



nyhart
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Town of Narragansett Pension Plan

July 1, 2023
Actuarial Valuation Report

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At the request of the plan sponsor, this report summarizes the Town of Narragansett Pension Plan as of July 1, 2023. The purpose of this report is to communicate the following results of the valuation:

- Funded Status; and
- Actuarially Determined Contribution as of July 1, 2023 for the plan year ending June 30, 2025

This report has been prepared in accordance with the applicable Federal and State laws. Consequently, it may not be appropriate for other purposes. Please contact Nyhart prior to disclosing this report to any other party or relying on its content for any purpose other than that explained above. Failure to do so may result in misrepresentation or misinterpretation of this report.

The results in this report were prepared using information provided to us by other parties. The census information has been provided to us by the Town. Asset information has been provided to us by the Board. We have reviewed the provided data for reasonableness when compared to prior information provided, but have not audited the data. Where relevant data may be missing, we have made assumptions we believe to be reasonable. We are not aware of any significant issues with and have relied on the data provided. Any errors in the data provided may result in a different result than those provided in this report. A summary of the data used in the valuation is included in this report.

The actuarial assumptions and methods were chosen by the Board. In our opinion, all actuarial assumptions and methods are individually reasonable and in combination represent our best estimate of anticipated experience of the plan.

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); and
- changes in plan provisions or applicable law.

We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement. This report has been prepared in accordance with generally accepted actuarial principles and practice.

Neither Nyhart nor any of its employees have any relationship with the plan or its sponsor which could impair or appear to impair the objectivity of this report.

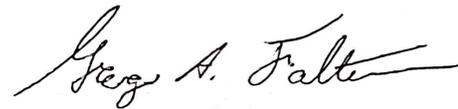
In preparing the results, Nyhart used Proval valuation software developed by Winklevoss Technologies, LLC. This software is widely used for the purpose of performing pension valuations. We coded the plan provisions, assumptions, methods, and participant data summarized in this report, and reviewed the liability and cost outputs for reasonableness. We are not aware of any material weaknesses or limitations in the software, and have determined it is appropriate for performing this valuation.

The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States and are available for any questions.

Nyhart



Jennifer Street, ASA, EA, MAAA



Greg Faltenovich, EA, FCA, MAAA

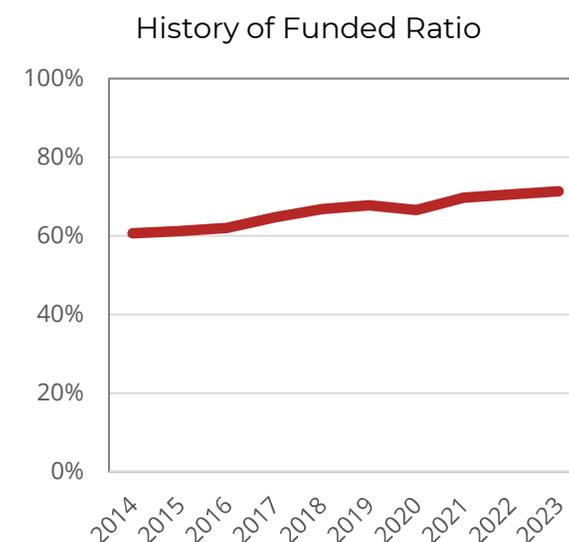
December 22, 2023

Date

Summary Results

The actuarial valuation's primary purpose is to produce a scorecard measure displaying the funding progress of the plan toward the ultimate goal of paying benefits at retirement. The accrued liability is based on an entry age level percentage of pay method.

Valuation Date For Plan Year Ending	July 1, 2022 June 30, 2024	July 1, 2023 June 30, 2025
Funded Status Measures		
Entry Age Accrued Liability	\$174,620,638	\$182,868,186
Actuarial Value of Assets	123,093,130	130,494,493
Unfunded Accrued Liability	\$51,527,508	\$52,373,693
Funded Percentage (AVA)	70.5%	71.4%
Funded percentage (MVA)	63.6%	67.4%
Cost Measures		
Actuarially Determined Contribution	\$7,829,979	\$8,250,086
Actuarially Determined Contribution (as a percentage of projected payroll)	47.9%	47.6%
Asset Performance		
Market Value of Assets (MVA)	\$111,018,065	\$123,328,761
Actuarial Value of Assets (AVA)	\$123,093,130	\$130,494,493
Actuarial Value/Market Value	110.9%	105.8%
Participant Information		
Active Participants	254	257
Terminated Vested Participants	39	41
Retirees, Beneficiaries, and Disabled Participants	244	255
Total	537	553
Total Expected Payroll For Plan Year Ending	\$16,746,004	N/A
Projected Payroll For Plan Year Ending	\$16,346,512	\$17,332,114



Changes Since Prior Valuation and Key Notes

There have been no changes to the plan provisions since the last valuation.

The assumed interest rate has been updated from 7.10% to 7.05%. This change caused an increase in the funding liability.

A Low-Default-Risk-Obligation Measure (LDROM) was added to the report in order to comply with new Actuarial Standards of Practice requirements. This new calculation is displayed on the final page of the report.

Five Year Valuation Summary

	07/01/2019	07/01/2020	07/01/2021	07/01/2022	07/01/2023
Funding					
Accrued Liability	\$147,346,509	\$158,521,049	\$166,245,445	\$174,620,638	\$182,868,186
Actuarial Value of Assets	\$99,830,602	\$105,455,477	\$115,890,940	\$123,093,130	\$130,494,493
Unfunded Actuarial Accrued Liability	\$47,515,907	\$53,065,572	\$50,354,505	\$51,527,508	\$52,373,693
Funded Percentage	67.8%	66.5%	69.7%	70.5%	71.4%
Total Normal Cost (NC)	\$3,007,323	\$3,084,668	\$3,258,089	\$3,475,370	\$3,594,547
NC as a Percent of Covered Payroll	21.3%	20.7%	22.2%	22.0%	21.5%
Actual Contribution	\$6,268,731	\$7,093,037	\$7,993,583	TBD	TBD
Recommended Contribution	\$6,343,867	\$7,011,892	\$7,332,341	\$7,829,979	\$8,250,086
Recommended Contribution (% of Pay)	43.1%	45.2%	48.2%	47.9%	47.6%
Interest Rate	7.20%	7.20%	7.15%	7.10%	7.05%
Rate of Return					
Actuarial Value of Assets	4.4%	4.6%	9.0%	5.1%	4.5%
Market Value of Assets	6.0%	1.8%	23.6%	-12.3%	9.4%
Demographic Information					
Active Participants	250	249	248	254	257
Terminated Vested Participants	22	26	31	39	41
Retired Participants	197	198	205	209	212
Beneficiaries	13	17	18	18	26
Disabled Participants	16	15	15	17	17
Total Participants	498	505	517	537	553
Covered Payroll	\$14,152,836	\$14,916,381	\$14,697,899	\$15,793,731	\$16,746,004
Average Covered Pay	\$56,611	\$59,905	\$59,266	\$62,180	\$65,160

Identification of Risks

The results presented in this report are shown as single point values. However, these values are derived using assumptions about future markets and demographic behavior. If actual experience deviates from our assumptions, the actual results for the plan will consequently deviate from those presented in this report. Therefore, it is critical to understand the risks facing this pension plan. The following table shows the risks we believe are most relevant to the Town of Narragansett Pension Plan. The risks are generally ordered with those we believe to have the most significance at the top. Also shown are possible methods by which a more detailed assessment of the risk can be performed.

Type of Risk	Additional Information
Investment Return	Portfolio risk and substantial equity position leave the plan open to adverse market results, which could increase costs in the future.
Participant Longevity	The plan has adopted the PubS-2010 Mortality Table projected with scale MP-2021 for valuation purposes. These tables are modified from the standard tables, and, compared to the base mortality table, project a slightly higher participant longevity overall. There is no guarantee the anticipated mortality experience will mirror your plan's future experience. Deviation from expected mortality rates could impact long-term liabilities and plan cost.
Salary Growth	The plan has experienced volatility in observed salary increases in the recent past; as benefits are based on final average salary, the salary growth assumption is key to accurately calculating liabilities and future costs.

Type of Risk	Method to Assess Risk
Investment Return	Scenario Testing; Asset Liability Study
Contribution Risk	Scenario Testing
Participant Longevity	Projections and Contribution Strategy
Salary Growth	Stress Testing
Demographic Risk	Stress Testing

Plan Maturity Measures - July 1, 2023

Each pension plan has a distinct life-cycle. New plans promise future benefits to active employees and then accumulate assets to pre-fund those benefits. As the plan matures, benefits are paid and the pre-funded assets begin to decumulate until ultimately, the plan pays out all benefits. A plan's maturity has a dramatic influence on how risks should be viewed. The following maturity measures illustrate where the Town of Narragansett Pension Plan falls in its life-cycle.

Duration of Liabilities: 12.2

Duration is the most common measure of plan maturity. It is defined as the sensitivity of the liabilities to a change in the interest rate assumption. The metric also approximates the weighted average length of time, in years, until benefits are expected to be paid. A plan with high duration is, by definition, more sensitive to changes in interest rates. A plan with low duration is more susceptible to risk if asset performance deviates from expectations as there would be less time to make up for market losses in adverse market environments while more favorable environments could result in trapped surplus from gains. Conversely, high duration plans can often take on more risk when investing, and low duration plans are less sensitive to interest rate fluctuations.

Demographic Distribution - Ratio of Actively Accruing Participants to All Participants: 46.5%

A plan with a high ratio is more sensitive to fluctuations in salary (if a salary-based plan) and statutory changes. A plan with a low ratio is at higher risk from demographic experience. Such a plan should pay close attention to valuation assumptions as there will be less opportunity to realize future offsetting gains or losses when current experience deviates from assumptions. Plans with a low ratio also have limited opportunities to make alterations to plan design to affect future funded status.

Asset Leverage - Ratio of Payroll for Plan Participants to Market Value of Assets: 13.6%

Younger plans typically have a large payroll base from which to draw in order to fund the plan while mature plans often have a large pool of assets dedicated to providing benefits to a population primarily consisting of members no longer on payroll. Plans with low asset leverage will find it more difficult to address underfunding, as the contributions needed to make up the deficit will represent a higher percentage of payroll than for a plan with high asset leverage.

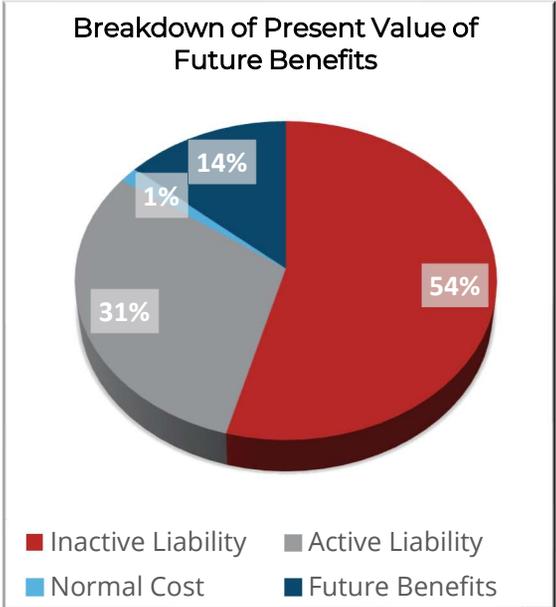
Benefit Payment Percentage - Ratio of Annual Benefit Payments to Market Value of Assets: 6.4%

As a plan enters its decumulation phase, a larger percentage of the pre-funded assets are paid out each year to retirees. A high percentage is not cause for alarm as long as the plan is nearly fully funded. However, such a plan is more sensitive to negative asset performance, especially if cash contributions are not an option to make up for losses.

Present Value of Future Benefits

The Present Value of Future Benefits represents the future benefits payable to the existing participants.

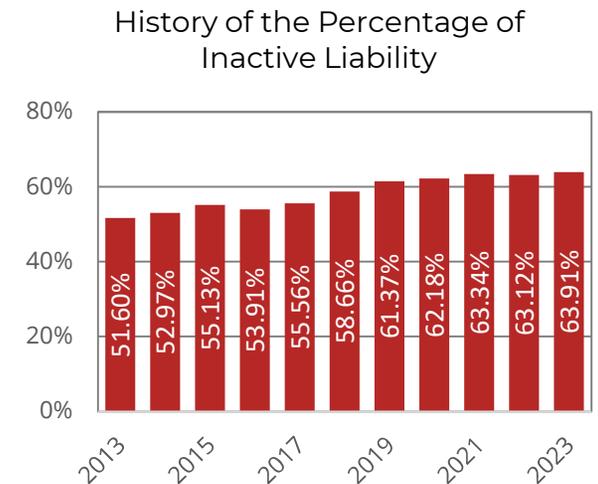
	July 1, 2023
Present Value of Future Benefits	
Active participants	
Retirement	\$93,992,787
Disability	2,771,000
Death	615,570
Termination	1,200,201
Refund of contributions	0
Total active	\$98,579,558
Inactive participants	
Retired participants	\$102,348,476
Beneficiaries	6,257,738
Disabled participants	6,624,544
Terminated vested participants	1,644,894
Total inactive	\$116,875,652
Total	\$215,455,210
 Present value of future payrolls	 \$131,222,877



Funding Liability

The Funding Liability measures the present value of benefits earned as of the valuation date, using a specified set of actuarial assumptions.

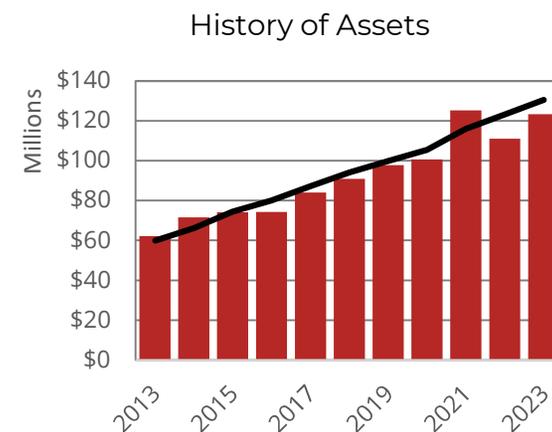
	July 1, 2023
Entry Age Normal Liabilities	
Active participants	
Retirement	\$65,088,004
Disability	763,139
Death	165,826
Termination	(24,435)
Refund of contributions	0
Total Active	\$65,992,534
Inactive participants	
Retired participants	\$102,348,476
Beneficiaries	6,257,738
Disabled participants	6,624,544
Terminated vested participants	1,644,894
Total Inactive	\$116,875,652
Total	\$182,868,186
Total Normal Cost	\$3,594,547



Asset Information

The amount of assets backing the pension promise is often the most significant driver of volatility and future costs within a pension plan. The investment performance of the assets directly offsets the ultimate cost.

	July 1, 2023
Market Value Reconciliation	
Market value of assets, beginning of prior year	\$111,018,065
Contributions	
Employer contributions	7,993,583
Member contributions	1,737,272
Non-employer contributing entity	0
Total	9,730,855
Investment income	10,465,393
Benefit payments	(7,885,552)
Market value of asset, beginning of current year	\$123,328,761
Return on Market Value	9.4%
 Actuarial value of assets	
Value at beginning of current year	\$130,494,493



Asset Information (continued) - 20% Phase in

Plan Assets are used to develop funded percentages and contribution requirements.

July 1, 2023

1.	Expected market value of assets		
	(a) Market value of assets, beginning of prior year		\$111,018,065
	(b) Contributions		9,730,855
	(c) Benefit payments		(7,885,552)
	(d) Expected return		7,946,669
	(e) Expected market value of assets, beginning of current year		\$120,810,037
2.	Market value of assets, beginning of current year		\$123,328,761
3.	Actual return on market value		\$10,465,393
4.	Amount subject to phase in [(3)-(1d)]		\$2,518,724
5.	Phase in of asset gain/(loss)		
	(a) Current year (80% x \$2,518,724)		\$2,014,979
	(b) First prior year (60% x (\$24,531,726))		(14,719,036)
	(c) Second prior year (40% x \$16,506,720)		6,602,688
	(d) Third prior year (20% x \$(5,321,813))		(1,064,363)
	(e) Total phase-in		\$(7,165,732)
6.	Preliminary actuarial value of assets, beginning of current year [(2)-(5e)]		\$130,494,493
7.	80% Market value of assets		\$98,663,009
8.	120% Market value of assets		\$147,994,513
9.	Adjustment to actuarial value of assets due to 20% corridor		\$0
10.	Final actuarial value of assets (6) - (9)		\$130,494,493
11.	Return on actuarial value of assets		4.5%

Reconciliation of Gain/Loss

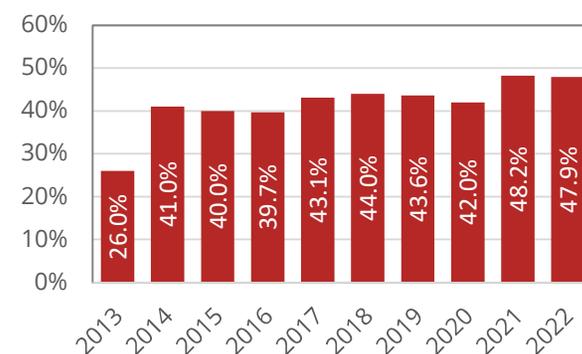
	July 1, 2023
Liability (gain)/loss	
Actuarial liability, beginning of prior year	\$174,620,638
Normal cost	\$3,475,370
Benefit payments	(7,885,552)
Expected Interest	12,369,679
Change in actuarial assumptions	1,107,503
Change in plan provisions	0
Expected actuarial liability, beginning of current year	\$183,687,638
Actual actuarial liability	\$182,868,186
Liability (gain)/loss	\$(819,452)
Asset (gain)/loss	
Actuarial value of assets, beginning of prior year	\$123,093,130
Contributions	9,730,855
Benefit payments	(7,885,552)
Expected investment return	8,803,998
Expected actuarial value of assets, beginning of current year	\$133,742,431
Actual actuarial value of assets, beginning of current year	\$130,494,493
Asset (gain)/loss	\$3,247,938
Total (gain)/loss	\$2,428,486

Development of Actuarially Determined Contribution for Plan Year Ending June 30, 2025

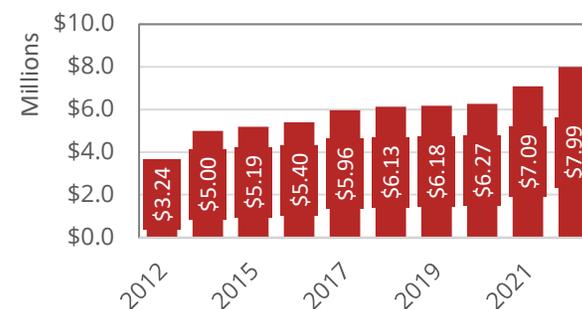
The actuarially determined contribution is the annual amount necessary to fund the plan according to funding policies and/or applicable laws.

Valuation Date For Plan Year Ending	July 1, 2023 June 30, 2025
Funded Position	
1. Entry age accrued liability	\$182,868,186
2. Actuarial value of assets	\$130,494,493
3. Unfunded actuarial accrued liability (UAAL)	\$52,373,693
Employer Contributions	
1. Normal Cost	
(a) Total normal cost	\$3,594,547
(b) Expected participant contributions	(1,385,479)
(c) Net normal cost	\$2,209,068
2. Amortization of UAAL	5,238,909
3. Applicable interest	525,082
4. Calculated contribution at valuation date	\$7,973,059
5. Total payroll	\$16,746,004
6. Calculated contribution as a percentage of total payroll (4) / (5)	47.6%
7. Projected payroll	\$17,332,114
8. Actuarially determined contribution (6) x (7)	\$8,250,086

History of Recommended Contribution (% of Payroll)



History of Contributions

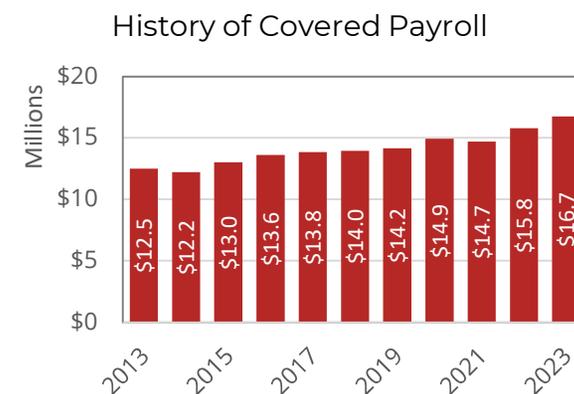


In accordance with ASOP No. 4, we reviewed the plan's funding method (liability method, amortization method and period, asset smoothing method), contribution policy & allocation procedures, and the computation of the recommended contribution. We believe each to be reasonable, both individually and in combination, as expected plan costs are expected to be fully funded over a reasonable timeframe.

Demographic Information

The foundation of a reliable actuarial report is the participant information provided by the plan sponsor. Monitoring trends in demographic information is crucial for long-term pension planning.

	July 1, 2022	July 1, 2023
Participant Counts		
Active Participants	254	257
Retired Participants	209	212
Beneficiaries	18	26
Disabled Participants	17	17
Terminated Vested Participants	39	41
Total Participants	537	553
Active Participant Demographics		
Average Age	45.2	45.2
Average Service	10.2	10.1
Average Compensation	\$62,180	\$65,160
Total Payroll	\$15,793,731	\$16,746,004



	July 1, 2022	July 1, 2023
Retiree Statistics		
Average Age	67.9	68.1
Average Monthly Benefit	\$2,749	\$2,782
Beneficiary Statistics		
Average Age	75.4	71.8
Average Monthly Benefit	\$1,151	\$1,604
Disabled Participant Statistics		
Average Age	66.0	67.5
Average Monthly Benefit	\$2,356	\$2,553
Terminated Vested Participant Statistics		
Average Age	54.9	54.9
Average Monthly Benefit	\$1,052	\$1,094
Terminated Participants Due a Return of Employee Contributions Statistics		
Average Age	45.6	43.6
Total Employee Contributions Payable	\$304,722	\$335,285

Participant Reconciliation

	Active	Terminated Vested	Disabled	Retired	Survivor	Totals
Prior Year	254	39	17	209	18	537
Active						
To Terminated Vested	(5)	5	0	0	0	0
To Disabled	(1)	0	1	0	0	0
To Retired	(11)	0	0	11	0	0
To Lump Sum Cash-Out	(5)	0	0	0	0	(5)
To Death	(1)	0	0	0	0	(1)
Disabled						
To Death	0	0	(1)	0	0	(1)
Terminated Vested						
To Active	1	(1)	0	0	0	0
To Retired	0	(1)	0	1	0	0
To Lump Sum Cash-Out	0	(3)	0	0	0	(3)
Terminated Non-Vested						
To Active	0	0	0	0	0	0
Retired						
To Death	0	0	0	(9)	0	(9)
To Disabled	0	0	0	0	0	0
Lump Sum Cash-Out						
To Active	0	0	0	0	0	0
Survivor						
To Death	0	0	0	0	0	0
Additions	25	2	0	0	8	35
Departures	0	0	0	0	0	0
Current Year	257	41	17	212	26	553

Active Participant Schedule

Active participant information grouped based on age and service.

Age Group	Years of Service										Total	Average Pay*
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up		
Under 25	4	5									9	\$43,025
25 to 29	7	21	2								30	\$56,128
30 to 34	3	17	13	4							37	\$64,203
35 to 39	2	4	9	10	4						29	\$68,412
40 to 44	2	2	3	4	10	4					25	\$77,179
45 to 49	2	4	6	3	5	2	1				23	\$56,437
50 to 54	2	3	6	4	3	8	6				32	\$66,057
55 to 59	1	4	8	3	6	3	2	3			30	\$63,781
60 to 64	1	6	3	9	3	2		1			25	\$57,981
65 to 69	1		4	1	5			1			12	\$52,039
70 & up		2	2	1							5	\$33,286
Total	25	68	56	39	36	19	9	5			257	\$61,968

*Average Pay shown above is based on pensionable compensation from 7/1/2022 – 6/30/2023.

Name of plan

Town of Narragansett Pension Plan

Effective date

The plan was originally effective as of July 1, 1984.

Participation

All permanent, regular and probationary status employees who work for at least five months of a year and for at least twenty hours per week who elect to contribute to the Plan at the prescribed rates are eligible to participate in the Plan.

School Department employees who have been, are, or will be eligible for membership in the State Teacher’s Retirement System shall be excluded from this Plan.

The Plan shall exclude any Police Officer covered under the 1666 Plan who has refused to join the Plan.

Normal retirement benefit

For all employees hired prior to July 1, 2011: A benefit equal to 2.5% of Final Average Compensation multiplied by years of credited service (subject to a maximum benefit of 75% of Final Average Compensation).

For Council 94 and Local 1033 employees hired on or after July 1, 2011: A benefit equal to 2.0% of Final Average Compensation multiplied by years of credited service up to 20 and 2.5% of Final Average Compensation multiplied by years of service in excess of 20, limited to 14 (subject to a maximum benefit of 75% of Final Average Compensation).

For Council 94 and Local 1033 employees hired on or after July 1, 2014: A benefit equal to 2.0% of Final Average Compensation multiplied by years of credited service (subject to a maximum benefit of 75% of Final Average Compensation).

For School employees hired on or after July 1, 2015: A benefit equal to 2.0% of Final Average Compensation multiplied by years of credited service (subject to a maximum benefit of 75% of Final Average Compensation).

For Police and Fire Union members hired on or after July 1, 2013: A benefit equal to 2.0% of Final Average Compensation multiplied by years of credited service.

Normal retirement date

Municipal Employees	<p>A member may retire upon the later of attainment of age 58 or the completion of 10 years of credited service, but, in any case, he can retire immediately after completing 20 years of credited service</p> <p>For Local 1033 members hired on or after 7/1/2014: A member may retire after completing 25 years of service</p> <p>For Council 94 members hired on or after 7/1/2014: A member may retire upon the later of attainment of age 65 or the completion of 10 years of credited service, but, in any case, he can retire immediately after completing 25 years of credited service</p> <p>For School employees hired on or after 7/1/2015: A member may retire upon the later of attainment of age 65 or the completion of 10 years of credited service, or at any age after the completion of 25 years of credited service.</p>
Firefighters	<p>For Firefighters hired prior to July 1, 2011: A Firefighter may retire upon completion of 20 years of credited service</p> <p>For Firefighters hired on or after July 1, 2011, except Blanchette and Hultzman: A Firefighter may retire 23 years from their date of hire with a minimum 20 years of credited service</p> <p>For Firefighters hired on or after July 1, 2013: A Firefighter may retire upon completion of 25 years of credited service</p>
Police Officers (including Chapter 1666)	<p>For Police Union members hired before July 1, 2013: A Police Union member may retire upon the earlier of attainment of age 58 or the completion of 20 years of credited service</p> <p>For Police Union members hired on or after July 1, 2013: A Police Union member may retire upon the completion of 25 years of credited service</p>

Average monthly salary

Average annual basic compensation during the highest three consecutive years of service.

Early retirement

A member who has attained age 55 with 10 years of credited service, or has attained age 50 with 20 years of credited service may elect to retire and receive a monthly benefit equal to the actuarial equivalent of the accrued benefit determined as of the normal retirement date.

Disability retirement

Non-Occupational Causes

Municipal Employees	After the completion of seven years of credited service but prior to attainment of age 58, a disabled member is entitled to the greater of (a) 2.5% of Final Average Compensation multiplied by years of credited service (subject to a minimum of 25% and maximum of 50%) or (b) 1 2/3% of Final Average Compensation multiplied by years of credited service (subject to a minimum of 25%)
Firefighters and Police Officers	After the completion of seven years of credited service but prior to attainment of age 58 (age 55 for firefighters), a benefit equal to 2.5% of Final Average Compensation multiplied by years of credited service (subject to a minimum of 25% and a maximum of 50%)

Occupational Causes

A benefit equal to 66 2/3% of the annualized rate of compensation determined as of the date of disability, reduced by the monthly value of any payments provided for the member under any worker's compensation law.

Preretirement death benefit

Municipal Employees

Non-Occupational Causes	Upon the death of a member his beneficiary shall be entitled to the greater of (a) a refund of employee contributions with interest plus a lump sum benefit equal to \$400 times years of credited service (subject to a minimum of \$2,000 and a maximum of \$8,000) or (b) for a member with 10 or more years of credited service, a refund of employee contributions with interest, plus a monthly benefit equal to 50% of the member's accrued benefit.
Occupational Causes	Upon the death of a member, his beneficiary shall receive a refund of employee contributions with interest, plus a benefit equal to 50% of compensation.
Firefighters and Police Officers	Upon the death of a Firefighter or Police Officer who has completed 10 years of credited service, the beneficiary may elect either a refund of employee contributions with interest or a benefit equal to 50% of the accrued benefit. Special rules apply for death after meeting the eligibility for retirement.

Termination Benefit

For vested participants: Accrued benefit payable at normal retirement date

For non-vested participants: A return of employee contributions with interest payable as a lump sum

Vesting

For non-Firefighters: 100% vested after 10 years of Credited Service

For Firefighters: 100% vested after 20 years of Credited Service (25 years of Credited Service for Firefighters hired on or after 7/1/2013)

Compensation

Annual base compensation excluding longevity, incentive and holiday pay. School employees shall have longevity pay included in compensation.

Credited service

Contributing employees will receive credit for all service rendered to the Town from date of membership subject to certain special provisions.

Cost of Living Adjustments

Municipal Employees	Who retire on or after July 1, 2002 shall receive annual 3% compounded COLAs beginning on the July 1 of the year that the employee turns 58 years old. Council 94 employees hired on or after 7/1/2014 shall receive annual 3% simple COLAs beginning on the July 1 of the year that the employee turns 58 years old. School employees hired on or after 7/1/2015 shall receive a compounded COLA on each July 1 st based on the COLA given to Social Security recipients, if any.
Firefighters	Who retire on or after July 1, 2002 and before July 1, 2015 shall receive annually a 3% compounded COLA beginning on the July 1 of the year that the firefighter turns 52 years old. Who retire on or after July 1, 2015 shall receive annually a 3% simple COLA beginning on the July 1 of the year that the firefighter turns 52 years old, subject to the suspension below. The COLA has been suspended for 8 years for active members as of July 1, 2013.

Police Officers

Who retire on or after July 1, 2002, if employed before July 1, 2013, shall receive annual 3% compounded COLAs beginning on the earlier of July 1 or the year that the employee turns 52 years old of July 1 of the year that is the fifth anniversary of the police officer’s retirement, subject to the suspension below.

Employees hired on or after July 1, 2013 shall receive a 3% simple COLA at retirement and when eligible

The COLA has been suspended for 8 years for active members as of July 1, 2013

Optional forms of payment

In lieu of the normal form of benefit, any member who is married at the time of retirement may elect a pension that provides, upon the member’s death, for 67.5% of the pension to continue to the dependent spouse or dependent children.

Participant contributions

As of July 1, 2018

Municipal Employees	10% of salary; for Council 94 and Local 1033 employees, 11% of salary
Firefighters	11% of salary, holiday, incentive & longevity
Police Officers	11% of base salary, holiday, incentive & longevity
Laborers & Clerical	10% of base salary & longevity
Mid-managers	10% of base salary & longevity
Non Union	10% of base salary
School	10% of base salary & longevity

Contributions cease once a participant has reached 30 years of service

Except where otherwise indicated, the following assumptions were selected by the plan sponsor with the concurrence of the actuary. Prescribed assumptions are based on the requirements of the relevant law, the Internal Revenue Code, and applicable regulation.

Valuation Date

July 1, 2023

Participant and Asset Information Collected as of

July 1, 2023

Cost Method (CO)

Individual Entry Age Cost Method % of pay

Amortization Method (CO)

20 year closed level percent of pay amortization of Unfunded Actuarial Accrued Liability. For this purpose, pay is assumed to grow at 3.50% annually

Asset Valuation Method

The actuarial value of assets is equal to the fair market value of assets on the valuation date adjusted for a 5-year phase in of gains and losses on fair market value of assets.

Interest Rates (CO)

7.05%

This assumption has been set by the plan sponsor in conjunction with their asset advisor.

Annual Pay Increases (FE)

Age	Percent
20-24	10.00%
25-29	8.00%
30-34	6.00%
35-39	5.00%
40-44	4.50%
45-54	4.25%
55+	4.00%

The annual pay increases are based on a study of actual experience for the plan from July 1, 2010 – July 1, 2020.

Mortality Rates (FE)

Healthy Lives

Municipal Employees	PubG-2010 Mortality Table with generational improvements from 2010 based on the MP-2021 mortality improvement scale
Firefighters and Police	PubS-2010 Mortality Table with generational improvements from 2010 based on the MP-2021 mortality improvement scale
School Employees	PubT-2010 Mortality Table with generational improvements from 2010 based on the MP-2021 mortality improvement scale
Survivors	Pub-2010 Continuing Survivor Mortality Table with generational improvements from 2010 based on the MP-2021 mortality improvement scale

Disabled Lives

Municipal Employees & School Employees	PubNS-2010 Disabled Mortality Table with generational improvements from 2010 based on the MP-2021 mortality improvement scale
Firefighters and Police	PubS-2010 Disabled Mortality Table with generational improvements from 2010 based on the MP-2021 mortality improvement scale

As the plan is not large enough to have credible experience, mortality assumptions are set to reflect general population trends.

Retirement Rates (FE)

Non-Public Safety Employees

Local 1033 Hired On or After 7/1/2014

100% at the earlier of 25 years of service or age 58 with 10 years of service

Council 94 Hired On or After 7/1/2014 and School Hired On or After 7/1/2015

100% at the earlier of 25 years of service or age 65 with 10 years of service

All others

25% at 20 years of service, 20% at 21-24 years of service, 100% at 25 years of service and 100% at age 58 with 10 years of service

Public Safety Employees

Police Hired On or After 7/1/2013

100% at the earlier of 25 years of service or age 58

Fire Hired On or After 7/1/2013

100% at 25 years of service

All others

35% at 20 years of service, 20% at 21-24 years of service, 100% at 25 years of service and 100% at age 58

The retirement rates are based on a study of actual experience for the plan from July 1, 2010 – July 1, 2020.

Disability Rates (FE)

50% of the rates in accordance with the 1985 Pension Disability Table

<u>Age</u>	<u>Percent</u>
25	0.05%
35	0.11%
45	0.26%
55	0.75%

As the plan is not large enough to have credible experience, disability rates are determined based on the results of broad population studies.

Withdrawal Rates (FE)

Non-Public Safety Employees A rate of 7.5% annually up to 10 years of service, followed by rates in accordance with the T-2 Table of *The Pension Actuary's Handbook*

<u>Age</u>	<u>Percent</u>
25	5.29%
35	4.70%
45	1.77%
55	0.00%

Public Safety Employees No withdrawal is assumed

The withdrawal rates are based on a study of actual experience for the plan from July 1, 2010 – July 1, 2020.

Marital Status and Ages (FE)

85% of participants not in pay status are assumed to be married with wives assumed to be 4 years younger than husbands. For participants in pay status, actual spousal information is used.

Cost of Living Adjustment (CO)

For Council 94: 3% increase is assumed once the participant is eligible with a simple COLA occurring once the benefit reaches \$35,000

For Local 1033: 3% increase is assumed once the participant is eligible. For employees retiring after January 1, 2012, a 3% increase with a simple COLA occurring once the benefit reaches \$45,000

For Police and Fire: the COLA is suspended for active members as of July 1, 2013 for 8 years

For Fire members expected to retire before July 1, 2015: the COLA is 3% compounded when eligible and subject to the suspension noted above

For Fire members expected to retire on or after July 1, 2015: the COLA is 3% simple when eligible and subject to the suspension noted above

Cost of Living Adjustment - continued

For Police members hired on
or after July 1, 2013: a 3% simple COLA when eligible

For School employees hired
on or after July 1, 2015: 2% increase is assumed once the participant is eligible

For all other employees: 3% compound COLA is assumed once eligible

Expense and/or Contingency Loading (FE)

None

Contribution Timing

The Actuarially Determined Contribution is calculated assuming contributions are made at the end of the current plan year and presented as the same percentage of projected payroll for the following plan year. Payroll growth is assumed to be 3.50% for this purpose.

Other procedures

Benefits projected to assumed retirement age for active participants have been limited so as not to exceed maximum benefit limits imposed by Code Section 415(b) and/or maximum compensation limits of Code Section 401(a)(17).

FE indicates an assumption representing an estimate of future experience

MD indicates an assumption representing observations of estimates inherent in market data

CO indicates an assumption representing a combination of an estimate of future experience and observations of market data

The actuarial report also shows the necessary items required for plan reporting and any state requirements.

- ✓ Schedule of Amortizations
- ✓ Actuarially Determined Contribution by Division
- ✓ Low-Default-Rate Obligation Measure (LDRM)

Schedule of Amortizations

July 1, 2023

<u>Date Established</u>	<u>Remaining Period Years</u>	<u>Outstanding Balance</u>	<u>Annual Payment</u>
7/1/2014	11	\$38,780,773	\$4,149,431
7/1/2015	12	2,957,826	294,718
7/1/2016	13	1,679,016	156,869
7/1/2017	14	(1,106,496)	(97,503)
7/1/2018	15	(533,254)	(44,542)
7/1/2019	16	1,241,687	98,743
7/1/2020	17	6,200,368	471,225
7/1/2021	18	(1,787,722)	(130,285)
7/1/2022	19	2,491,744	174,656
7/1/2023	20	2,449,751	165,597
	Total	\$52,373,693	\$5,238,909

Actuarially Determined Contribution by Division

	Town	Police	Fire	Beach	Water	Wastewater	Library	School	Total
(1) Total Normal Cost	904,338	1,087,680	861,120	0	43,116	86,633	27,602	584,058	3,594,547
(2) Expected Employee Contributions	409,315	359,718	317,195	0	17,470	37,944	12,032	231,805	1,385,479
(3) Employer Normal Cost = (1) - (2)	495,023	727,962	543,925	0	25,646	48,689	15,570	352,253	2,209,068
(4) Net Amortization Payment	<u>1,271,632</u>	<u>1,345,007</u>	<u>1,168,468</u>	<u>12,420</u>	<u>113,880</u>	<u>183,431</u>	<u>94,213</u>	<u>1,049,858</u>	<u>5,238,909</u>
(5) Interest at Valuation rate on (3) + (4)	<u>124,548</u>	<u>146,144</u>	<u>120,724</u>	<u>876</u>	<u>9,837</u>	<u>16,364</u>	<u>7,740</u>	<u>98,849</u>	<u>525,082</u>
(6) Calculated contribution at valuation date (3) + (4) + (5)	1,891,203	2,219,113	1,833,117	13,296	149,363	248,484	117,523	1,500,960	7,973,059
(7) Valuation Payroll	4,983,161	3,628,598	3,647,444	0	296,131	541,404	284,195	3,365,071	16,746,004
(8) Calculated contribution at valuation date as a percentage of valuation payroll (6) ÷ (7)	38.0%	61.2%	50.3%	0.0%	50.4%	45.9%	41.4%	44.6%	47.6%
(9) Projected Payroll	<u>5,157,571</u>	<u>3,755,599</u>	<u>3,775,105</u>	<u>0</u>	<u>306,496</u>	<u>560,353</u>	<u>294,142</u>	<u>3,482,848</u>	<u>17,332,114</u>
(10) Actuarially determined contribution (8) x (9), with adjustments due to rounding*	1,957,737	2,296,868	1,897,311	13,296	154,347	256,969	121,653	1,551,905	8,250,086

*For divisions with a valuation payroll of \$0 (Beach), the actuarial determined contribution is the calculated contribution at the valuation date.

Low-Default-Risk Obligation Measure (LDROM)

For reports issued after February 15, 2023 the Plan’s actuary is generally required to disclose liabilities under an alternative low-default-risk based discount rate. This LDROM liability measure represents the estimated asset value as of the measurement date the Plan would need in order to purchase a low-default-risk fixed income securities portfolio with durations that are reasonably consistent with the timing of benefits expected to be paid from the plan.

	July 1, 2023
LDROM liability	\$ 233,358,968
Market value of assets	<u>\$ 123,328,761</u>
LDROM funded status	\$ (110,030,207)

The LDROM liability measure is for informational purposes only. The plan sponsor has no requirements to contribute to the Plan to meet this threshold, and the funded status on this basis is not reported to any government agency or used for any restrictions.

If Plan assets are invested to earn in excess of a fixed income portfolio, a shortfall on this basis may not necessarily mean the security of participant benefits is at risk. If the plan is fully funded, or nearly fully funded, on the LDROM measure, the plan sponsor may want to consider reducing investment risk in order to offer greater benefit security and lower contribution volatility. We did not perform an analysis of assumption or provision changes resulting from a potential shift in investment policy due to the limited scope of our engagement.

The above LDROM liability measure applies a single effective discount rate of 5.20% which would produce approximately the same discounted cashflows as the FTSE Above Median AA Curve as of June 30, 2023. All other data, assumptions, methods and provisions are the same as those detailed in this report.