



July 15, 2021

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, 2020 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 – 80.9% on a market value of assets basis as of October 1, 2020.

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, 2020 Funding Actuarial Valuation Report and the Plan's Financial Reporting for the Year Ended September 30, 2020





July 15, 2021

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, 2020 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, 2020. 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, 2020 is 80.9% 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.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

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 
Shelly L. Jones, M.A.A.A.
Enrolled Actuary No. 20-08646
Consultant & Actuary

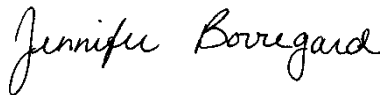
By 
Jennifer M. Borregard, M.A.A.A.
Enrolled Actuary No. 20-07624
Consultant & Actuary



TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
A	Chapter 112.664, F.S. Results	
	Net Pension Liability	
	1. Using financial reporting assumptions per GASB Statement No. 67 and No. 68 and using assumptions required under Section 112.664(1)(a), F.S.	1
	2. Using assumptions required under Section 112.664(1)(b), F.S.	2
	3. Using assumptions required under Section 112.664(1)(a), F.S. plus 2%	3
	Asset and Benefit Payments Projection	
	1. Using financial reporting assumptions per GASB Statement No. 67 and No. 68 and using assumptions required under Section 112.664(1)(a), F.S.	4
	2. Using assumptions required under Section 112.664(1)(b), F.S.	5
	3. Using assumptions required under Section 112.664(1)(a), F.S. plus 2%	6
	Actuarially Determined Contribution	7
	Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments	8
B	Summary of Plan Provisions	10
C	Actuarial Assumptions and Cost Methods Used for Funding	14
D	Glossary	20

SECTION A

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, 2020
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 1,317,790
Interest	2,186,887
Benefit Changes	2,630,481
Difference Between Actual and Expected Experience	(293,683)
Assumption Changes	(617,989)
Benefit Payments	(834,962)
Contribution Refunds	(42,964)
Other	0
Net Change in Total Pension Liability	\$ 4,345,560
Total Pension Liability (TPL) - (beginning of year)	27,531,518
Total Pension Liability (TPL) - (end of year)	\$ 31,877,078
B. <u>Plan Fiduciary Net Position</u>	
Contributions - Town	\$ 1,141,115
Contributions - State	0
Contributions - Member	696,439
Net Investment Income	1,267,297
Benefit Payments	(834,962)
Contribution Refunds	(42,964)
Administrative Expenses	(108,171)
Other	(57,617)
Net Change in Plan Fiduciary Net Position	\$ 2,061,137
Plan Fiduciary Net Position - (beginning of year)	24,188,592
Plan Fiduciary Net Position - (end of year)	\$ 26,249,729
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ 5,627,349
Valuation Date	October 1, 2019

Certain Key Assumptions

Investment Return Assumption 7.25%

Mortality Table:

General Employees: For healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without projected mortality improvements. Police Officers: For healthy participants during employment, PUB-2010 Headcount Weighted Safety Employee Female Mortality Table and Safety Below Median Employee Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted Safety Healthy Retiree Female Mortality Table and Safety Below Median Healthy Retiree Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, 80% PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table / 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, separate rates for males and females, without projected mortality improvements.



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

Measurement Date		September 30, 2020
A. <u>Total Pension Liability (TPL)</u>		
Service Cost	\$	2,045,577
Interest		2,135,125
Benefit Changes		3,842,609
Difference Between Actual and Expected Experience		(351,281)
Assumption Changes		(1,110,254)
Benefit Payments		(834,962)
Contribution Refunds		(42,964)
Other		0
Net Change in Total Pension Liability	\$	5,683,850
Total Pension Liability (TPL) - (beginning of year)		36,608,947
Total Pension Liability (TPL) - (end of year)	\$	42,292,797
B. <u>Plan Fiduciary Net Position</u>		
Contributions - Town	\$	1,141,115
Contributions - State		0
Contributions - Member		696,439
Net Investment Income		1,267,297
Benefit Payments		(834,962)
Contribution Refunds		(42,964)
Administrative Expenses		(108,171)
Other		(57,617)
Net Change in Plan Fiduciary Net Position	\$	2,061,137
Plan Fiduciary Net Position - (beginning of year)		24,188,592
Plan Fiduciary Net Position - (end of year)	\$	26,249,729
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$	16,043,068
Valuation Date		October 1, 2019

Certain Key Assumptions

Investment Return Assumption 5.25%

Mortality Table:

General Employees: For healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without projected mortality improvements. Police Officers: For healthy participants during employment, PUB-2010 Headcount Weighted Safety Employee Female Mortality Table and Safety Below Median Employee Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted Safety Healthy Retiree Female Mortality Table and Safety Below Median Healthy Retiree Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, 80% PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table / 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, separate rates for males and females, without projected mortality improvements.



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

	September 30, 2020
Measurement Date	
A. <u>Total Pension Liability (TPL)</u>	
Service Cost	\$ 897,527
Interest	2,151,414
Benefit Changes	1,902,129
Difference Between Actual and Expected Experience	(252,837)
Assumption Changes	(363,001)
Benefit Payments	(834,962)
Contribution Refunds	(42,964)
Other	0
Net Change in Total Pension Liability	\$ 3,457,306
Total Pension Liability (TPL) - (beginning of year)	21,500,219
Total Pension Liability (TPL) - (end of year)	\$ 24,957,525
B. <u>Plan Fiduciary Net Position</u>	
Contributions - Town	\$ 1,141,115
Contributions - State	0
Contributions - Member	696,439
Net Investment Income	1,267,297
Benefit Payments	(834,962)
Contribution Refunds	(42,964)
Administrative Expenses	(108,171)
Other	(57,617)
Net Change in Plan Fiduciary Net Position	\$ 2,061,137
Plan Fiduciary Net Position - (beginning of year)	24,188,592
Plan Fiduciary Net Position - (end of year)	\$ 26,249,729
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ (1,292,204)
Valuation Date	October 1, 2019

Certain Key Assumptions

Investment Return Assumption 9.25%

Mortality Table:

General Employees: For healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without projected mortality improvements. Police Officers: For healthy participants during employment, PUB-2010 Headcount Weighted Safety Employee Female Mortality Table and Safety Below Median Employee Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted Safety Healthy Retiree Female Mortality Table and Safety Below Median Healthy Retiree Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, 80% PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table / 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, separate rates for males and females, 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)
2021	\$ 26,087,513	\$ 1,846,536	\$ 1,153,344	\$ 26,780,705
2022	26,780,705	1,893,175	1,246,451	27,427,429
2023	27,427,429	1,936,490	1,338,423	28,025,496
2024	28,025,496	1,977,336	1,403,120	28,599,712
2025	28,599,712	2,016,177	1,474,931	29,140,958
2026	29,140,958	2,051,406	1,578,179	29,614,185
2027	29,614,185	2,079,827	1,729,719	29,964,293
2028	29,964,293	2,099,431	1,878,471	30,185,253
2029	30,185,253	2,110,016	2,018,347	30,276,922
2030	30,276,922	2,111,764	2,144,424	30,244,262
2031	30,244,262	2,105,071	2,255,757	30,093,576
2032	30,093,576	2,091,844	2,315,005	29,870,415
2033	29,870,415	2,073,656	2,366,706	29,577,365
2034	29,577,365	2,050,649	2,412,044	29,215,970
2035	29,215,970	2,022,913	2,451,545	28,787,338
2036	28,787,338	1,991,425	2,462,157	28,316,606
2037	28,316,606	1,956,169	2,491,192	27,781,583
2038	27,781,583	1,916,795	2,506,230	27,192,148
2039	27,192,148	1,873,738	2,514,550	26,551,336
2040	26,551,336	1,827,277	2,514,614	25,863,999
2041	25,863,999	1,777,097	2,523,555	25,117,541
2042	25,117,541	1,722,708	2,530,531	24,309,718
2043	24,309,718	1,664,843	2,512,459	23,462,102
2044	23,462,102	1,603,256	2,515,940	22,549,418
2045	22,549,418	1,537,412	2,507,544	21,579,286
2046	21,579,286	1,468,320	2,475,577	20,572,029
2047	20,572,029	1,395,761	2,463,548	19,504,242
2048	19,504,242	1,319,879	2,424,107	18,400,014
2049	18,400,014	1,241,138	2,390,247	17,250,905
2050	17,250,905	1,159,406	2,349,605	16,060,706
2051	16,060,706	1,074,525	2,313,361	14,821,870
2052	14,821,870	986,095	2,277,694	13,530,271
2053	13,530,271	893,290	2,256,177	12,167,384
2054	12,167,384	795,816	2,221,797	10,741,403
2055	10,741,403	694,700	2,163,443	9,272,660
2056	9,272,660	590,870	2,095,138	7,768,392
2057	7,768,392	484,552	2,024,560	6,228,384
2058	6,228,384	375,720	1,952,016	4,652,088
2059	4,652,088	263,791	1,891,471	3,024,408
2060	3,024,408	148,710	1,816,151	1,356,967
2061	1,356,967	34,369	1,739,821	-

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: 40.75

Certain Key Assumptions

Investment return assumption 7.25%

Mortality Table:

General Employees: For healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without projected mortality improvements. Police Officers: For healthy participants during employment, PUB-2010 Headcount Weighted Safety Employee Female Mortality Table and Safety Below Median Employee Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted Safety Healthy Retiree Female Mortality Table and Safety Below Median Healthy Retiree Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, 80% PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table / 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, separate rates for males and females, 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, Members or State. 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, Member and State 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)
2021	\$ 26,087,513	\$ 1,337,053	\$ 1,153,344	\$ 26,271,222
2022	26,271,222	1,344,070	1,246,451	26,368,841
2023	26,368,841	1,346,600	1,338,423	26,377,018
2024	26,377,018	1,345,204	1,403,120	26,319,102
2025	26,319,102	1,340,137	1,474,931	26,184,308
2026	26,184,308	1,330,148	1,578,179	25,936,277
2027	25,936,277	1,312,850	1,729,719	25,519,408
2028	25,519,408	1,286,767	1,878,471	24,927,704
2029	24,927,704	1,251,756	2,018,347	24,161,113
2030	24,161,113	1,207,953	2,144,424	23,224,642
2031	23,224,642	1,155,647	2,255,757	22,124,532
2032	22,124,532	1,096,220	2,315,005	20,905,747
2033	20,905,747	1,030,775	2,366,706	19,569,816
2034	19,569,816	959,359	2,412,044	18,117,131
2035	18,117,131	881,979	2,451,545	16,547,565
2036	16,547,565	799,277	2,462,157	14,884,685
2037	14,884,685	711,156	2,491,192	13,104,649
2038	13,104,649	617,280	2,506,230	11,215,699
2039	11,215,699	517,876	2,514,550	9,219,025
2040	9,219,025	413,048	2,514,614	7,117,459
2041	7,117,459	302,464	2,523,555	4,896,368
2042	4,896,368	185,660	2,530,531	2,551,497
2043	2,551,497	63,064	2,512,459	102,102
2044	102,102	-	2,515,940	-
2045	-	-	2,507,544	-
2046	-	-	2,475,577	-
2047	-	-	2,463,548	-
2048	-	-	2,424,107	-
2049	-	-	2,390,247	-
2050	-	-	2,349,605	-

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: 23.00

Certain Key Assumptions

Investment return assumption 5.25%

Mortality Table:

General Employees: For healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted General Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without projected mortality improvements. Police Officers: For healthy participants during employment, PUB-2010 Headcount Weighted Safety Employee Female Mortality Table and Safety Below Median Employee Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted Safety Healthy Retiree Female Mortality Table and Safety Below Median Healthy Retiree Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, 80% PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table / 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, separate rates for males and females, 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, Members or State. 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, Member and State 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)
2021	\$ 26,087,513	\$ 2,356,089	\$ 1,153,344	\$ 27,290,258
2022	27,290,258	2,462,740	1,246,451	28,506,547
2023	28,506,547	2,570,701	1,338,423	29,738,825
2024	29,738,825	2,681,489	1,403,120	31,017,194
2025	31,017,194	2,796,189	1,474,931	32,338,452
2026	32,338,452	2,913,302	1,578,179	33,673,575
2027	33,673,575	3,029,311	1,729,719	34,973,167
2028	34,973,167	3,142,171	1,878,471	36,236,867
2029	36,236,867	3,252,149	2,018,347	37,470,669
2030	37,470,669	3,360,044	2,144,424	38,686,289
2031	38,686,289	3,466,986	2,255,757	39,897,518
2032	39,897,518	3,576,097	2,315,005	41,158,610
2033	41,158,610	3,690,192	2,366,706	42,482,096
2034	42,482,096	3,810,374	2,412,044	43,880,426
2035	43,880,426	3,937,767	2,451,545	45,366,648
2036	45,366,648	4,074,718	2,462,157	46,979,209
2037	46,979,209	4,222,445	2,491,192	48,710,462
2038	48,710,462	4,381,842	2,506,230	50,586,074
2039	50,586,074	4,554,925	2,514,550	52,626,449
2040	52,626,449	4,743,657	2,514,614	54,855,492
2041	54,855,492	4,949,401	2,523,555	57,281,338
2042	57,281,338	5,173,447	2,530,531	59,924,254
2043	59,924,254	5,418,810	2,512,459	62,830,605
2044	62,830,605	5,687,475	2,515,940	66,002,140
2045	66,002,140	5,981,257	2,507,544	69,475,853
2046	69,475,853	6,304,156	2,475,577	73,304,432
2047	73,304,432	6,658,894	2,463,548	77,499,778
2048	77,499,778	7,048,913	2,424,107	82,124,584
2049	82,124,584	7,478,381	2,390,247	87,212,718
2050	87,212,718	7,951,042	2,349,605	92,814,155

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: All future years

Certain Key Assumptions

Investment return assumption 9.25%

Mortality Table:

General Employees: For healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted General Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without projected mortality improvements. Police Officers: For healthy participants during employment, PUB-2010 Headcount Weighted Safety Employee Female Mortality Table and Safety Below Median Employee Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For healthy participants post employment, PUB-2010 Headcount Weighted Safety Healthy Retiree Female Mortality Table and Safety Below Median Healthy Retiree Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018. For disabled participants, 80% PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table / 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, separate rates for males and females, 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, Members or State. 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, Member and State 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, 2020	October 1, 2020	October 1, 2020
B. Actuarial Determined Contribution to Be Paid During Fiscal Year Ending	September 30, 2022	September 30, 2022	September 30, 2022
C. Annual Payroll of Active Employees	\$ 6,361,141	\$ 6,361,141	\$ 6,361,141
D. Total Minimum Funding Requirement			
1. Total Normal Cost	\$ 1,421,772	\$ 2,151,856	\$ 1,000,839
2. Annual Payment to Amortize Unfunded Actuarial Liability	395,636	994,460	(166,924)
3. Interest Adjustment	18,269	13,480	22,882
4. Total Minimum Funding Requirement (1. + 2. + 3., not less than 1.)	\$ 1,835,677	\$ 3,159,796	\$ 1,000,839
E. Expected Payroll of Active Employees for Following Plan Year (\$ / % of pay) (C x 1.000)	\$ 6,361,141 100.00%	\$ 6,361,141 100.00%	\$ 6,361,141 100.00%
F. Expected Contribution Sources (\$ / % of pay)			
1. Town	\$ 1,305,712 20.53%	\$ 2,629,831 41.34%	\$ 470,874 7.40%
2. Member	508,891 8.00%	508,891 8.00%	508,891 8.00%
3. State	21,074 0.33%	21,074 0.33%	21,074 0.33%
4. Total	\$ 1,835,677 28.86%	\$ 3,159,796 49.67%	\$ 1,000,839 15.73%

Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments

	<u>Amortization Base</u>	<u>Amortization Payment</u>				<u>Remaining Funding Period</u>
		<u>Current Unfunded Liabilities</u>	<u>Valuation and 112.664(1)(a), F.S. Assumptions</u>	<u>112.664(1)(b), F.S. Assumptions</u>	<u>112.664(1)(a), F.S. Assumptions Plus 2%</u>	
10/01/2009	Combined Bases * - General Employees	\$ 1,940	\$ 220	\$ 199	\$ 240	13 years
10/01/2010	Actuarial (Gain) / Loss - General Employees	229,085	20,556	17,838	23,381	20 years
10/01/2010	Assumption Changes - General Employees	(123,074)	(11,043)	(9,583)	(12,561)	20 years
10/01/2011	Actuarial (Gain) / Loss - General Employees	83,766	7,354	6,345	8,403	21 years
10/01/2011	Combined Charge Bases * - Police Officers	6,546,469	656,892	584,169	732,014	16 years
10/01/2011	Combined Credit Bases * - Police Officers	(5,530,998)	(625,825)	(567,888)	(685,257)	13 years
10/01/2012	Actuarial (Gain) / Loss - General Employees	163,017	14,028	12,036	16,102	22 years
10/01/2012	Actuarial (Gain) / Loss - Police Officers	613,681	52,807	45,311	60,615	22 years
10/01/2012	Assumption Changes - General Employees	123,168	10,599	9,094	12,166	22 years
10/01/2012	Assumption Changes - Police Officers	46,357	3,989	3,423	4,579	22 years
10/01/2013	Actuarial (Gain) / Loss - General Employees	88	7	6	9	23 years
10/01/2013	Actuarial (Gain) / Loss - Police Officers	(35,861)	(3,030)	(2,586)	(3,493)	23 years
10/01/2013	Plan Amendment - Police Officers	42,658	3,604	3,076	4,155	23 years
10/01/2014	Actuarial (Gain) / Loss - General Employees	89,547	7,440	6,317	8,612	24 years
10/01/2014	Actuarial (Gain) / Loss - Police Officers	(175,204)	(14,557)	(12,359)	(16,850)	24 years
10/01/2015	Actuarial (Gain) / Loss - General Employees	157,769	12,909	10,904	15,001	25 years
10/01/2015	Actuarial (Gain) / Loss - Police Officers	(177,625)	(14,533)	(12,276)	(16,889)	25 years
10/01/2015	Assumption Changes - General Employees	146,462	11,984	10,122	13,926	25 years
10/01/2015	Assumption Changes - Police Officers	307,048	25,123	21,221	29,194	25 years
10/01/2015	Plan Amendment - General Employees	306,968	25,116	21,215	29,187	25 years
10/01/2016	Actuarial (Gain) / Loss - General Employees	319,229	25,753	21,646	30,040	26 years
10/01/2016	Actuarial (Gain) / Loss - Police Officers	(88,104)	(7,108)	(5,974)	(8,291)	26 years
10/01/2016	Assumption Changes - General Employees	38,738	3,125	2,627	3,645	26 years
10/01/2016	Assumption Changes - Police Officers	63,244	5,102	4,288	5,951	26 years
10/01/2017	Actuarial (Gain) / Loss - General Employees	(240,866)	(19,181)	(16,045)	(22,454)	27 years
10/01/2017	Actuarial (Gain) / Loss - Police Officers	(212,508)	(16,922)	(14,156)	(19,810)	27 years
10/01/2018	Actuarial (Gain) / Loss - General Employees	140,392	11,047	9,198	12,977	28 years
10/01/2018	Plan Amendment - General Employees	1,619,937	127,465	106,135	149,732	28 years
10/01/2018	Plan Amendment - CBA - General Employees	32,955	2,593	2,159	3,046	28 years
10/01/2018	Actuarial (Gain) / Loss - Police Officers	307,233	24,175	20,129	28,398	28 years
10/01/2018	Plan Amendment - CBA - Police Officers	920,348	72,417	60,299	85,069	28 years



Unfunded Actuarial Accrued Liabilities Bases and Amortization Payments

	<u>Amortization Base</u>	Current Unfunded <u>Liabilities</u>	<u>Amortization Payment</u>			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>	
10/01/2019	Actuarial (Gain) / Loss - General Employees	177,835	13,840	11,472	16,311	29 years
10/01/2019	Assumption Changes - General Employees	(206,204)	(16,047)	(13,302)	(18,913)	29 years
10/01/2019	Actuarial (Gain) / Loss - Police Officers	(293,537)	(22,844)	(18,936)	(26,923)	29 years
10/01/2019	Assumption Changes - Police Officers	(403,493)	(31,401)	(26,029)	(37,008)	29 years
10/01/2020	Actuarial (Gain) / Loss - General Employees	533,105	41,068	33,894	48,554	30 years
10/01/2020	Actuarial (Gain) / Loss - Police Officers	(14,094)	(1,086)	(896)	(1,284)	30 years
10/01/2020	Assumption Change - 112.664(1)(b), F.S. Assumptions	10,559,560	N/A	671,367	N/A	30 years
10/01/2020	Assumption Change - 112.664(1)(a), F.S. Assumptions Plus 2%	(7,010,540)	N/A	N/A	(638,498)	30 years
	TOTAL		\$ 395,636	\$ 994,460	\$ (166,924)	

* 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, 2020)**

A. Effective Date:

January 1, 1962. Most recent amendatory Ordinance considered: 2020-1711.

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 retired prior to February 1, 2020, 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 sworn Police Officers retired on or after February 1, 2020, the earliest of (1) age 50 with 20 years of Creditable Service, (2) age 59 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 who retire prior to January 1, 2020, the earliest of (1) age 62 with 15 years of Creditable Service or (2) age 65 with 10 years of Creditable Service. For all other employees who retire on or after January 1, 2020, the earliest of (1) age 50 with 20 years of Creditable Service or (2) age 52 with 15 years of Creditable Service or (3) age 55 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, 80% (68% prior to January 1, 2020, 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, 2020)**

3. Form of Payment:

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

F. Early Retirement:

1. Eligibility:

For sworn Police Officers, Town Manager and Attorney, the earlier of (a) age 55 with 15 years of Creditable Service, or (b) 20 years of Creditable Service regardless of age. For all other employees effective January 1, 2020, 20 years of Creditable Service regardless of age (prior to January 1, 2020 eligibility was 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, 2020)**

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, 2020)**

L. Cost of Living Increase

For Police Officers who retire on or before January 14, 2020, a 1.5% automatic annual cost of living increase is provided for retirees, disableds, beneficiaries and vested terminated members. For Police Officers who retire after January 14, 2020, a 2.0% automatic annual cost of living increase is provided for retirees, disableds, beneficiaries and vested terminated members.

For General and Senior Management retirees, disableds, beneficiaries and vested terminated members who retire before January 1, 2020, a 1.5% automatic annual cost of living increase is provided. For General and Senior Management retirees, disableds, beneficiaries and vested terminated members who retire on or after January 1, 2020, a 2.0% automatic annual cost of living increase is provided.

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, 2020)**

A. Mortality

General Mortality Assumptions:

For healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For healthy participants post employment, PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without mortality improvements projected.

Sample Ages (2020)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	32.58	35.02	28.63
60	27.74	30.00	24.55	27.84
62	25.85	28.02	22.93	26.02

Sample Ages (2040)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	34.22	36.50	30.64
60	29.30	31.44	26.40	29.51
62	27.37	29.43	24.72	27.63

**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2020)**

A. Mortality (cont'd)

Police Mortality Assumptions:

For healthy participants during employment, PUB-2010 Headcount Weighted Safety Employee Female Mortality Table and Safety Below Median Employee Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For healthy participants post employment, PUB-2010 Headcount Weighted Safety Healthy Retiree Female Mortality Table and Safety Below Median Healthy Retiree Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For disabled participants, 80% PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table / 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, separate rates for males and females, without mortality improvements projected.

Sample Ages (2020)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	30.45	34.32	27.59
60	25.51	29.26	23.01	26.39
62	23.58	27.25	21.28	24.55

Sample Ages (2040)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Male	Female	Male	Female
	55	32.09	35.81	29.48
60	27.08	30.70	24.79	28.13
62	25.11	28.67	23.00	26.25

**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2020)**

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, 2020)**

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, 2020)**

G. Smoothed Actuarial Value of Assets

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

H. Assumed Retirement Age

		Annual Rate of Retirement*		
Age	General Employees	Senior Mangement	Age	Police Officers
Rates when the maximum benefit cap is not applicable				
40	N/A	N/A	40	3%
41-45	4%	4%	41-45	2%
46-47	3%	3%	46-47	1%
48-49	2%	2%	48-50	1%
50-64	5%	5%	51 & over	1%
65-69	50%	50%	NRA	50%
70	100%	100%	Past NRA	50%
Rates when the maximum benefit cap is applicable				
50-64	100%	35%		
65-69	100%	50%		
70	100%	100%		

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.

**Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation
(as of October 1, 2020)**

J. Actuarial Funding Method (cont'd)

Vested Normal Retirement, Termination, Disability, and Death Benefits: Unit Credit Cost Method

Under this method, the actuarial present value of vested accrued benefits is an amount calculated to be the sum of the present values of each individual's vested accrued or earned benefit under the Plan as of the valuation date. Each individual's calculation is based on pay and service as of the valuation date.

K. Change 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.