

June 29, 2018

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, 2017 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.

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 – 90.5% on a market value of assets basis as of October 1, 2017.

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



Retirement Plan for Employees of the Town of Surfside

CHAPTER 112.664, F.S. COMPLIANCE REPORT

In Connection with the October 1, 2017 Funding Actuarial Valuation Report and the Plan's Financial Reporting for the Year Ended September 30, 2017





June 29, 2018

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, 2017 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, 2017. We reviewed the information provided for internal and year-to-year consistency, but did not audit the data. The Plan is responsible for the accuracy of the data.

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 mortality assumptions are prescribed by statute.

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, future contributions are expected to remain relatively stable as a percentage of payroll and the funded status of the Plan is expected to improve. 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, 2017 is 90.5% 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.

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

By 
Lawrence F. Wilson, M.A.A.A
Enrolled Actuary No. 17-02802
Senior Consultant & Actuary

By 
Jennifer M. Borregard, M.A.A.A
Enrolled Actuary No. 17-07624
Consultant & Actuary

Date: June 29, 2018

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SECTION A

CHAPTER 112.664, F.S. RESULTS

Net Pension Liability
Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68

	Measurement Date	September 30, 2017
A.	<u>Total Pension Liability (TPL)</u>	
	Service Cost	\$ 1,052,014
	Interest	1,646,114
	Benefit Changes	282,066
	Difference Between Actual and Expected Experience	297,252
	Assumption Changes	93,312
	Benefit Payments	(572,055)
	Contribution Refunds	(79,232)
	Other	0
	Net Change in Total Pension Liability	\$ 2,719,471
	Total Pension Liability (TPL) - (beginning of year)	21,167,662
	Total Pension Liability (TPL) - (end of year)	\$ 23,887,133
B.	<u>Plan Fiduciary Net Position</u>	
	Contributions - Town	\$ 797,359
	Contributions - Member	462,846
	Net Investment Income	2,017,750
	Benefit Payments	(572,055)
	Contribution Refunds	(79,232)
	Administrative Expenses	(85,518)
	Other	0
	Net Change in Plan Fiduciary Net Position	\$ 2,541,150
	Plan Fiduciary Net Position - (beginning of year)	18,751,451
	Plan Fiduciary Net Position - (end of year)	\$ 21,292,601
C.	<u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ 2,594,532
	Valuation Date	October 1, 2016

Certain Key Assumptions

Investment Return Assumption 7.25%

Mortality Table:

General Employees: For healthy male participants during employment, RP 2000 Combined Male Healthy Participant Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants during employment, RP 2000 Combined Female Healthy Participant Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy male participants post employment, RP 2000 Annuitant Male Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants post employment, 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 participants, RP 2000 Disabled Male Mortality Table, setback four years, without projected mortality improvements. For disabled female participants, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements. Police Officers: For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, 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 participants, 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.

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

	September 30, 2017
Measurement Date	
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 1,052,014
Interest	1,646,114
Benefit Changes	287,408
Difference Between Actual and Expected Experience	261,318
Assumption Changes	(41,630)
Benefit Payments	(572,055)
Contribution Refunds	(79,232)
Other	0
Net Change in Total Pension Liability	\$ 2,553,937
Total Pension Liability (TPL) - (beginning of year)	21,333,196
Total Pension Liability (TPL) - (end of year)	\$ 23,887,133
B. <u>Plan Fiduciary Net Position</u>	
Contributions - Town	\$ 797,359
Contributions - Member	462,846
Net Investment Income	2,017,750
Benefit Payments	(572,055)
Contribution Refunds	(79,232)
Administrative Expenses	(85,518)
Other	0
Net Change in Plan Fiduciary Net Position	\$ 2,541,150
Plan Fiduciary Net Position - (beginning of year)	18,751,451
Plan Fiduciary Net Position - (end of year)	\$ 21,292,601
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ 2,594,532
Valuation Date	October 1, 2016

Certain Key Assumptions

Investment Return Assumption 7.25%

Mortality Table:

General Employees: For healthy male participants during employment, RP 2000 Combined Male Healthy Participant Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants during employment, RP 2000 Combined Female Healthy Participant Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy male participants post employment, RP 2000 Annuitant Male Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants post employment, 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 participants, RP 2000 Disabled Male Mortality Table, setback four years, without projected mortality improvements. For disabled female participants, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements. Police Officers: For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, 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 participants, 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.

Net Pension Liability
Using Assumptions Required Under 112.664(1)(b), F.S.

		<u>September 30, 2017</u>
Measurement Date		September 30, 2017
A. <u>Total Pension Liability (TPL)</u>		
Service Cost	\$	1,622,158
Interest		1,615,033
Benefit Changes		449,525
Difference Between Actual and Expected Experience		473,703
Assumption Changes		72,185
Benefit Payments		(572,055)
Contribution Refunds		(79,232)
Other		0
Net Change in Total Pension Liability	\$	3,581,317
Total Pension Liability (TPL) - (beginning of year)		28,170,832
Total Pension Liability (TPL) - (end of year)	\$	31,752,149
B. <u>Plan Fiduciary Net Position</u>		
Contributions - Town	\$	797,359
Contributions - Member		462,846
Net Investment Income		2,017,750
Benefit Payments		(572,055)
Contribution Refunds		(79,232)
Administrative Expenses		(85,518)
Other		0
Net Change in Plan Fiduciary Net Position	\$	2,541,150
Plan Fiduciary Net Position - (beginning of year)		18,751,451
Plan Fiduciary Net Position - (end of year)	\$	21,292,601
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$	10,459,548
Valuation Date		October 1, 2016

Certain Key Assumptions

Investment Return Assumption 5.25%

Mortality Table:

General Employees: For healthy male participants during employment, RP 2000 Combined Male Healthy Participant Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants during employment, RP 2000 Combined Female Healthy Participant Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy male participants post employment, RP 2000 Annuitant Male Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants post employment, 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 participants, RP 2000 Disabled Male Mortality Table, setback four years, without projected mortality improvements. For disabled female participants, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements. Police Officers: For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, 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 participants, 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.

Net Pension Liability

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

Measurement Date	<u>September 30, 2017</u>
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 721,492
Interest	1,613,591
Benefit Changes	197,265
Difference Between Actual and Expected Experience	118,091
Assumption Changes	(69,981)
Benefit Payments	(572,055)
Contribution Refunds	(79,232)
Other	0
Net Change in Total Pension Liability	\$ 1,929,171
Total Pension Liability (TPL) - (beginning of year)	16,756,264
Total Pension Liability (TPL) - (end of year)	<u>\$ 18,685,435</u>
B. <u>Plan Fiduciary Net Position</u>	
Contributions - Town	\$ 797,359
Contributions - Member	462,846
Net Investment Income	2,017,750
Benefit Payments	(572,055)
Contribution Refunds	(79,232)
Administrative Expenses	(85,518)
Other	0
Net Change in Plan Fiduciary Net Position	\$ 2,541,150
Plan Fiduciary Net Position - (beginning of year)	18,751,451
Plan Fiduciary Net Position - (end of year)	<u>\$ 21,292,601</u>
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ (2,607,166)
Valuation Date	October 1, 2016

Certain Key Assumptions

Investment Return Assumption 9.25%

Mortality Table:

General Employees: For healthy male participants during employment, RP 2000 Combined Male Healthy Participant Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants during employment, RP 2000 Combined Female Healthy Participant Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy male participants post employment, RP 2000 Annuitant Male Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants post employment, 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 participants, RP 2000 Disabled Male Mortality Table, setback four years, without projected mortality improvements. For disabled female participants, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements. Police Officers: For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, 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 participants, 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.

Asset and Benefit Payment Projection
Not Reflecting Any Future Contributions
Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68
and Using Assumptions Required Under 112.664(1)(a), F.S.

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2018	\$ 20,938,994	\$ 1,487,625	\$ 783,828	\$ 21,642,791
2019	21,642,791	1,534,272	896,524	22,280,539
2020	22,280,539	1,578,973	936,047	22,923,465
2021	22,923,465	1,623,834	981,113	23,566,186
2022	23,566,186	1,668,497	1,030,896	24,203,787
2023	24,203,787	1,713,275	1,068,170	24,848,892
2024	24,848,892	1,758,839	1,099,223	25,508,508
2025	25,508,508	1,804,462	1,155,833	26,157,137
2026	26,157,137	1,847,984	1,246,016	26,759,105
2027	26,759,105	1,887,574	1,350,315	27,296,364
2028	27,296,364	1,922,339	1,458,076	27,760,627
2029	27,760,627	1,951,440	1,575,387	28,136,680
2030	28,136,680	1,973,824	1,700,993	28,409,511
2031	28,409,511	1,991,099	1,765,487	28,635,123
2032	28,635,123	2,005,966	1,803,816	28,837,273
2033	28,837,273	2,019,777	1,825,583	29,031,467
2034	29,031,467	2,033,587	1,832,489	29,232,565
2035	29,232,565	2,048,179	1,832,183	29,448,561
2036	29,448,561	2,063,853	1,831,804	29,680,610
2037	29,680,610	2,080,649	1,832,514	29,928,745
2038	29,928,745	2,098,603	1,833,447	30,193,901
2039	30,193,901	2,117,844	1,832,993	30,478,752
2040	30,478,752	2,139,095	1,817,587	30,800,260
2041	30,800,260	2,162,230	1,822,068	31,140,422
2042	31,140,422	2,187,577	1,804,426	31,523,573
2043	31,523,573	2,216,242	1,781,594	31,958,221
2044	31,958,221	2,247,757	1,781,527	32,424,451
2045	32,424,451	2,282,324	1,761,834	32,944,941
2046	32,944,941	2,321,396	1,727,436	33,538,901
2047	33,538,901	2,364,700	1,721,190	34,182,411

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: 99.99

Certain Key Assumptions

Investment return assumption 7.25%

Mortality Table:

General Employees: For healthy male participants during employment, RP 2000 Combined Male Healthy Participant Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants during employment, RP 2000 Combined Female Healthy Participant Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy male participants post employment, RP 2000 Annuitant Male Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants post employment, 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 participants, RP 2000 Disabled Male Mortality Table, setback four years, without projected mortality improvements. For disabled female participants, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements. Police Officers: For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, 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 participants, 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.

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.

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

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2018	\$ 20,938,994	\$ 1,077,181	\$ 783,828	\$ 21,232,347
2019	21,232,347	1,089,403	896,524	21,425,226
2020	21,425,226	1,098,414	936,047	21,587,593
2021	21,587,593	1,105,666	981,113	21,712,146
2022	21,712,146	1,110,801	1,030,896	21,792,051
2023	21,792,051	1,113,944	1,068,170	21,837,825
2024	21,837,825	1,115,471	1,099,223	21,854,073
2025	21,854,073	1,114,727	1,155,833	21,812,967
2026	21,812,967	1,110,024	1,246,016	21,676,975
2027	21,676,975	1,099,942	1,350,315	21,426,602
2028	21,426,602	1,083,757	1,458,076	21,052,283
2029	21,052,283	1,060,795	1,575,387	20,537,691
2030	20,537,691	1,030,235	1,700,993	19,866,933
2031	19,866,933	993,200	1,765,487	19,094,646
2032	19,094,646	951,574	1,803,816	18,242,404
2033	18,242,404	906,217	1,825,583	17,323,038
2034	17,323,038	857,755	1,832,489	16,348,304
2035	16,348,304	806,591	1,832,183	15,322,712
2036	15,322,712	752,758	1,831,804	14,243,666
2037	14,243,666	696,088	1,832,514	13,107,240
2038	13,107,240	636,399	1,833,447	11,910,192
2039	11,910,192	573,567	1,832,993	10,650,766
2040	10,650,766	507,882	1,817,587	9,341,061
2041	9,341,061	438,996	1,822,068	7,957,989
2042	7,957,989	366,882	1,804,426	6,520,445
2043	6,520,445	292,055	1,781,594	5,030,906
2044	5,030,906	213,856	1,781,527	3,463,235
2045	3,463,235	132,109	1,761,834	1,833,510
2046	1,833,510	47,519	1,727,436	153,593
2047	153,593	43	1,721,190	-

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: 29.08

Certain Key Assumptions

Investment return assumption 5.25%

Mortality Table:

General Employees: For healthy male participants during employment, RP 2000 Combined Male Healthy Participant Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants during employment, RP 2000 Combined Female Healthy Participant Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy male participants post employment, RP 2000 Annuitant Male Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants post employment, 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 participants, RP 2000 Disabled Male Mortality Table, setback four years, without projected mortality improvements. For disabled female participants, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements. Police Officers: For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, 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 participants, 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.

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.

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

FYE	Market Value of Assets (BOY)	Expected Investment Return	Projected Benefit Payments	Market Value of Assets (EOY)
2018	\$ 20,938,994	\$ 1,898,115	\$ 783,828	\$ 22,053,281
2019	22,053,281	1,995,616	896,524	23,152,373
2020	23,152,373	2,095,328	936,047	24,311,654
2021	24,311,654	2,200,334	981,113	25,530,875
2022	25,530,875	2,310,652	1,030,896	26,810,631
2023	26,810,631	2,427,187	1,068,170	28,169,648
2024	28,169,648	2,551,361	1,099,223	29,621,786
2025	29,621,786	2,682,886	1,155,833	31,148,839
2026	31,148,839	2,819,681	1,246,016	32,722,504
2027	32,722,504	2,960,090	1,350,315	34,332,279
2028	34,332,279	3,103,667	1,458,076	35,977,870
2029	35,977,870	3,250,086	1,575,387	37,652,569
2030	37,652,569	3,398,788	1,700,993	39,350,364
2031	39,350,364	3,552,646	1,765,487	41,137,523
2032	41,137,523	3,716,064	1,803,816	43,049,771
2033	43,049,771	3,891,871	1,825,583	45,116,059
2034	45,116,059	4,082,661	1,832,489	47,366,231
2035	47,366,231	4,290,817	1,832,183	49,824,865
2036	49,824,865	4,518,259	1,831,804	52,511,320
2037	52,511,320	4,766,721	1,832,514	55,445,527
2038	55,445,527	5,038,089	1,833,447	58,650,169
2039	58,650,169	5,334,541	1,832,993	62,151,717
2040	62,151,717	5,659,196	1,817,587	65,993,326
2041	65,993,326	6,014,323	1,822,068	70,185,581
2042	70,185,581	6,402,979	1,804,426	74,784,134
2043	74,784,134	6,829,473	1,781,594	79,832,013
2044	79,832,013	7,296,406	1,781,527	85,346,892
2045	85,346,892	7,807,505	1,761,834	91,392,563
2046	91,392,563	8,368,430	1,727,436	98,033,557
2047	98,033,557	8,983,031	1,721,190	105,295,398

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: 99.99

Certain Key Assumptions

Investment return assumption 9.25%

Mortality Table:

General Employees: For healthy male participants during employment, RP 2000 Combined Male Healthy Participant Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants during employment, RP 2000 Combined Female Healthy Participant Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy male participants post employment, RP 2000 Annuitant Male Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants post employment, 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 participants, RP 2000 Disabled Male Mortality Table, setback four years, without projected mortality improvements. For disabled female participants, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements. Police Officers: For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For disabled male participants, 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 participants, 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.

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.

ACTUARIALLY DETERMINED CONTRIBUTION

	Valuation Assumptions and 112.664(1)(a), F.S. Assumptions	112.664(1)(b), F.S. Assumptions	112.664(1)(a), F.S. Assumptions Plus 2% on Investment Return Assumption
A. Valuation Date	October 1, 2017	October 1, 2017	October 1, 2017
B. Actuarial Determined Contribution to Be Paid During Fiscal Year Ending	September 30, 2019	September 30, 2019	September 30, 2019
C. Annual Payroll of Active Employees	\$ 5,624,740	\$ 5,624,740	\$ 5,624,740
D. Total Minimum Funding Requirement			
1. Total Normal Cost	\$ 1,088,055	\$ 1,648,233	\$ 766,170
2. Annual Payment to Amortize Unfunded Actuarial Liability	163,792	623,458	(268,718)
3. Interest Adjustment	15,196	11,213	19,032
4. Total Minimum Funding Requirement (1. + 2. + 3., not less than 1.)	\$ 1,267,043	\$ 2,282,904	\$ 766,170
E. Expected Payroll of Active Employees for Following Plan Year (\$ / % of pay) (C x 1.000)	\$ 5,624,740 100.00%	\$ 5,624,740 100.00%	\$ 5,624,740 100.00%
F. Expected Contribution Sources (\$ / % of pay)			
1. Town	\$ 817,472 14.53%	\$ 1,833,333 32.59%	\$ 316,599 5.63%
2. Member	449,571 7.99%	449,571 7.99%	449,571 7.99%
3. State	0 0.00%	0 0.00%	0 0.00%
4. Total	\$ 1,267,043 22.53%	\$ 2,282,904 40.59%	\$ 766,170 13.62%

Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments

	<u>Amortization Base</u>	Current Unfunded <u>Liabilities</u>	Amortization Payment			Remaining Funding <u>Period</u>
			Valuation and 112.664(1)(a), F.S. <u>Assumptions</u>	112.664(1)(b), F.S. <u>Assumptions</u>	112.664(1)(a), F.S. <u>Assumptions Plus 2%</u>	
10/01/2009	Combined Bases * - General Employees	\$ 1,927	\$ 193	\$ 172	\$ 215	16 years
10/01/2010	Actuarial (Gain) / Loss - General Employees	219,805	18,571	15,850	21,409	23 years
10/01/2010	Assumption Changes - General Employees	(118,089)	(9,977)	(8,515)	(11,502)	23 years
10/01/2011	Actuarial (Gain) / Loss - General Employees	80,129	6,658	5,652	7,706	24 years
10/01/2011	Combined Charge Bases * - Police Officers	6,661,425	612,258	534,428	693,063	19 years
10/01/2011	Combined Credit Bases * - Police Officers	(5,777,555)	(579,737)	(515,556)	(646,036)	16 years
10/01/2012	Actuarial (Gain) / Loss - General Employees	155,511	12,724	10,748	14,786	25 years
10/01/2012	Actuarial (Gain) / Loss - Police Officers	606,082	49,590	41,888	57,627	25 years
10/01/2012	Assumption Changes - General Employees	117,497	9,614	8,120	11,172	25 years
10/01/2012	Assumption Changes - Police Officers	45,783	3,746	3,164	4,353	25 years
10/01/2013	Actuarial (Gain) / Loss - General Employees	83	7	6	8	26 years
10/01/2013	Actuarial (Gain) / Loss - Police Officers	(35,302)	(2,848)	(2,394)	(3,322)	26 years
10/01/2013	Plan Amendment - Police Officers	41,993	3,388	2,847	3,952	26 years
10/01/2014	Actuarial (Gain) / Loss - General Employees	85,020	6,770	5,664	7,926	27 years
10/01/2014	Actuarial (Gain) / Loss - Police Officers	(171,951)	(13,693)	(11,454)	(16,030)	27 years
10/01/2015	Actuarial (Gain) / Loss - General Employees	149,491	11,763	9,794	13,818	28 years
10/01/2015	Actuarial (Gain) / Loss - Police Officers	(173,858)	(13,680)	(11,391)	(16,070)	28 years
10/01/2015	Assumption Changes - General Employees	138,777	10,920	9,092	12,827	28 years
10/01/2015	Assumption Changes - Police Officers	300,536	23,648	19,690	27,779	28 years
10/01/2015	Plan Amendment - General Employees	290,860	22,886	19,056	26,884	28 years
10/01/2016	Actuarial (Gain) / Loss - General Employees	301,919	23,496	19,477	27,692	29 years
10/01/2016	Actuarial (Gain) / Loss - Police Officers	(86,024)	(6,695)	(5,549)	(7,890)	29 years
10/01/2016	Assumption Changes - General Employees	36,638	2,851	2,363	3,360	29 years
10/01/2016	Assumption Changes - Police Officers	61,752	4,806	3,984	5,664	29 years
10/01/2017	Actuarial (Gain) / Loss - General Employees	(227,421)	(17,519)	(14,459)	(20,713)	30 years
10/01/2017	Actuarial (Gain) / Loss - Police Officers	(207,030)	(15,948)	(13,163)	(18,856)	30 years
10/01/2017	Assumption Change - 112.664(1)(b), F.S. Assumptions	7,768,982	N/A	493,944	N/A	30 years
10/01/2017	Assumption Change - 112.664(1)(a), F.S. Assumptions Plus 2%	(5,144,454)	N/A	N/A	(468,540)	30 years

* Combined per Internal Revenue Code Regulation 1.412(b)-1

SECTION B

SUMMARY OF PLAN PROVISIONS

Outline of Principal Provisions of the Retirement Plan
(as of October 1, 2017)

A. Effective Date:

January 1, 1962. Most recent amendatory Ordinance considered: 16-1652.

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.

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 a participating Town Manager and the Town Attorney, the earlier of (1) age 62 with 15 years of Creditable Service or (2) 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:

Period of Service	Benefit Accrual Rate per Year of Service Based on Employee Contribution Rate of			
	5%	6%	7%	8%
Before 10/1/1979	1 2/3%	N/A	N/A	N/A
10/1/1979 - 6/30/1996	1 2/3%	N/A	2.0%	N/A
7/1/1996 - 1/31/2003	1 2/3%	N/A	2.0%	2.5%
2/1/2003 - 9/30/2005	2.0%	2.5%	N/A	N/A
10/1/2005 - 9/30/2006	2.0%	2.5%	N/A	3.0% ¹
10/1/2006 - 9/30/2016	2.0%	2.5%	N/A	3.5% ¹
10/1/2016 forward	N/A	N/A	2.65% ²	2.8% ² / 3.0% ³ / 3.5% ¹

Maximum benefit is 90% (75% prior to October 1, 2006) of AFC for Police Officers, 68% (60% prior to October 1, 2016) of AFC for General Employees and 80% (60% prior to October 1, 2016) of AFC for Senior Management Employees.

¹ For Police Officers only.

² For General Employees only.

³ For Senior Management Employees only.

Outline of Principal Provisions of the Retirement Plan
(as of October 1, 2017)

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.

Outline of Principal Provisions of the Retirement Plan
(as of October 1, 2017)

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).

<u>Years of Creditable Service</u>	<u>Percentage</u>	
	<u>General Employees</u>	<u>Police Officers</u>
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%

3. A participating Town Manager and the Town Attorney 100% vested upon completion of 7 years of Creditable Service.

Outline of Principal Provisions of the Retirement Plan
(as of October 1, 2017)

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 Since Previous Actuarial Valuation

None.

SECTION C

ACTUARIAL ASSUMPTIONS AND COST METHODS USED FOR FUNDING

Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2017)

A. Mortality

General Mortality Assumptions:

For healthy male participants during employment, RP 2000 Combined Male Healthy Participant Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants during employment, RP 2000 Combined Female Healthy Participant Mortality Table, with White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB.

For healthy male participants post employment, RP 2000 Annuitant Male Mortality Table, with 50% White Collar / 50% Blue Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB. For healthy female participants post employment, 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 participants, RP 2000 Disabled Male Mortality Table, setback four years, without projected mortality improvements. For disabled female participants, RP 2000 Disabled Female Mortality Table, set forward two years, without projected mortality improvements.

Sample Ages (2017)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	30.42	33.47	29.99
60	25.49	28.45	25.32	28.35
62	23.58	26.49	23.48	26.43

Sample Ages (2037)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	32.57	35.32	32.16
60	27.67	30.29	27.52	30.21
62	25.76	28.32	25.68	28.26

Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2017)

A. Mortality (cont'd)

Police Mortality Assumptions:

For healthy participants during employment, RP 2000 Combined Healthy Participant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB.

For healthy participants post employment, RP 2000 Annuitant Mortality Tables, separate rates for males and females, with 90% Blue Collar Adjustment / 10% White Collar Adjustment and fully generational mortality improvements projected to each future decrement date with Scale BB.

For disabled male participants, 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 participants, 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.

Sample Ages (2017)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	29.73	32.50	29.21
60	24.84	27.46	24.94	27.31
62	22.97	25.50	22.85	25.39

Sample Ages (2037)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	31.96	34.44	31.46
60	27.11	29.40	26.92	29.27
62	25.23	27.41	25.12	27.33

Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2017)

B. Investment Return

7.25%, compounded annually - net of investment expenses includes inflation at 2.50%.

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:

<u>General Employees</u>	
<u>Age</u>	<u>Withdrawal Rate</u>
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%

<u>Police Officers</u>	
<u>Service</u>	<u>Withdrawal Rate</u>
0 - 4	12.0%
5 - 6	10.0%
7	5.0%
8	2.0%
9 & over	1.0%

Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2017)

E. Salary Increase Factors

Current salary is assumed to increase at a rate based on the tables below - includes assumed wage inflation of 3.0%.

General Employees	
<u>Service</u>	<u>Salary Increase</u>
0 - 4	6.5%
4 - 5	6.0%
6	5.0%
7 - 9	4.5%
10 & over	4.0%

Police Officers	
<u>Service</u>	<u>Salary Increase</u>
0 - 3	8.0%
3	7.0%
4 - 5	6.0%
6	5.0%
7 & over	4.0%

F. Disability Benefits

1. Rates: See Table Below
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.

Age	Annual Rate of Disability	
	General Employees	Police 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%

Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2017)

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

Age	Annual Rate of Retirement*	
	General Employees	Police 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

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. Changes Since Previous Actuarial Valuation

None.

SECTION D

GLOSSARY

GLOSSARY

<i>Actuarial Accrued Liability</i>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<i>Actuarial Assumptions</i>	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.
<i>Actuarial Cost Method</i>	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.
<i>Actuarial Equivalent</i>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<i>Actuarial Present Value</i>	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.
<i>Actuarial Present Value of Future Benefits</i>	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.
<i>Actuarial Valuation</i>	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.
<i>Actuarial Value of Assets</i>	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.

<i>Amortization Method</i>	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.
<i>Amortization Payment</i>	That portion of the plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<i>Amortization Period</i>	The period used in calculating the Amortization Payment.
<i>Annual Required Contribution</i>	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.
<i>Closed Amortization Period</i>	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.
<i>Employer Normal Cost</i>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<i>Equivalent Single Amortization Period</i>	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.
<i>Experience Gain/Loss</i>	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.
<i>Funded Ratio</i>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.

<i>GASB</i>	Governmental Accounting Standards Board.
<i>GASB No. 67 and GASB No. 68</i>	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.
<i>Normal Cost</i>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<i>Open Amortization Period</i>	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.
<i>Unfunded Actuarial Accrued Liability</i>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<i>Valuation Date</i>	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.