

August 8, 2019

William P. Hanes, Esq.
Administrator
Town of Palm Beach Retirement System
701 South Olive Avenue, Suite 1809
West Palm Beach, FL. 33401

Re: Town of Palm Beach Retirement System – 10-Year Projections Reflecting a 6.00% Ultimate Investment Return Assumption in Addition to Compensation and Salary Scale Changes

Dear Bill:

As requested, we have prepared projections for the Town of Palm Beach Retirement System (Plan) reflecting a proposed change in the ultimate investment return assumption in addition to the compensation and salary scale changes previously proposed, as described below. The enclosed exhibits present projected assets, liabilities and contribution requirements over the next 10 years.

This letter complements the letters dated April 2, 2019 and April 15, 2019, which presented 10-year projections of the current plan, and the letter dated May 23, 2019, which presented 10-year projections of proposed compensation and benefit changes.

These projections reflect the Town's funding policy to make extra payments in excess of the required employer contribution of \$5.42 million toward the unfunded actuarial liability each year until the plan becomes fully funded. This is subject to an annual cap on the total employer contribution of \$16 million per year (indexed at 2.75% per year after 2017). Indexation from 2017 to 2019 puts the total employer contribution cap at \$16.89 million for 2019.

The enclosed exhibits include projection results for the Plan in the aggregate (for General & Ocean Rescue, Police Officers, and Firefighters combined) under the scenarios described below.

Scenario 1A – The scenario uses the same assumptions as used in the September 30, 2018 Actuarial Valuation Report, with the following exceptions:

- The investment return assumption is assumed to decrease by 0.1% per year from 7.2% used in the September 30, 2018 Actuarial Valuation Report to 7.0% as of September 30, 2020.
- Actual salary increases for fiscal year (FY) 2019 are assumed to be equal to the salary increases from FY 2018 to FY 2019, as provided by the Town.
- Actual salary increases for FY 2020 are updated to match the scheduled salary increases during FY 2020, as provided by the Town, reflecting changes to bring pay ranges up to the 75th percentile of the market for all benefit groups.
- Beginning with the September 30, 2019 valuation date, the long-term annual salary increase assumption is changed from 3.5% to 6.0% per year for Police Officers and Firefighters and from 3.5% to 5.5% per year for General and Ocean Rescue members.

This scenario is like Scenario 3A from the May 23, 2019 projections with the exception that the proposed changes in plan provisions for Police Officers and Firefighters are NOT reflected, since they have not been adopted yet.

- **Scenario 1B (Stress Test)** – same as Scenario 1A but reflecting an actual return on the market value of assets of 5.0% each year.
- **Scenario 2A** – same as Scenario 1A described above, with the exception that the investment return assumption is further decreased by 0.2% per year after reaching 7.0% as of September 30, 2020 for an additional five years, until reaching an ultimate rate of 6.0% as of September 30, 2025.
- **Scenario 2B (Stress Test)** – same as Scenario 2A but reflecting an actual return on the market value of assets of 5.0% each year.

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

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 due to changing conditions; 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 project limits the analysis of the potential range of such future measurements to the four projection scenarios presented herein.

Examples of risk that may reasonably be anticipated to significantly affect the Plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the either assumed or forecasted returns;
2. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the Plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
3. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
4. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;

5. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example if the investment return is less (or more) than the assumed rate, the cost of the Plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution amounts may be considered as a minimum contribution that complies with the pension Board's funding policy and the State statutes. The timely receipt of the actuarially determined contributions is critical to support the financial health of the Plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

Risk Assessment

Risk assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability. The scope of this report limits risk assessment to the four projection scenarios presented herein. We are prepared to perform additional assessment to aid the Board in the decision making process.

Additional Disclosures

Throughout the projection period, new members are assumed to be hired each year at a rate sufficient to maintain a constant active headcount. New employees are assumed to have the same average demographic characteristics (age, gender, salary – adjusted each year for inflation) at their dates of employment as those of current members with 5 years of service or less as of September 30, 2018. Additionally, DROP and Share accounts are projected forward assuming a 40% payout in the first projection year, 30% in year two, 20% in year three and the remainder paid out in year four.

Projections are deterministic, meaning that throughout the projection period, Plan experience is expected to match the actuarial assumptions. The only differences in experience from assumptions which are reflected in these projections are due to recognizing scheduled salary increases in FY 2019 and FY 2020 (as provided by the Town) and projecting an actual investment return on the market value of assets of 5.0% per year in the stress test scenarios (Scenarios 1B and 2B).

The calculations are based upon assumptions regarding future events, which may or may not materialize. 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. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the author of the report prior to relying on information in the report.

The calculations in this report are based upon information furnished by the Town of Palm Beach and the Plan Administrator for the September 30, 2018 Actuarial Valuation concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We reviewed this information for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the Town or the Plan Administrator.

This report complements the September 30, 2018 Actuarial Valuation Report previously delivered to the Plan Administrator and the Town and should be considered in conjunction with that report. Please see the Actuarial Valuation Report as of September 30, 2018, dated February 26, 2019 for additional discussion of the nature of actuarial calculations and information related to participant data, economic and demographic assumptions, and benefit provisions.

Peter N. Strong and Dina Lerner 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 undersigned 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 fairly presents the actuarial position of the Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

Respectfully submitted,

Peter N. Strong, FSA, EA, MAAA
Senior Consultant and Actuary

Dina Lerner, ASA, EA, MAAA
Senior Analyst and Actuary

Enclosures

cc: William P. Hanes, Esq, Plan Administrator (electronic)

Town of Palm Beach Retirement System (Composite)

Scenario 1A: Current Plan with Changes in Compensation and Salary Increase Assumptions as Described Below
 (7.2% Investment Return Assumption, decreasing 0.1% per year until 7.0%)

Actual Rate of Return on Plan Assets Earned Each Year = Expected

Valuation Date	Active Count	Payroll	Expected Benefit Payments	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Liability		Funded Ratio	Fiscal Year Ending	Total Employer Contribution			
						BOY ADEEC	BOY ADEEC as % of Payroll			BOY ADEEC Dollar Amount	BOY ADEEC Illustrative	Additional Contribution	Total Contribution
9/30/2018	275	18,248,772	24,353,914	326,654,957	226,185,226	100,469,731	69.2%	2019	52.12%	10,181,437	5,420,000	15,601,437	
9/30/2019	275	19,438,118	23,598,064	333,658,222	230,837,927	102,820,295	69.2%	2020	55.47%	10,542,818	5,420,000	15,962,818	
9/30/2020	275	20,282,373	22,989,286	339,885,866	241,616,328	98,269,538	71.1%	2021	58.25%	11,793,077	5,420,000	17,213,077	
9/30/2021	275	21,186,474	22,449,656	343,281,348	255,115,618	88,165,730	74.3%	2022	56.55%	11,946,610	5,420,000	17,366,610	
9/30/2022	275	22,168,182	21,985,246	347,647,460	268,990,960	78,656,500	77.4%	2023	52.91%	11,674,311	5,420,000	17,094,311	
9/30/2023	275	23,147,270	22,491,871	352,965,063	284,081,402	68,883,661	80.5%	2024	49.50%	11,428,523	5,420,000	16,848,523	
9/30/2024	275	24,013,045	23,135,299	358,279,089	299,486,776	58,792,313	83.6%	2025	46.16%	11,129,743	5,420,000	16,549,743	
9/30/2025	275	24,958,779	23,689,321	363,468,430	315,036,420	48,432,010	86.7%	2026	42.90%	10,728,588	5,420,000	16,148,588	
9/30/2026	275	25,737,644	24,292,817	368,588,401	330,712,405	37,875,996	89.7%	2027	39.10%	10,164,911	5,420,000	15,584,911	
9/30/2027	275	26,443,580	24,865,281	373,565,795	346,284,952	27,280,843	92.7%	2028	33.61%	9,008,676	5,420,000	14,428,676	
9/30/2028	275	27,321,358	25,402,974	378,462,232	361,166,054	17,296,178	95.4%	2029	29.93%	8,244,319	5,420,000	13,664,319	
								2030	26.04%	7,409,028	5,420,000	12,829,028	

Total: \$ 124,252,041 \$ 65,040,000 \$ 189,292,041
 Total Present Value at 9/30/2018 (using 7% discount rate): \$ 89,766,321 \$ 46,062,815 \$ 135,829,136

Assumptions

Mortality Assumption: FRS Non-Special Risk Mortality for General Employees; FRS Special Risk Mortality for Ocean Rescue, Police Officers and Firefighters

Investment Return Assumption: 7.20% as of 9/30/18, 7.10% as of 9/30/19, and 7.00% as of 9/30/20 and thereafter

Actual Return on Plan Assets: Same as assumed above

Payroll Growth Assumption: 2.75% per year

Salary Increase Assumption: 3.5% per year as of 9/30/18, as of 9/30/19 scheduled salary increases through FY 2020, as provided by the Town, reflecting changes to bring pay ranges up to the 75th percentile of the market for General Employees and Ocean Rescue as well as for Police Officers and Firefighters, and 6.0% per year thereafter (5.5% thereafter for General Employees and Ocean Rescue)

For the Share and DROP accounts, 40% of the total was included in the benefit payments in the FYE 2019, 30% in FYE 2020, 20% in FYE 2021, and 10% in FYE 2022.

We have not determined any additional possible impact due to F.S. 112.64(5).

Total employer contributions should not expect any reduction from Chapter 175 or 185 monies.

Additional contributions of \$5.42 million per year beginning in FYE 2017 until the Plan is fully funded, subject to total annual contribution cap of \$16 million, indexed after 2017; allocated between the benefit groups based on each group's proportion of the total amount of unfunded actuarial liability as of the prior valuation year.

Future experience was assumed to be consistent with the aforementioned actuarial assumptions and methods. If experience differs from the actuarial assumptions or if the Board adopts different assumptions or methods, future results could be significantly different from the projected results above.

Town of Palm Beach Retirement System (Composite)

Scenario 1B (Stress Test): Current Plan with Changes in Compensation and Salary Increase Assumptions as Described Below
 (7.2% Investment Return Assumption, decreasing 0.1% per year until 7.0%)

Actual Rate of Return on Plan Assets Earned Each Year = 5%

Valuation Date	Active Count	Payroll	Expected Benefit Payments	Unfunded			Funded Ratio	Total Employer Contribution				
				Actuarial Accrued Liability	Actuarial Value of Assets	Actuarial Accrued Liability		Fiscal Year Ending	BOY ADEC as % of Payroll	BOY ADEC Illustrative Dollar Amount	Additional Contribution	Total Contribution
9/30/2018	275	18,248,772	24,353,914	326,654,957	226,185,226	100,469,731	69.2%	2019	52.12%	10,181,437	5,420,000	15,601,437
9/30/2019	275	19,438,118	23,598,064	333,658,222	229,888,033	103,770,189	68.9%	2020	55.47%	10,542,818	5,420,000	15,962,818
9/30/2020	275	20,282,373	22,989,286	339,885,866	238,718,450	101,167,416	70.2%	2021	58.64%	11,871,948	5,420,000	17,291,948
9/30/2021	275	21,186,474	22,449,656	343,281,348	249,254,963	94,026,385	72.6%	2022	57.70%	12,189,872	5,420,000	17,609,872
9/30/2022	275	22,168,182	21,985,246	347,647,460	259,099,354	88,548,106	74.5%	2023	55.17%	12,174,713	5,420,000	17,594,713
9/30/2023	275	23,147,270	22,491,871	352,965,063	269,068,104	83,896,959	76.2%	2024	53.24%	12,292,184	5,420,000	17,712,184
9/30/2024	275	24,013,045	23,135,299	358,279,089	279,214,137	79,064,952	77.9%	2025	51.73%	12,470,748	5,420,000	17,890,748
9/30/2025	275	24,958,779	23,689,321	363,468,430	289,426,233	74,042,197	79.6%	2026	50.40%	12,605,129	5,420,000	18,025,129
9/30/2026	275	25,737,644	24,292,817	368,588,401	299,738,638	68,849,763	81.3%	2027	48.70%	12,658,458	5,420,000	18,078,458
9/30/2027	275	26,443,580	24,865,281	373,565,795	310,028,972	63,536,823	83.0%	2028	45.42%	12,174,584	5,420,000	17,594,584
9/30/2028	275	27,321,358	25,402,974	378,462,232	319,765,733	58,696,499	84.5%	2029	44.33%	12,210,381	5,420,000	17,630,381
								2030	43.19%	12,289,294	5,420,000	17,709,294

Total: \$ 143,661,566 \$ 65,040,000 \$ 208,701,566
Total Present Value at 9/30/2018 (using 7% discount rate): \$ 100,601,537 \$ 46,062,816 \$ 146,664,353

Assumptions

Mortality Assumption: FRS Non-Special Risk Mortality for General Employees; FRS Special Risk Mortality for Ocean Rescue, Police Officers and Firefighters

Investment Return Assumption: 7.20% as of 9/30/18, 7.10% as of 9/30/19, and 7.00% as of 9/30/20 and thereafter

Actual Return on Plan Assets: 5.0% per annum

Payroll Growth Assumption: 2.75% per year

Salary Increase Assumption: 3.5% per year as of 9/30/18, as of 9/30/19 scheduled salary increases through FY 2020, as provided by the Town, reflecting changes to bring pay ranges up to the 75th percentile of the market for General Employees and Ocean Rescue as well as for Police Officers and Firefighters, and 6.0% per year thereafter (5.5% thereafter for General Employees and Ocean Rescue)

For the Share and DROP accounts, 40% of the total was included in the benefit payments in the FYE 2019, 30% in FYE 2020, 20% in FYE 2021, and 10% in FYE 2022.

We have not determined any additional possible impact due to F.S. 112.64(5).

Total employer contributions should not expect any reduction from Chapter 175 or 185 monies.

Additional contributions of \$5.42 million per year beginning in FYE 2017 until the Plan is fully funded, subject to total annual contribution cap of \$16 million, indexed after 2017; allocated between the benefit groups based on each group's proportion of the total amount of unfunded actuarial liability as of the prior valuation year.

Future experience was assumed to be consistent with the aforementioned actuarial assumptions and methods. If experience differs from the actuarial assumptions or if the Board adopts different assumptions or methods, future results could be significantly different from the projected results above.

Town of Palm Beach Retirement System (Composite)

**Scenario 2A: Scenario 1A with a 6.0% Ultimate Investment Return Assumption (phased in by September 30, 2025)
(7.2% Investment Return Assumption, decreasing 0.1% per year until 7.0% then decreasing by 0.2% per year until 6.0%)
Actual Rate of Return on Plan Assets Earned Each Year = Expected**

Valuation Date	Active Count	Payroll	Expected Benefit Payments	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded		Total Employer Contribution					
						Actuarial Accrued Liability	Actuarial Value of Assets	Funded Ratio	Fiscal Year Ending	BOY ADEC as % of Payroll	BOY ADEC Illustrative Dollar Amount	Additional Contribution	Total Contribution
9/30/2018	275	18,248,772	24,353,914	326,654,957	226,185,226	100,469,731	69.2%	2019	52.12%	10,181,437	5,420,000	15,601,437	
9/30/2019	275	19,438,118	23,598,064	333,658,222	230,837,927	102,820,295	69.2%	2020	55.47%	10,542,818	5,420,000	15,962,818	
9/30/2020	275	20,282,373	22,989,286	339,885,866	241,616,328	98,269,538	71.1%	2021	58.25%	11,793,077	5,420,000	17,213,077	
9/30/2021	275	21,186,474	22,449,656	351,869,929	255,115,618	96,754,311	72.5%	2022	56.61%	11,957,791	5,420,000	17,377,791	
9/30/2022	275	22,168,182	21,985,246	364,875,392	268,409,216	96,466,176	73.6%	2023	56.16%	12,392,925	5,420,000	17,812,925	
9/30/2023	275	23,147,270	22,491,871	378,882,863	283,027,766	95,855,097	74.7%	2024	56.16%	12,966,526	5,420,000	18,386,526	
9/30/2024	275	24,013,045	23,135,299	392,938,362	298,183,582	94,754,780	75.9%	2025	56.21%	13,550,449	5,420,000	18,970,449	
9/30/2025	275	24,958,779	23,689,321	406,920,583	313,765,134	93,155,449	77.1%	2026	56.33%	14,088,332	5,420,000	19,508,332	
9/30/2026	275	25,737,644	24,292,817	412,171,228	329,816,485	82,354,743	80.0%	2027	55.94%	14,541,444	5,420,000	19,961,444	
9/30/2027	275	26,443,580	24,865,281	417,277,808	346,720,204	70,557,604	83.1%	2028	51.28%	13,747,266	5,420,000	19,167,266	
9/30/2028	275	27,321,358	25,402,974	422,306,645	363,252,550	59,054,095	86.0%	2029	48.59%	13,382,167	5,420,000	18,802,167	
								2030	45.67%	12,996,569	5,420,000	18,416,569	
Total:										\$ 152,140,801	\$ 65,040,000	\$ 217,180,801	
Total Present Value at 9/30/2018 (using 7% discount rate):										\$ 105,516,631	\$ 46,062,816	\$ 151,579,447	
Total Present Value at 9/30/2018 (using 6% discount rate):										\$ 110,670,487	\$ 48,166,860	\$ 158,837,347	

Assumptions

Mortality Assumption: FRS Non-Special Risk Mortality for General Employees; FRS Special Risk Mortality for Ocean Rescue, Police Officers and Firefighters
Investment Return Assumption: 7.20% as of 9/30/18, 7.10% as of 9/30/19, 7.00% as of 9/30/20, 6.80% as of 9/30/21, 6.60% as of 9/30/22, 6.40% as of 9/30/23, 6.20% as of 9/30/24, and 6.00% as of 9/30/25 and thereafter
Actual Return on Plan Assets: Same as assumed above
Payroll Growth Assumption: 2.75% per year
Salary Increase Assumption: 3.5% per year as of 9/30/18, as of 9/30/19 scheduled salary increases through FY 2020, as provided by the Town, reflecting changes to bring pay ranges up to the 75th percentile of the market for General Employees and Ocean Rescue as well as for Police Officers and Firefighters, and 6.0% per year thereafter (5.5% thereafter for General Employees and Ocean Rescue)

For the Share and DROP accounts, 40% of the total was included in the benefit payments in the FYE 2019, 30% in FYE 2020, 20% in FYE 2021, and 10% in FYE 2022. We have not determined any additional possible impact due to F.S. 112.64(5). Total employer contributions should not expect any reduction from Chapter 175 or 185 monies. Additional contributions of \$5.42 million per year beginning in FYE 2017 until the Plan is fully funded, subject to total annual contribution cap of \$16 million, indexed after 2017; allocated between the benefit groups based on each group's proportion of the total amount of unfunded actuarial accrued liability as of the prior valuation year. Future experience was assumed to be consistent with the aforementioned actuarial assumptions and methods. If experience differs from the actuarial assumptions or if the Board adopts different assumptions or methods, future results could be significantly different from the projected results above.

Town of Palm Beach Retirement System (Composite)

Scenario 2B (Stress Test): Scenario 1B with a 6.0% Ultimate Investment Return Assumption (phased in by September 30, 2025) (7.2% Investment Return Assumption, decreasing 0.1% per year until 7.0% then decreasing by 0.2% per year until 6.0%)
 Actual Rate of Return on Plan Assets Earned Each Year = 5%

Valuation Date	Active Count	Payroll	Expected Benefit Payments	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded		Funded Ratio	Total Employer Contribution				
						Actuarial Accrued Liability	Actuarial Value of Assets		Fiscal Year Ending	BOY ADEC as % of Payroll	BOY ADEC Illustrative Dollar Amount	BOY ADEC Additional Contribution	Total Contribution
9/30/2018	275	18,248,772	24,353,914	326,654,957	226,185,226	100,469,731	69.2%	2019	52.12%	10,181,437	5,420,000	15,601,437	
9/30/2019	275	19,438,118	23,598,064	333,658,222	229,888,033	103,770,189	68.9%	2020	55.47%	10,542,818	5,420,000	15,962,818	
9/30/2020	275	20,282,373	22,989,286	339,885,866	238,718,450	101,167,416	70.2%	2021	58.64%	11,871,948	5,420,000	17,291,948	
9/30/2021	275	21,186,474	22,449,656	351,869,929	249,254,963	102,614,966	70.8%	2022	57.76%	12,201,280	5,420,000	17,621,280	
9/30/2022	275	22,168,182	21,985,246	364,875,392	258,625,665	106,249,727	70.9%	2023	58.42%	12,890,238	5,420,000	18,310,238	
9/30/2023	275	23,147,270	22,491,871	378,882,863	268,463,883	110,418,980	70.9%	2024	59.78%	13,803,018	5,420,000	19,223,018	
9/30/2024	275	24,013,045	23,135,299	392,938,362	279,063,147	113,875,215	71.0%	2025	61.43%	14,810,749	5,067,339	19,878,088	
9/30/2025	275	24,958,779	23,689,321	406,920,583	290,149,976	116,770,607	71.3%	2026	63.09%	15,778,696	4,646,040	20,424,736	
9/30/2026	275	25,737,644	24,292,817	412,171,228	301,857,608	110,313,620	73.2%	2027	64.26%	16,704,417	4,281,999	20,986,416	
9/30/2027	275	26,443,580	24,865,281	417,277,808	314,607,521	102,670,287	75.4%	2028	61.13%	16,386,042	5,177,500	21,563,542	
9/30/2028	275	27,321,358	25,402,974	422,306,645	328,366,723	93,939,922	77.8%	2029	60.22%	16,586,238	5,420,000	22,006,238	
								2030	58.67%	16,694,762	5,420,000	22,114,762	
Total:										\$ 168,451,643	\$ 62,532,878	\$ 230,984,521	
Total Present Value at 9/30/2018 (using 7% discount rate):										\$ 114,732,512	\$ 44,551,608	\$ 159,284,120	
Total Present Value at 9/30/2018 (using 6% discount rate):										\$ 120,633,027	\$ 46,545,989	\$ 167,179,016	

Assumptions

Mortality Assumption: FRS Non-Special Risk Mortality for General Employees; FRS Special Risk Mortality for Ocean Rescue, Police Officers and Firefighters
 Investment Return Assumption: 7.20% as of 9/30/18, 7.10% as of 9/30/19, 7.00% as of 9/30/20, 6.80% as of 9/30/21, 6.60% as of 9/30/22, 6.40% as of 9/30/23, 6.20% as of 9/30/24, and 6.00% as of 9/30/25 and thereafter
 Actual Return on Plan Assets: 5.0% per annum
 Payroll Growth Assumption: 2.75% per year
 Salary Increase Assumption: 3.5% per year as of 9/30/18, as of 9/30/19 scheduled salary increases through FY 2020, as provided by the Town, reflecting changes to bring pay ranges up to the 75th percentile of the market for General Employees and Ocean Rescue as well as for Police Officers and Firefighters, and 6.0% per year thereafter (5.5% thereafter for General Employees and Ocean Rescue)

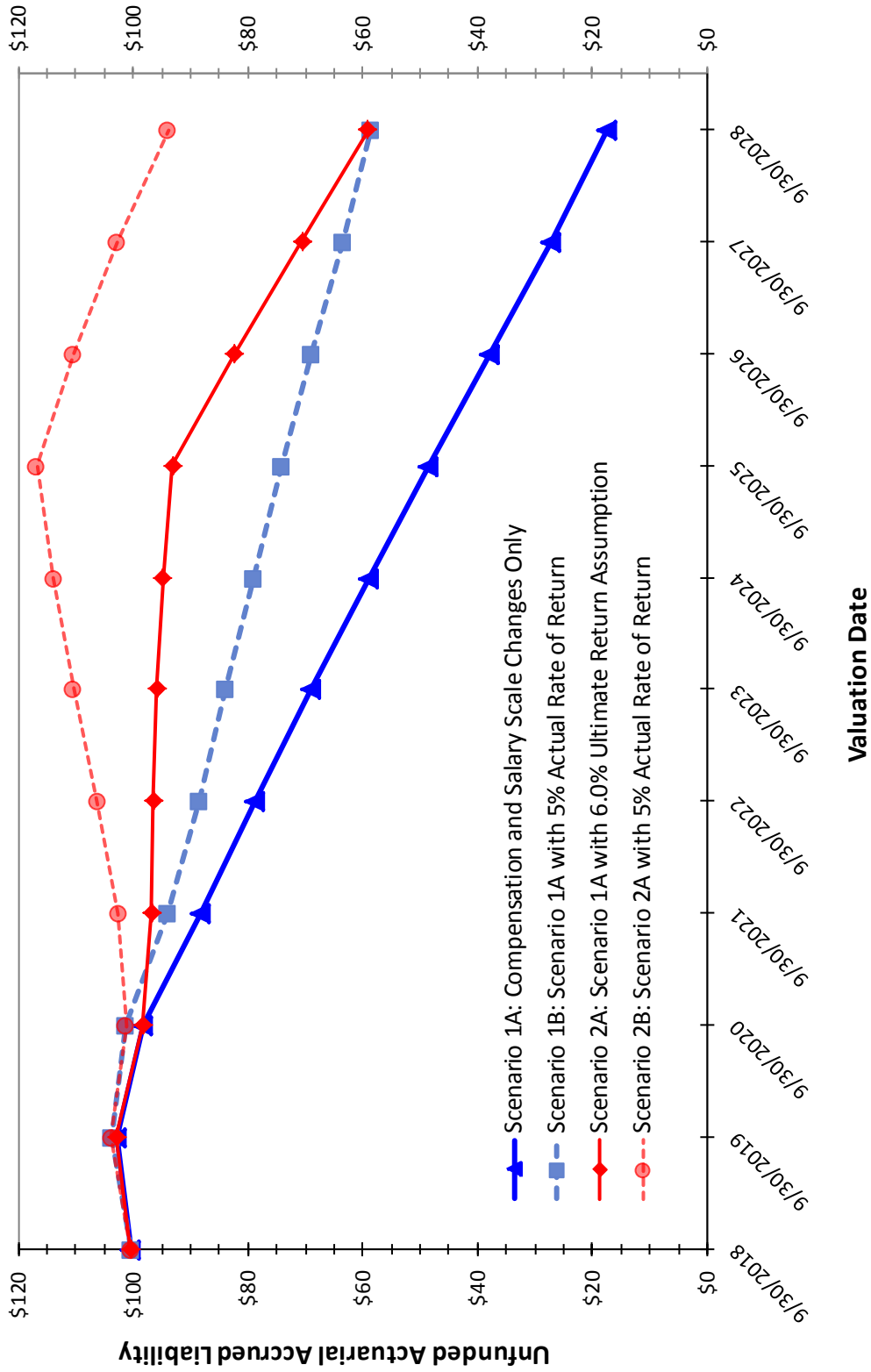
For the Share and DROP accounts, 40% of the total was included in the benefit payments in the FYE 2019, 30% in FYE 2020, 20% in FYE 2021, and 10% in FYE 2022. We have not determined any additional possible impact due to F.S. 112.64(5).

Total employer contributions should not expect any reduction from Chapter 175 or 185 monies.

Additional contributions of \$5.42 million per year beginning in FYE 2017 until the Plan is fully funded, subject to total annual contribution cap of \$16 million, indexed after 2017; allocated between the benefit groups based on each group's proportion of the total amount of unfunded actuarial accrued liability as of the prior valuation year.

Future experience was assumed to be consistent with the aforementioned actuarial assumptions and methods. If experience differs from the actuarial assumptions or if the Board adopts different assumptions or methods, future results could be significantly different from the projected results above.

Town of Palm Beach Retirement System (Composite) Projected Unfunded Actuarial Accrued Liability (in \$ millions)



**Town of Palm Beach Retirement System (Composite)
Projected Total Employer Contributions (in \$Millions)**

