  |
| 2038 | $19,839,852$ | $1,379,740$ | $1,514,841$ | $19,839,852$ |  |
| 2039 | $19,710,001$ | $1,370,623$ | $1,509,591$ | $19,710,001$ |  |
| 2040 | $19,578,665$ | $1,361,851$ | $1,501,959$ | $19,578,665$ |  |
| 2041 | $19,457,874$ | $1,352,905$ | $1,482,642$ | $19,457,874$ |  |
|  |  |  | $1,487,503$ | $19,323,276$ |  |

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no future contributions from the Town, Members or State:

## Certain Key Assumptions

Investment return assumption
$7.25 \%$
Mortality Table:
For healthy male participants, RP 2000 Annuitant Male Mortality Table, with 10\% White Collar / 90\% Blue Collar Adjustment for Police Officers - 50\% White Collar / $50 \%$ Blue Collar Adjustment for General Employees and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants, RP 2000 Annuitant Female Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male Police Officers, $60 \%$ RP 2000 Disabled Male Mortality Table setback four years / $40 \%$ RP 2000 Annuitant Male Mortality Table, with White Collar Adjustment and no setback, without projected mortality improvements. For disabled female Police Officers, 60\% RP 2000 Disabled Female Mortality Table set forward two years / $40 \%$ RP 2000 Annuitant Female Mortality Table, with White Collar Adjustment, without projected mortality improvements. For disabled male General Employees, RP 2000 Disabled Male Mortality Table, setback four years, without projected mortality improvements. For disabled female General Employees, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements.

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the Town or Members. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include Town and Member contributions, the Plan is expected to be able to pay all future benefit payments.

## Retirement Plan for Employe es of the Town of Surfside, Florida

## Asset and Benefit Payment Projection Not Reflecting Any Future Contributions Using Assumptions Required Under 112.664(1)(a), F.S.

| FYE | Market Value of <br> Assets (BOY) | Expected Investment <br> Return | Projected Benefit <br> Payments | Market Value of <br> Assets (EOY) |  |
| :--- | ---: | :---: | ---: | ---: | ---: |
| 2016 | $\$$ | $16,326,334$ | $\$$ | $1,156,256$ | $\$$ |
| 2017 | $16,777,244$ | $1,185,482$ | 705,346 | $\$$ | $16,777,244$ |
| 2018 | $17,168,196$ | $1,213,835$ | 794,530 | $17,168,196$ |  |
| 2019 | $17,587,726$ | $1,241,455$ | 794,305 | $17,587,726$ |  |
| 2020 | $17,962,926$ | $1,267,356$ | 866,255 | $17,962,926$ |  |
| 2021 | $18,330,535$ | $1,292,567$ | 899,747 | $18,330,535$ |  |
| 2022 | $18,686,270$ | $1,316,423$ | 936,832 | $18,686,270$ |  |
| 2023 | $19,016,064$ | $1,339,026$ | 986,629 | $19,016,064$ |  |
| 2024 | $19,334,817$ | $1,361,188$ | $1,020,273$ | $19,334,817$ |  |
| 2025 | $19,651,333$ | $1,382,617$ | $1,044,672$ | $19,651,333$ |  |
| 2026 | $19,950,209$ | $1,401,656$ | $1,083,741$ | $19,950,209$ |  |
| 2027 | $20,200,432$ | $1,416,939$ | $1,151,433$ | $20,200,432$ |  |
| 2028 | $20,392,369$ | $1,427,826$ | $1,225,001$ | $20,392,369$ |  |
| 2029 | $20,517,253$ | $1,433,568$ | $1,302,942$ | $20,517,253$ |  |
| 2030 | $20,562,619$ | $1,433,182$ | $1,388,202$ | $20,562,619$ |  |
| 2031 | $20,513,002$ | $1,427,784$ | $1,482,799$ | $20,513,002$ |  |
| 2032 | $20,411,631$ | $1,419,466$ | $1,529,155$ | $20,411,631$ |  |
| 2033 | $20,277,033$ | $1,409,235$ | $1,554,064$ | $20,277,033$ |  |
| 2034 | $20,120,032$ | $1,397,731$ | $1,566,236$ | $20,120,032$ |  |
| 2035 | $19,948,385$ | $1,385,453$ | $1,569,378$ | $19,948,385$ |  |
| 2036 | $19,768,758$ | $1,372,766$ | $1,565,080$ | $19,768,758$ |  |
| 2037 | $19,585,100$ | $1,359,656$ | $1,556,424$ | $19,585,100$ |  |
| 2038 | $19,393,608$ | $1,345,938$ | $1,551,149$ | $19,393,608$ |  |
| 2039 | $19,192,636$ | $1,331,614$ | $1,546,909$ | $19,192,636$ |  |
| 2040 | $18,983,682$ | $1,317,181$ | $1,522,114$ | $18,983,682$ |  |
| 2041 | $18,778,750$ | $1,302,022$ | $1,529,893$ | $18,778,750$ |  |
|  |  |  | $18,550,878$ |  |  |

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no future contributions from the Town, Members or State:

## Certain Key Assumptions

Investment return assumption $7.25 \%$
Mortality Table:
RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the Town or Members. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include Town and Member contributions, the Plan is expected to be able to pay all future benefit payments.

## Retirement Plan for Employees of the Town of Surfside, Florida

## Asset and Benefit Payment Projection <br> Not Reflecting Any Future Contributions <br> Using Assumptions Required Under 112.664(1)(b), F.S.

| FYE | Market Value of <br> Assets (BOY) | Expected Investment <br> Return | Projected Benefit <br> Payments | Market Value of <br> Assets (EOY) |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 2016 | $\$$ | $16,326,334$ | $\$$ | 837,231 | $\$$ |
| 2017 | $16,458,219$ | 841,639 | 705,346 | $\$$ | $16,458,219$ |
| 2018 | $16,505,328$ | 844,118 | 794,530 | $16,505,328$ |  |
| 2019 | $16,555,141$ | 844,703 | 794,305 | $16,555,141$ |  |
| 2020 | $16,533,589$ | 842,627 | 866,255 | $16,533,589$ |  |
| 2021 | $16,476,469$ | 838,582 | 899,747 | $16,476,469$ |  |
| 2022 | $16,378,219$ | 832,019 | 936,832 | $16,378,219$ |  |
| 2023 | $16,223,609$ | 822,952 | 986,629 | $16,223,609$ |  |
| 2024 | $16,026,288$ | 811,904 | $1,020,273$ | $16,026,288$ |  |
| 2025 | $15,793,520$ | 798,582 | $1,044,672$ | $15,793,520$ |  |
| 2026 | $15,508,361$ | 781,701 | $1,083,741$ | $15,508,361$ |  |
| 2027 | $15,138,629$ | 760,214 | $1,151,433$ | $15,138,629$ |  |
| 2028 | $14,673,842$ | 733,614 | $1,225,001$ | $14,673,842$ |  |
| 2029 | $14,104,514$ | 701,319 | $1,302,942$ | $14,104,514$ |  |
| 2030 | $13,417,631$ | 662,588 | $1,388,202$ | $13,417,631$ |  |
| 2031 | $12,597,420$ | 618,219 | $1,482,799$ | $12,597,420$ |  |
| 2032 | $11,686,484$ | 569,692 | $1,529,155$ | $11,686,484$ |  |
| 2033 | $10,702,112$ | 517,669 | $1,554,064$ | $10,702,112$ |  |
| 2034 | $9,653,545$ | 462,531 | $1,566,236$ | $9,653,545$ |  |
| 2035 | $8,54,698$ | 404,543 | $1,569,378$ | $8,546,698$ |  |
| 2036 | $7,386,161$ | 343,859 | $1,565,080$ | $7,386,161$ |  |
| 2037 | $6,173,596$ | 280,348 | $1,556,424$ | $6,173,596$ |  |
| 2038 | $4,902,795$ | 213,750 | $1,551,149$ | $4,902,795$ |  |
| 2039 | $3,569,636$ | 143,938 | $1,546,909$ | $3,569,636$ |  |
| 2040 | $2,173,006$ | 71,136 | $1,540,568$ | $2,173,006$ |  |
| 2041 | 722,028 | 7,341 | $1,522,114$ | 722,028 |  |
|  |  | $1,529,893$ | - |  |  |

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no future contributions from the Town, Members or State:

## Certain Key Assumptions

Investment return assumption
Mortality Table:
RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the Town or Members. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include Town and Member contributions, the Plan is expected to be able to pay all future benefit payments.

## Retirement Plan for Employees of the Town of Surfside, Florida

## Asset and Benefit Payment Projection <br> Not Reflecting Any Future Contributions <br> Using Assumptions Required Under 112.664(1)(a), F.S. Plus $2 \%$ on Investment Return Assumption

| FYE | Market Value of <br> Assets (BOY) | Expected Investment <br> Return | Projected Benefit <br> Payments | Market Value of <br> Assets (EOY) |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 2016 | $\$$ | $16,326,334$ | $\$$ | $1,475,323$ | $\$$ |
| 2017 | $17,096,311$ | $1,542,137$ | 705,346 | $\$$ | $17,096,311$ |
| 2018 | $17,843,918$ | $1,611,302$ | 794,530 | $17,843,918$ |  |
| 2019 | $18,660,915$ | $1,683,318$ | 794,305 | $18,660,915$ |  |
| 2020 | $19,477,978$ | $1,757,241$ | 866,255 | $19,477,978$ |  |
| 2021 | $20,335,472$ | $1,834,726$ | 899,747 | $20,335,472$ |  |
| 2022 | $21,233,366$ | $1,915,320$ | 936,832 | $21,233,366$ |  |
| 2023 | $22,162,057$ | $1,999,561$ | 986,629 | $22,162,057$ |  |
| 2024 | $23,141,345$ | $2,088,939$ | $1,020,273$ | $23,141,345$ |  |
| 2025 | $24,185,612$ | $2,183,603$ | $1,044,672$ | $24,185,612$ |  |
| 2026 | $25,285,474$ | $2,281,994$ | $1,083,741$ | $25,285,474$ |  |
| 2027 | $26,416,035$ | $2,382,935$ | $1,151,433$ | $26,416,035$ |  |
| 2028 | $27,573,969$ | $2,486,192$ | $1,225,001$ | $27,573,969$ |  |
| 2029 | $28,757,219$ | $2,591,428$ | $1,302,942$ | $28,757,219$ |  |
| 2030 | $29,960,445$ | $2,698,051$ | $1,388,202$ | $29,960,445$ |  |
| 2031 | $31,175,697$ | $2,808,170$ | $1,482,799$ | $31,175,697$ |  |
| 2032 | $32,454,712$ | $2,925,248$ | $1,529,155$ | $32,454,712$ |  |
| 2033 | $33,825,896$ | $3,051,481$ | $1,554,064$ | $33,825,896$ |  |
| 2034 | $35,31,141$ | $3,188,711$ | $1,566,236$ | $35,311,141$ |  |
| 2035 | $36,930,474$ | $3,338,712$ | $1,569,378$ | $36,930,474$ |  |
| 2036 | $38,704,106$ | $3,503,200$ | $1,565,080$ | $38,704,106$ |  |
| 2037 | $40,650,882$ | $3,683,538$ | $1,556,424$ | $40,650,882$ |  |
| 2038 | $42,783,271$ | $3,880,993$ | $1,551,149$ | $42,783,271$ |  |
| 2039 | $45,117,355$ | $4,097,210$ | $1,546,909$ | $45,117,355$ |  |
| 2040 | $47,673,997$ | $4,334,611$ | $1,540,568$ | $47,673,997$ |  |
| 2041 | $50,486,494$ | $4,594,383$ | $1,52,114$ | $50,486,494$ |  |
|  |  |  | $1,529,893$ | $53,550,984$ |  |

Number of years for which current market value of assets are adequate to sustain the payment of expected retirement benefits reflecting no future contributions from the Town, Members or State:

## Certain Key Assumptions

Investment return assumption
Mortality Table:
RP-2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with fully generational mortality improvements projected to each future payment date with Scale AA.

Note: As required in Section 112.664(c) of the Florida Statutes, the projection of Plan assets does not include future contributions from the Town or Members. For this reason, this projection should not be viewed as representative of the amount of time the Plan can sustain benefit payments. Under the Government Accounting Standards Board standards which include Town and Member contributions, the Plan is expected to be able to pay all future benefit payments.

Retirement Plan for Employees of the Town of Surfside, Florida


## Retirement Plan for Employees of the Town of Surfside, Florida

## Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments

|  | Amortization Base | Current Unfunded Liabilities |  | Amortization Payment |  |  |  |  |  |  |  | Remaining <br> Funding <br> Period |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Valuation <br> Assumptions |  | 112.664(1)(a), F.S. <br> Assumptions |  | 112.664(1)(b), F.S. <br> Assumptions |  | $\begin{gathered} 112.664(1)(\mathrm{a}), \text { F.S. } \\ \text { Assumptions Plus } 2 \% \end{gathered}$ |  |  |
| 10/01/2009 | Combined Bases *- General Employees | \$ | 1,984 | \$ | 187 | \$ | 187 | \$ | 164 | \$ | 211 | 18 years |
| 10/01/2010 | Actuarial (Gain) / Loss - General Employees |  | 220,977 |  | 18,080 |  | 18,080 |  | 15,272 |  | 21,011 | 25 years |
| 10/01/2010 | Assumption Changes - General Employees |  | $(118,720)$ |  | $(9,714)$ |  | $(9,714)$ |  | $(8,205)$ |  | $(11,288)$ | 25 years |
| 10/01/2011 | Actuarial (Gain) / Loss - General Employees |  | 80,380 |  | 6,484 |  | 6,484 |  | 5,450 |  | 7,564 | 26 years |
| 10/01/2011 | Combined Charge Bases * Police Officers |  | 5,870,436 |  | 515,346 |  | 515,346 |  | 444,655 |  | 588,915 | 21 years |
| 10/01/2011 | Combined Credit Bases *- Police Officers |  | $(5,096,907)$ |  | $(481,003)$ |  | $(481,003)$ |  | $(422,402)$ |  | $(541,755)$ | 18 years |
| 10/01/2012 | Actuarial (Gain) / Loss - General Employees |  | 155,693 |  | 12,398 |  | 12,398 |  | 10,371 |  | 14,514 | 27 years |
| 10/01/2012 | Actuarial (Gain) / Loss - Police Officers |  | 533,421 |  | 42,477 |  | 42,477 |  | 35,533 |  | 49,726 | 27 years |
| 10/01/2012 | Assumption Changes - General Employees |  | 117,634 |  | 9,367 |  | 9,367 |  | 7,836 |  | 10,966 | 27 years |
| 10/01/2012 | Assumption Changes - Police Officers |  | 40,295 |  | 3,209 |  | 3,209 |  | 2,684 |  | 3,756 | 27 years |
| 10/01/2013 | Actuarial (Gain) / Loss - General Employees |  | 83 |  | 7 |  | 7 |  | 5 |  | 8 | 28 years |
| 10/01/2013 | Actuarial (Gain) / Loss - Police Officers |  | $(31,065)$ |  | $(2,444)$ |  | $(2,444)$ |  | $(2,035)$ |  | $(2,871)$ | 28 years |
| 10/01/2013 | Plan Amendment - Police Officers |  | 36,953 |  | 2,908 |  | 2,908 |  | 2,421 |  | 3,416 | 28 years |
| 10/01/2014 | Actuarial (Gain) / Loss - General Employees |  | 84,829 |  | 6,602 |  | 6,602 |  | 5,472 |  | 7,780 | 29 years |
| 10/01/2014 | Actuarial (Gain) / Loss - Police Officers |  | $(151,292)$ |  | $(11,774)$ |  | $(11,774)$ |  | $(9,760)$ |  | $(13,876)$ | 29 years |
| 10/01/2015 | Actuarial (Gain) / Loss - General Employees |  | 148,934 |  | 11,473 |  | 11,473 |  | 9,469 |  | 13,564 | 30 years |
| 10/01/2015 | Actuarial (Gain) / Loss - Police Officers |  | $(152,951)$ |  | $(11,783)$ |  | $(11,783)$ |  | $(9,724)$ |  | $(13,930)$ | 30 years |
| 10/01/2015 | Assumption Changes - General Employees |  | 138,259 |  | 10,651 |  | 10,651 |  | 8,790 |  | 12,592 | 30 years |
| 10/01/2015 | Assumption Changes - Police Officers |  | 264,396 |  | 20,368 |  | 20,368 |  | 16,810 |  | 24,080 | 30 years |
| 10/01/2015 | Assumption Change - 112.664(1)(a), F.S. Assumptions |  | 107,092 |  | N/A |  | 8,250 |  | N/A |  | N/A | 30 years |
| 10/01/2015 | Assumption Change - 112.664(1)(b), F.S. Assumptions |  | 6,454,799 |  | N/A |  | N/A |  | 410,390 |  | N/A | 30 years |
| 10/01/2015 | Assumption Change - 112.664(1)(a), F.S. Assumptions Plus 2\% |  | $(4,137,743)$ |  | N/A |  | N/A |  | N/A |  | $(376,852)$ | 30 years |

[^0]
## SECTION B

## SUMMARY OF PLAN PROVISIONS

> GRS

# Retirement Plan for Employees of the Town of Surfside, Florida <br> Outline of Principal Provisions of the Retirement Plan <br> (as of October 1, 2015) 

## A. Effective Date:

January 1, 1962. Most recent amendatory Ordinance considered: 13-1603.

## B. Eligibility Requirements:

All regular, full-time employees are eligible upon employment. The Town Manager and Town Attorney have the right to opt out of the Plan at any time.

## C. Creditable Service:

All service of a member measured in years and completed calendar months since latest date of hire with the Town.

## D. Average Final Compensation (AFC):

The average of basic compensation during the highest three years (five years for General Employees) of the ten years preceding termination of employment; does not include bonuses, overtime, lump sum payments of unused leave or other nonregular payments.

## E. Normal Retirement:

## 1. Eligibility:

For sworn Police Officers, the earliest of (1) age 52 with 20 years of Creditable Service, (2) age 62 with 5 years of Creditable Service, (3) completion of 25 years of Creditable Service or (4) the completion of 15 years and 4 months of service if hired on a full time basis in March 2003. For the Town Manager, age 64 with 7 years of Creditable Service. For all other employees, the earlier of (1) age 62 with 15 years of Creditable Service or (2) age 65 with 10 years of Creditable Service.
2. Benefit:

|  | Benefit Accrual Rate per Year of <br> Service Based on <br> Employee Contribution Rate of |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Period of <br> Service | $\mathbf{5 \%}$ | $\mathbf{6 \%}$ | $\mathbf{7 \%}$ | $\mathbf{8 \%}$ |
| Before $10 / 1 / 1979$ | $12 / 3 \%$ | $\mathrm{~N} / \mathrm{A}$ | $\mathrm{N} / \mathrm{A}$ | $\mathrm{N} / \mathrm{A}$ |
| $10 / 1 / 1979-6 / 30 / 1996$ | $12 / 3 \%$ | $\mathrm{~N} / \mathrm{A}$ | $2 \%$ | $\mathrm{~N} / \mathrm{A}$ |
| $7 / 1 / 1996-1 / 31 / 2003$ | $12 / 3 \%$ | $\mathrm{~N} / \mathrm{A}$ | $2 \%$ | $2.5 \%$ |
| $2 / 1 / 2003-9 / 30 / 2005$ | $2 \%$ | $2.5 \%$ | $\mathrm{~N} / \mathrm{A}$ | $\mathrm{N} / \mathrm{A}$ |
| $10 / 1 / 2005-9 / 30 / 2006$ | $2 \%$ | $2.5 \%$ | $\mathrm{~N} / \mathrm{A}$ | $3 \%$ * |
| After $10 / 1 / 2006$ | $2 \%$ | $2.5 \%$ | $\mathrm{~N} / \mathrm{A}$ | $3.5 \%$ * |

Maximum benefit is $90 \%$ ( $75 \%$ prior to October 1, 2006) of AFC ( $60 \%$ of AFC for General Employees).

* For Police Officers only.


# Retirement Plan for Employees of the Town of Surfside, Florida 

## Outline of Principal Provisions of the Retirement Plan

(as of October 1, 2015)

## E. Normal Retirement (cont'd):

3. Form of Payment:

Straight life annuity with guaranteed refund of Accumulated Contributions (with options available).

## F. Early Retirement:

1. Eligibility:

The earlier of (a) age 55 with 15 years of Creditable Service, or (b) 20 years of Creditable Service regardless of age.
2. Benefit:

Same as Normal Retirement Benefit using AFC and Creditable Service as of Early Retirement Date but payable at Normal Retirement Date assuming continued employment. Alternatively, benefits may commence immediately after reduction of $0.5 \%$ for each month early.

## G. Delayed Retirement:

1. Eligibility:

Retirement after Normal Retirement Date.
2. Benefit:

Calculated in the same manner as Normal Retirement Benefit using AFC and Creditable Service as of delayed retirement date.

## H. Disability Retirement:

1. Service Connected:
a) Eligibility:

Total and permanent disability incurred prior to normal retirement date as a direct result of performance of service to the Town and eligible for Social Security disability benefits.
b) Benefit:
$75 \%$ (if injury) or $45 \%$ (if disease) of the rate of pay in effect on date of disability payable for life or until recovery. For General Employees, less Social Security disability benefits; there is an offset for Workers' Compensation to the extent that the disability benefit plus the Workers' Compensation benefit exceed $100 \%$ of preretirement salary.

## 2. Non-Service Connected:

a) Eligibility:

Total and permanent disability not incurred as a direct result of performance of service to the Town.

## Retirement Plan for Employees of the Town of Surfside, Florida <br> Outline of Principal Provisions of the Retirement Plan <br> (as of October 1, 2015)

## H. Disability Retirement (cont'd):

2. Non-Service Connected (cont'd):
b) Benefit:

Accrued pension benefit.

## I. Death Benefit:

1. Pre-Retirement:

Refund of Accumulated Contributions
2. After Normal Retirement Date but before Actual Retirement:

Survivor benefit payable in accordance with optional form of benefit chosen by member.
3. After Retirement:

Refund of any remaining Accumulated Contributions or optional survivor's benefits if elected.

## J. Accumulated Contributions:

The sum of all amounts contributed by members including $4 \%$ interest on contributions made after January 1, 1979. Effective January 1, 2009, member contributions are picked-up by the Town.

## K. Termination Benefit:

Upon termination prior to normal or early retirement date a member shall be entitled to choose (1) or (2) below, where:

1. A refund of Accumulated Contributions.
2. The benefit as for normal retirement using AFC and creditable service as of date of termination multiplied by the applicable percentage on the table below, commencing upon the earliest date a member would have attained normal retirement had he remained in service (age 65 for General Employees).

| Percentage |  |  |
| :---: | :---: | :---: |
| Years of | General | Police |
| Credited Service | $\underline{\text { Employees }}$ | Officers |
| Less than 5 | $0 \%$ | $0 \%$ |
| 5 | $50 \%$ | $100 \%$ |
| 6 | $60 \%$ | $100 \%$ |
| 7 | $70 \%$ | $100 \%$ |
| 8 | $80 \%$ | $100 \%$ |
| 9 | $90 \%$ | $100 \%$ |
| 10 or more | $100 \%$ | $100 \%$ |

# Retirement Plan for Employees of the Town of Surfside, Florida <br> Outline of Principal Provisions of the Retirement Plan <br> (as of October 1, 2015) 

L. Cost of Living Increase

A $1.5 \%$ automatic annual cost of living increase is provided for all current and future retirees, disableds, beneficiaries and vested terminated members.

## M. Deferred Retirement Option Program (DROP)

1. Eligibility: Attainment of normal retirement date.
2. The maximum period of participation in the DROP is five (5) years.
3. An employee's account in the DROP program shall be credited with interest based upon actual Fund investment return.
4. No payment may be made from DROP until the employee actually separates from service with the Town.
N. Changes From Previous Valuation

None.

## SECTION C

## ACTUARIAL ASSUMPTIONS AND COST METHODS USED FOR FUNDING

## Retirement Plan for Employees of the Town of Surfside, Florida

## Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation

 (as of October 1, 2015)
## A. Mortality

For healthy male participants, RP 2000 Annuitant Male Mortality Table, with 10\% White Collar / 90\% Blue Collar Adjustment for Police Officers - 50\% White Collar / 50\% Blue Collar Adjustment for General Employees and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants, RP 2000 Annuitant Female Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB.

For disabled male Police Officers, $60 \%$ RP 2000 Disabled Male Mortality Table setback four years / 40\% RP 2000 Annuitant Male Mortality Table, with White Collar Adjustment and no setback, without projected mortality improvements. For disabled female Police Officers, 60\% RP 2000 Disabled Female Mortality Table set forward two years / 40\% RP 2000 Annuitant Female Mortality Table, with White Collar Adjustment, without projected mortality improvements.

For disabled male General Employees, RP 2000 Disabled Male Mortality Table, setback four years, without projected mortality improvements. For disabled female General Employees, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements.

## B. Investment Return

$7.25 \%$, compounded annually; net rate after investment related expenses.

## C. Allowances for Expenses or Contingencies

Estimated expenses for upcoming year, not including investment related expenses.

## D. Employee Withdrawal Rates

Withdrawal rates for males and females were used in accordance with the following illustrative examples:

| General Employees |  |
| :---: | :---: |
| Age | Withdrawal Rate |
| Under 25 | $30.0 \%$ |
| $25-29$ | $20.0 \%$ |
| $30-34$ | $15.0 \%$ |
| $35-39$ | $10.0 \%$ |
| $40-44$ | $9.0 \%$ |
| $45-49$ | $8.0 \%$ |
| $50-54$ | $7.0 \%$ |
| $55-60$ | $6.0 \%$ |
| $60 \&$ over | $5.0 \%$ |

# Retirement Plan for Employees of the Town of Surfside, Florida <br> Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation (as of October 1, 2015) 

D. Employee Withdrawal Rates (cont'd)

|  | Police Officers |  |
| :---: | :---: | :---: |
| Service | Withdrawal Rate |  |
| $0-4$ | $12.0 \%$ |  |
| $5-6$ | $10.0 \%$ |  |
| 7 | $5.0 \%$ |  |
| 8 | $2.0 \%$ |  |
| $9 \&$ over | $1.0 \%$ |  |

E. Salary Increase Factors

Current salary is assumed to increase at a rate based on the tables below.

| General Employees |  |
| :---: | :---: |
| Service | Salary Increase |
| $0-4$ | $6.5 \%$ |
| $4-5$ | $6.0 \%$ |
| 6 | $5.0 \%$ |
| $7-9$ | $4.5 \%$ |
| $10 \&$ over | $4.0 \%$ |


| Police Officers |  |
| :---: | :---: |
| Service | Salary Increase |
| $0-3$ | $8.0 \%$ |
| 3 | $7.0 \%$ |
| $4-5$ | $6.0 \%$ |
| 6 | $5.0 \%$ |
| $7 \&$ over | $4.0 \%$ |

# Retirement Plan for Employees of the Town of Surfside, Florida <br> Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation <br> (as of October 1, 2015) 

## F. Disability Benefits

1. Rates:
2. Percent Service Connected:

25\% for General, $80 \%$ for Police.
3. Assume $50 \%$ of Service Connected Disabilities are due to injury and $50 \%$ are due to disease.

|  | Annual Rate of Disability |  |
| :---: | :---: | :---: |
| Age | General <br> Employees | Police <br> Department |
| 20 | $0.07 \%$ | $0.14 \%$ |
| 30 | $0.11 \%$ | $0.18 \%$ |
| 40 | $0.19 \%$ | $0.30 \%$ |
| 50 | $0.51 \%$ | $1.00 \%$ |
| 60 | $1.66 \%$ | $0.00 \%$ |

## G. Smoothed Actuarial Value of Assets

The method used for determining the smoothed actuarial value of assets phases in the deviation between the expected and actual return on assets at the rate of $20 \%$ per year. The smoothed actuarial value of assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is $80 \%$ of the fair market value of plan assets and whose upper limit is $120 \%$ of the fair market value of plan assets.

## H. Assumed Retirement Age

|  | Annual Rate of Retirement* |  |
| :---: | :---: | :---: |
| Age | General <br> Employees | Police <br> Officers |
| 40 | N/A | $3 \%$ |
| $41-45$ | $4 \%$ | $2 \%$ |
| $46-47$ | $3 \%$ | $1 \%$ |
| $48-50$ | $2 \%$ | $1 \%$ |
| $51 \&$ over | $1 \%$ | $1 \%$ |
| NRA | $40 \%$ | $50 \%$ |
| Past NRA | $50 \%$ | $50 \%$ |

$100 \%$ of members are assumed to retire upon reaching age 70 for General Employees and age 65 for Police Officers.

* For Employees who meet the age and service eligibility requirements for normal or early retirement


# Retirement Plan for Employees of the Town of Surfside, Florida <br> Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation <br> (as of October 1, 2015) 

## I. Marriage Assumption

$100 \%$ of all members are assumed to be married. Wives are assumed to be three years younger than their husbands.

## J. Actuarial Funding Method

Normal Retirement, Termination, Disability, and Death Benefits: Entry-Age-Actuarial Cost Method. Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his age at hire to his assumed retirement age to fund his estimated benefits, assuming the Plan has always been in effect. The normal cost for the Plan is the sum of such amounts for all employees. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the Plan is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the smoothed actuarial accrued liability over the actuarial value of assets of the Plan.

## K. Change From Previous Valuation

1. Mortality was:

For healthy General Employee participants, RP 2000 Combined Mortality Tables, separate rates for males and females, 15 years generational projection from valuation date for actives - 7 years generational projection from valuation date for inactives with Scale AA.

For healthy Police Officer participants, RP 2000 Combined Mortality Tables, separate rates for males and females, with Blue Collar Adjustment and 15 years generational projection from valuation date for actives - 7 years generational projection from valuation date for inactives with Scale AA.

For disabled participants, RP 2000 Disabled Mortality Tables, separate rates for males and females, 15 years generational projection from valuation date for actives - 7 years generational projection from valuation date for inactives with Scale AA.
2. Investment Return was:
$7.5 \%$, compounded annually; net rate after investment related expenses.

## Retirement Plan for Employees of the Town of Surfside, Florida <br> Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation

 (as of October 1, 2015)
## K. Change From Previous Valuation (cont'd)

3. Employee Withdrawal Rates were:

Withdrawal rates for males and females were used in accordance with the following illustrative examples:

| General Employees |  |
| :---: | :---: |
| Age | Withdrawal Rate |
| 20 | $18.0 \%$ |
| 30 | $15.2 \%$ |
| 40 | $8.3 \%$ |
| 50 | $2.2 \%$ |
| 60 | $0.7 \%$ |


| Police Officers |  |  |  |
| :---: | :---: | :---: | :---: |
| Service | Withdrawal Rate | Service | Withdrawal Rate |
| 1 | 20.0\% | 7 | 6.0\% |
| 2 | 18.0\% | 8 | 4.0\% |
| 3 | 15.0\% | 9 | 3.0\% |
| 4 | 12.0\% | 10 | 2.5\% |
| 5 | 10.0\% | 11 \& over | 2.0\% |
| 6 | 8.0\% |  |  |

4. Salary Increase Factors were:

Current salary is assumed to increase at a rate based on the tables below.

| General Employees |  |
| :---: | :---: |
| Service | Salary Increase |
| $0-4$ | $6.5 \%$ |
| $4-7$ | $4.5 \%$ |
| $7 \&$ over | $4.0 \%$ |

## Retirement Plan for Employees of the Town of Surfside, Florida

Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation (as of October 1, 2015)

## K. Change From Previous Valuation (cont'd)

4. Salary Increase Factors were (cont'd):

| Police Officers |  |
| :---: | :---: |
| Service | Salary Increase |
| $0-2$ | $13.5 \%$ |
| $2-3$ | $12.5 \%$ |
| $3-4$ | $10.5 \%$ |
| $4-5$ | $8.5 \%$ |
| $5-6$ | $6.5 \%$ |
| $6 \&$ over | $4.5 \%$ |

5. Assumed Retirement Age was:

|  | Annual Rate of Retirement |  |
| :---: | :---: | :---: |
|  | General <br> Employees | Police <br> Officers |
| 40 | N/A | $3 \%$ |
| $41-45$ | $4 \%$ | $2 \%$ |
| $46-47$ | $3 \%$ | $1 \%$ |
| $48-50$ | $2 \%$ | $1 \%$ |
| $51+$ | $1 \%$ | $1 \%$ |
| NRA | $100 \%$ | $100 \%$ |

## GLOSSARY

## Actuarial Accrued Liability

## Actuarial Assumptions

## Actuarial Cost Method

Actuarial Equivalent

Actuarial Present Value

## Actuarial Present Value of Future Benefits

## Actuarial Valuation

## Actuarial Value of Assets

The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.

Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members and other items.

A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.

Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.

The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.

The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits and inactive, non-retired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 67.

The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially required contribution.

## Amortization Payment

Amortization Period
Annual Required Contribution

## Closed Amortization Period

## Employer Normal Cost

## Equivalent Single Amortization Period

## Experience Gain/Loss

## Funded Ratio

A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.

That portion of the plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

The period used in calculating the Amortization Payment.
The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The annual required contribution consists of the Employer Normal Cost and Amortization Payment plus interest adjustment.

A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.

The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.

For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. Losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.

The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.

Governmental Accounting Standards Board.

GASB No. 67 and
GASB No. 68

Normal Cost

Unfunded Actuarial Accrued Liability

## Valuation Date

These are the governmental accounting standards that set the accounting rules for public retirement plans and the employers that sponsor or contribute to them. Statement No. 67 sets the accounting rules for the plans themselves, while Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement plans.

The annual cost assigned, under the Actuarial Cost Method, to the current plan year.

An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30 -year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.

The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.

The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.


[^0]:    * Combined per Internal Revenue Code Regulation 1.412(b)-1

