



August 21, 2019

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, 2018 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](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 – 90.1% on a market value of assets basis as of October 1, 2018.

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,

A handwritten signature in black ink that reads "Jennifer Borregard". The signature is written in a cursive, flowing style.

Jennifer M. Borregard, E.A.  
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, 2018 Funding Actuarial Valuation Report and the Plan's Financial Reporting for the Year Ended September 30, 2018







August 21, 2019

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, 2018 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, 2018. 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, 2018 is 90.1% 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.

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 us or under our direct supervision and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate, and in our 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 Michelle Jones  
Shelly L. Jones, M.A.A.A  
Enrolled Actuary No. 17-08646  
Consultant & Actuary

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

Date: August 21, 2019

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## **SECTION A**

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### **CHAPTER 112.664, F.S. RESULTS**



**Net Pension Liability**  
**Using Financial Reporting Assumptions per GASB Statements No. 67 and No. 68**  
**and Using Assumptions Required Under 112.664(1)(a), F.S.**

Measurement Date	September 30, 2018
<b>A. <u>Total Pension Liability (TPL)</u></b>	
Service Cost	\$ 1,002,537
Interest	1,745,881
Benefit Changes	0
Difference Between Actual and Expected Experience	(348,726)
Assumption Changes	0
Benefit Payments	(816,380)
Contribution Refunds	(2,736)
Other	0
<b>Net Change in Total Pension Liability</b>	<b>\$ 1,580,576</b>
<b>Total Pension Liability (TPL) - (beginning of year)</b>	<b>23,887,133</b>
<b>Total Pension Liability (TPL) - (end of year)</b>	<b>\$ 25,467,709</b>
<b>B. <u>Plan Fiduciary Net Position</u></b>	
Contributions - Town	\$ 917,274
Contributions - Member	459,190
Net Investment Income	1,579,816
Benefit Payments	(816,380)
Contribution Refunds	(2,736)
Administrative Expenses	(120,389)
Other	0
<b>Net Change in Plan Fiduciary Net Position</b>	<b>\$ 2,016,775</b>
<b>Plan Fiduciary Net Position - (beginning of year)</b>	<b>21,292,601</b>
<b>Plan Fiduciary Net Position - (end of year)</b>	<b>\$ 23,309,376</b>
<b>C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u></b>	<b>\$ 2,158,333</b>
Valuation Date	October 1, 2017

**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.

		September 30, 2018
Measurement Date		
<b>A. <u>Total Pension Liability (TPL)</u></b>		
Service Cost	\$	1,562,715
Interest		1,706,942
Benefit Changes		0
Difference Between Actual and Expected Experience		(444,760)
Assumption Changes		0
Benefit Payments		(816,380)
Contribution Refunds		(2,736)
Other		0
<b>Net Change in Total Pension Liability</b>	<b>\$</b>	<b>2,005,781</b>
<b>Total Pension Liability (TPL) - (beginning of year)</b>		<b>31,752,149</b>
<b>Total Pension Liability (TPL) - (end of year)</b>	<b>\$</b>	<b>33,757,930</b>
<b>B. <u>Plan Fiduciary Net Position</u></b>		
Contributions - Town	\$	917,274
Contributions - Member		459,190
Net Investment Income		1,579,816
Benefit Payments		(816,380)
Contribution Refunds		(2,736)
Administrative Expenses		(120,389)
Other		0
<b>Net Change in Plan Fiduciary Net Position</b>	<b>\$</b>	<b>2,016,775</b>
<b>Plan Fiduciary Net Position - (beginning of year)</b>		<b>21,292,601</b>
<b>Plan Fiduciary Net Position - (end of year)</b>	<b>\$</b>	<b>23,309,376</b>
<b>C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u></b>	<b>\$</b>	<b>10,448,554</b>
Valuation Date		October 1, 2017

**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	September 30, 2018
<b>A. <u>Total Pension Liability (TPL)</u></b>	
Service Cost	\$ 680,652
Interest	1,716,466
Benefit Changes	0
Difference Between Actual and Expected Experience	(291,482)
Assumption Changes	0
Benefit Payments	(816,380)
Contribution Refunds	(2,736)
Other	0
<b>Net Change in Total Pension Liability</b>	<b>\$ 1,286,520</b>
<b>Total Pension Liability (TPL) - (beginning of year)</b>	<b>18,685,435</b>
<b>Total Pension Liability (TPL) - (end of year)</b>	<b>\$ 19,971,955</b>
<b>B. <u>Plan Fiduciary Net Position</u></b>	
Contributions - Town	\$ 917,274
Contributions - Member	459,190
Net Investment Income	1,579,816
Benefit Payments	(816,380)
Contribution Refunds	(2,736)
Administrative Expenses	(120,389)
Other	0
<b>Net Change in Plan Fiduciary Net Position</b>	<b>\$ 2,016,775</b>
<b>Plan Fiduciary Net Position - (beginning of year)</b>	<b>21,292,601</b>
<b>Plan Fiduciary Net Position - (end of year)</b>	<b>\$ 23,309,376</b>
<b>C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u></b>	<b>\$ (3,337,421)</b>
Valuation Date	October 1, 2017

**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.

<b>FYE</b>	<b>Market Value of Assets (BOY)</b>	<b>Expected Investment Return</b>	<b>Projected Benefit Payments</b>	<b>Market Value of Assets (EOY)</b>
2019	\$ 23,002,682	\$ 1,632,164	\$ 914,545	\$ 23,720,301
2020	23,720,301	1,681,912	973,196	24,429,017
2021	24,429,017	1,731,445	1,020,795	25,139,667
2022	25,139,667	1,781,075	1,069,502	25,851,240
2023	25,851,240	1,831,147	1,108,536	26,573,851
2024	26,573,851	1,882,403	1,137,712	27,318,542
2025	27,318,542	1,933,730	1,206,261	28,046,011
2026	28,046,011	1,982,356	1,312,181	28,716,186
2027	28,716,186	2,025,903	1,441,934	29,300,155
2028	29,300,155	2,063,312	1,568,806	29,794,661
2029	29,794,661	2,094,121	1,698,583	30,190,199
2030	30,190,199	2,117,339	1,839,087	30,468,451
2031	30,468,451	2,134,415	1,918,818	30,684,048
2032	30,684,048	2,148,230	1,965,555	30,866,723
2033	30,866,723	2,160,287	1,996,091	31,030,919
2034	31,030,919	2,171,708	2,008,549	31,194,078
2035	31,194,078	2,183,435	2,011,154	31,366,359
2036	31,366,359	2,195,796	2,014,497	31,547,658
2037	31,547,658	2,208,759	2,019,156	31,737,261
2038	31,737,261	2,222,330	2,023,674	31,935,917
2039	31,935,917	2,236,608	2,026,869	32,145,656
2040	32,145,656	2,252,367	2,012,648	32,385,375
2041	32,385,375	2,269,641	2,015,351	32,639,665
2042	32,639,665	2,288,625	2,001,260	32,927,030
2043	32,927,030	2,310,206	1,982,025	33,255,211
2044	33,255,211	2,333,933	1,983,720	33,605,424
2045	33,605,424	2,360,054	1,964,922	34,000,556
2046	34,000,556	2,390,206	1,926,189	34,464,573
2047	34,464,573	2,424,273	1,915,240	34,973,606
2048	34,973,606	2,462,823	1,872,897	35,563,532

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)
2019	\$ 23,002,682	\$ 1,181,837	\$ 914,545	\$ 23,269,974
2020	23,269,974	1,194,215	973,196	23,490,993
2021	23,490,993	1,204,475	1,020,795	23,674,673
2022	23,674,673	1,212,744	1,069,502	23,817,915
2023	23,817,915	1,219,163	1,108,536	23,928,542
2024	23,928,542	1,224,148	1,137,712	24,014,978
2025	24,014,978	1,226,751	1,206,261	24,035,468
2026	24,035,468	1,224,839	1,312,181	23,948,126
2027	23,948,126	1,216,592	1,441,934	23,722,784
2028	23,722,784	1,201,182	1,568,806	23,355,160
2029	23,355,160	1,178,220	1,698,583	22,834,797
2030	22,834,797	1,146,937	1,839,087	22,142,647
2031	22,142,647	1,108,349	1,918,818	21,332,178
2032	21,332,178	1,064,481	1,965,555	20,431,104
2033	20,431,104	1,016,313	1,996,091	19,451,326
2034	19,451,326	964,523	2,008,549	18,407,300
2035	18,407,300	909,638	2,011,154	17,305,784
2036	17,305,784	851,714	2,014,497	16,143,001
2037	16,143,001	790,537	2,019,156	14,914,382
2038	14,914,382	725,907	2,023,674	13,616,615
2039	13,616,615	657,684	2,026,869	12,247,430
2040	12,247,430	586,203	2,012,648	10,820,985
2041	10,820,985	511,238	2,015,351	9,316,872
2042	9,316,872	432,670	2,001,260	7,748,282
2043	7,748,282	350,862	1,982,025	6,117,119
2044	6,117,119	265,178	1,983,720	4,398,577
2045	4,398,577	175,485	1,964,922	2,609,140
2046	2,609,140	82,632	1,926,189	765,583
2047	765,583	6,321	1,915,240	-
2048	-	-	1,872,897	-

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: 28.33

**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)
2019	\$ 23,002,682	\$ 2,082,545	\$ 914,545	\$ 24,170,682
2020	24,170,682	2,187,686	973,196	25,385,172
2021	25,385,172	2,297,674	1,020,795	26,662,051
2022	26,662,051	2,413,377	1,069,502	28,005,926
2023	28,005,926	2,535,756	1,108,536	29,433,146
2024	29,433,146	2,666,332	1,137,712	30,961,766
2025	30,961,766	2,804,341	1,206,261	32,559,846
2026	32,559,846	2,946,929	1,312,181	34,194,594
2027	34,194,594	3,091,729	1,441,934	35,844,389
2028	35,844,389	3,238,065	1,568,806	37,513,648
2029	37,513,648	3,386,057	1,698,583	39,201,122
2030	39,201,122	3,535,203	1,839,087	40,897,238
2031	40,897,238	3,688,153	1,918,818	42,666,573
2032	42,666,573	3,849,506	1,965,555	44,550,524
2033	44,550,524	4,022,263	1,996,091	46,576,696
2034	46,576,696	4,209,068	2,008,549	48,777,215
2035	48,777,215	4,412,487	2,011,154	51,178,548
2036	51,178,548	4,634,445	2,014,497	53,798,496
2037	53,798,496	4,876,560	2,019,156	56,655,900
2038	56,655,900	5,140,647	2,023,674	59,772,873
2039	59,772,873	5,428,809	2,026,869	63,174,813
2040	63,174,813	5,744,191	2,012,648	66,906,356
2041	66,906,356	6,089,225	2,015,351	70,980,230
2042	70,980,230	6,466,755	2,001,260	75,445,725
2043	75,445,725	6,880,764	1,982,025	80,344,464
2044	80,344,464	7,333,814	1,983,720	85,694,558
2045	85,694,558	7,829,626	1,964,922	91,559,262
2046	91,559,262	8,374,026	1,926,189	98,007,099
2047	98,007,099	8,970,992	1,915,240	105,062,851
2048	105,062,851	9,625,742	1,872,897	112,815,696

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, 2018	October 1, 2018	October 1, 2018
B. Actuarial Determined Contribution to Be Paid During Fiscal Year Ending	September 30, 2020	September 30, 2020	September 30, 2020
C. Annual Payroll of Active Employees	\$ 6,183,349	\$ 6,183,349	\$ 6,183,349
D. Total Minimum Funding Requirement			
1. Total Normal Cost	\$ 1,233,517	\$ 1,853,791	\$ 877,754
2. Annual Payment to Amortize Unfunded Actuarial Liability	189,894	692,210	(284,003)
3. Interest Adjustment	16,705	12,327	20,923
4. Total Minimum Funding Requirement (1. + 2. + 3., not less than 1.)	\$ 1,440,116	\$ 2,558,328	\$ 877,754
E. Expected Payroll of Active Employees for Following Plan Year (\$ / % of pay) (C x 1.000)	\$ 6,183,349 100.00%	\$ 6,183,349 100.00%	\$ 6,183,349 100.00%
F. Expected Contribution Sources (\$ / % of pay)			
1. Town	\$ 945,871 15.30%	\$ 2,064,083 33.38%	\$ 383,509 6.20%
2. Member	494,245 7.99%	494,245 7.99%	494,245 7.99%
3. Total	\$ 1,440,116 23.29%	\$ 2,558,328 41.37%	\$ 877,754 14.20%

Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments

Amortization Base	Current Unfunded Liabilities	Amortization Payment			Remaining Funding Period
		Valuation and 112.664(1)(a), F.S. Assumptions	112.664(1)(b), F.S. Assumptions	112.664(1)(a), F.S. Assumptions Plus 2%	
10/01/2009 Combined Bases * - General Employees	\$ 1,727	\$ 180	\$ 161	\$ 199	15 years
10/01/2010 Actuarial (Gain) / Loss - General Employees	202,973	17,466	14,987	20,048	22 years
10/01/2010 Assumption Changes - General Employees	(109,046)	(9,383)	(8,051)	(10,771)	22 years
10/01/2011 Actuarial (Gain) / Loss - General Employees	74,190	6,268	5,350	7,226	23 years
10/01/2011 Combined Charge Bases * - Police Officers	6,283,676	593,001	520,755	667,898	18 years
10/01/2011 Combined Credit Bases * - Police Officers	(5,381,442)	(559,643)	(500,958)	(620,137)	15 years
10/01/2012 Actuarial (Gain) / Loss - General Employees	144,335	11,992	10,181	13,881	24 years
10/01/2012 Actuarial (Gain) / Loss - Police Officers	580,310	48,216	40,935	55,811	24 years
10/01/2012 Assumption Changes - General Employees	109,052	9,061	7,693	10,488	24 years
10/01/2012 Assumption Changes - Police Officers	43,836	3,642	3,092	4,216	24 years
10/01/2013 Actuarial (Gain) / Loss - General Employees	77	6	5	7	25 years
10/01/2013 Actuarial (Gain) / Loss - Police Officers	(33,857)	(2,770)	(2,340)	(3,219)	25 years
10/01/2013 Plan Amendment - Police Officers	40,274	3,295	2,783	3,829	25 years
10/01/2014 Actuarial (Gain) / Loss - General Employees	79,239	6,392	5,373	7,456	26 years
10/01/2014 Actuarial (Gain) / Loss - Police Officers	(165,168)	(13,325)	(11,200)	(15,542)	26 years
10/01/2015 Actuarial (Gain) / Loss - General Employees	139,573	11,114	9,298	13,011	27 years
10/01/2015 Actuarial (Gain) / Loss - Police Officers	(167,232)	(13,317)	(11,140)	(15,590)	27 years
10/01/2015 Assumption Changes - General Employees	129,570	10,318	8,631	12,079	27 years
10/01/2015 Assumption Changes - Police Officers	289,081	23,020	19,257	26,949	27 years
10/01/2015 Plan Amendment - General Employees	271,565	21,625	18,090	25,316	27 years
10/01/2016 Actuarial (Gain) / Loss - General Employees	282,350	22,217	18,499	26,098	28 years
10/01/2016 Actuarial (Gain) / Loss - Police Officers	(82,849)	(6,519)	(5,428)	(7,658)	28 years
10/01/2016 Assumption Changes - General Employees	34,263	2,696	2,245	3,167	28 years
10/01/2016 Assumption Changes - Police Officers	59,473	4,680	3,897	5,497	28 years
10/01/2017 Actuarial (Gain) / Loss - General Employees	(212,997)	(16,576)	(13,740)	(19,536)	29 years
10/01/2017 Actuarial (Gain) / Loss - Police Officers	(199,621)	(15,535)	(12,877)	(18,309)	29 years
10/01/2018 Actuarial (Gain) / Loss - General Employees	124,125	9,562	7,892	11,305	30 years
10/01/2018 Actuarial (Gain) / Loss - Police Officers	288,322	22,211	18,331	26,259	30 years
10/01/2018 Assumption Change - 112.664(1)(b), F.S. Assumptions	8,501,053	N/A	540,489	N/A	30 years
10/01/2018 Assumption Change - 112.664(1)(a), F.S. Assumptions Plus 2%	(5,643,382)	N/A	N/A	(513,981)	30 years
<b>TOTAL</b>		\$ 189,894	\$ 692,210	\$ (284,003)	

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



## **SECTION B**

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### **SUMMARY OF PLAN PROVISIONS**

Outline of Principal Provisions of the Retirement Plan  
(as of October 1, 2018)

A. Effective Date:

January 1, 1962. Most recent amendatory Ordinance considered: 16-2392.

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% <sup>1</sup>
10/1/2006 - 9/30/2016	2.0%	2.5%	N/A	3.5% <sup>1</sup>
10/1/2016 forward	N/A	N/A	2.65% <sup>2</sup>	2.8% <sup>2</sup> / 3.0% <sup>3</sup> / 3.5% <sup>1</sup>

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.

<sup>1</sup> For Police Officers only.

<sup>2</sup> For General Employees only.

<sup>3</sup> For Senior Management Employees only.

Outline of Principal Provisions of the Retirement Plan  
(as of October 1, 2018)

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, 2018)

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, 2018)

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

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### **ACTUARIAL ASSUMPTIONS AND COST METHODS USED FOR FUNDING**

**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation**  
**(as of October 1, 2018)**

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 (2018)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	30.53	33.57	30.10
60	25.60	28.54	25.44	28.44
62	23.70	26.58	23.60	26.52

Sample Ages (2038)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	32.67	35.41	32.26
60	27.78	30.38	27.63	30.30
62	25.87	28.40	25.78	28.35

Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation  
(as of October 1, 2018)

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 (2018)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	29.84	32.60	29.33
60	24.96	27.56	24.76	27.41
62	23.09	25.59	22.97	25.49

Sample Ages (2038)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	32.06	34.54	31.57
60	27.21	29.49	27.03	29.36
62	25.34	27.51	25.23	27.42



Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation  
(as of October 1, 2018)

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 - 59	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, 2018)

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 - 3	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 - 2	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, 2018)

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 actuarial accrued liability over the smoothed actuarial value of assets of the Plan.

K. Changes Since Previous Actuarial Valuation

None.

## **SECTION D**

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### **GLOSSARY**

## GLOSSARY

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

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

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