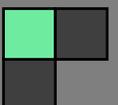


2018

Town of Palm Beach Retirement System Annual Report

Plan Profile, Demographic and Financial Highlights

Jane Struder, CPA
Finance Director



May 15, 2019

Board of Trustees and Employees
Town of Palm Beach Retirement System
Palm Beach, FL 33480

Gentlemen and Participants:

It is our pleasure to present The Town of Palm Beach Employee's Retirement System Annual Report. The report represents the financial and actuarial information for the plan as of fiscal year end September 30, 2018. The demographic information presented for the defined contribution plans with ICMA covers the period January 1, 2018 through December 31, 2018.

Copies of this report will be accessible to all Town Employees and interested citizens via the Town's website.

The report includes; a summarized plan description, plan provisions, demographic information for both the defined benefit plans as well as the defined contribution plans, fiscal year-end financial statements, a listing of professional service providers for the plan, and current investment managers.

Sincerely,

Jane Le Clainche, CPA
Finance Director

William Hanes
Plan Administrator

Danielle Olson
Human Resource Director

Town of Palm Beach Retirement System

Dan Stanton, Chairman
Gerald Goldsmith, Vice Chairman
Brett Madison, General Employee Representative, Secretary
C. Edward Carter, Trustee
Brad Kaufman, Trustee
Thomas Parker, Trustee
Jane Le Clainche, Finance Director
Lieutenant Michael Marx, Firefighter Representative
Sergeant Daniel Wilkinson, Police Representative

Employees' Pension System

The Town of Palm Beach's employee pension plan was created in 1947.

The funds were overseen by a single Retirement System Board of Trustees until 1999. The board included citizens appointed by the Town Council, and police officer, firefighter, and general employee representatives elected by their respective peers. The Mayor, Town Council President, and Town Manager served ex officio. The 1999 State Legislature authorized police officers and firefighters to more independently oversee their pension funds (if their local plan was receiving the Chapter 175/185 subsidy), and the Town's single board was divided into a General Employees' Retirement Board of Trustees and a Public Safety Retirement Board of Trustees. In 2004, the Public Safety Retirement Board of Trustees further divided into a Police Officers' Retirement Board of Trustees and a Firefighters' Retirement Board of Trustees.

The plans were separately managed by 3 pension boards from 2004 until April 1, 2012, when the three retirement boards were consolidated into the Town of Palm Beach Retirement System Board of Trustees. This Board now oversees all of the Town's pension assets and retirement programs. An outside pension consultant serves as investment advisor to the Board. The Board also has contracted out a portion of the plan administration services.

On May 1, 2012, the retirement benefits for most Town employees were changed from a defined benefit plan to a hybrid pension plan. Employees who were eligible to retire on or before that date were grandfathered into the old defined benefit plan, and the accrued benefits for all other employees were frozen as of May 1, 2012. Benefits accrued after that date by those not grandfathered were in a new hybrid pension plan that contained a defined benefit component and a defined contribution component. In addition, the Town ceased participation in the State of Florida's Chapter 175 and 185 programs for firefighters and police officers. Approximately 268 active employees and 415 retirees are covered by the Town's retirement plan.

During 2016, the Town Council approved benefit changes for non-union public safety officers. The changes included the elimination of the hybrid option and include an enhanced DB plan with an increased multiplier and reduced retirement age. The changes are described in more detail in the Summary of Plan Description section of this document.

During 2017, the Town Council approved benefit changes for union firefighters, general employees and lifeguards. The union firefighters have an enhanced DB plan with an increased multiplier and reduced retirement age. The plan is the same as was approved for the non-union public safety officers. The Town Council approved a change to the hybrid plan for the General Employees that included an increase in the multiplier and reduced age for the DB plan and a reduced DC plan.

The Town Council approved a new policy requiring an annual extraordinary contribution of \$5,420,000 to the Town's retirement system each year. The investment return assumption was decreased to 7.2% in fiscal year 2018 and will be decreased by .1% each subsequent year until a 7% assumption is achieved in 2020.

The Town Council and Retirement Board approved a reduction in the amortization period from 25 years to a hybrid amortization of 20 years for assumption/method changes and 15 years for experience gains/losses and plan changes.

Investment Objective: The long-term objectives of the Fund are to invest System contributions and assets to ensure that there will be no principal erosion of funds or the purchasing power thereof. Investments are managed in a prudent and professional manner in compliance with all applicable statutes and regulations such as Florida Statutes Section 215.47. Though not regulated by the Employee Retirement Income Security Act of 1974, the Trustees and other fiduciaries intend to comply with fiduciary standards of the Act.

Investment Strategy: The Fund has adopted an investment strategy emphasizing broad diversification. Diversification helps to reduce portfolio volatility (variability of returns) and maximize investment returns at appropriate levels of risk over time.

AndCo Consulting: The Board of Trustees has retained AndCo Consulting, an independent investment consultant for the purpose of assisting the Board in developing and attaining the fund objectives. AndCo assists in establishing objectives, offers alternative models for asset allocation, identifies and recommends appropriate managers or funds, and produces timely quarterly reports that monitor performance of individual managers against similar managers as well as performance of the funds against objectives and appropriate indices.

Asset Allocation Policy: Industry and academic studies have consistently found that asset allocation is the primary driver of risk (volatility) and return. The Fund seeks to meet or exceed the System's actuarial rate of return assumption while looking for opportunities to reduce volatility through diversification.

Rebalancing Policy: Portfolio rebalancing is an important discipline for portfolio risk management. The Fund has established long-term asset allocation targets with ranges. Rebalancing is reviewed not less than quarterly and is required when actual allocation falls outside prescribed ranges. Where possible, rebalancing is coordinated with normal Fund contributions/withdrawals.

Plan Administration: William P. Hanes Consulting, Inc. is the administrator of the plan and processes all requests by employees for filing benefit claims and information on plan benefits. The plan administrator processes investment transactions between the investment consultant, custodian, and managers as directed by the board of trustees.

Professional Service Providers as of December 31, 2018

| | | |
|--|--|---|
| Plan Administrator | Contact | |
| William P. Hanes Consulting, Inc. P.O. Box 2112 Palm Beach, FL 33480 | William P. Hanes (561)906-5885 whanes@townofpalmbeach.com | |
| Board Attorney | Contact | |
| Lewis, Longman and Walker 315 South Calhoun Street, Suite 830 Tallahassee, Florida 32301 | James W. Linn, Board Counsel (850)222-5702 jlinn@llw-law.com | |
| Investment Consultant | Consultant | |
| AndCo Consulting 4901 Vineland Road Suite 600 Orlando, FL 32811 | Dave West (866)240-7932 davew@andcoconsulting.com | |
| Actuary | Contact | |
| Gabriel Roeder Smith & Company One East Broward Blvd Suite 505 Ft. Lauderdale, FL 33301-1804 | Pete Strong FSA, EA, MAAA, FCA (954)713-2102 Pete.strong@grsconsulting.com | |
| Custodial Bank | Contact | |
| State Street Global Services 801 Pennsylvania Ave Kansas City, MO 64105 | Kaylee Payne (816)871-3512 kpayne@statestreet.com | |
| Independent Auditors | Contact | |
| Marcum One SE Third Avenue 16 th Floor Miami, FL 33131 | Michael Futterman, CPA Partner (305)995-9610 Michael.futterman@marcumllp.com | |
| Deferred Compensation | Contact | Contact |
| ICMA-RC Service, LLC 2655 Lejeune Road, Suite 545 Coral Gables, FL 33134 | Joe Teague (202)962-4644 jteague@icmarc.org | Steven Feigelis (202)701-5969 or (561)963-1681 sfeigelis@icmarc.org |
| Financial and Accounting Services | Contact | |
| Town of Palm Beach 360 South County Road Palm Beach, FL 33480 | Jane Le Clainche, Finance Director (561)227-6330 jleclainche@townofpalmbeach.com | |
| Human Resources Enrollment/Training | Contact | |
| Town of Palm Beach 360 South County Road Palm Beach, FL 33480 | Danielle Olson, Human Resource Director (561)227-6322 dolson@townofpalmbeach.com | |

Investment Managers and Investments as of December 31, 2018

Domestic Equity

SSgA S&P 500 Flagship Fund
Thompson Siegel & Walmsley SMID Cap Value
Geneva Mid Cap Growth

International Equity

Artisan International Growth Fund
Oakmark International Value Fund
Wells Capital Berkeley Street Emerging Markets Equity Fund

Private Equity

Landmark Equity Partners
Private Equity Investment Fund
HarbourVest Private Equity
Pomona Capital
JP Morgan Venture Capital Fund

Hedge Fund of Funds

Weatherlow Offshore Fund I Ltd.
Blackrock Multi Asset Income Fund

Fixed Income

Goldman Sachs Core Plus Fixed Income
Vanguard Total Bond Market Index

Real Estate

Gerding Edlen Green Cities II
Westport Real Estate Fund IV
Gerding Edlen Green Cities III
Long Wharf Real Estate Partners
JP Morgan Strategic Property

Liquid Capital

State Street STIF Account

Summary of Plan Provisions

Grandfathered Benefits: The benefits consist of the old defined benefit plan (Plan A - see below) including future accruals in Plan A for employees that were eligible to retire on or before May 1, 2012 (grandfather).

Plan A Benefits: The accrued benefits prior to May 1, 2012 in the old defined benefit plan (frozen benefits).

Plan B Benefits: The accrued benefits on and after May 1, 2012.

Normal Retirement:

ELIGIBILITY

Plan A

- a) *General:* 30 or more years of service, regardless of age; or age 55 with 10 or more years of service
- b) *Ocean Rescue:* Age 50 with 10 or more years of service. Or 10 or more years of service and age plus credited service totals 65 years or more.
- c) *Police and Firefighters:* 20 or more years of service, regardless of age; or, age 50 with 10 or more years of service; or, at least 10 years of service and age plus credited service totals 65 years or more.
- d) Immediate vesting was granted to all employees who on May 1, 2012, were active contributing plan participants.

Plan B

General and Ocean Rescue: Age 62 with 10 or more years of service if employed or participating in DROP on May 1, 2017. If not employed or participating in DROP on May 1, 2017, retirement eligibility age is 65 with 10 or more years of service. Employees hired on or after May 1, 2017 are eligible to retire at age 62 with 10 or more years of service.

Police: Age 56 with 10 or more years of service if employed or participating in DROP on October 1, 2016. If not employed or participating in DROP on October 1, 2016, retirement eligibility age is 65 with 10 or more years of service. Employees hired on or after October 1, 2016 are eligible to retire at age 56 with 10 or more years of service.

Union - Firefighters: Age 56 with 10 or more years of service if employed on or participating in DROP on August 12, 2017. If not employed or participating in DROP on August 12, 2017, retirement eligibility age of 65 with 10 or more years of service. Employees hired on or after August 12, 2017 are eligible to retire at age 56 with 10 or more years of service.

PENSION AMOUNT**Plan A**

- a) *General*: Average final compensation (AFC) times the sum of a) 2.75% for service earned after September 30, 1990, to a maximum of 82.5%, plus 2.35% for service earned on or before September 30, 1990 for the first 30 years of service, plus, b) 1.0% for service in excess of 30 years.
- b) *Ocean Rescue*: AFC times the sum of a) 2.85% for the first 25 years of service with a maximum of 71.25%, plus, b) 1.0% for service in excess of 25 years.
- c) *Police Officers and Firefighters*: AFC multiplied by the sum of a) 3.5% per year of credited service to a maximum of 87.5 percent, plus, b) 2.0% per year of credited service, if any, in excess of 43.75 years.

Plan B

General and Ocean Rescue: The normal form of pension is a pension payable for life. Also see Automatic Death Benefit. AFC multiplied by 1.25% per year of credited service from May 1, 2012, through April 30, 2017 and multiplied by 1.70% per year after May 1, 2017.

Union Firefighters: The normal form of pension is a pension payable for life. Also see Automatic Death Benefit. AFC multiplied by 1.25% per year of credited service from May 1, 2012 through September 30, 2017. AFC

multiplied by 2.75% per year of credited service on or after October 1, 2017.

Police and non-union Firefighters: The normal form of pension is a pension payable for life. Also see Automatic Death Benefit. AFC multiplied by 1.25% per year of credited service from May 1, 2012 through September 30, 2016. AFC multiplied by 2.75% per year of credited service on or after October 1, 2016.

Members can elect an optional survivorship benefit with an actuarial reduction in benefit.

Average Final Compensation (AFC):**Plan A**

Average of the highest 2 consecutive years within the member's last 5 years of credited service.

Plan B

AFC after April 30, 2012, is the average of the final 5 years of credited service.

DROP Retirement: Both Plan A and Plan B

Eligibility - Same as Normal Retirement. Participation must be terminated within 5 years of DROP commencement.

Pension Amount

General and Ocean Rescue: 100% of member's accrued benefit at the date of election to participate in DROP. Grandfathered General and Ocean Rescue employees: 98% of member's accrued benefit at the date of election to participate in DROP

Police and Firefighters: 100% of the member's accrued benefit at the date of election to participate in DROP.

The rate of return credit for the DROP and Share accounts is calculated based on a five-year trailing average annual return of the plan, and applied to the DROP and Share balances at the end of each quarter on the average daily balance for the quarter.

Early Retirement (General Employees Only):**ELIGIBILITY****Plan A**

Age 50 with 10 or more years of credited service based on a monthly reduction from normal retirement date as explained below.

Plan B

Early retirement at age 60 with 10 or more years of credited service, based on a monthly reduction from normal retirement date based on actuarial equivalency.

PENSION AMOUNT**Plan A**

Computed as a normal retirement benefit but reduced 6/10 of 1% (3/10 of 1% if service credit is 20 or more years) for each month early retirement precedes the member's normal retirement date.

Deferred Retirement (Vested Termination Benefit): Both Plan A and Plan B

Eligibility - 10 or more years of service (waived for frozen benefits). Pension begins upon meeting requirement for normal retirement. Contributions must be left on deposit in the System; failure to do so results in forfeiture of the vested benefit. Frozen accrued benefits as of April 30, 2012 are vested immediately.

Pension Amount - Computed as for normal retirement, based upon Plan A frozen benefit, or Plan B service and AFC at time of termination.

Duty Disability Retirement: Both Plan A and Plan B

Eligibility - No age or service requirements.

General Employees and Ocean Rescue: Payment of sixty percent of the monthly AFC (greater of Plan A or B); or if the member retires prior to attaining the age for normal retirement, the amount of the monthly pension shall be computed as if the member has continued to accrue credited service until the date the member would have attained the age for normal retirement provided that the member has been in receipt of the disability benefit for at least five years.

Police Officers and Firefighters: Payment of sixty percent of the monthly AFC (greater of Plan A or B); or if the member retires prior to attaining the age for normal retirement, the amount of the monthly pension shall be computed as if the member has continued to accrue credited service until the date the member would have attained the age for normal retirement provided that the member has been in receipt of the disability benefit for at least five years.

Non-Duty Disability Before Retirement: Both Plan A and Plan B

Eligibility - 10 or more years of service (waived for frozen benefit).

Pension Amount - Computed as for normal retirement. For Police and Firefighter benefit groups, the disability pension benefit shall not be less than a payment of 30 percent of the member's AFC at the time of disability.

Elective Survivor Benefits

Eligibility – The member dies while in the employ of the Town with at least 10 years of credited service and not participating in the DROP. Survivor beneficiary shall be in writing and filed with Human Resources Department.

Duty Death Special Provision: Both Plan A and Plan B

Eligibility – Death while actuarially performing duty for the Town or was the natural and proximate result, independent of all other causes, of a personal injury or disease arising out of and in the course of the actual performance of duty for the town.

- 1) 10-year vesting requirement waived
- 2) Surviving children is 25% of deceased member's AFC, not to exceed 75% of AFC when four or more surviving children.
- 3) Surviving spouse is paid difference between 75% of deceased AFC and aggregate amount paid surviving children.

Automatic Death After Retirement Pension:**Plan A**

To Surviving Child(ren): 25% of the retiree's pension payable to age 18, not to exceed an equal share of 75% of the retiree's pension. Payments to surviving children may be paid to age 25 if retirement if no surviving spouse.

To Surviving Spouse: The difference, if any, between 75% of the deceased retiree's pension and the aggregate amount paid to any surviving children for the month.

Plan B

Reduced option forms of payment are available for survivorship benefits.

Post-Retirement Cost-of-Living Adjustments:**Plan A**

Pensions are increased 2.0% annually based on the total pension payable subsequent to an initial 3-year deferral period.

Plan B

None.

Purchase of Service Credit: Both Plan A and Plan B

A vested member who has not purchased service credit under Prior Governmental Service, including Military Service elsewhere may purchase years or fractional parts of years of service, not to exceed 5 years, to be added to years of credited service provided that the member contributes the sum that would have been contributed to the retirement plan to pay the full actuarial cost.

Purchase of service by members of benefit group firefighter may only be based upon actual prior service as a firefighter or service in the military and purchase of service by a member of benefit group police officer may only be based upon actual prior service as a police officer or service in the military.

Fiscal Year End Financial Statements

Town of Palm Beach Retirement System Statement of Fiduciary Net Position September 30, 2018

| | 2018 |
|--|-----------------------|
| ASSETS | |
| Cash and cash equivalents | \$ 591,761 |
| Interest and dividends receivable | 139,374 |
| Due from broker for securities sold | 752,465 |
| Prepaid expenses and other assets | 12,063 |
| Investments, at fair value | |
| Short term investment fund | 4,054,764 |
| Domestic fixed income funds | 23,728,660 |
| Common Stock | 22,112,222 |
| Domestic equity funds | 56,540,384 |
| International equity funds | 50,993,591 |
| Hedge funds | 16,941,065 |
| Private equity funds | 21,255,467 |
| Real estate funds | 24,252,851 |
| Total Investments | 219,879,004 |
| Total Assets | 221,374,667 |
| LIABILITIES | |
| Accounts payable and accrued liabilities | 117,539 |
| Due to the Town | 1,513,243 |
| Total Liabilities | 1,630,782 |
| NET POSITION HELD IN TRUST FOR PENSION BENEFITS | \$ 219,743,885 |

**Town of Palm Beach Retirement System
Statement of Changes in Fiduciary Net Position
Year ended September 30, 2018**

| | 2018 |
|--|-----------------------|
| ADDITIONS | |
| Contributions | |
| Town | \$ 14,079,252 |
| Member | 1,261,956 |
| Total contributions | 15,341,208 |
| Investment income | |
| Net appreciation in fair value of investments | 15,288,021 |
| Interest and dividends | 1,036,233 |
| Other | 68,491 |
| Total investment income/(loss) | 16,392,745 |
| Less investment expense | (596,731) |
| Total additions | 31,137,222 |
| DEDUCTIONS | |
| Benefit payments | 17,072,904 |
| Share account distributions | 99,729 |
| DROP distributions | 3,483,053 |
| Refunds of participants' contributions | 150,883 |
| Administrative expense | 409,496 |
| Total deductions | 21,216,065 |
| Net increase | 9,921,157 |
| Net position held in trust for pension Benefits | |
| Beginning of Year | 209,822,728 |
| NET POSITION HELD IN TRUST FOR PENSION END OF YEAR | \$ 219,743,885 |

Town and Employee Contributions

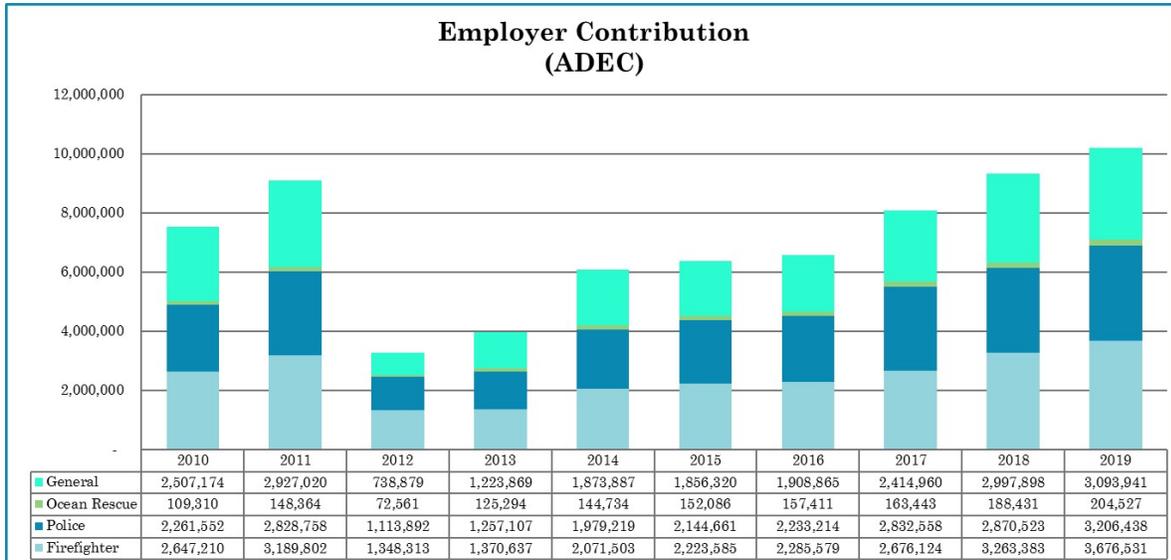
The contribution requirements of the Plan members are established and may be amended by the Town Council. Plan members are required to contribute a percentage of their annual pensionable wages as described in the following table. The member contribution rates for the FY19 budget year (presented as a percentage of the employees' annual compensation) vary by benefit group, and are shown below (along with the Town's matching contribution rates for the 401(a) plan):

| Benefit Group | Defined Benefit Plan Employee Contribution | 401(a) Defined Contribution Plan | | | |
|-----------------------|---|----------------------------------|----------|---|------------|
| | | Mandatory Contribution | | Voluntary Contribution (post tax) | |
| | | Employee | Employer | Employee | Employer |
| General Employees | 3.5% | 3% | 3% | Voluntary up to the maximum allowable under IRS regulations | Up to 2.0% |
| Lifeguard Employees | 3.5% | 3% | 3% | | Up to 2.0% |
| Firefighter Union | 10% Variable | | | | |
| Firefighter Non-Union | 10% Variable | | | | |
| Police Officer | 10% Variable | | | | |

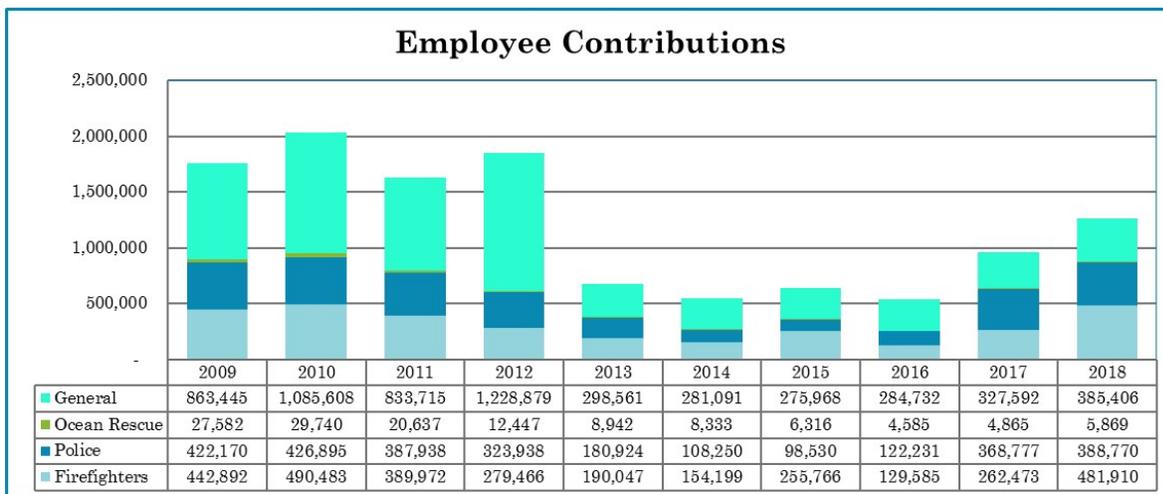
The Town's annual appropriation for the defined benefit pension plan is based upon the actuaries' determined rate. The defined contribution appropriation is based upon salary estimates and employer matching contribution rates including the discretionary contribution. In addition, the Town Council adopted a policy that provides for an annual appropriation of \$5,420,000 to begin to fund the UAAL. The Town's actuarial determined contributions for the defined benefit and the defined contribution plans and the percent of budgeted payroll for the defined benefit plan and total Town contribution for FY19 are shown in the table below and do not include the extraordinary \$5,420,000 contribution:

| | DB Contribution | DC Contribution | Total Town Contribution | % of Payroll (DB Plan) | % of Payroll (overall) |
|-------------------|--------------------|------------------|-------------------------|------------------------|------------------------|
| General Employees | \$2,997,898 | \$626,050 | \$3,623,948 | 28.42% | 34.35% |
| Lifeguards | 188,431 | 8,778 | 197,209 | 114.09% | 119.40% |
| Police | 2,870,523 | 0 | 2,870,523 | 80.65% | 80.65% |
| Fire-Rescue | 3,263,383 | 0 | 3,263,383 | 94.38% | 94.38% |
| Total | \$9,320,235 | \$634,828 | \$9,955,063 | 52.56% | 56.14% |

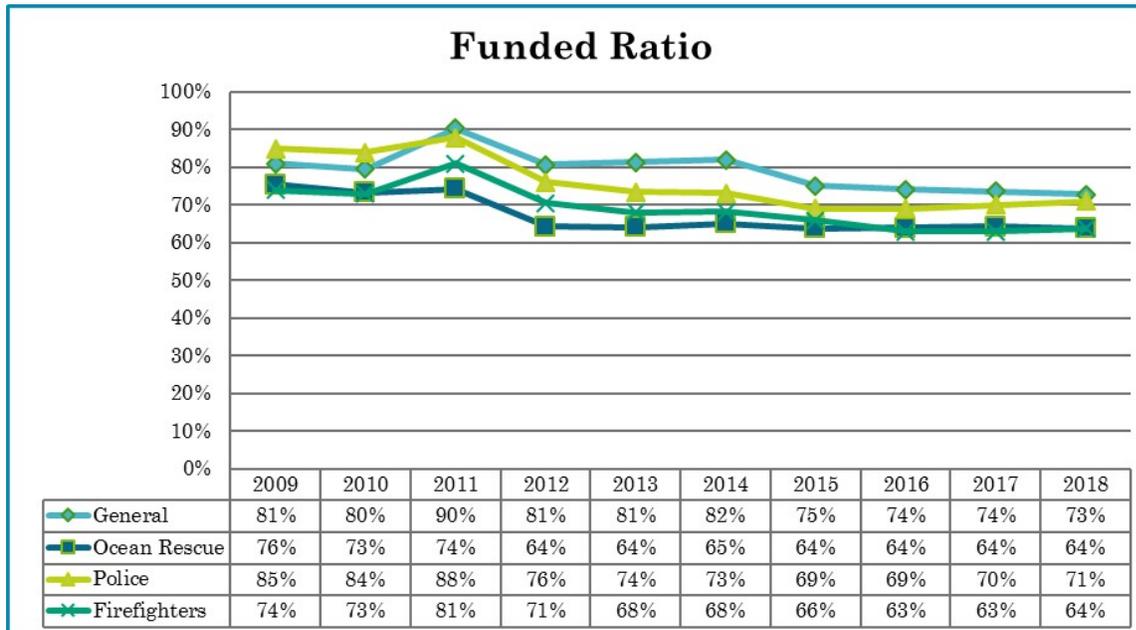
The employer funding history in total dollar contribution for the defined benefit plan for the past 10 years through FY19 budget is as follows:



Employee Contribution history for the past 10 years through FY18 actual is shown below. The FY17 contributions increased due to the increase in the Police and non-union firefighter contribution percentage. FY18 showed an increase due to the increase in the General Employee and union firefighter contribution increases.



The ten-year historical funded ratio through 2018 for the four member groups is as follows:



The table below shows the breakdown in costs between Normal Cost and the amortization of the UAAL by benefit tier (Plan B and Legacy), for the plan as a whole and each employee group. A small number of grandfathered employees continue to accrue benefits under the legacy plan and their normal cost is included in the legacy plan below.

| Actuarially Determined Contribution Breakdown by Benefit Tier | | | | | |
|--|----------------------|---------------------|---------------------|---------------------|---------------------|
| Valuation Date: September 30, 2018 | | | | | |
| | Total Plan | General | Ocean Rescue | Police | Firefighters |
| Participants | 275 | 164 | 4 | 50 | 57 |
| Total Plan | | | | | |
| Employer Normal Cost | 7.78% | 6.61% | 5.78% | 9.58% | 9.20% |
| Amortization of UAAL | 49.63% | 24.85% | 132.85% | 78.69% | 83.18% |
| Total | 57.41% | 31.46% | 138.63% | 88.27% | 92.38% |
| Town Contribution | \$ 10,542,818 | \$ 3,276,537 | \$ 210,518 | \$ 3,200,781 | \$ 3,854,982 |
| Plan B - Ongoing Plan | | | | | |
| Employer Normal Cost | 7.65% | 6.38% | 5.78% | 9.58% | 9.20% |
| Amortization of UAAL | 0.79% | 0.84% | 0.60% | 0.64% | 0.82% |
| Total | 8.44% | 7.22% | 6.38% | 10.22% | 10.02% |
| Town Contribution | \$ 1,550,367 | \$ 751,958 | \$ 9,688 | \$ 370,590 | \$ 418,131 |
| Plan A - Legacy Plan | | | | | |
| Employer Normal Cost | 0.13% | 0.23% | 0.00% | 0.00% | 0.00% |
| Amortization of UAAL | 48.84% | 24.01% | 132.25% | 78.05% | 82.36% |
| Total | 48.97% | 24.24% | 132.25% | 78.05% | 82.36% |
| Town Contribution | \$ 8,992,451 | \$ 2,524,579 | \$ 200,830 | \$ 2,830,191 | \$ 3,436,851 |
| Legacy cost | 85.3% | 77.1% | 95.4% | 88.4% | 89.2% |

The Town Council has committed to lowering the investment return assumption from the current 7.2% to 7% by .1% per year. As of the September 30, 2018 valuation date, the cost to lower the assumption to 7% immediately would increase the Town Contribution for FY20 by \$528,572 and increase the UAAL by \$7,500,617. The details are shown in the chart below.

| | Total Plan |
|--------------------------------|-----------------------|
| Current Rate of 7.2% | |
| Employer Normal Cost | 7.78% |
| Amortization of UAAL | 49.63% |
| Total | 57.41% |
| Town Contribution | \$ 10,542,818 |
| UAAL | \$ 100,469,731 |
| Funded Ratio | 69.20% |
| Assumption Change to 7% | |
| Employer Normal Cost | 8.28% |
| Amortization of UAAL | 51.97% |
| Total | 60.25% |
| Town Contribution | \$ 11,071,390 |
| UAAL | \$ 107,970,348 |
| Funded Ratio | 66.60% |
| Difference | |
| Town Contribution | \$ 528,572 |
| UAAL | \$ 7,500,617 |
| Funded Ratio | -1.50% |

Unfunded Actuarial Accrued Liability (UAAL)

The UAAL as of September 30, 2018, for all pension groups is \$100,469,731. The table below summarizes the reasons for the increase since 2009.

Experience (Gain)/Loss include demographic experience due to salary increases, retirements, terminations, mortality experience and other census changes that differ from the actuarial assumptions. In addition, it also includes the gains/losses from investments.

Assumption changes include reductions in the investment assumption, changes in several demographic assumptions after an experience study and changes in the mortality tables.

Benefit changes include the reduction in benefits in 2012 offset by benefit improvements made since 2012.

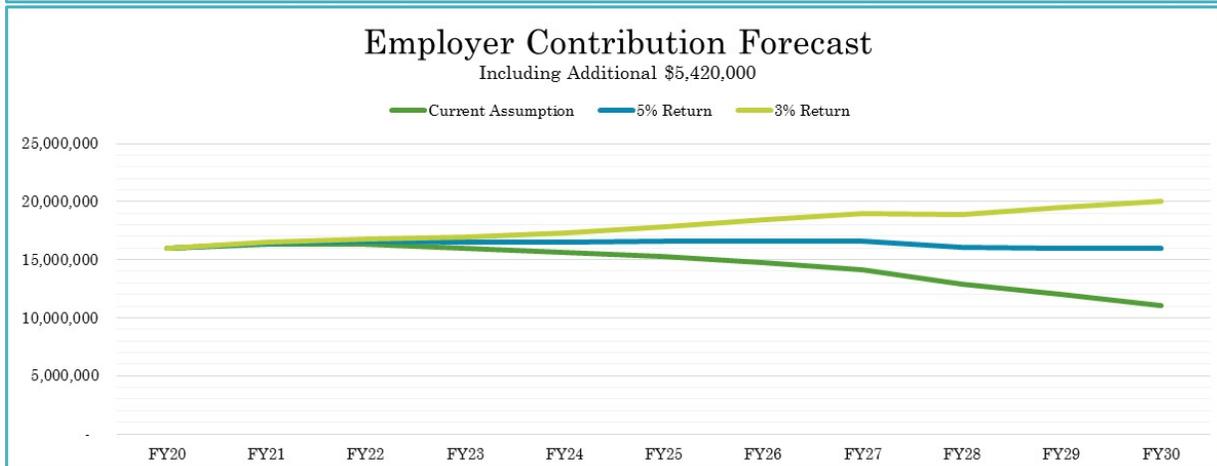
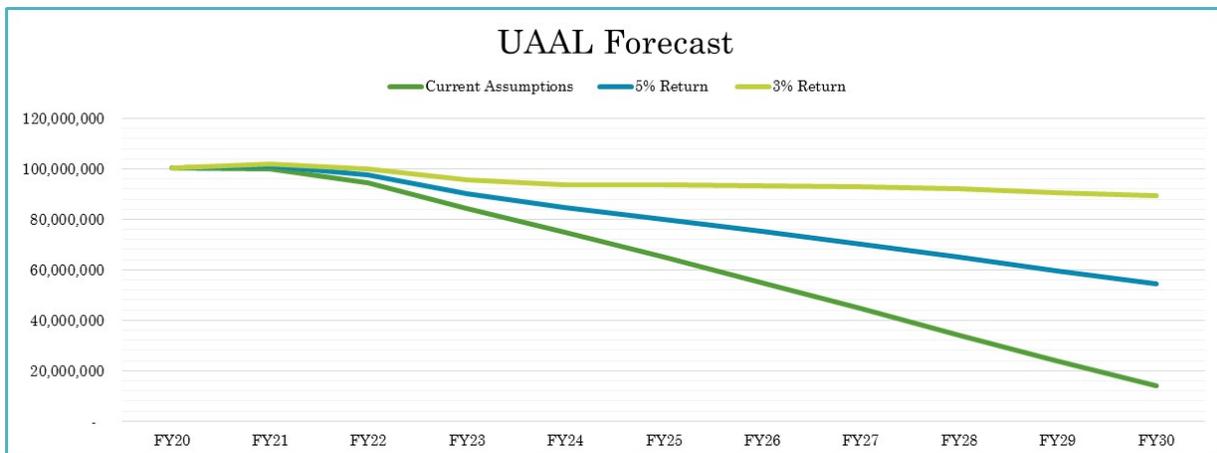
| Date | | General | Lifeguard | Police | Firefighter | Total |
|-------------|--|--------------------|------------------|--------------------|--------------------|---------------------|
| 2009 | Initial Unfunded | 13,626,087 | 884,806 | 6,341,700 | 16,690,974 | 37,543,567 |
| | Experience (Gain)/Loss | | | | | |
| 2010 | Experience (Gain)/Loss | 1,372,378 | 80,139 | 967,432 | 1,529,373 | 3,949,322 |
| 2011 | Experience (Gain)/Loss | (4,189,596) | 136,863 | 457,403 | (1,235,083) | (4,830,413) |
| 2012 | Experience (Gain)/Loss | 4,611,397 | 313,081 | 6,550,534 | 5,612,257 | 17,087,269 |
| 2013 | Experience (Gain)/Loss | (952,869) | 26,996 | 2,505,541 | 2,150,242 | 3,729,910 |
| 2014 | Experience (Gain)/Loss | (82,037) | (20,564) | 1,055,375 | 198,588 | 1,151,362 |
| 2015 | Experience (Gain)/Loss | 2,798,379 | 109,144 | 2,694,489 | 2,468,818 | 8,070,830 |
| 2016 | Experience (Gain)/Loss | 37,292 | (14,954) | (661,559) | 3,341,528 | 2,702,307 |
| 2017 | Experience (Gain)/Loss | 216,024 | 94,820 | 343,087 | 623,144 | 1,277,075 |
| 2018 | Experience (Gain)/Loss | 2,052,840 | 88,247 | 772,455 | 1,375,254 | 4,288,796 |
| | Total Experience (Gain)/Loss | 5,863,808 | 813,772 | 14,684,757 | 16,064,121 | 37,426,458 |
| | Benefit Changes | | | | | |
| 2012 | Benefit Changes | (5,018,751) | (248,437) | (4,484,278) | (7,752,885) | (17,504,351) |
| 2013 | Benefit Changes | 80,419 | - | - | - | 80,419 |
| 2014 | Benefit Changes | 41,772 | 1,732 | 91,106 | 37,518 | 172,128 |
| 2016 | Benefit Changes | 1,577,848 | 23,312 | 927,089 | 433,395 | 2,961,644 |
| 2017 | Benefit Changes | - | - | - | 881,364 | 881,364 |
| | Total Benefit Changes | (3,318,712) | (223,393) | (3,466,083) | (6,400,608) | (13,408,796) |
| | Assumption Method Changes | | | | | |
| 2010 | Assumption Method Changes | (1,861,388) | (52,546) | (675,443) | (817,190) | (3,406,567) |
| 2011 | Assumption Method Changes | (117,507) | 68,607 | 414,689 | 206,445 | 572,234 |
| 2012 | Assumption Method Changes | 4,679,545 | 266,741 | 4,677,945 | 4,754,914 | 14,379,145 |
| 2015 | Assumption Method Changes | 6,517,916 | 187,497 | 1,877,436 | 2,417,539 | 11,000,388 |
| 2016 | Assumption Method Changes | 2,557,591 | 173,039 | 3,184,121 | 3,237,409 | 9,152,160 |
| 2017 | Assumption Method Changes | 1,198,983 | 64,805 | 1,122,267 | 1,185,708 | 3,571,763 |
| 2018 | Assumption Method Changes | 1,220,072 | 65,418 | 1,138,140 | 1,215,749 | 3,639,379 |
| | Total Assumption Method Changes | 14,195,212 | 773,561 | 11,739,155 | 12,200,574 | 38,908,502 |
| | UAAL as of September 30, 2018 | 30,366,395 | 2,248,746 | 29,299,529 | 38,555,061 | 100,469,731 |
| | Membership - Retirees | 213 | 11 | 103 | 108 | 435 |
| | Membership - Active | 164 | 4 | 50 | 57 | 275 |
| | Membership - Terminated/Vested | 34 | 1 | 24 | 32 | 91 |
| | Ratio of Total Membership to UAAL | 73,884 | 140,547 | 165,534 | 195,711 | 125,430 |

UAAL and Employer Contribution Forecast

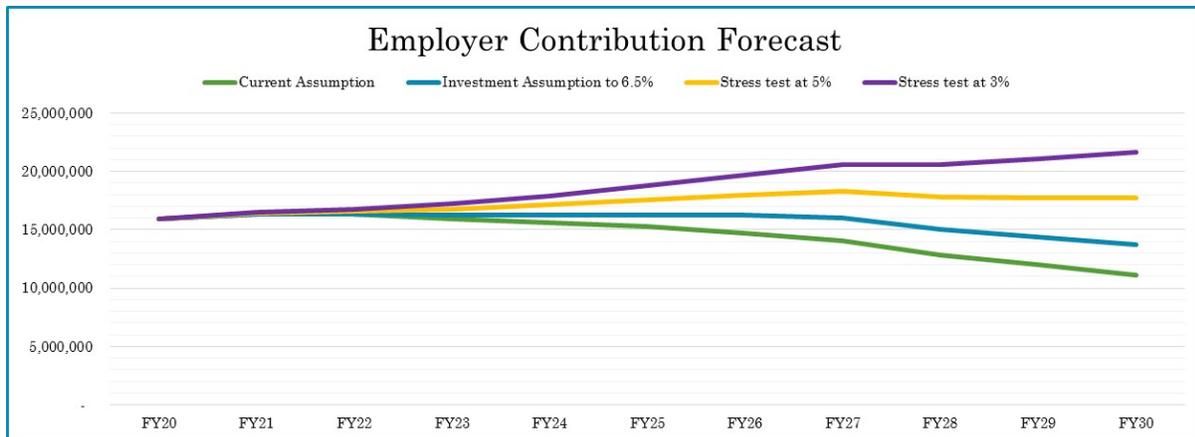
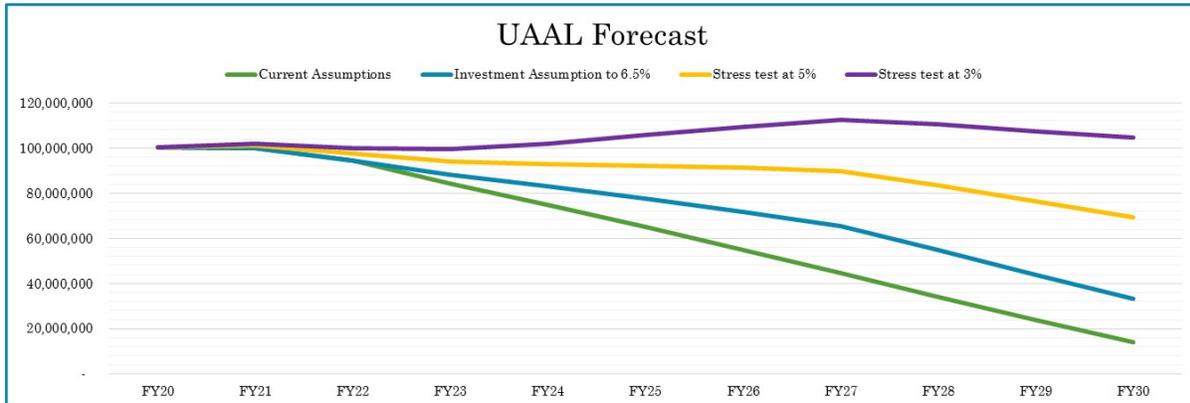
A ten-year forecast of the Unfunded Actuarial Accrued Liability (UAAL) and Employer Contribution has been prepared by the actuary. The current assumptions include the reduction in investment return by .01% per year from 7.2% used in the September 30, 2018, Actuarial Valuation Report to 7.0% as of September 30, 2020 and the payroll growth assumption is assumed to decrease by .25% to 2.75% as of September 30, 2018.

This forecast was stress tested using an estimated actual return on the market value of assets of 5% per year and 3% per year. The results are shown on the following charts for UAAL and Employer Contribution.

Since these forecasts were prepared last year, there has been improvement in the UAAL forecast. This is due to the Town's commitment to contribute an additional \$5,420,000 per year to the system, which has been included in the forecast and the reduction in the amortization period from 25 years to a hybrid of 20 years for assumption changes and 15 years for experience gains/losses and plan changes.



In addition to the forecasts on the prior page, the Retirement Board requested a forecast considering the impact of further reductions to the investment assumption from 7% to 6.5% in .1% increments from 2020 to 2025. These results were also stress tested at a potential 5% and 3% actual rate of return on the plan assets. The results are summarized in the graphs below.

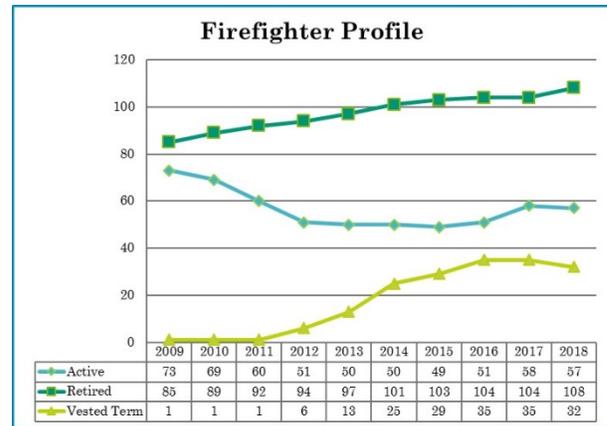
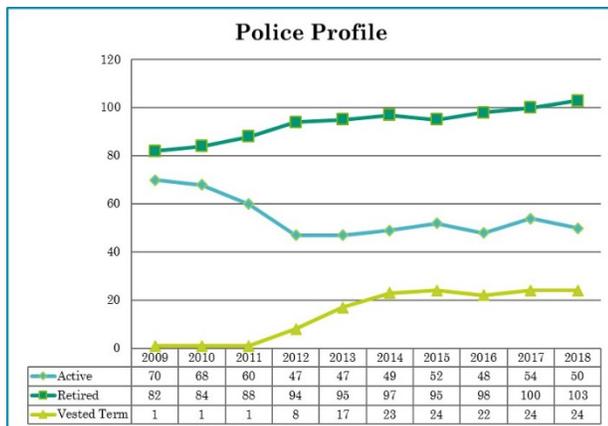
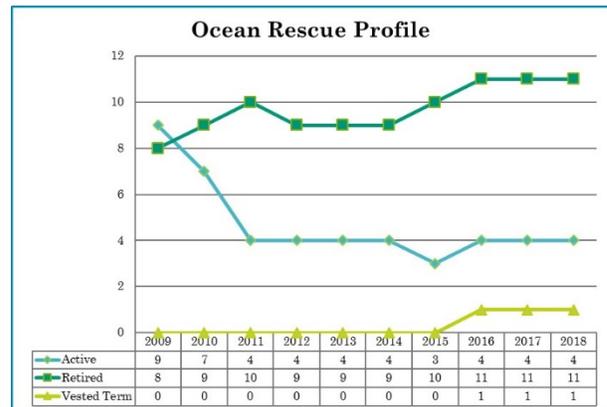
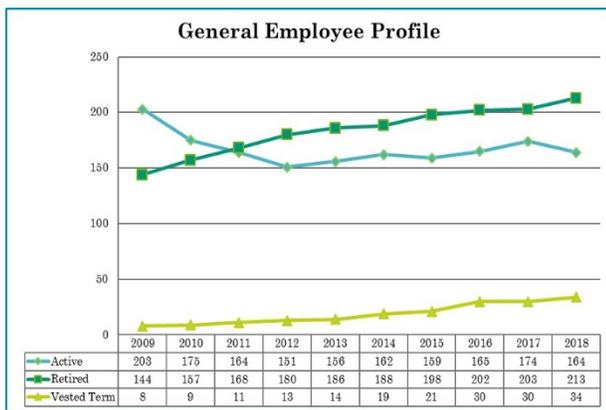
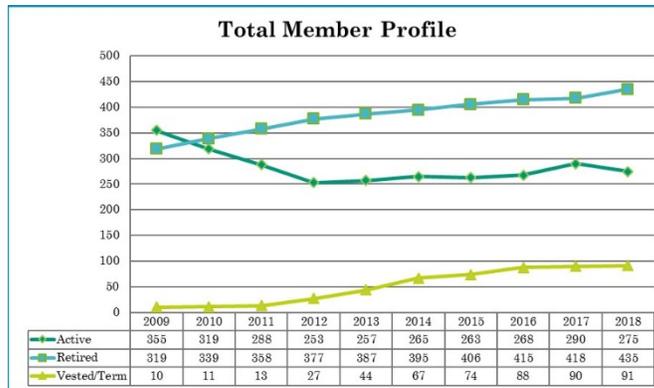


Current assumptions would result in a funded ratio of 96.1% or UAAL of \$13,957,436 as of September 30, 2028, and the worst case stress test results at 3% shows a funded ratio of 72.4% or UAAL of \$104,580,321 at the same point in time compared to the 69.2% funded ratio or a UAAL of \$100,469,731, as of September 30, 2018.

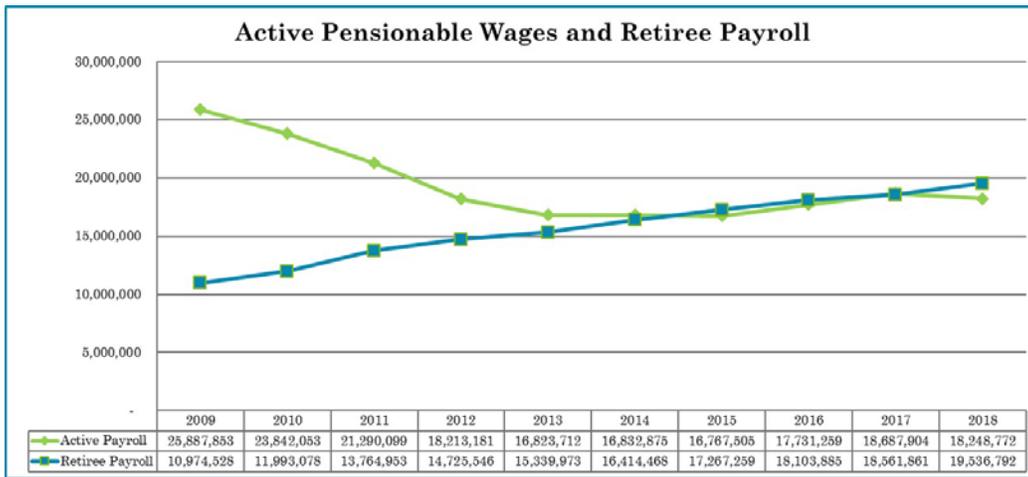
The employer contribution under the current assumptions would result in an \$11,075,661 employer contribution as of September 30, 2028 and the worst case stress test at 3% would result in an employer contribution of \$21,613,623 at the same point in time. The employer contribution for FY20 (actuarial results as of September 30, 2018) is \$15,962,818.

Demographic Information

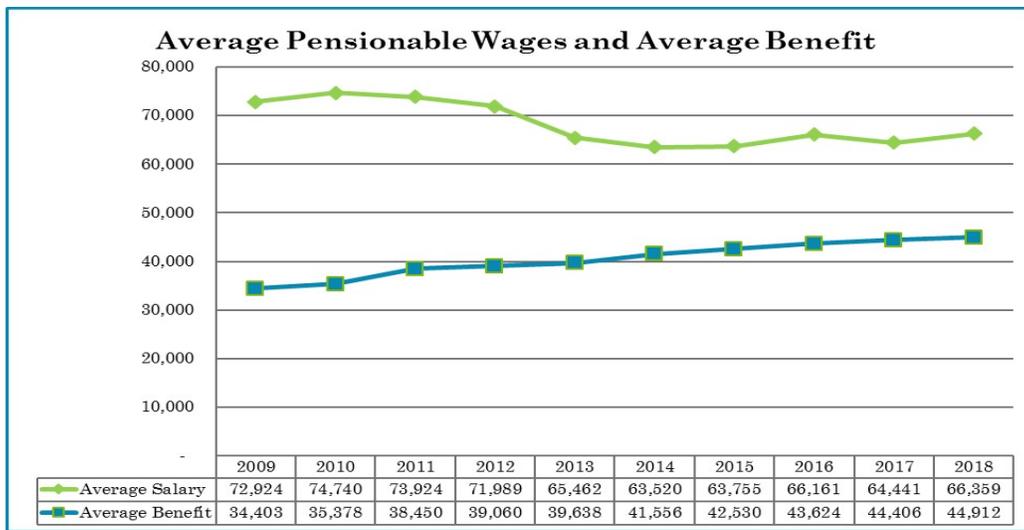
The following charts depict the System membership (Active, Retired and Vested Terminated Members) for the past 10 years. The first chart shows the total membership for all three funds. It is followed by charts depicting the membership for each separate benefit group. Information extracted from the September 30, 2018 Actuarial Report.



The following chart depicts the ten-year trend for total active employee salary and total retiree pension payroll information.



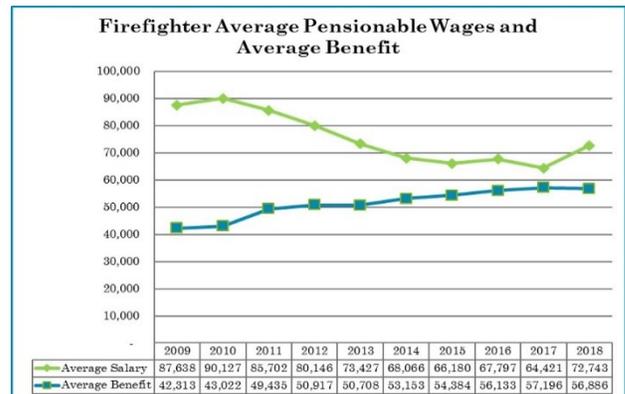
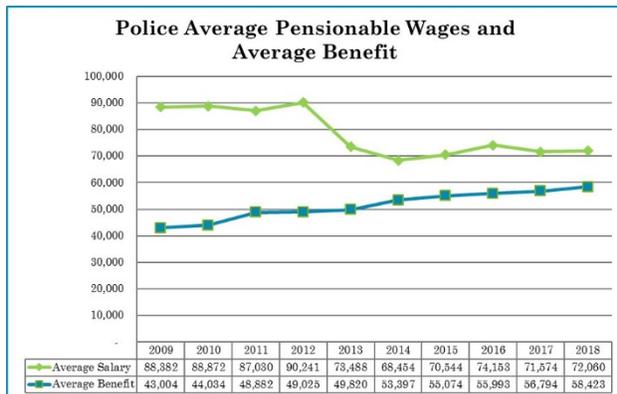
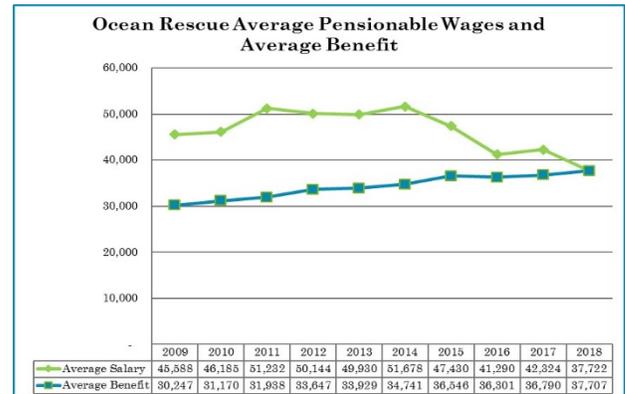
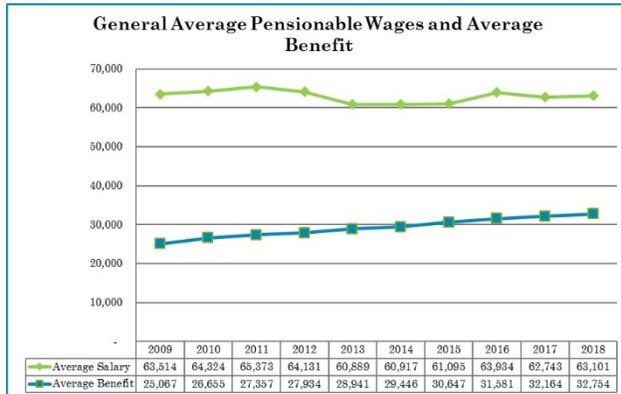
The following chart depicts the ten-year trend for average active salary and average pension benefit for the entire fund.



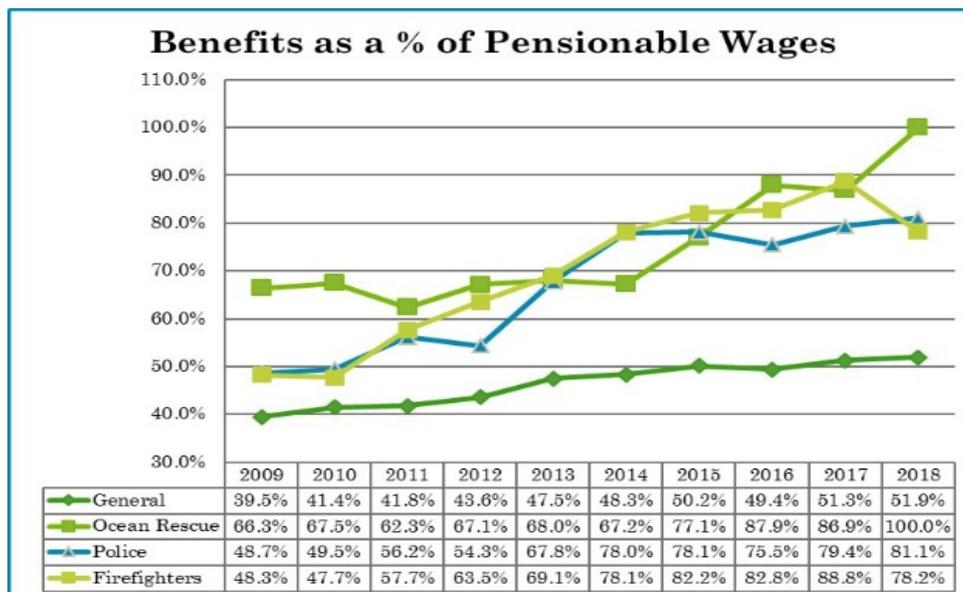
The following chart depicts the ten-year trend of average age at retirement.



The following charts depict the average salary and average benefit for each of the member groups.



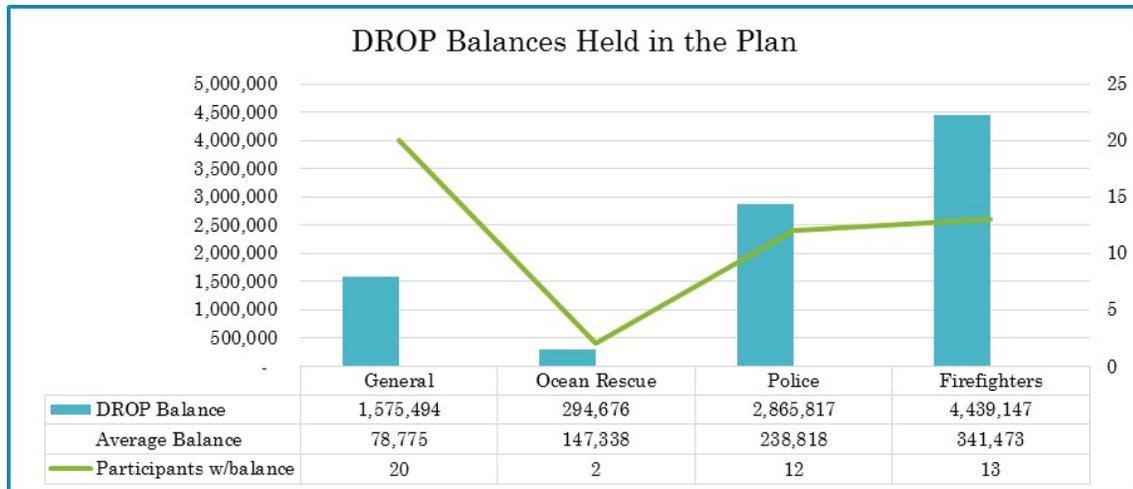
The following chart depicts the ten-year trend of retirement benefits as a percent of pensionable wages.



Demographic Information for the DROP and Share Accounts Held in the Plan

DROP information as of December 31, 2018

| | |
|---|--------------------|
| Total DROP Assets Held In the Plan | \$9,175,134 |
| Total Participants with a Balance | 56 |
| Total Contributing Participants | 41 |
| Average Account Balance | \$185,884 |



Drop Entry Year for Contributing Participants

| | 2014 | 2015 | 2016 | 2017 | 2018 | Total |
|---------------------|------|------|------|------|------|-------|
| General | 3 | 5 | 5 | 3 | 6 | 21 |
| Ocean Rescue | 0 | 1 | 1 | 0 | 0 | 2 |
| Police | 4 | 1 | 3 | 1 | 2 | 9 |
| Firefighters | 4 | 4 | 1 | 0 | 1 | 9 |
| Total | 11 | 11 | 10 | 4 | 9 | 41 |

Firefighter Share Accounts

Firefighter Share Account information as of December 31, 2018

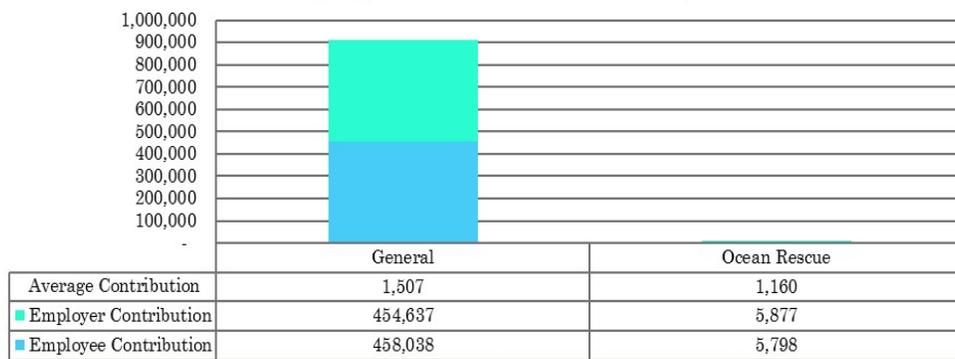
| | |
|--|------------------|
| Total Share Assets Held In the Plan | \$853,423 |
| Total Participants with a Balance | 61 |
| Total Contributing Participants | 0 |
| Average Account Balance | \$13,991 |

Demographic Information for the 401(a) Defined Contribution Plan

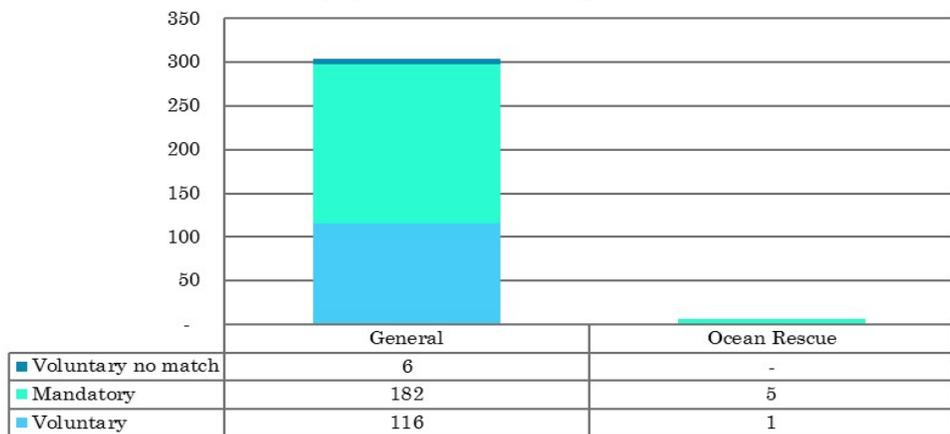
Plan Snapshot as of December 31, 2018 Provided by ICMA-RC

| | |
|--|---------------------|
| Total Assets | \$10,101,190 |
| Total Participants with a Balance | 354 |
| Total Contributing Participants | 187 |
| Average Account Balance | \$28,534 |

Total 401(a) DC Contributions Employee and Employer January 1, 2018 - December 31, 2018



401 (a) DC Participation

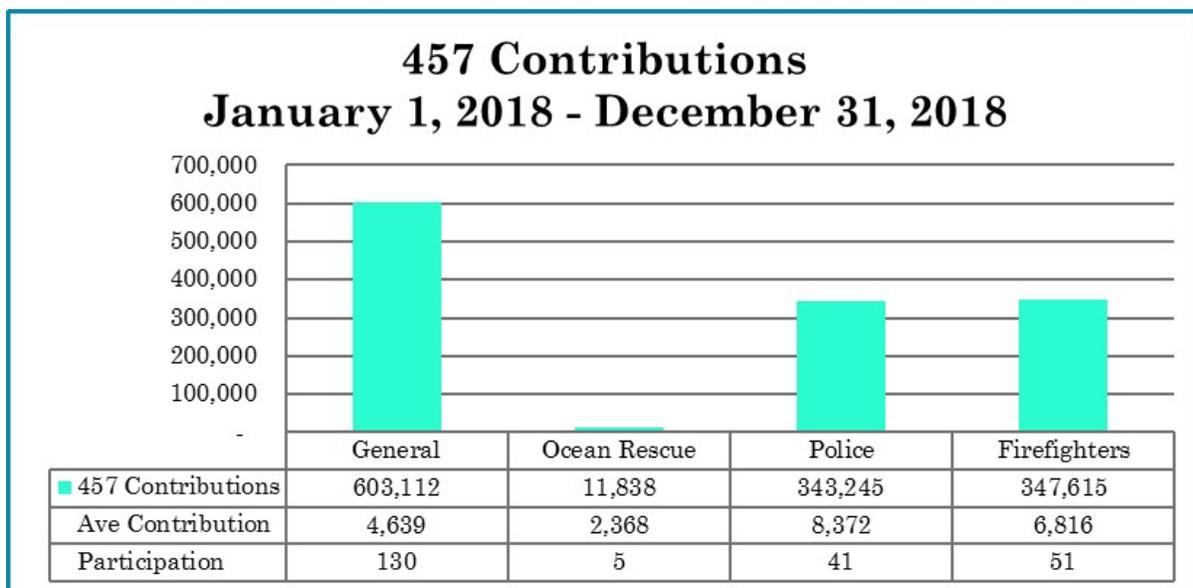


Demographic Information for the 457 Deferred Compensation Plan

Plan Snapshot as of December 31, 2018 Provided by ICMA-RC

| | |
|--|---------------------|
| Total Assets | \$35,081,669 |
| Total Participants with a Balance | 364 |
| Total Contributing Participants | 227 |
| Average Account Balance | \$96,378 |

Above contributions, represent employee contributions only. The Town does not provide matching contributions to the 457 Deferred Compensation Plan.

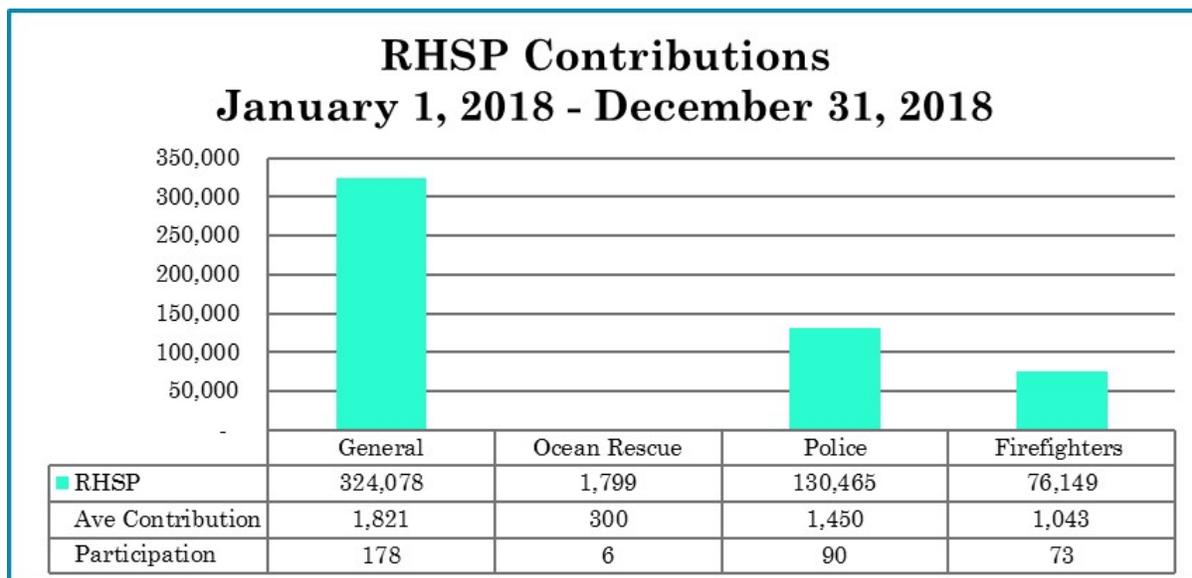


Demographic Information for the Retirement Health Savings Plan (RHSP)

Plan Snapshot as of December 31, 2018 Provided by ICMA-RC

| | |
|--|--------------------|
| Total Assets | \$2,912,955 |
| Total Participants with a Balance | 477 |
| Total Contributing Participants | 347 |
| Average Account Balance | \$6,107 |

Above contributions represent employee contributions only. The Town does not provide matching contributions to the RHSP Plan. RHSP Contributions during the employee's career are based on different formulas for employee groups based on hire dates, and years of service and a percent of base pay. Contributions at retirement consist of a portion of accrued employee sick time and vacation leave balances at the time of retirement.



Demographic Information for Other ICMA-RC Plans

Plan Snapshot for Roth IRA Plan (705765) as of December 31, 2018, Provided by ICMA-RC

| | |
|-----------------------------------|-----------|
| Total Assets | \$422,988 |
| Total Participants with a Balance | 54 |
| Total Contributing Participants | 39 |
| Average Account Balance | \$7,833 |

Plan Snapshot for 401 DROP Plan for General Employees (108334) as of December 31, 2018, Provided by ICMA-RC (Discontinued)

| | |
|-----------------------------------|---------|
| Total Assets | \$9,239 |
| Total Participants with a Balance | 1 |
| Total Contributing Participants | 0 |
| Average Account Balance | \$9,239 |

Plan Snapshot for 401 DROP Plan for Police Officers (108335) as of December 31, 2018, Provided by ICMA-RC (Discontinued)

| | |
|-----------------------------------|----------|
| Total Assets | \$72,837 |
| Total Participants with a Balance | 1 |
| Total Contributing Participants | 0 |
| Average Account Balance | \$72,837 |

Plan Snapshot for 401 Old DROP Plan for Firefighters (108552) as of December 31, 2018, Provided by ICMA-RC (Discontinued)

| | |
|-----------------------------------|----------|
| Total Assets | \$44,821 |
| Total Participants with a Balance | 4 |
| Total Contributing Participants | 0 |
| Average Account Balance | \$11,205 |

Plan Snapshot for 401 Firefighter SHARE Plan (106796) as of December 31, 2018, Provided by ICMA-RC (Discontinued)

| | |
|-----------------------------------|-------------|
| Total Assets | \$2,280,001 |
| Total Participants with a Balance | 46 |
| Total Contributing Participants | 0 |
| Average Account Balance | \$49,565 |

Plan Snapshot for RHS Plan (Discontinued) (800533) as of December 31, 2018, Provided by ICMA-RC

| | |
|-----------------------------------|-----------|
| Total Assets | \$468,696 |
| Total Participants with a Balance | 51 |
| Average Account Balance | \$9,190 |