



RETIREMENT PLAN FOR EMPLOYEES OF THE TOWN OF WILTON

ACTUARIAL VALUATION REPORT

JULY 1, 2020





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### Report Prepared By:

Steve A. Lemanski  
Vice President, Practice Leader, Consulting Actuary  
860.856.2073  
[slemanski@hhconsultants.com](mailto:slemanski@hhconsultants.com)

Brianne Fayed  
Senior Actuarial Analyst  
860.856.2072  
[bfayed@hhconsultants.com](mailto:bfayed@hhconsultants.com)



## Executive Summary

	July 1, 2020	July 1, 2019
<b>Number of members</b>		
Active employees	207	224
Terminated vested members	26	22
Vested in employee contributions only	30	29
Retired, disabled and beneficiaries	265	256
Total	528	531
<b>Covered employee payroll</b>	14,220,259	14,715,130
<b>Average plan salary</b>	68,697	65,693
<b>Actuarial present value of future benefits</b>	148,627,370	145,149,583
<b>Actuarial accrued liability</b>	128,396,878	123,070,376
<b>Plan assets</b>		
Market value of assets	124,112,921	122,334,119
Actuarial value of assets	127,711,241	121,756,346
<b>Unfunded accrued liability</b>	685,637	1,314,030
<b>Funded ratio</b>	99.5%	98.9%
<b>Actuarially determined employer contribution (ADEC)</b>		
Fiscal year ending	2022	2021
ADEC	1,901,548	1,957,101
Underfunding "load"	5%	5%
Total Contribution with "load"	1,996,625	2,054,956



## Valuation Results and Highlights

### Purpose of the Valuation

The purpose of the valuation is to develop the Actuarially Determined Employer Contribution (ADEC).

The ultimate cost of a pension plan is based primarily on the level of benefits promised by the plan. The pension fund's investment earnings serve to reduce the cost of plan benefits and expenses. Thus,

$$\text{Ultimate cost} = \text{Benefits Paid} + \text{Expenses Incurred} - \text{Investment Return} - \text{Employee Contributions}$$

The actuarial cost method distributes this ultimate cost over the working lifetime of current plan participants. By means of this budgeting process, costs are allocated to both past and future years, and a cost is assigned to the current year. The current year's allocated cost, or normal cost, is the building block upon which the actuarially determined employer contribution is developed. The July 1, 2020 valuation produces the contribution for the fiscal year ending 2022.

### Information Available in the Valuation Report

The Executive Summary is intended to emphasize the notable results of the valuation from the perspective of the Plan Sponsor. Supporting technical detail is documented in Results of the Valuation, Supporting Exhibits and Description of Actuarial Methods and Assumptions. A concise summary of the principal provisions of the Plan is outlined in Summary of Plan Provisions.

### Changes Reflected in the Valuation

None.

### Cash Contribution for Fiscal Year Ending 2022

The Town cost is:	2022 Fiscal Year
Police	\$1,124,050
Board of Education	553,228
Library	83,984
Town Hall	54,340
Fire	181,023
Total	<u>\$1,996,625</u>

### Liability Experience During Period Under Review

The plan experienced a net actuarial loss on liabilities of approximately \$20,000 since the prior valuation. This net loss was driven by a loss due to mortality, offset by gains from COLAs, salary increases, and turnover and retirement patterns.



**Asset Experience During Period Under Review**

The plan's assets provided the following rates of return during the past fiscal year:

	2020 Fiscal Year
Market Value Basis	2.3%
Actuarial Value Basis	5.8%

The Actuarial Value of assets, rather than the Market Value, is used to determine plan contributions. The Actuarial Value spreads the asset volatility over 5 years, thereby smoothing out fluctuations that are inherent in the Market Value.

**Assessment and Measurement of Risks**

**Plan Maturity Measurements**

	July 1, 2020	July 1, 2019
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Actuarial accrued liability for members currently in pay status as a percentage of the total actuarial accrued liability	54.7%	54.5%
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- A lower percentage results in greater volatility as the investment return assumption changes.
- A higher percentage results in greater demand on cash due to a proportionately higher percentage of benefits being in pay status.

	July 1, 2020
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Duration of benefit payments using an investment rate of return of 6.875%	14.9 years
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- A higher duration will occur if the plan's percentage of members in pay status decreases. A plan with a higher duration will have a liability that is more sensitive to changes in the investment return assumption.

	July 1, 2020	July 1, 2019
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Ratio of market value of assets to covered payroll	8.7	8.3
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- A higher ratio is more typical of relatively mature plans with a larger percentage of inactive members and may cause more potential contribution volatility as pension fund assets fluctuate.



## Risks to Assess

### Overriding Minimum Contribution

	Fiscal Year Ending 2022
Actuarially determined employer contribution (ADEC)	1,996,625
Overriding minimum contribution (OMC)*	<u>1,988,095</u>
Surplus (deficit) - ADEC vs. OMC	8,530

- A deficit suggests that a plan's current funding policy contribution approach may result in little to no progress being made towards: (1) reducing the plan's unfunded liability; and (2) increasing the plan's funded ratio in the near-term.

\* As defined in "Public Pension Plan Funding Policy" (Society of Actuaries, 2010).

### Estimated Impact of a 5% Reduction in Market Value of Assets

	Fiscal Year Ending 2022
Increase in actuarially determined employer contribution (ADEC)	108,555

- Plans would generally be subject to a larger amortization payment if the market value of assets were 5% smaller. As a result, the ADEC would generally be higher for up to 20 years.

Due to the asset smoothing method, the ADEC will additionally increase by the same amount in each of the next few years. Each of these additional contributions will continue for up to 20 years.

### Estimated Impact of a 1 Year Increase in Life Expectancies

	Fiscal Year Ending 2022
Increase in actuarially determined employer contribution (ADEC)	366,716

- If members live longer than expected, it generally results in larger benefits and/or additional benefit payments made. As a result, the ADEC would generally be higher for up to 20 years.



## Historical Results

<b>Valuation Year Beginning</b>	<b>Investment Return Assumption</b>	<b>Annual Effective Rate of Return on Market Value of Assets</b>	<b>Market Value of Assets as a % of Actuarial Accrued Liability</b>	<b>Benefit Payments as a % of Market Value of Assets</b>
2020	6.875%	N/A	96.7%	N/A
2019	6.875%	2.3%	99.4%	4.9%
2018	6.875%	6.3%	99.2%	4.6%
2017	6.875%	7.3%	98.3%	4.8%
2016	6.875%	12.1%	91.8%	4.7%
2015	6.875%	0.6%	96.7%	4.5%



## Certification

This report presents the results of the July 1, 2020 Actuarial Valuation for Retirement Plan for Employees of the Town of Wilton (the Plan) for the purpose of estimating the funded status of the Plan and determining the Actuarially Determined Employer Contribution (ADEC) for the fiscal year ending June 30, 2022. This report may not be appropriate for any other purpose.

The valuation has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with all applicable Actuarial Standards of Practice.

I certify that the actuarial assumptions and methods that were selected by me and represent my best estimate of anticipated actuarial experience under the Plan.

In preparing this valuation, I have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the Trustee. I have audited neither the employee data nor the financial information, although I have reviewed them for reasonableness.

The results in this valuation report are based on the Plan as summarized in the *Summary of Plan Provisions* section of this report and the actuarial assumptions and methods detailed in the *Description of Actuarial Methods and Assumptions* section of this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as, but not limited to, 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. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

I have no relationship with the employer or the Plan that would impair, or appear to impair, my objectivity in performing the work presented in this report. I am a member of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Steve A. Lemanski, FSA, FCA, MAAA  
Enrolled Actuary 20-05506

April 14, 2021



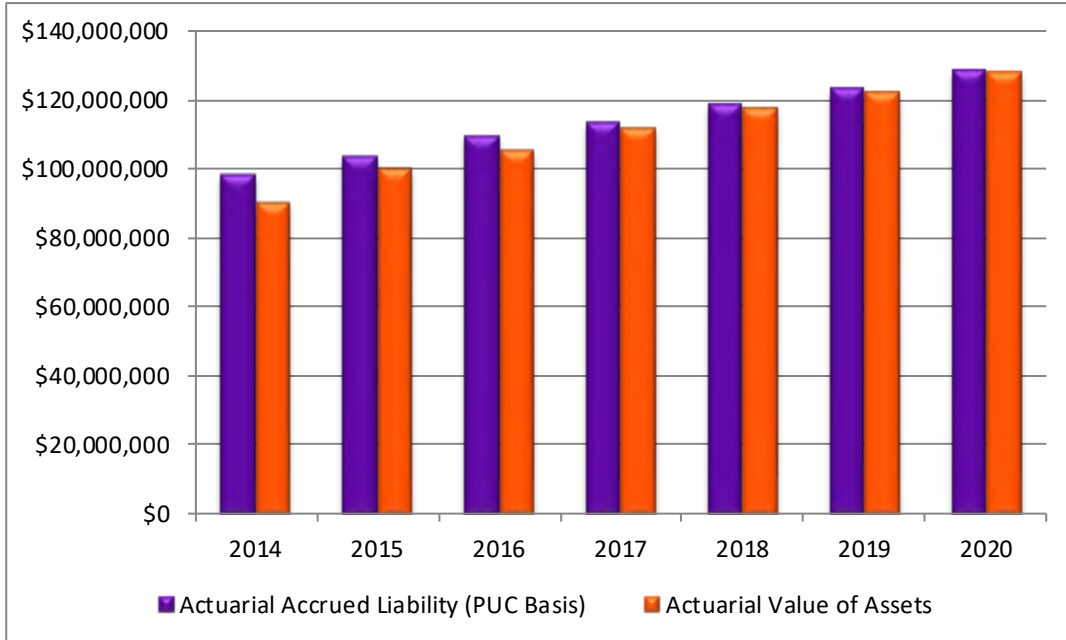


## Development of Unfunded Accrued Liability and Funded Ratio

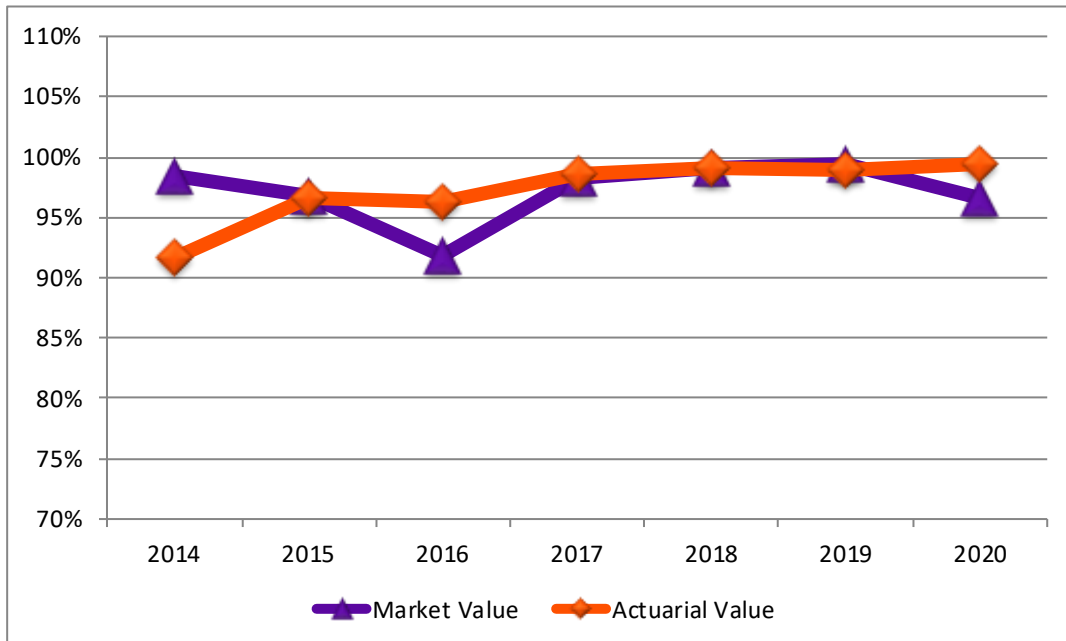
	July 1, 2020	July 1, 2019
Actuarial accrued liability for inactive members		
Retired pensioners	\$61,857,559	\$59,254,257
Disabled pensioners	2,970,789	2,993,217
Beneficiaries in payment status	5,389,078	4,818,204
Terminated vested members	2,791,005	2,319,550
Total	73,008,431	69,385,228
Actuarial accrued liability for active employees	55,388,447	53,685,148
Total actuarial accrued liability	128,396,878	123,070,376
Actuarial value of assets	127,711,241	121,756,346
Unfunded accrued liability	685,637	1,314,030
Funded ratio	99.5%	98.9%



### Actuarial Accrued Liability vs. Actuarial Value of Assets



### Funded Ratio



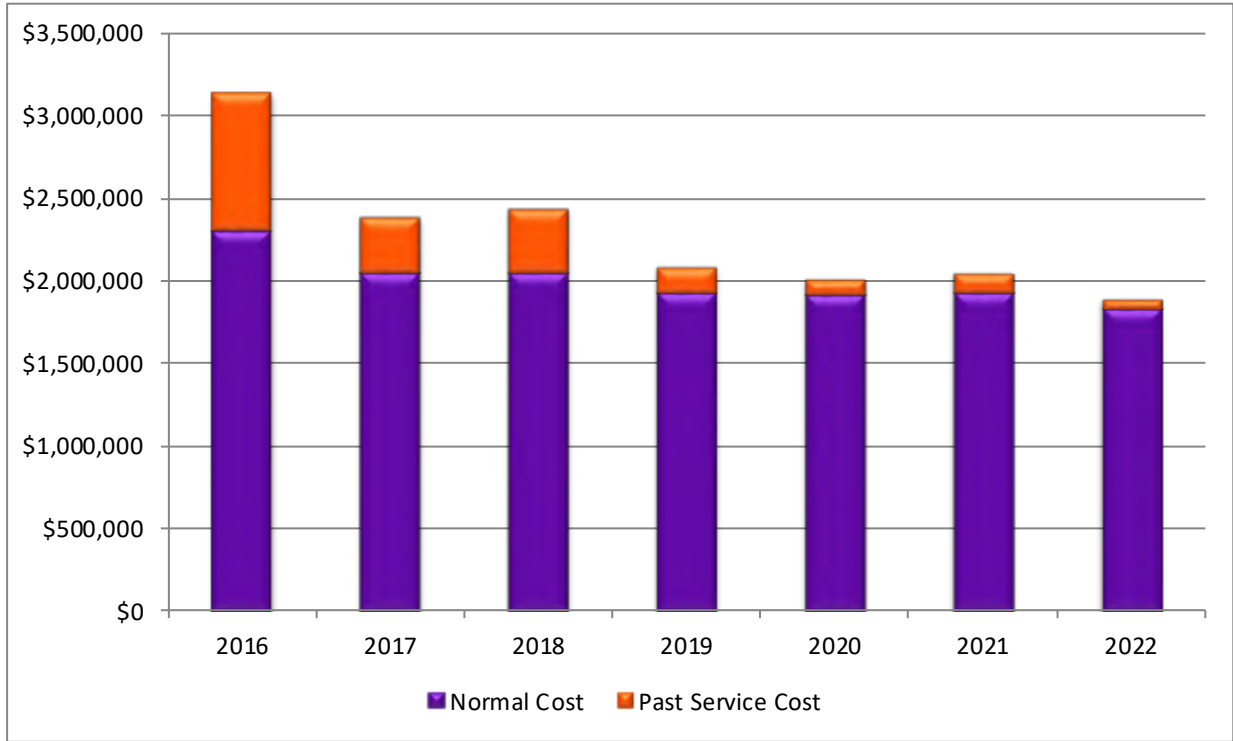


## Determination of Normal Cost and Actuarially Determined Employer Contribution

	July 1, 2020		July 1, 2019	
	Cost	Percent of payroll	Cost	Percent of payroll
Gross normal cost	\$2,521,701	17.2%	\$2,626,921	17.3%
Estimated employee contributions	(955,507)	-6.5%	(991,754)	-6.5%
Estimated administrative expenses	220,000	1.5%	150,000	0.9%
Town's normal cost	1,786,194	12.2%	1,785,167	11.7%
Amortization of unfunded accrued liability	59,969	0.4%	114,931	0.8%
Contribution before adjustment as of the valuation date	1,846,163	12.6%	1,900,098	12.5%
Estimated valuation year payroll for actives not yet at 100% assumed retirement age	14,626,132		15,208,679	
Fiscal year ending	2022		2021	
Adjustment for interest and inflation	55,385		57,003	
Actuarially determined employer contribution	1,901,548		1,957,101	
Underfunding "load"	5%		5%	
Total Contribution with "load"	1,996,625		2,054,956	



### Actuarially Determined Employer Contribution





### Actuarially Determined Employer Contribution per Group

	Police	Board of Education	Library	Town Hall	Fire	Total
Gross normal cost	\$692,401	\$934,059	\$159,222	\$315,400	\$420,619	\$2,521,701
Estimated employee contributions	(260,050)	(316,653)	(49,842)	(111,999)	(216,963)	(955,507)
Estimated administrative expenses	60,407	81,490	13,891	27,516	36,696	220,000
Town's normal cost	492,758	698,896	123,271	230,917	240,352	1,786,194
Actuarial accrued liability	41,935,679	41,011,740	5,199,225	21,064,088	19,186,146	128,396,878
Actuarial value of assets	35,686,480	43,153,838	5,720,758	23,129,741	20,020,424	127,711,241
Unfunded accrued liability	6,249,199	(2,142,098)	(521,533)	(2,065,653)	(834,278)	685,637
Amortization of unfunded accrued liability	546,585	(187,358)	(45,616)	(180,672)	(72,970)	59,969
Contribution before adjustment as of the valuation date	1,039,343	511,538	77,655	50,245	167,382	1,846,163
Estimated valuation year payroll for actives not yet at 100% assumed retirement age	3,370,852	5,798,919	928,264	2,120,600	2,407,497	14,626,132
Town's normal cost as a percentage of payroll	14.6%	12.1%	13.3%	10.9%	10.0%	12.2%
Contribution as a percentage of payroll	30.8%	8.8%	8.4%	2.4%	7.0%	12.6%
Fiscal year ending June 30, 2022						
Adjustment for interest and inflation	31,181	15,346	2,330	1,507	5,021	55,385
Actuarially determined employer contribution	1,070,524	526,884	79,985	51,752	172,403	1,901,548
Underfunding "load"	5%	5%	5%	5%	5%	5%
Total Contribution with "load"	1,124,050	553,228	83,984	54,340	181,023	1,996,625



## Development of Asset Values

Summary of Fund Activity		
	Market Value	Actuarial Value
<b>1. Beginning value of assets July 1, 2019</b>		
Trust assets	\$122,334,119	\$121,756,346
<b>2. Contributions</b>		
Town contributions during year	4,072,104	4,072,104
Employee contributions during year	1,053,980	1,053,980
Total for plan year	5,126,084	5,126,084
<b>3. Disbursements</b>		
Benefit payments during year	5,962,135	5,962,135
Administrative expenses during year	220,236	220,236
Total for plan year	6,182,371	6,182,371
<b>4. Net investment return</b>		
Interest and dividends	2,890,617	N/A
Realized and unrealized gain / (loss)	(23,652)	N/A
Expected return	N/A	8,374,963
Recognized gain / (loss)	N/A	(1,363,781)
Required adjustment due to corridor	N/A	0
Reversal of prior year required adjustment	N/A	0
Investment-related expenses	(31,876)	N/A
Total for plan year	2,835,089	7,011,182
<b>5. Ending value of assets July 1, 2020</b>		
Trust assets: (1) + (2) - (3) + (4)	124,112,921	127,711,241
<b>6. Approximate rate of return</b>	2.3%	5.8%



**Relationship of Actuarial Value to Market Value**

1. Market value 7/1/2020	\$124,112,921
2. Gain / (loss) not recognized in actuarial value 7/1/2020	<u>(3,598,320)</u>
3. Preliminary actuarial value 7/1/2020: (1) - (2)	127,711,241
4. Preliminary actuarial value as a percentage of market value: (3) ÷ (1)	102.9%
5. Gain / (loss) recognized for corridor minimum / maximum	N/A
6. Actuarial value 7/1/2020 after corridor minimum / maximum: (3) + (5)	127,711,241
7. Actuarial value as a percentage of market value: (6) ÷ (1)	102.9%

**Development of Market Value Gain / Loss for 2019-2020 Plan Year**

1. Market value 7/1/2019	\$122,334,119
2. Town contributions	4,072,104
3. Employee contributions	1,053,980
4. Benefit payments	5,962,135
5. Administrative expenses	220,236
6. Expected return at 6.875%	<u>8,374,963</u>
7. Expected value 7/1/2020: (1) + (2) + (3) - (4) - (5) + (6)	129,652,795
8. Market value 7/1/2020	<u>124,112,921</u>
9. Market value gain / (loss) for 2019-2020 plan year: (8) - (7)	(5,539,874)

**Recognition of Gain / Loss in Actuarial Value**

Year	(a) Gain / (loss)	(b) Total recognized as of 7/1/2019	(c) Recognized in current year: 20% of (a)	(d) Total recognized as of 7/1/2020: (b) + (c)	(e) Not recognized as of 7/1/2020: (a) - (d)
2015-2016	(\$6,320,152)	(\$5,056,120)	(\$1,264,032)	(\$6,320,152)	\$0
2016-2017	5,230,723	3,138,435	1,046,145	4,184,580	1,046,143
2017-2018	494,035	197,614	98,807	296,421	197,614
2018-2019	(683,630)	(136,726)	(136,726)	(273,452)	(410,178)
2019-2020	(5,539,874)	0	<u>(1,107,975)</u>	(1,107,975)	<u>(4,431,899)</u>
Total			(1,363,781)		(3,598,320)



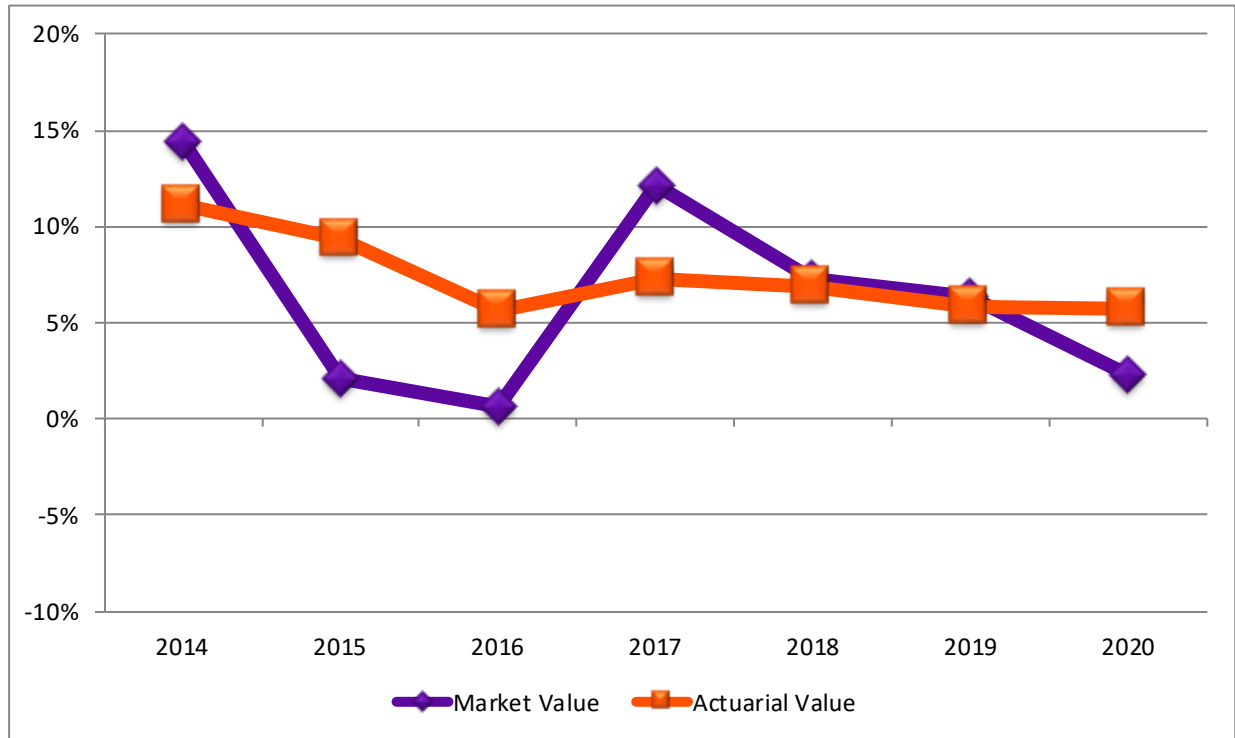
<b>Rate of Return on Market Value of Assets</b>				
<b>Period Ending</b>	<b>Average Annual Effective Rate of Return</b>			
	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
<b>June 30</b>				
2011	21.1%	4.5%	4.2%	5.2%
2012	0.6%	11.0%	1.5%	5.7%
2013	12.4%	11.0%	5.2%	6.5%
2014	14.4%	9.0%	11.9%	6.5%
2015	2.1%	9.5%	9.8%	5.9%
2016	0.6%	5.5%	5.8%	5.0%
2017	12.1%	4.8%	8.2%	4.8%
2018	7.3%	6.6%	7.2%	6.2%
2019	6.3%	8.5%	5.6%	8.7%
2020	2.3%	5.3%	5.6%	7.7%

<b>Rate of Return on Actuarial Value of Assets</b>				
<b>Period Ending</b>	<b>Average Annual Effective Rate of Return</b>			
	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
<b>June 30</b>				
2011	4.3%	4.4%	6.0%	5.4%
2012	3.1%	3.0%	5.2%	5.3%
2013	6.0%	4.5%	4.5%	5.0%
2014	11.1%	6.7%	5.1%	5.8%
2015	9.3%	8.8%	6.7%	6.4%
2016	5.6%	8.6%	7.0%	6.5%
2017	7.3%	7.4%	7.8%	6.5%
2018	6.9%	6.6%	8.0%	6.2%
2019	5.8%	6.7%	7.0%	6.1%
2020	5.8%	6.2%	6.3%	6.5%





### Actual Rate of Return on Assets





## Target Allocation and Expected Rate of Return July 1, 2020

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*	Weighting
Core Fixed Income	21.00%	1.25%	0.26%
Global Fixed Income	5.00%	0.75%	0.04%
High Yield Fixed Income	2.50%	4.00%	0.10%
U.S. Large Cap	22.00%	5.25%	1.16%
U.S. Small Cap	8.00%	5.75%	0.46%
International Developed	20.00%	5.75%	1.15%
Emerging Markets	10.00%	7.75%	0.78%
Inflation Protection Fixed Income	1.50%	0.75%	0.01%
Private Debt	5.00%	4.75%	0.24%
Real Estate	5.00%	5.75%	0.29%
	100.00%		4.49%
Long-Term Inflation Expectation			2.60%
Long-Term Expected Nominal Return			7.09%

*\*Long-Term Real Returns are provided by HHIA. The returns are geometric means.*

The long-term expected rate of return on pension plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return are developed. Best estimates of the real rates of return for each major asset class are included in the pension plan's target asset allocation.

The information above is based on geometric means and does not reflect additional returns through investment selection, asset allocation and rebalancing. An expected rate of return of 6.875% was used.



## Amortization of Unfunded Liability

Schedule of Amortization Bases				
	Date established	Amortization installment	Years remaining	Present value of remaining installments as of July 1, 2020
2020 base	July 1, 2020	59,969	20	685,637



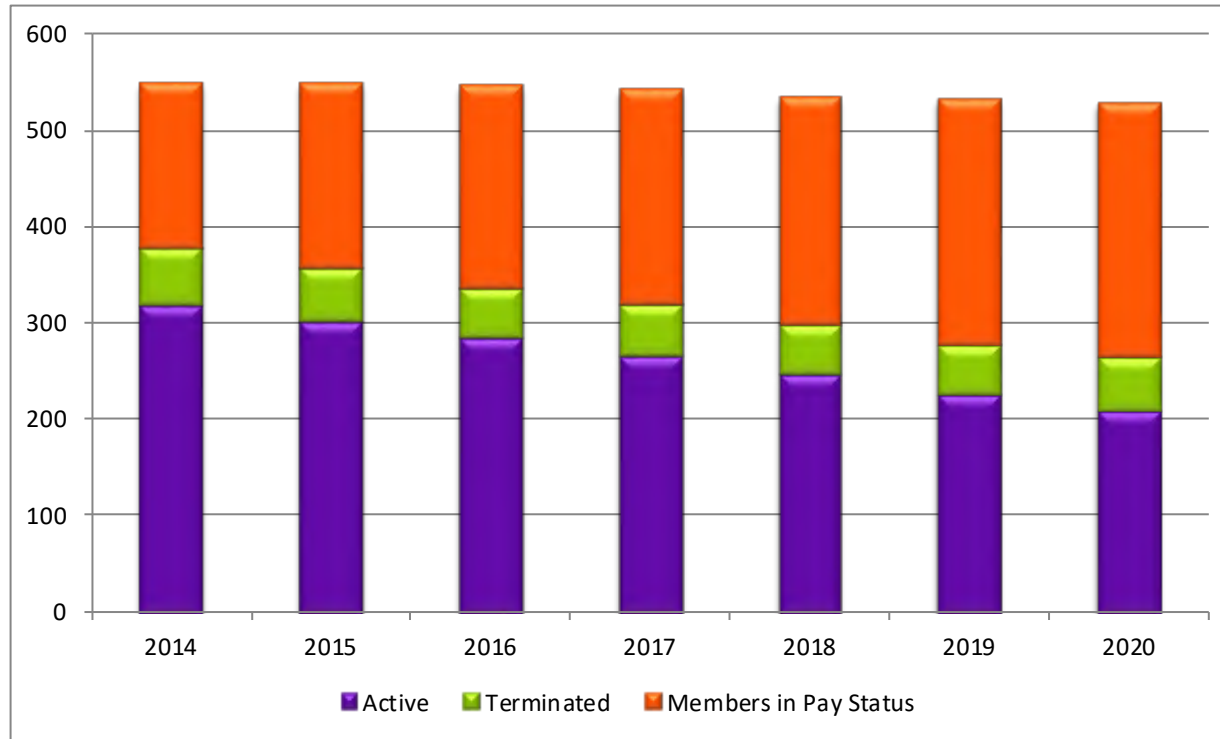
## Member Data

The data reported by the Plan Sponsor for this valuation includes 207 active employees who met the Plan's minimum age and service requirements as of July 1, 2020.

Member Data							
	Active	Terminated vested	Due refund of contributions	Retirees	Disabilities	Beneficiaries	Total
<b>Total members July 1, 2019</b>	224	22	29	228	5	23	531
Adjustments	-1	+1	0	+1	0	0	+1
Retirements	-9	-1	N/A	+10	N/A	N/A	0
Disabilities	0	N/A	N/A	N/A	0	N/A	0
Terminations							
Vested	-5	+5	N/A	N/A	N/A	N/A	0
Lump sum payments	0	-1	0	N/A	N/A	N/A	-1
Due contributions only	-1	N/A	+1	N/A	N/A	N/A	0
Deaths							
With death benefit	-1	0	0	-2	0	0	-3
Without death benefit	0	0	0	-3	0	0	-3
Transfers	0	0	0	N/A	N/A	N/A	0
Rehires	0	0	0	N/A	N/A	N/A	0
New beneficiaries	N/A	N/A	N/A	N/A	N/A	+3	+3
New entrants	0	N/A	0	N/A	N/A	N/A	0
<b>Total members July 1, 2020</b>	207	26	30	234	5	26	528



### Member Counts by Status





<b>Member Data</b>						
	<b>Active</b>	<b>Terminated vested</b>	<b>Due refund of contributions</b>	<b>Retirees</b>	<b>Disabilities</b>	<b>Beneficiaries</b>
<b>Average age</b>						
July 1, 2019	54.6	55.7	46.3	72.1	62.4	73.1
July 1, 2020	55.3	56.4	46.4	72.3	63.4	73.7
<b>Average service</b>						
July 1, 2019	16.6	N/A	N/A	N/A	N/A	N/A
July 1, 2020	17.6	N/A	N/A	N/A	N/A	N/A
<b>Covered employee payroll</b>						
July 1, 2019	\$14,715,130	N/A	N/A	N/A	N/A	N/A
July 1, 2020	14,220,259	N/A	N/A	N/A	N/A	N/A
<b>Total annual benefits</b>						
July 1, 2019	N/A	\$226,288	N/A	\$4,714,326	\$194,982	\$393,585
July 1, 2020	N/A	280,110	N/A	4,925,683	196,932	442,927



Member Data - Police							
	Active	Terminated vested	Due refund of contributions	Retirees	Disabilities	Beneficiaries	Total
<b>Total members July 1, 2019</b>	35	0	1	34	2	6	78
Adjustments	0	0	0	+1	0	0	+1
Retirements	-2	0	N/A	+2	N/A	N/A	0
Disabilities	0	N/A	N/A	N/A	0	N/A	0
Terminations							
Vested	0	0	N/A	N/A	N/A	N/A	0
Lump sum payments	0	0	0	N/A	N/A	N/A	0
Due contributions only	-1	N/A	+1	N/A	N/A	N/A	0
Deaths							
With death benefit	0	0	0	0	0	0	0
Without death benefit	0	0	0	0	0	0	0
Transfers	0	0	0	N/A	N/A	N/A	0
Rehires	0	0	0	N/A	N/A	N/A	0
New beneficiaries	N/A	N/A	N/A	N/A	N/A	0	0
New entrants	0	N/A	0	N/A	N/A	N/A	0
<b>Total members July 1, 2020</b>	32	0	2	37	2	6	79



Member Data - Board of Education							
	Active	Terminated vested	Due refund of contributions	Retirees	Disabilities	Beneficiaries	Total
<b>Total members July 1, 2019</b>	119	17	27	133	0	10	306
Adjustments	-1	+1	0	0	0	0	0
Retirements	-5	-1	N/A	+6	N/A	N/A	0
Disabilities	0	N/A	N/A	N/A	0	N/A	0
Terminations							
Vested	-4	+4	N/A	N/A	N/A	N/A	0
Lump sum payments	0	0	0	N/A	N/A	N/A	0
Due contributions only	0	N/A	0	N/A	N/A	N/A	0
Deaths							
With death benefit	-1	0	0	0	0	0	-1
Without death benefit	0	0	0	-2	0	0	-2
Transfers	0	0	0	N/A	N/A	N/A	0
Rehires	0	0	0	N/A	N/A	N/A	0
New beneficiaries	N/A	N/A	N/A	N/A	N/A	+1	+1
New entrants	0	N/A	0	N/A	N/A	N/A	0
<b>Total members July 1, 2020</b>	108	21	27	137	0	11	304





Member Data - Library							
	Active	Terminated vested	Due refund of contributions	Retirees	Disabilities	Beneficiaries	Total
<b>Total members July 1, 2019</b>	13	1	0	14	0	1	29
Adjustments	0	0	0	0	0	0	0
Retirements	0	0	N/A	0	N/A	N/A	0
Disabilities	0	N/A	N/A	N/A	0	N/A	0
Terminations							
Vested	-1	+1	N/A	N/A	N/A	N/A	0
Lump sum payments	0	0	0	N/A	N/A	N/A	0
Due contributions only	0	N/A	0	N/A	N/A	N/A	0
Deaths							
With death benefit	0	0	0	0	0	0	0
Without death benefit	0	0	0	-1	0	0	-1
Transfers	0	0	0	N/A	N/A	N/A	0
Rehires	0	0	0	N/A	N/A	N/A	0
New beneficiaries	N/A	N/A	N/A	N/A	N/A	0	0
New entrants	0	N/A	0	N/A	N/A	N/A	0
<b>Total members July 1, 2020</b>	12	2	0	13	0	1	28



Member Data - Town Hall							
	Active	Terminated vested	Due refund of contributions	Retirees	Disabilities	Beneficiaries	Total
<b>Total members July 1, 2019</b>	31	3	0	33	0	3	70
Adjustments	0	0	0	0	0	0	0
Retirements	-2	0	N/A	+2	N/A	N/A	0
Disabilities	0	N/A	N/A	N/A	0	N/A	0
Terminations							
Vested	0	0	N/A	N/A	N/A	N/A	0
Lump sum payments	0	0	0	N/A	N/A	N/A	0
Due contributions only	0	N/A	0	N/A	N/A	N/A	0
Deaths							
With death benefit	0	0	0	-2	0	0	-2
Without death benefit	0	0	0	0	0	0	0
Transfers	0	0	0	N/A	N/A	N/A	0
Rehires	0	0	0	N/A	N/A	N/A	0
New beneficiaries	N/A	N/A	N/A	N/A	N/A	+2	+2
New entrants	0	N/A	0	N/A	N/A	N/A	0
<b>Total members July 1, 2020</b>	29	3	0	33	0	5	70



Member Data - Fire							
	Active	Terminated vested	Due refund of contributions	Retirees	Disabilities	Beneficiaries	Total
<b>Total members July 1, 2019</b>	26	1	1	14	3	3	48
Adjustments	0	0	0	0	0	0	0
Retirements	0	0	N/A	0	N/A	N/A	0
Disabilities	0	N/A	N/A	N/A	0	N/A	0
Terminations							
Vested	0	0	N/A	N/A	N/A	N/A	0
Lump sum payments	0	-1	0	N/A	N/A	N/A	-1
Due contributions only	0	N/A	0	N/A	N/A	N/A	0
Deaths							
With death benefit	0	0	0	0	0	0	0
Without death benefit	0	0	0	0	0	0	0
Transfers	0	0	0	N/A	N/A	N/A	0
Rehires	0	0	0	N/A	N/A	N/A	0
New beneficiaries	N/A	N/A	N/A	N/A	N/A	0	0
New entrants	0	N/A	0	N/A	N/A	N/A	0
<b>Total members July 1, 2020</b>	26	0	1	14	3	3	47



## Description of Actuarial Methods

### Asset Valuation Method

The Actuarial Value of assets used in the development of plan contributions phases in the recognition of differences between the actual return on Market Value and expected return on Market Value over a 5-year period at 20% per year.

### Actuarial Cost Method

Changes in Actuarial Cost Method: None.

Description of Current Actuarial Cost Method: Projected Unit Credit

Normal Cost: Under this method, the normal cost equals the total present value of the benefits accruing for all members during the upcoming year, increased to reflect salaries projected to the assumed retirement date.

Unfunded Accrued Liability: The actuarial accrued liability equals the present value of all benefits accrued to date, increased to reflect salaries for all active members. The actuarial accrued liability is reduced by plan assets to develop the unfunded accrued liability. This amount is amortized over 20 years on an open basis.

Experience Gains and Losses: All experience gains and losses (the financial effect of the difference between the actual experience during the prior period and the result expected by the actuarial assumptions for that prior period) appear directly in the actuarial accrued liability and are amortized at the same rate the plan is amortizing the remaining unfunded accrued liability.



## Description of Actuarial Assumptions

### Actuarial Assumptions as of July 1, 2020

#### Mortality

RP-2014 Adjusted to 2006 Total Dataset Mortality Table projected to measurement date with Scale MP-2018.

#### Mortality Improvement

Projected to date of decrement using Scale MP-2018 (generational).

#### Interest

6.875% per year.

#### Payroll Growth

3.50%.

#### Inflation

2.60%.

#### Retirement Age

##### Police Retirement Probability

Age	<30 Yrs. Svc.	> 30 Yrs. Svc.
<45	2.5%	0.0%
45-49	15.0%	5.0%
50-54	10.0%	25.0%
55-59	5.0%	10.0%
60-64	10.0%	10.0%
65	100.0%	100.0%

##### Plan 3

Age	Retirement Probability
<55	0.0%
55-59	6.0%
60-64	6.0%
65	30.0%
66-74	15.0%
75-78	33.3%
79	100.0%



**Retirement Age (cont.)**

Fire

Age	Retirement Probability
<50	5.0%
50-54	10.0%
55-59	10.0%
60-61	20.0%
62-64	10.0%
65	100.0%

**Salary Scale**

Police/Fire Salary Scale

Service	Police	Fire
0	8.50%	8.00%
1	8.50%	8.00%
2	8.50%	8.00%
3	8.50%	8.00%
4	8.50%	8.00%
5	8.50%	8.00%
6	8.50%	3.00%
7	3.00%	

Service	Plan 3 Salary Scale*
1	5.50%
2	5.50%
3	5.50%
4	5.50%
5	5.50%
6	5.50%
7	5.50%
8	3.00%

\* Board of Ed uses 3.50% salary scale for all service.

No future salary increases are assumed when computing the value of either the accrued or vested benefits.

**Cost of Living Increases**

Pension benefits to retirees are assumed to increase by 2.5% each year.



## Turnover

### Police/Fire Turnover

Age	Male and Female
<30	5.00%
30-34	3.75%
35-39	2.50%
40-44	1.50%
45-49	0.75%
50+	0.00%

### Non-Certified Board of Education Turnover

Service	Male and Female
≤ 1	13.00%
2	12.00%
3	8.00%
4	7.00%
5-9	5.00%
10-20	2.50%

### Town/Library/School Lunch Turnover

Service	Male and Female
≤ 4	0.00%
5-20	1.50%

## Spouse's and Disability Benefits

No service connected deaths are assumed to occur during the year. Actuarial liabilities are costed explicitly for non-service connected death benefits.

Service connected disabilities are assumed to occur at the following (sample) rates:

Age	Rate
30	0.00064
35	0.00098
40	0.00158
45	0.00259
50	0.00448

The actuarial assumptions shown above are based on the results of an actuarial experience study for the period July 1, 2005 to June 30, 2015.

## Expenses

An estimate of actual administrative expenses to be paid from the plan will be included in the annual contribution (investment expenses are deducted from investment return of the fund and are not included in administrative expenses). The estimated expenses for the 2020-2021 year are \$220,000.



### Summary of Principal Provisions

	Plan 1 - Police	Plan 3 - Other Town Employees	Plan 4 - Fire Fighters												
Eligibility:	<p>Full-time employee, customarily employed for more than 20 hours per week and more than 5 months per year, and not covered by any other non-governmental retirement plan contributed to by State funds.</p> <p>Police employees become active participants on their date of employment.</p> <p>Employees hired or rehired on or after April 2, 2015 are not eligible to participate in the plan.</p>	<p>Full-time employee, customarily employed for more than 20 hours per week and more than 5 months per year, and not covered by any other non-governmental retirement plan contributed to by State funds.</p> <p>Employees hired or rehired after the date indicated below are not eligible to participate in the plan:</p> <table border="0"> <thead> <tr> <th><u>Union</u></th> <th><u>Effective Date</u></th> </tr> </thead> <tbody> <tr> <td>Non-Union</td> <td>July 1, 2007</td> </tr> <tr> <td>AFSCME</td> <td>July 1, 2007</td> </tr> <tr> <td>Library Assoc.</td> <td>June 1, 2009</td> </tr> <tr> <td>BOE Custodians</td> <td>July 1, 2010</td> </tr> <tr> <td>BOE Discretionary and WAESCA</td> <td>July 1, 2011</td> </tr> </tbody> </table>	<u>Union</u>	<u>Effective Date</u>	Non-Union	July 1, 2007	AFSCME	July 1, 2007	Library Assoc.	June 1, 2009	BOE Custodians	July 1, 2010	BOE Discretionary and WAESCA	July 1, 2011	<p>Full-time employee, customarily employed for more than 20 hours per week and more than 5 months per year, and not covered by any other non-governmental retirement plan contributed to by State funds.</p> <p>Fire Fighter employees become active participants on their date of employment.</p>
<u>Union</u>	<u>Effective Date</u>														
Non-Union	July 1, 2007														
AFSCME	July 1, 2007														
Library Assoc.	June 1, 2009														
BOE Custodians	July 1, 2010														
BOE Discretionary and WAESCA	July 1, 2011														
Normal Retirement: Eligibility:	<p>Age requirement:</p> <ul style="list-style-type: none"> <li>55 prior to July 1, 1993</li> <li>54 effective July 1, 1993</li> <li>53 effective July 1, 1994</li> <li>52 effective July 1, 1995</li> <li>51 effective July 1, 1996</li> <li>50 effective July 1, 1997</li> <li>48 effective July 1, 2005</li> </ul> <p>Service requirement: 20 years</p>	<p>Age requirement: Age 65.</p> <p>Service requirement: 10 years for Town and Library Members, alternative eligibility of Rule of 80, effective July 1, 2002 for Board of Education – Discretionary and WAESCA – effective July 1, 2006 and for Board of Education Custodians – effective July 1, 2013).</p> <p>Effective July 1, 2011, Board of Education and Discretionary and WAESCA have a 5 year service requirement.</p>	<p>Age requirement:</p> <ul style="list-style-type: none"> <li>Age 50 effective July, 1997 and if DOH &lt; July 1, 2015</li> <li>Age 52 if DOH ≥ July 1, 2015</li> </ul> <p>Service requirement:</p> <ul style="list-style-type: none"> <li>20 prior to July 1, 1993</li> <li>21 effective July 1, 1993</li> <li>22 effective July 1, 1994</li> <li>23 effective July 1, 1995</li> <li>24 effective July 1, 1996</li> <li>25 effective July 1, 1997</li> </ul>												





	Plan 1 - Police	Plan 3 - Other Town Employees	Plan 4 - Fire Fighters
Normal Retirement (continued):		<p>Part III - A:</p> <p>As of June 30, 1986, there will be no further accruals under Part III-A. Commencing July 1, 1986, Part III-A Members will accrue benefits for all service as provided by Part III-B, with the final benefit reduced by an offset reflecting Part III-A Membership through June 30, 1986. The contribution requirements of Part III-B will also become effective for former Part III-A Members as of that date.</p>	
Benefit:	<p>2.5% of Average Annual Salary for each year of Credited Service. Average Annual Salary is defined as the highest consecutive three-year average Compensation within the last 10 years preceding Retirement date.</p> <p>The maximum benefit is 76% of Average Annual Salary or maximum 30.4 years of Credited Service.</p> <p>Members employed on September 17, 2014, including members who have retired through April 8, 2015, shall be credited with an additional 2 years of credited service solely for purposes of determining the monthly Retirement Allowance.</p>	<p>2.0% of Average Annual Salary (for Town and Library Members, 2.25% effective July 1, 2002, for Board of Education Discretionary and WAESCA, effective July 1, 2006, and for Board of Education Custodians effective July 1, 2013) for each year of Credited Service. Average Annual Salary is defined as the average of the highest consecutive 4 years Compensation within the last 10 years preceding the earlier of Retirement or the cessation of contributions upon completion of 30 years of Credited Service.</p> <p>The maximum benefit is 60.0% (67.5% for Town and Library Members effective July 1, 2002, for Board of Education Discretionary and WAESCA, effective July 1, 2006, and for Board of Education Custodians effective July 1, 2013) of Average Annual Salary or maximum 30 years of Credited Service.</p>	<p>2.0% of Average Annual Salary for each year of service through September 30, 1979 plus 2.5% of Average Annual Salary for each year of Credited Service thereafter. For participants hired on or after 7/1/2015, 2.25% of Average Annual Salary for each year of Credited Service. Average Annual Salary is defined as the highest consecutive 3 year (effective July 1, 2003) or 4 year average (for dates of hire on or after 7/1/2015) average Base Contributable Compensation, which effective July 1, 2002 includes holiday pay and effective July 1, 2003 includes longevity pay and effective July 1, 2008 includes EMT stipend, within the last 10 years preceding Retirement.</p> <p>The maximum benefit is 71.25% of Average Annual Salary for dates of hire prior to 7/1/2015. The maximum benefit is 67.50% of Average Annual Salary for dates of hire on or after 7/1/2015.</p>



	Plan 1 - Police	Plan 3 - Other Town Employees	Plan 4 - Fire Fighters
Early Retirement: Eligibility:	Age requirement: None Service requirement: 15 years	Age requirement: 55 Service requirement: 10 years Effective July 1, 2011, Board of Education and Discretionary and WAESCA have 5 year service requirement or meets the Rule of 65.  For Town and Library Members, effective July 1, 2002, for Board of Education Discretionary and WAESCA, effective July 1, 2006, and for Board of Education Custodians effective July 1, 2013: Age 55 and meets the Rule of 65.	Age requirement: 45 Service requirement: 10 years
Benefit:	Normal pension reduced by appropriate plan factors.	Normal pension reduced by appropriate plan factors.  For Town and Library Members, effective July 1, 2002, for Board of Education Discretionary and WAESCA, effective July 1, 2006, and for Board of Education Custodians effective July 1, 2012: Normal pension reduced 3% for each year by which the sum of age and years of Credited Service is less than 80.	Normal pension reduced by appropriate plan factors.
Vesting:	Age requirement: None Service requirement: 10 years Amount: Normal pension accrued, payable at normal retirement age. Reduced benefit for payment prior to normal retirement age, for those Members eligible to elect early retirement.	Same for all but Board of Education WAESCA and Discretionary – effective July 1, 2011 service requirement is 5 years.	Same.



	Plan 1 - Police	Plan 3 - Other Town Employees	Plan 4 - Fire Fighters
Termination Benefit:	Return of employee contributions plus interest if termination occurs prior to completing 10 years of Credited Service. Otherwise accrued benefit is payable at normal retirement age or reduced benefit if employee has reached early retirement age at termination, or a refund of contributions plus interest if employee terminates vested but not yet eligible to receive a Retirement benefit.	Return of employee contributions plus interest if termination occurs prior to completing 10 years of Credited Service (5 years for Board of Education Discretionary and WAESCA effective July 1, 2011). Otherwise accrued benefit is payable at Normal Retirement Age or reduced benefit at early retirement age, or a refund of contributions plus interest if employee terminates vested but not yet eligible to receive a Retirement benefit plus Members may elect a refund of employee contributions with interest at retirement age and receive a monthly benefit reduced for the value of the payout.	Same as Police.
Pre-Retirement Death Benefit:			
<i>Service Connected:</i>			
Eligibility	Age requirement: None	Age requirement: None	Age requirement: None
Benefit:	Service requirement: None If no dependent spouse or dependent children, benefit is \$2,000 plus employee contributions with interest, payable immediately. If Member has dependent spouse, annual benefit is 50% of salary payable at age 55. If Member has dependent children under age 18, benefit will be payable immediately until children reach age 18 when it will cease and resume when spouse reaches age 55.	Service requirement: None/ 10 years If no dependent spouse or dependent children benefit is \$2,000 plus employee contributions with interest. If Member is age 55 with 10 years of service (5 years for Board of Education WAESCA and Discretionary) and has dependent spouse, spouse can elect either life annuity of 50% of accrued benefits or lump sum benefit equal to \$2,000 plus employee contributions with interest. Benefit to spouse will cease at death or remarriage.	Service requirement: None If no dependent spouse or dependent children, \$2,000 plus employee contributions with interest, payable immediately. If Member has a dependent spouse and or children, the greater of an annual benefit of 50% of Average Annual Salary or 100% of the accrued benefit payable immediately to the spouse, ceasing on death or remarriage, payable to children under 18 if no surviving spouse.



	Plan 1 - Police	Plan 3 - Other Town Employees	Plan 4 - Fire Fighters												
<i>Non-Service Connected:</i>															
Eligibility:	Age requirement: None	Age requirement: None	Age requirement: None												
	Service requirement: None/ 10 years	Service requirement: None/ 10 years	Service requirement: None/ 10 years												
Benefit:	If less than 10 years of service or unmarried, \$2,000 plus employee contributions with interest, payable immediately. If 10 years or more of service and Member is married, surviving spouse's benefit is 50% of the benefit that would have been payable to the participant if the participant had: (1) terminated immediately before death, and (2) elected a 50% joint and survivor annuity deferred to early or normal retirement date	If less than 10 years of service or unmarried, \$2,000 plus employee contributions with interest, payable immediately. If 10 years or more of service and Member is married, surviving spouse's benefit is 50% of the benefit that would have been payable to the participant if the participant had: (1) terminated immediately before death, and (2) elected a 50% joint and survivor annuity deferred to early or normal retirement date.	If less than 10 years of service or unmarried, \$2,000 plus employee contributions with interest, payable immediately. If 10 years or more of service and Member is married, surviving spouse's benefit is 50% of the benefit that would have been payable to the participant if the participant had: (1) terminated immediately before death, and (2) elected a 50% joint and survivor annuity deferred to early or normal retirement date.												
Post-Retirement Death Benefit:	Return of employee contributions plus interest, less any retirement benefits paid.	Return of employee contributions plus interest, less any retirement benefits paid.	Return of employee contributions plus interest, less any retirement benefits paid.												
Normal Form of Benefit:	Life Annuity	Life Annuity	Life Annuity												
Employee Contribution Rate:	8.00% of annual base compensation.  8.25% of annual base compensation, effective July 1, 2018.	3.5% of annual base compensation (6.0% for Town and Library Members effective July 1, 2002, Board of Education Discretionary & WAESCA, effective July 1, 2006, and for Board of Education Custodians effective July 1, 2012).	The following % of annual base compensation: <table border="0" style="margin-left: 20px;"> <tr> <td>7/1/03 – 6/30/08</td> <td>7.5%</td> </tr> <tr> <td>7/1/08 – 6/30/09</td> <td>8.0%</td> </tr> <tr> <td>7/1/09 – 6/30/10</td> <td>8.5%</td> </tr> <tr> <td>7/1/10 – 6/30/11</td> <td>9.0%</td> </tr> <tr> <td>7/1/11 – 6/30/15</td> <td>9.25%</td> </tr> <tr> <td>7/1/15+</td> <td>9.50%</td> </tr> </table>	7/1/03 – 6/30/08	7.5%	7/1/08 – 6/30/09	8.0%	7/1/09 – 6/30/10	8.5%	7/1/10 – 6/30/11	9.0%	7/1/11 – 6/30/15	9.25%	7/1/15+	9.50%
7/1/03 – 6/30/08	7.5%														
7/1/08 – 6/30/09	8.0%														
7/1/09 – 6/30/10	8.5%														
7/1/10 – 6/30/11	9.0%														
7/1/11 – 6/30/15	9.25%														
7/1/15+	9.50%														



	Plan 1 - Police	Plan 3 - Other Town Employees	Plan 4 - Fire Fighters
Employee Contribution Rate (continued):	Interest on Employee Contributions: 5.0% per year effective June 20, 1994 from end of plan year in which contributions are made to end of month preceding date of event.	Same	Same
Disability Benefits:			
<i>Service Connected:</i> Eligibility:	Age requirement: None  Service requirement: None  Other: Determined by Board of Selectmen to be totally and permanently disabled.	Age requirement: None  Service requirement: None	Age requirement: None  Service requirement: None  Other: Totally and permanently disabled.
Benefit:	Greater of 50% of Average Annual Salary or 100% of accrued pension benefit under the plan, payable immediately.	None	Greater of 50% of Average Annual Salary or 100% of accrued pension benefit under the plan, payable immediately.
<i>Non-Service Connected:</i> Eligibility:	Age requirement: None  Service requirement: 10 years  Other: Determined by Board of Selectmen to be totally and permanently disabled.	Age requirement: None  Service requirement: None	Age requirement: None  Service requirement: None
Benefit:	100% of accrued pension benefit under the plan, payable immediately.	None	None
Actuarial Equivalent:	Equivalent value when computed with regular interest on the basis of the tables last adopted by the Board of Selectmen.	Same	Same



	Plan 1 - Police	Plan 3 - Other Town Employees	Plan 4 - Fire Fighters
Optional Forms:	Contingent beneficiary, ten year certain and life.	Same	Same
Cost of Living:	Review at least once every four years. Historical cost of living adjustments have been as follows: July 1, 1979: 4% per year since retirement (max. 44%) July 1, 1983: 4% per year since retirement (max. 16%) July 1, 1986: 2% per year since retirement (max. 6%) July 1, 1988: 3% for all eligibles July 1, 1989: 3% for all eligibles July 1, 1993: Percentage of inflation since July 1, 1989 July 1, 1994: 2.5% for all eligibles July 1, 1997: 4.0% for all eligibles July 1, 1998: 4.22% for all eligibles July 1, 1999: 1.45% for all eligibles July 1, 2000: 3.19% for all eligibles July 1, 2001: 2.86% for all eligibles July 1, 2002: 1.3% for all eligibles July 1, 2003: 2.3% for all eligibles July 1, 2004: 2.5% for all eligibles July 1, 2005: 3.0% for all eligibles July 1, 2006: 0.0% for all eligibles July 1, 2007: 1.98% for all eligibles July 1, 2008: 2.50% for all eligibles July 1, 2009: 0.0% for all eligibles July 1, 2010: 0.0% for all eligibles July 1, 2011: 0.0% for all eligibles July 1, 2012: 2.5% for all eligibles July 1, 2013: 1.25% for all eligibles July 1, 2014: 1.5% for all eligibles July 1, 2015: 0.5% for all eligibles July 1, 2016: 0.0% for all eligibles July 1, 2017: 0.0% for all eligibles July 1, 2018: 0.0% for all eligibles July 1, 2019: 0.0% for all eligible January 1, 2020: 1.0% for all retirees on or before January 1, 2019.	Same	Same