# nyhart

# Town of Narragansett Chapter 1666 Police Pension Plan

July 1, 2016 Actuarial Valuation Report

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At the request of the plan sponsor, this report summarizes the Town of Narragansett Chapter 1666 Police Pension Plan as of July 1, 2016. The purpose of this report is to communicate the following results of the valuation:

- · Funded Status; and
- Actuarially Determined Contribution as of July 1, 2016

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 Town. 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.

To the extent that this report or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.



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

Elizabeth A. Wiley, ASA

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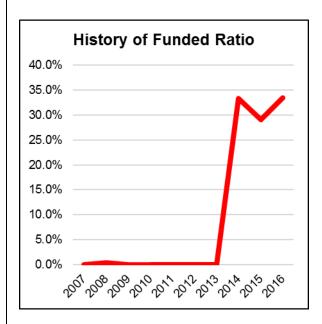
<u>December 29, 2016</u>

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 normal method.

Valuation Date For Plan Year Ending	July 1, 2015 June 30, 2017	July 1, 2016 June 30, 2018
Funded Status Measures		
Entry Age Accrued Liability	\$2,488,616	\$2,450,507
Actuarial Value of Assets	723,354	820,641
Unfunded Accrued Liability	\$1,765,262	\$1,629,866
Funded Percentage (AVA)	29.1%	33.5%
Funded percentage (MVA)	29.1%	33.5%
Cost Measures		
Actuarially Determined Contribution	\$230,391	\$226,427
Actuarially Determined Contribution (as a percentage of payroll)	N/A	N/A
Asset Performance		
Market Value of Assets (MVA)	\$723,354	\$820,641
Actuarial Value of Assets (AVA)	\$723,354	\$820,641
Actuarial Value/Market Value	100.0%	100.0%
Participant Information		
Active Participants	0	0
Terminated Vested Participants	0	0
Retirees, Beneficiaries, and Disabled Participants	17	17
Total	17	17





#### **Changes Since Prior Valuation and Key Notes**

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

The mortality for healthy participants has been updated from the RP-2014 Blue Collar Mortality Table with generational improvements from 2006 based on assumptions from the 2014 SSA Trustees' Report to the RP-2014 Blue Collar Mortality Table with generational improvements from 2006 based on assumptions from the 2015 SSA Trustees' Report.

The mortality for disabled participants has been updated from the RP-2014 Disabled Mortality Table with generational improvements from 2006 based on assumptions from the 2014 SSA Trustees' Report to the RP-2014 Disabled Mortality Table with generational improvements from 2006 based on assumptions from the 2015 SSA Trustees' Report.

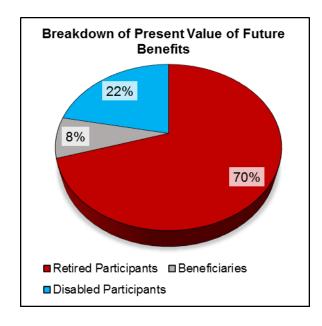


#### **Present Value of Future Benefits**

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

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Present Value of Future Benefits	
Active participants	
Retirement	\$0
Disability	0
Death	0
Termination	0
Refund of contributions	0
Total active	\$0
active participants	
Retired participants	\$1,721,306
Beneficiaries	194,448
Disabled participants	534,753
Terminated vested participants	0
Total inactive	\$2,450,507
Fotal	\$2,450,507
Present value of future payrolls	N/A





# **Funding Liability**

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

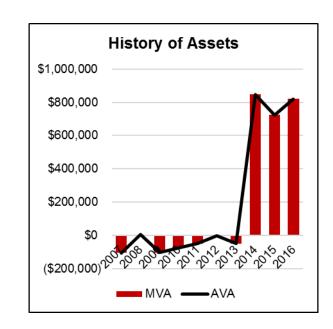
	July 1, 2016
Entry Age Normal Liabilities	
Active participants	
Retirement	\$0
Disability	0
Death	0
Termination	0
Refund of contributions	0
Total Active	\$0
nactive participants	
Retired participants	\$1,721,306
Beneficiaries	194,448
Disabled participants	534,753
Terminated vested participants	0
Total Inactive	\$2,450,507
Total	\$2,450,507
Normal Cost	\$0



#### **Asset Information**

The amount of assets backing the pension promise is 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, 2016
Market Value Reconciliation	
Market value of assets, beginning of prior year	\$723,354
Employer Contributions	\$355,000
Investment income	(3,610)
Benefit payments	(254,103)
Market value of assets, beginning of current year	\$820,641
Return on Market Value	-0.47%
Market value of assets available for pension benefits	\$820,641
Actuarial value of assets	
Value at beginning of current year	\$820,641





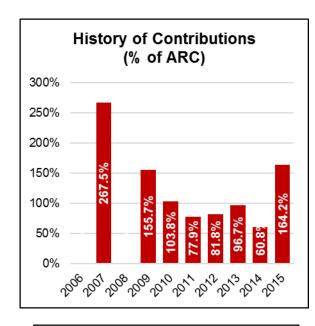
Reconciliation of Gain/Loss	
	July 1, 2016
Liability (gain)/loss	
Actuarial liability, July 1, 2015	\$2,488,616
Normal cost	0
Benefit payments	(254,103)
Expected Interest	170,192
Change in actuarial assumptions	(1,023)
Expected actuarial liability, beginning of current year	\$2,403,682
Actual actuarial liability	\$2,450,507
Liability (gain)/loss	\$46,825
Asset (gain)/loss	
Actuarial value of assets, July 1, 2015	\$723,354
Contributions	355,000
Benefit payments	(254,103)
Expected investment return	55,650
Expected actuarial value of assets, beginning of current year	\$879,901
Actual actuarial value of assets, beginning of current year	\$820,641
Asset (gain)/loss	\$59,260
Total (gain)/loss	\$106,085

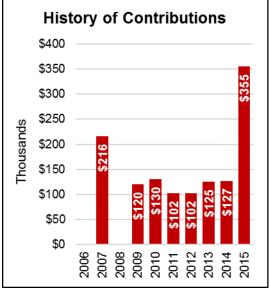


#### **Development of Actuarially Determined Contribution**

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, 2016 June 30, 2018
Funded Position	
Entry age accrued liability	\$2,450,507
2. Actuarial value of assets	\$820,641
3. Unfunded actuarial accrued liability (UAAL)	\$1,629,866
Employer Contributions	
1. Normal Cost	\$0
2. Amortization of UAAL	205,043
3. Applicable interest	22,539
4. Preliminary actuarially determined contribution	\$227,582
5. Adjustment due to phasing in effect of assumption change	\$1,155
6. Actuarially determined contribution (4) - (5)	\$226,427







### **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.

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Participant Counts		
Active Participants	0	
Retired Participants	8	
Beneficiaries	7	
Disabled Participants	2	
Terminated Vested Participants	0	
Total Participants	17	
Active Participant Demographics		
Average Age	N/A	
Average Service	N/A	
/Wordgo Colvico	14/71	
Average Compensation	N/A	
Average Compensation	N/A	



# **Demographic Information (continued)**

	July 1, 2016
Retiree Statistics	
Average Age	73.9
Average Monthly Benefit	\$1,878
Beneficiary Statistics	
Average Age	83.8
Average Monthly Benefit	\$412
Disabled Participants Statistics	
Average Age	65.8
Average Monthly Benefit	\$1,727
Terminated Participants Statistics	
Average Age	N/A
Average Monthly Benefit	N/A



# **Participant Reconciliation**

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Totals
Prior Year	0	0	2	8	7	17
Disabled To Death	0	0	0	0	0	0
Retired To Death	0	0	0	0	0	0
Survivor To Death	0	0	0	0	0	0
Additions Departures	0	0	0	0 0	0	0 0
Current Year	0	0	2	8	7	17



Name of Plan Town of Narragansett Chapter 1666 Police Pension Plan

Participation All members of the permanent Police Force who were hired prior to July 1, 1978 and refused the September 1984 offer to join

the Chapter 1666 Pension Plan

**Benefits** 

**Normal Retirement** 

Eligibility The attainment of age 65 or the completion of 20 years of service

Benefit 50% of Final Earnings

**Disability Retirement** 

Eligibility A member becomes unable to perform Active Police Duty by reason of clearly proved physical or mental infirmities

Benefit 50% of Final Earnings in the Year of Disability

**Preretirement Death** 

Eligibility An active member dies after 25 Years of Service

Benefit His widow shall receive 67.5% of the member's Accrued Benefit continuing until her death or remarriage

Optional Forms of Payment Married participants are entitled to a 67.5% Joint and Survivor Annuity. If not married, participants are entitled to a Life

Annuity



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. The actuary was not able to evaluate the prescribed assumptions for reasonableness for the purpose of the measurement.

Valuation Date July 1, 2016

Participant and Asset Information Collected as of July 1, 2016

Cost Method (CO) Entry Age Normal Cost Method

Amortization Method (CO)

Unfunded Actuarial Accrued Liability is amortized over the average expected future lifetime of

the plan participants

Asset Valuation Method The actuarial value of assets is equal to the market value of assets

Interest Rates (CO) 7.2%. The interest rate changed effective 7/1/2015 from 7.50% to 7.2%. This interest rate

change is phased in to the actuarially determined contribution over 3 years.

Expense and/or Contingency Loading (FE) None

**Mortality Rates (FE)** 

Healthy RP-2014 Blue Collar Mortality Table with generational improvements from 2006 based on

assumptions from the 2015 SSA Trustees' Report

Disabled RP-2014 Disabled Mortality Table with generational improvements from 2006 based on

assumptions from the 2015 SSA Trustees' Report

Cost of Living Adjustment 3% for eligible employees



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
- √ Phase-In of Interest Rate Assumption Change



July 1, 2016

(\$4,495)

\$205.043

\$1,629,866

#### **Schedule of Amortizations**

Total

Date Established	Original Amount	Remaining Years	<u>Balance</u>	<u>Payment</u>
7/1/2014	\$1,694,385	11	\$1,543,828	\$193,970
7/1/2015	\$131,154	11	\$123,907	\$15,568
7/1/2016	(\$37,869)	12	(\$37,869)	(\$4,495)

(\$37,869)



#### **Phase-In of Interest Rate Assumption Change**

The Actuarially Determined Contribution has been adjusted for valuation purposes to smooth the effects of the assumption changes made effective 7/1/2015. Determination of the Actuarial Recommended Funding Contribution is shown below.

(1) Actuarial recommended funding contribution (prior to assumption change)	\$224,117
(2) Actuarial recommended funding contribution (after assumption change)	227,582
(3) Increase due to interest rate change (2) – (1)	3,465
(4) Adjustment to actuarial recommended funding contribution (3) x 1 / 3	1,155
(5) Actuarial recommended funding contribution (2) – (4)	\$226,427

