Milliman

Town of Westport
Public Works Pension Fund

Actuarial Valuation as of July 1, 2012
For Fiscal Year 2013-14

Prepared by
Milliman, Inc.

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Certification

We have performed an actuarial valuation of the Plan as of July 1, 2012 for fiscal year 2013-14. This report presents the results of our valuation.

The ultimate cost of a pension plan is the total amount needed to provide benefits for plan members and beneficiaries and to pay the expenses of administering the plan. Pension costs are met by contributions and by investment return on plan assets. The principal purpose of this report is to set forth an actuarial recommendation of the contribution, or range of contributions, which will properly fund the plan, in accordance with applicable government regulations. In addition, this report provides:

- A valuation of plan assets and liabilities to review the year-to-year progress of funding.
- Information needed to meet disclosure requirements.
- Review of plan experience for the previous year to ascertain whether the assumptions and methods employed for valuation purposes are reflective of actual events and remain appropriate for prospective application.
- Assessment of the relative funded position of the plan, i.e., through a comparison of plan assets and projected plan liabilities.
- Comments on any other matters which may be of assistance in the funding and operation of the plan.

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In preparing this report, we relied on employee census data and financial information as of the valuation date, furnished by the Town. We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have found them to be reasonably consistent and comparable with data used for other purposes. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete and our calculations may need to be revised. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Certification

The calculations reported herein have been made on a basis consistent with our understanding of ERISA and the related sections of the tax code. Additional determinations may be needed for purposes other than meeting funding requirements, such as judging benefit security at plan termination or meeting employer accounting requirements. On the basis of the foregoing, we hereby certify that, to the best of our knowledge, this report is complete and accurate and all costs and liabilities were determined in conformance with generally accepted actuarial principles and practices.

We further certify that, in our opinion, each actuarial assumption, method and technique used is reasonable taking into account the experience of the Plan and reasonable expectations or would, in the aggregate, result in a total contribution equivalent to that which would be determined if each such assumption, method, or technique were reasonable. 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 the actuarial assignment, we did not perform an analysis of the potential range of such future measurement.

We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Rebecca A. Sielman, FSA
Consulting Actuary

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Section I - Executive Summary
A. Highlights

Assets

There are two different measures of the plan's assets that are used throughout this report. The **Market Value** is a snapshot of the plan's investments as of the valuation date. The **Actuarial Value** is a smoothed asset value designed to temper the volatile fluctuations in the market by recognizing investment gains or losses over five years.

	Market	Actuarial
Value as of July 1, 2011	$13,191,401	$13,191,401
Contributions	569,105	569,105
Investment Income	392,127	723,198
Benefit Payments and Administrative Expenses	(635,156)	(635,156)
Value as of July 1, 2012	13,517,477	13,848,548

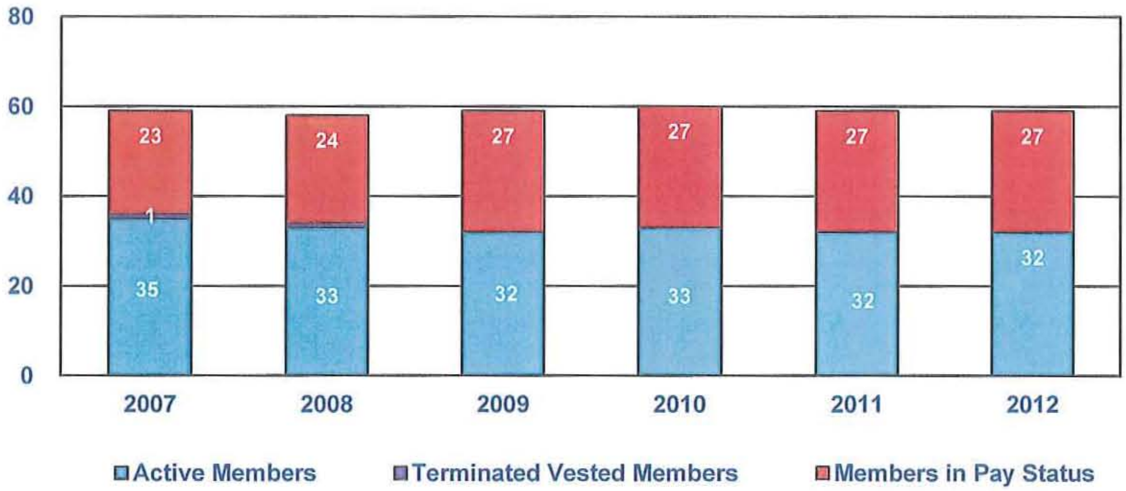
For fiscal year 2011-12, the plan's assets earned 2.98% on a Market Value basis and 5.50% on an Actuarial Value basis. The actuarial assumption for this period was 6.125%; the result is an asset loss of $413,800 on a Market Value basis and a loss of $82,800 on an Actuarial Value basis. Historical asset values are shown in the graph below to the left; historical returns are shown in the graph below to the right.

Please note that the Actuarial Value currently exceeds the Market Value by $331,100. This figure represents investment losses that will be gradually recognized over the next five years. This process will exert upward pressure on the Town's contribution, unless there are offsetting market gains.

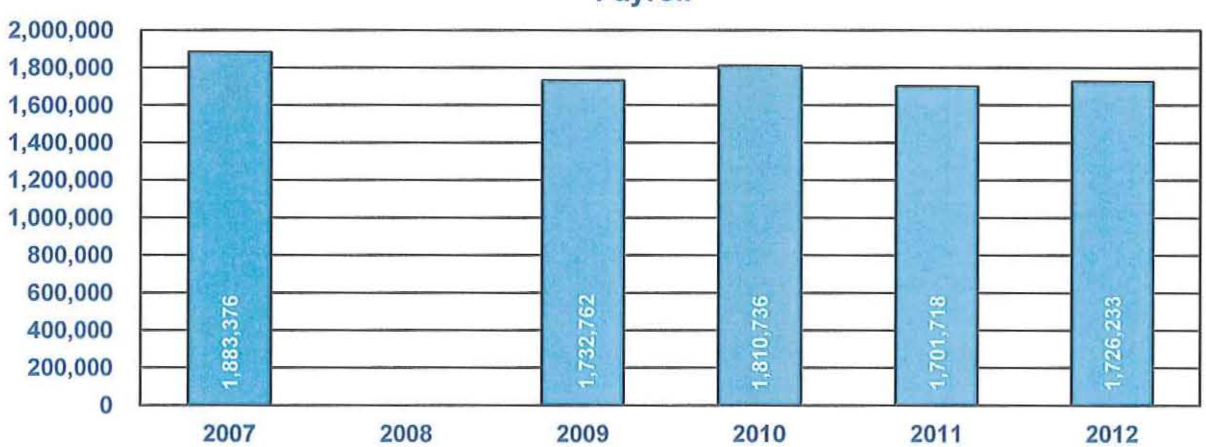
Section I - Executive Summary
A. Highlights

Membership

There are three basic categories of plan members included in the actuarial valuation: (1) active employees who have met the eligibility requirements for membership, (2) former employees who have a vested right to benefits but have not yet started collecting, and (3) members who are receiving monthly pension benefits.



From July 1, 2011 to July 1, 2012, the overall membership stayed the same at 59. During this period, there were 2 new members, which was offset by the transfer of two retired members to other plans.



Section I - Executive Summary
A. Highlights

Plan Changes

None.

Changes in Actuarial Methods or Assumptions

None.

Experience since 2011 Valuation

The plan's assets experienced modest losses, as discussed in more detail on page 3.

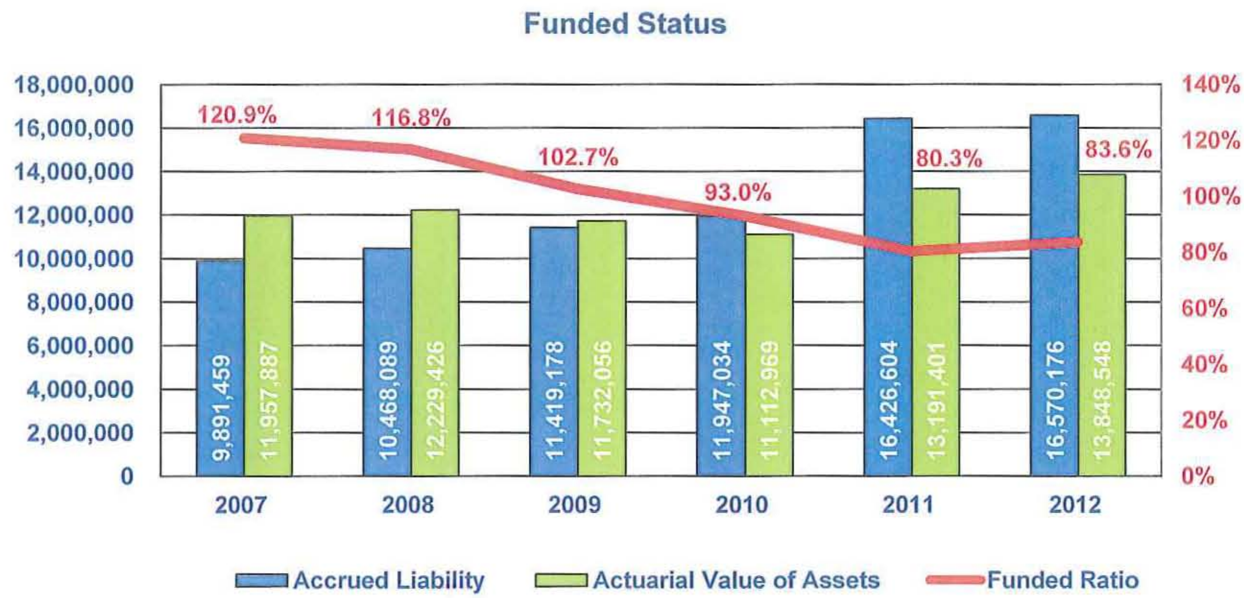
The plan had a modest gain because pay levels for members who were active in both the 2011 and 2012 valuations increased at a much lower rate (0.6%) than assumed. There were similarly modest gains from the corrected reporting of several retirees as disabled rather than service retirees, and from a net outflow of members to other Town plans.

The overall result was a slightly lower Annual Required Contribution than expected.

Section I - Executive Summary
A. Highlights

Funded Status

The chart below shows the plan's Accrued Liability and Actuarial Value of Assets for the past few years.

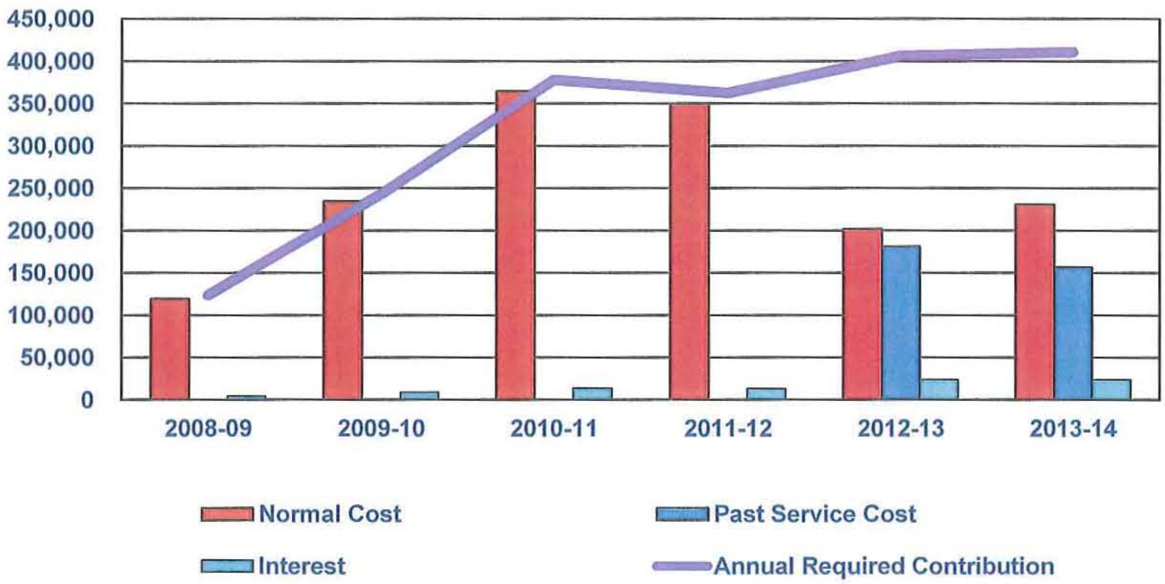


Section I - Executive Summary
A. Highlights

Annual Required Contribution

The Annual Required Contribution consists of three pieces: a **Normal Cost** payment to fund the benefits earned each year, a **Past Service Cost** to gradually reduce any unfunded or surplus liability, and **Interest** to the end of the year. If the plan has a sufficiently large surplus, the Past Service Cost may be large enough to cover the Normal Cost, in which case no contribution is required.

Contribution levels for the current year and the past few fiscal years are shown below.

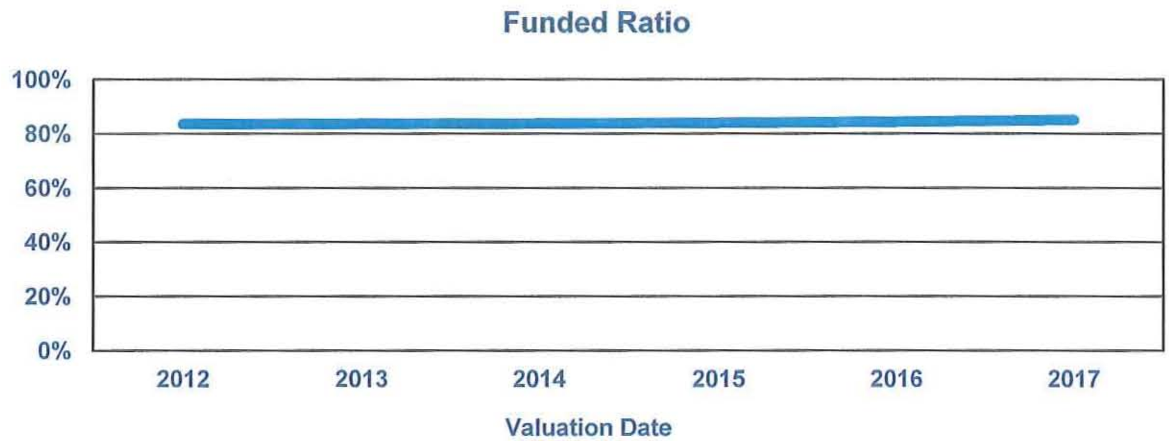


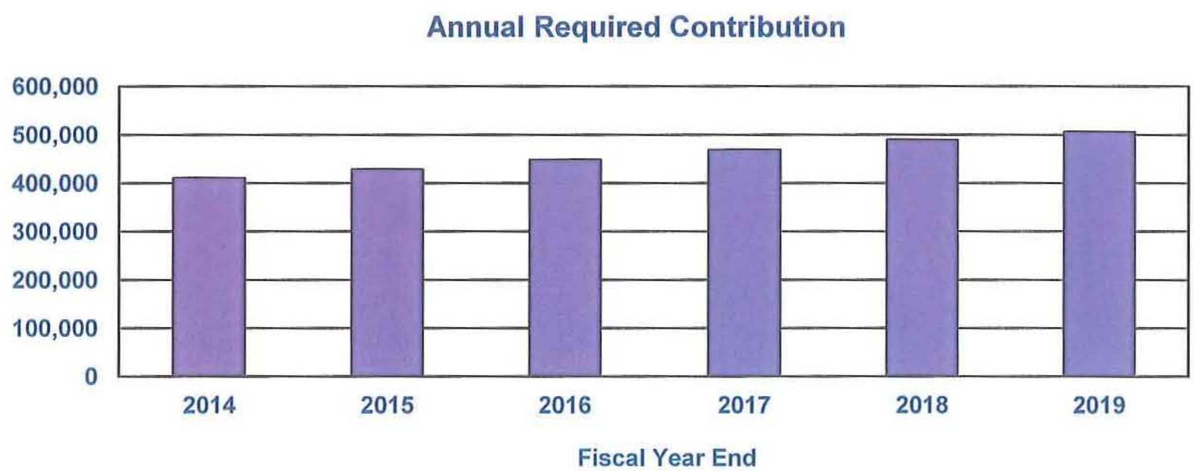
The upward trend in the Annual Required Contribution during this period is due primarily to the large market losses suffered in 2008.

Section I - Executive Summary
A. Highlights

Long Range Forecast

We expect the valuation results for the next several years to follow the patterns illustrated below:





To the extent that there are future investment or liability gains or losses, changes in the actuarial assumptions or methods, or plan changes, the actual valuation results will differ from these forecasts. Please see Section III C for more details of the long range forecast.

Section I - Executive Summary
B. Summary of Principal Results

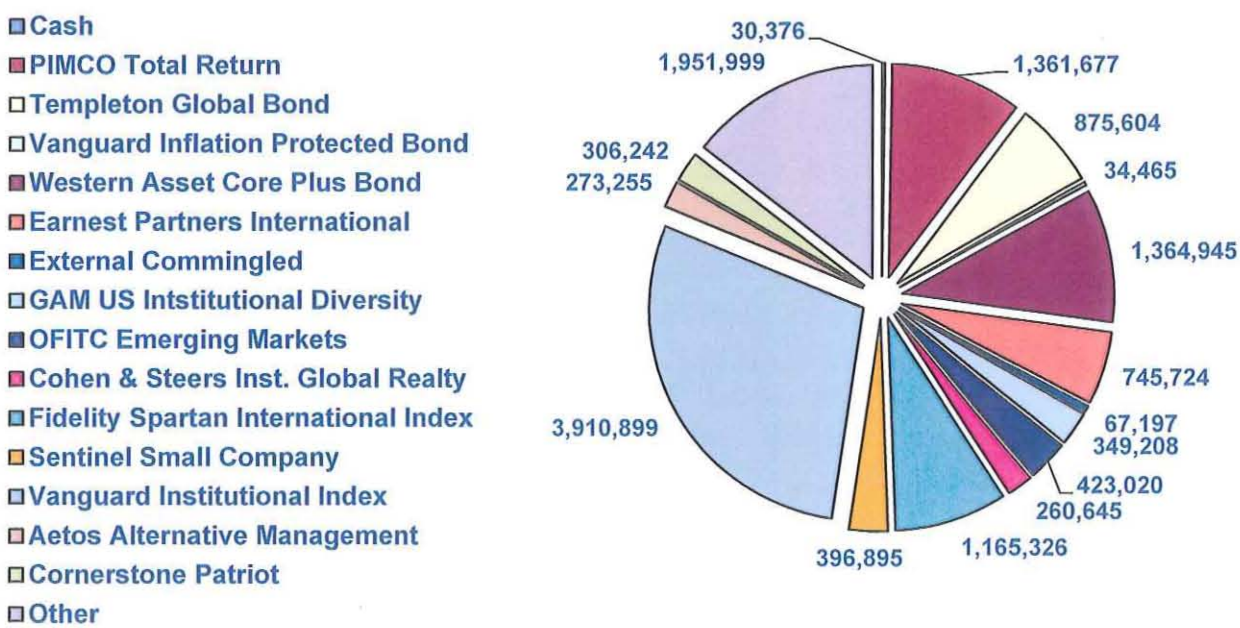
Membership	July 1, 2011	July 1, 2012
Active Members	30	32
Terminated Vested Members	0	0
Members in Pay Status	29	27
Payroll	$1,701,718	$1,790,720
Assets and Liabilities	**July 1, 2011**	**July 1, 2012**
Market Value of Assets	$13,191,401	$13,517,477
Actuarial Value of Assets	13,191,401	13,848,548
Accrued Liability for Active Members	$9,358,993	$9,978,450
Accrued Liability for Terminated Vested Members	0	0
Accrued Liability for Members in Pay Status	7,067,611	6,591,726
Total Accrued Liability	16,426,604	16,570,176
Unfunded Accrued Liability	3,235,203	2,721,628
Funded Ratio	80.3%	83.6%
Annual Required Contribution for Fiscal Year	**2012-13**	**2013-14**
Normal Cost	$201,913	$230,713
Past Service Cost	181,003	156,544
Interest	23,454	23,719
Annual Required Contribution	406,370	410,976

Section II - Plan Assets
A. Summary of Fund Transactions

Market Value as of July 1, 2011	$13,191,401
Employer Contributions	407,000
Employee Contributions	162,105
Benefit Payments	(635,156)
Investment Income	411,347
Investment Expenses	(19,220)
Market Value as of July 1, 2012	13,517,477
Approximate Rate of Return	2.98%

Note: The rate shown here is not the dollar or time weighted investment yield rate which measures investment performance. It is an approximate net return assuming all activity occurred on average midway through the fiscal year.

Asset Allocation



SECTION II - PLAN ASSETS
B. Development of Actuarial Value of Assets

In order to minimize the impact of market fluctuations on the contribution level, we use an Actuarial Value of Assets that recognizes gains and losses over a five year period starting on July 1, 2011. The Actuarial Value of Assets as of July 1, 2012 is determined below.

1. Expected Market Value of Assets:	
a. Market Value of Assets as of July 1, 2011	$13,191,401
b. Employer and Employee Contributions	569,105
c. Benefit Payments and Administrative Expenses	(635,156)
d. Expected Investment Return Based on 6.125% Interest	805,966
e. Expected Market Value of Assets as of July 1, 2012	13,931,316
2. Actual Market Value of Assets as of July 1, 2012	13,517,477
3. Market Value (Gain)/Loss: (1e) - (2)	413,839
4. Delayed Recognition of Market (Gains)/Losses:	

Plan Year End	(Gain)/Loss	Percent Not Recognized	Amount Not Recognized
06/30/2012	$413,839	80%	$331,071
06/30/2011	0	60%	0
06/30/2010	0	40%	0
06/30/2009	0	20%	0

	331,071
5. Actuarial Value as of July 1, 2012: (2) + (4)	13,848,548
6. Approximate Rate of Return on Actuarial Value	5.50%
7. Actuarial Value (Gain)/Loss	82,768

SECTION III - DEVELOPMENT OF CONTRIBUTION
A. Past Service Cost

For determining the Past Service Cost, the Unfunded Accrued Liability is amortized as a level percent over a period of 25 years starting on July 1, 2011.

		July 1, 2011	July 1, 2012
1.	Accrued Liability		
	Active Members	$9,358,993	$9,978,450
	Terminated Vested Members	0	0
	Retired Members	5,524,674	4,313,388
	Disabled Members	0	910,025
	Beneficiaries of Deceased Members	1,542,937	1,368,313
	Total	16,426,604	16,570,176
2.	Actuarial Value of Assets (see Section II B)	13,191,401	13,848,548
3.	Unfunded Accrued Liability: (1) - (2)	3,235,203	2,721,628
4.	Funded Ratio: (2) / (1)	80.3%	83.6%
5.	Amortization Period	25	24
6.	Amortization Growth Rate	3.00%	3.00%
7.	Past Service Cost: (3) amortized over (5)	181,003	156,544

SECTION III - DEVELOPMENT OF CONTRIBUTION
B. Annual Required Contribution

	Fiscal Year 2012-13	Fiscal Year 2013-14
1. Total Normal Cost	$355,471	$385,839
2. Expected Employee Contributions	153,558	155,126
3. Expected Expenses	0	0
4. Net Normal Cost: (1) - (2) + (3)	201,913	230,713
5. Past Service Cost (see Section III A)	181,003	156,544
6. Interest on (4) + (5) to start of next fiscal year	23,454	23,719
7. Annual Required Contribution: (4) + (5) + (6)	406,370	410,976

SECTION III - DEVELOPMENT OF CONTRIBUTION
C. Long Range Forecast

This forecast is based on the results of the July 1, 2012 actuarial valuation and assumes that the Town will pay the Annual Required Contribution each year, the assets will return 6.125% on a market value basis each year, and there are no future changes in the actuarial methods or assumptions or in the plan provisions. Actual results at each point in time will yield different values, reflecting the actual experience of the plan membership and assets.

	Values as of the Valuation Date					Cash Flows Projected to the Following Fiscal Year			
Valuation Date	Accrued Liability	Actuarial Value of Assets	Unfunded Accrued Liability	Funded Ratio	Fiscal Year Ending	Town Contributions	Employee Contributions	Benefit Payments	Net Cash Flows
7/1/2012	$16,570,176	$13,848,548	$2,721,628	83.6%	2014	$410,976	$160,000	($674,000)	($103,024)
7/1/2013	17,321,000	14,498,000	2,823,000	83.7%	2015	429,000	165,000	(694,000)	(100,000)
7/1/2014	18,109,000	15,182,000	2,927,000	83.8%	2016	449,000	170,000	(715,000)	(96,000)
7/1/2015	18,937,000	15,916,000	3,021,000	84.0%	2017	469,000	175,000	(736,000)	(92,000)
7/1/2016	19,807,000	16,704,000	3,103,000	84.3%	2018	490,000	180,000	(758,000)	(88,000)
7/1/2017	20,723,000	17,633,000	3,090,000	85.1%	2019	506,000	185,000	(781,000)	(90,000)
7/1/2018	21,686,000	18,622,000	3,064,000	85.9%	2020	522,000	191,000	(804,000)	(91,000)
7/1/2019	22,698,000	19,670,000	3,028,000	86.7%	2021	538,000	197,000	(828,000)	(93,000)
7/1/2020	23,763,000	20,781,000	2,982,000	87.5%	2022	554,000	203,000	(853,000)	(96,000)
7/1/2021	24,883,000	21,958,000	2,925,000	88.2%	2023	571,000	209,000	(879,000)	(99,000)
7/1/2022	26,062,000	23,204,000	2,858,000	89.0%	2024	589,000	215,000	(905,000)	(101,000)
7/1/2023	27,303,000	24,523,000	2,780,000	89.8%	2025	608,000	221,000	(932,000)	(103,000)
7/1/2024	28,610,000	25,921,000	2,689,000	90.6%	2026	628,000	228,000	(960,000)	(104,000)
7/1/2025	29,986,000	27,402,000	2,584,000	91.4%	2027	648,000	235,000	(989,000)	(106,000)
7/1/2026	31,435,000	28,974,000	2,461,000	92.2%	2028	668,000	242,000	(1,019,000)	(109,000)
7/1/2027	32,961,000	30,639,000	2,322,000	93.0%	2029	690,000	249,000	(1,050,000)	(111,000)
7/1/2028	34,569,000	32,403,000	2,166,000	93.7%	2030	712,000	256,000	(1,082,000)	(114,000)
7/1/2029	36,263,000	34,273,000	1,990,000	94.5%	2031	735,000	264,000	(1,114,000)	(115,000)
7/1/2030	38,048,000	36,255,000	1,793,000	95.3%	2032	760,000	272,000	(1,147,000)	(115,000)
7/1/2031	39,929,000	38,357,000	1,572,000	96.1%	2033	784,000	280,000	(1,181,000)	(117,000)

For purposes of this forecast the amortization period declines to 1 year to illustrate the progress of the plan towards becoming fully funded; in actual practice the amortization period will not be less than 10 years in order to shield the Town from contribution volatility.

SECTION IV - ACCOUNTING INFORMATION
A. Notes to Required Supplementary Information

The information presented in Section IV has been determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	July 1, 2012
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level percent
Amortization Period	Closed 25 years from July 1, 2011
Asset Valuation Method	5 Year Smoothed Market Value
Actuarial Assumptions	
Investment Rate of Return	6.125%
Projected Salary Increases	3.500%
Amortization Growth Rate	3.000%
Inflation	2.500%
Cost-of-Living Adjustments	None.

SECTION IV - ACCOUNTING INFORMATION
B. Schedule of Funding Progress

Actuarial Valuation Date	For Fiscal Year	(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability (AAL)	(3) Unfunded AAL (UAAL) (2) - (1)	(4) Funded Ratio (1) / (2)	(5) Covered Payroll	(6) UAAL as a Percentage of Covered Payroll (3) / (5)
07/01/2009	2009-10	$11,732,056	$11,419,178	($312,878)	102.7%	$1,732,762	-18.1%
07/01/2010	2010-11	11,112,969	11,947,034	834,065	93.0%	1,810,736	46.1%
07/01/2011	2011-12	11,517,093	12,433,811	916,718	92.6%	1,671,941	54.8%
07/01/2011	2012-13	13,191,401	16,426,604	3,235,203	80.3%	1,701,718	190.1%
07/01/2012	2013-14	13,848,548	16,570,176	2,721,628	83.6%	1,790,720	152.0%

SECTION IV - ACCOUNTING INFORMATION
C. Schedule of Employer Contributions

Fiscal Year Ending June 30	Annual Required Contribution	Actual Contribution	Percent Funded
2007	$0	$42,800	-
2008	118,381	53,958	45.6%
2009	123,709	49,234	39.8%
2010	243,485	124,000	50.9%
2011	378,249	365,000	96.5%
2012	362,891	337,000	92.9%
2013	406,370	TBD	TBD
2014	410,976	TBD	TBD

SECTION IV - ACCOUNTING INFORMATION
D. Accrued and Vested Benefits

The actuarially computed Value of Accrued Benefits represents the present value of (a) the benefits based on earnings and service to date expected to become payable at future dates to present employees, (b) the benefits expected to become payable to former employees who have terminated service with vested rights or who have become inactive, and (c) the benefits currently payable to retired participants and beneficiaries.

	As of July 1, 2011	As of July 1, 2012
1. Value of Vested Benefits		
Active Members	$6,029,631	$6,740,862
Terminated Vested Members	0	0
Retired Members	5,524,674	4,313,388
Disabled Members	0	910,025
Beneficiaries of Deceased Members	1,542,937	1,368,313
Total Value of Vested Benefits	13,097,242	13,332,588
2. Value of Non-Vested Benefits	625,290	794,433
3. Total Value of Accrued Benefits: (1) + (2)	13,722,532	14,127,021
4. Market Value of Assets	13,191,401	13,517,477
5. Vested Funded Ratio: (4) / (1)	100.7%	101.4%
6. Accrued Funded Ratio: (4) / (3)	96.1%	95.7%

SECTION IV - ACCOUNTING INFORMATION
E. Statement of Changes in Accrued Plan Benefits

Increase/(Decrease) during the 2011-2012 plan year attributable to:

Increase for interest due to the decrease in the discount period	$821,342
Benefits Accumulated/(Forfeited)	218,303
Benefit Payments	(635,156)
Plan Amendments	0
Changes in Actuarial Assumptions	0
Net Increase/(Decrease)	404,489

Value of Accrued Plan Benefits:

July 1, 2012	$14,127,021
July 1, 2011	13,722,532
Net Increase/(Decrease)	404,489

SECTION V - MEMBERSHIP DATA
A. Reconciliation of Membership from Prior Valuation

Details of the changes in the Plan membership since the last valuation are shown below. Additional details on the Plan membership are provided in the remainder of Section V.

	Active	Term. Vested	Retirees	Disabled	Bene-ficiaries	Total
Count as of July 1, 2011	30	0	17	0	12	59
Terminated, due refund	-	-	-	-	-	0
Terminated, benefits due	-	-	-	-	-	0
Retired	-	-	-	-	-	0
Disabled	-	-	-	-	-	0
Died, with beneficiary	-	-	-	-	-	0
Died, no beneficiary	-	-	-	-	-	0
Paid refund	-	-	-	-	-	0
Net transfers	-	-	(2)	-	-	(2)
New member	2	-	-	-	-	2
New beneficiary	-	-	-	-	-	0
Correction	-	-	(3)	4	(1)	0
Count as of July 1, 2012	32	0	12	4	11	59

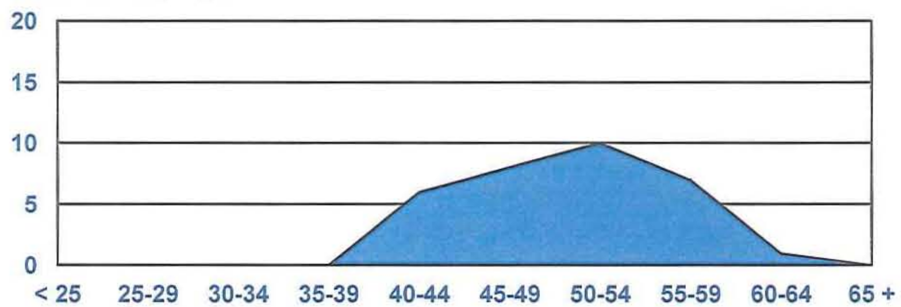
SECTION V - MEMBERSHIP DATA
B. Statistics of Membership

	As of July 1, 2011	As of July 1, 2012
Number of Active Members		
Number	30	32
Average Age	49.2	50.2
Average Service	17.5	17.4
Total Payroll	$1,701,718	$1,790,720
Average Payroll	56,724	55,960
Terminated Vested Members		
Number	0	0
Total Annual Benefit	$0	$0
Average Annual Benefit	0	0
Average Age	0.0	0.0
Retired Members		
Number	17	12
Total Annual Benefit	$461,081	$365,509
Average Annual Benefit	27,122	30,459
Average Age	70.2	74.3
Disabled Members		
Number	0	4
Total Annual Benefit	$0	$82,372
Average Annual Benefit	0	20,593
Average Age	0.0	57.8
Beneficiaries of Deceased Members		
Number	12	11
Total Annual Benefit	$162,583	$144,570
Average Annual Benefit	13,549	13,143
Average Age	76.3	77.2

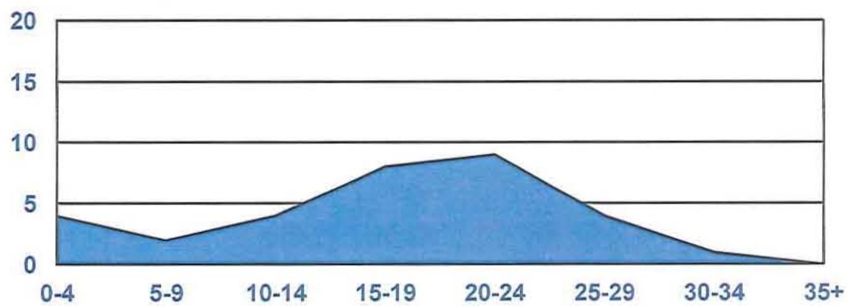
SECTION V - MEMBERSHIP DATA
C. Distribution of Active Members as of July 1, 2012 - Count

	Years of Service								
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
< 25	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0
40-44	0	1	2	2	1	0	0	0	6
45-49	2	1	2	0	3	0	0	0	8
50-54	2	0	0	3	3	2	0	0	10
55-59	0	0	0	3	1	2	1	0	7
60-64	0	0	0	0	1	0	0	0	1
65 +	0	0	0	0	0	0	0	0	0
Total	4	2	4	8	9	4	1	0	32

Distribution By Age



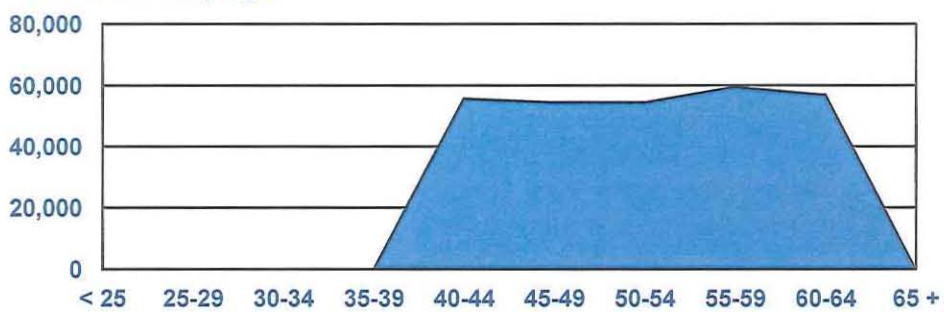
Distribution by Years of Service



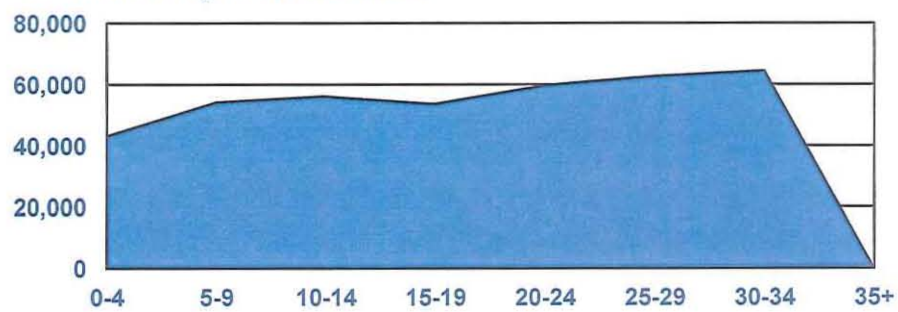
SECTION V - MEMBERSHIP DATA
D. Distribution of Active Members as of July 1, 2012 - Average Pay

	Years of Service								
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total
< 25	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0
40-44	0	51,585	56,999	54,225	61,089	0	0	0	55,854
45-49	44,309	56,999	55,577	0	59,910	0	0	0	54,562
50-54	42,140	0	0	50,272	60,258	64,363	0	0	54,460
55-59	0	0	0	56,999	59,843	61,089	64,487	0	59,644
60-64	0	0	0	0	56,999	0	0	0	56,999
65 +	0	0	0	0	0	0	0	0	0
Total	43,224	54,292	56,288	53,783	59,826	62,726	64,487	0	55,960

Distribution By Age



Distribution by Years of Service



SECTION V - MEMBERSHIP DATA
E. Distribution of Inactive Members as of July 1, 2012

	Age	Number	Annual Benefits
Terminated Vested Members / Members Due Refunds	< 30	0	$0
	30 - 39	0	0
	40 - 49	0	0
	50 - 59	0	0
	60 - 64	0	0
	65 +	0	0
	Total	0	0
Retired Members	< 50	0	$0
	50 - 59	1	40,932
	60 - 69	4	181,789
	70 - 79	3	90,145
	80 - 89	3	43,262
	90 +	1	9,382
	Total	12	365,510
Disabled Retirees	< 50	1	$27,468
	50 - 59	1	20,464
	60 - 69	2	34,441
	70 - 79	0	0
	80 - 89	0	0
	90 +	0	0
	Total	4	82,373
Beneficiaries	< 50	1	$48,917
	50 - 59	0	0
	60 - 69	1	5,700
	70 - 79	3	30,121
	80 - 89	4	42,045
	90 +	2	17,786
	Total	11	144,569

APPENDIX A - ACTUARIAL FUNDING METHOD

The actuarial funding method used in the valuation of this Plan is known as the **Entry Age Normal Cost Method**. Recommended annual contributions until the accrued liability is completely funded will consist of two pieces: Normal Cost plus a payment towards the Unfunded Accrued Liability.

The **Normal Cost** is determined by calculating the present value of future benefits for present active Members that will become payable as the result of death, disability, retirement or termination. This cost is then spread as a level percentage of earnings from entry age to termination as an Active Member. If Normal Costs had been paid at this level for all prior years, a fund would have accumulated. Because this fund represents the portion of benefits that would have been funded to date, it is termed the **Accrued Liability**. In fact, it is calculated by adding the present value of benefits for Retired Members and Terminated Vested Members to the present value of benefits for Active Members and subtracting the present value of future Normal Cost contributions.

The funding cost of the Plan is derived by making certain specific assumptions as to rates of interest, mortality, turnover, etc. which are assumed to hold for many years into the future. Since actual experience may differ somewhat from the assumptions, the costs determined by the valuation must be regarded as estimates of the true costs of the Plan.

The unfunded liability for the plan is the excess of the Accrued Liability over the assets which have been accumulated for the plan. This Unfunded Accrued Liability is amortized as a level percent. Beginning on July 1, 2011, the amortization period is 25 years; the amortization period will decrease each year until it reaches 10 years, after which point it will remain at 10 years.

Effective July 1, 2011, the **Actuarial Value of Assets** was reset to equal the market value. In future years, the **Actuarial Value** is determined by recognizing asset gains and losses over **five** years.

APPENDIX B - ACTUARIAL ASSUMPTIONS

Interest 6.125%

Amortization Growth Rate 3.000%

Salary Scale 3.500%

Expenses None.

Mortality RP-2000 Mortality Tables for employees, healthy annuitants, and disabled annuitants, with generational projection of future mortality improvements per Scale AA. This assumption includes a margin for improvements in longevity beyond the valuation date.

Turnover 50% of Vaughn Select and Ultimate table:

	Service			
Age	1	2	3	4+
20	14.90%	12.50%	10.50%	9.30%
25	13.90%	11.25%	9.25%	6.80%
30	12.90%	10.00%	8.00%	5.05%
35	11.90%	8.90%	6.90%	3.95%
40	10.90%	7.90%	5.90%	3.25%
45	9.90%	7.05%	5.05%	2.75%
50	8.90%	6.30%	4.30%	2.25%
55	6.75%	4.75%	3.08%	1.54%
60	0.00%	0.00%	0.00%	0.00%

Retirement Active members are assumed to retire according to the following table:

Age	Rate
<62	5%
62-69	20%
70	100%

Also 100% are assumed to retire at 33 years of service.

Terminated vested members are assumed to retire at their Normal Retirement Date.

APPENDIX B - ACTUARIAL ASSUMPTIONS

Disability

50% of 1985 Pension Class 4 table:

Age	Male	Female
25	0.13%	0.09%
35	0.25%	0.23%
45	0.47%	0.44%
55	1.14%	1.06%
65	2.30%	1.43%

All disabled members are assumed to receive the On Duty disability benefit.

Marriage Assumption

80% of members are assumed to be married and husbands are assumed to be 3 years older than their wives.

Load for Unused Sick Days

The Accrued Liability and Total Normal Cost for active members are loaded by 1.00% to anticipate the trade of unused sick days for additional pension service.

APPENDIX C - SUMMARY OF PLAN PROVISIONS

This exhibit summarizes the major provisions of the Plan. It is not intended to be, nor should it be interpreted as a complete statement of all plan provisions. All eligibility requirements and benefit amounts shall be determined in strict accordance with the plan document itself. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

Eligibility

Each public works employee is eligible to participate as of the date the employee completes the probationary period. Employees hired after the effective date of the new contract are not covered by this plan.

Employee Contributions

9% of Compensation for employees hired before July 1, 1999. 10% of Compensation for employees hired on or after July 1, 1999. Contributions are credited with 5% interest.

Credited Service

Service from date of hire measured in years and completed months, capped at 32.5 years. Credited Service includes unused sick time of 60-120 days.

Compensation

Base Salary, including "pick-up" contributions but excluding overtime or other income.

Final Average Earnings

Compensation earned during the last 12 months of service.

Normal Retirement Date

The first day of the month coincident with or next following the later of the date the member's age plus Credited Service equals 75, or age 55 with the completion of 10 years of service.

Normal Retirement Benefit

2.50% of Final Average Compensation times Credited Service (maximum of 32.5 years) reduced by payments from any program to which the employer has contributed.

Early Retirement Date

None provided.

Disability Retirement (On Duty)

50% of the annualized Compensation immediately prior to disability or if greater, the Normal Retirement Benefit calculated as if the member terminated at date of disability. At the death of the member, 100% of the benefit will continue to the spouse or eligible children. If hired on or after January 1, 2002, 75% of the benefit will continue.

Disability Retirement (Non Duty)

Refund of accumulated employee contributions with interest. The Pension Board may award a pension equal to the On Duty Disability benefit.

Pre-Retirement Death (On Duty)

50% of the annualized Compensation immediately prior to death. For members hired on or after January 1, 1999, 75% of the amount described above is payable to the beneficiary.

Pre-Retirement Death (Non Duty)

Refund of accumulated employee contributions with interest.

APPENDIX C - SUMMARY OF PLAN PROVISIONS

Normal Form of Payment	100% Joint & Survivor for members hired before January 1, 1999. 75% Joint & Survivor for members hired on or after January 1, 1999. Upon the death of the member and any beneficiaries, the excess of employee contributions with interest over the sum of benefits previously paid is payable to the member's estate.
Vesting	100% vested after completing 10 years of continuous service.
Vested Retirement	If vested, Normal Retirement Benefit accrued to date of termination payable at Normal Retirement Date. Can opt to receive a refund of employee contributions with interest in lieu of a monthly benefit.
Termination Benefit	If not vested at termination, a refund of accumulated employee contributions with interest will be paid.