

Town of East Hartford Pension Plan

**Actuarial Valuation and Review as of
July 1, 2016**





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April 4, 2017

*Mr. Donald Currey, Pension Board Chairman
Town of East Hartford
740 Main Street
East Hartford, CT 06108*

Dear Mr. Currey:

We are pleased to submit this Actuarial Valuation and Review as of July 1, 2016. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal year ending June 30, 2018 and analyzes the preceding year's experience.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Pension Plan. The census information and financial information on which our calculations were based was prepared by the Town of East Hartford. That assistance is gratefully acknowledged.

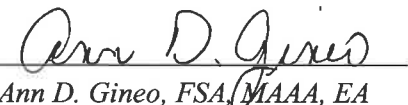
The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic 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.

The actuarial calculations were directed under our supervision. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Pension Board are reasonably related to the experience of and the expectations for the Plan.


We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

By: 
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SECTION 1: Valuation Summary for the Town of East Hartford Pension Plan

Purpose

This report has been prepared by Segal Consulting to present a valuation of the Town of East Hartford Pension Plan as of July 1, 2016. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Pension Board;
- The characteristics of covered active participants, inactive vested participants, and retired participants and beneficiaries as of July 1, 2016, provided by the Pension Board;
- The assets of the Plan as of June 30, 2016, provided by the Town;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

1. This July 1, 2016 valuation is used to determine the Actuarially Determined Contribution (ADC) for the fiscal year beginning July 1, 2017. As a dollar amount, the ADC has increased over the 2016-2017 fiscal year calculation from \$12,737,344 to \$13,706,771. As a percentage of pay, it has increased from 30.72% to 34.08%. The development of the ADC is shown in this valuation report on page 10 and a detailed reconciliation of the change in the ADC is on page 11. The allocation of the contribution by group is shown on page 18.
2. The actuarial valuation report as of July 1, 2016 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Unfavorable asset experience will increase the actuarial cost of the Plan, while favorable experience will decrease the actuarial cost of the Plan. For example, a 10% change in the current year's actuarial value of assets would produce a \$1,401,295 change in the recommended contribution level. Because the actuarial value of assets involves a smoothing method, a 10% change in market value would not be fully reflected immediately in the actuarial value of assets. Rather, that effect would be spread over a period of years. We have shown the full impact immediately so as to indicate the sensitivity of costs to market fluctuations.

SECTION 1: Valuation Summary for the Town of East Hartford Pension Plan

3. As indicated in Section 2, Subsection B of this report, the total unrecognized investment loss as of June 30, 2016 is \$17,304,129. This investment loss will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 7.90% per year (net of expenses) on a **market value** basis will result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 7.90% rate and all other actuarial assumptions are met, the contribution requirements would still increase in each of the next few years.
4. The Town has elected to grant a 1% COLA to Firefighters who retired between January 1, 2002 and June 30, 2005 and non-disabled General Employees who retired between January 1, 2002 and July 1, 2005. This change increased the contribution by \$50,000.
5. This year the discount rate was lowered from 8.00% to 7.90%. We believe the Town of East Hartford should consider further reducing this assumption to something in the 6.75% to 7.25% range.
6. The Town is amortizing the unfunded liability over 27 years with payments increasing 3.25% annually. These payments do not cover the interest on the unfunded liability. Therefore, the unfunded liability is expected to grow even if all assumptions are met.

SECTION 1: Valuation Summary for the Town of East Hartford Pension Plan

Summary of Key Valuation Results

	2017	2016	2015
Contributions for fiscal year beginning July 1:			
Actuarially Determined Contribution (ADC)	\$13,706,771	\$12,737,344	\$11,879,286
Funding elements for plan year beginning July 1:			
Normal cost, including administrative expenses		\$6,096,360	\$6,079,322
Market value of assets*		201,756,326	209,397,046
Actuarial value of assets*		219,060,455	213,702,418
Actuarial accrued liability		384,162,998	368,914,089
Unfunded/(overfunded) actuarial accrued liability		165,102,543	155,211,671
Demographic data for plan year beginning July 1:			
Number of retired participants and beneficiaries		682	670
Number of vested former participants		27	29
Number of active participants		549	579
Projected total pay		\$38,956,281	\$40,058,612
Projected average pay		70,959	69,186

* Does not include DROP assets. This amount was also excluded from plan liabilities. As of July 1, 2016, the DROP account assets are \$6,480,016. As of July 1, 2015, the DROP account assets were \$5,608,761.

SECTION 1: Valuation Summary for the Town of East Hartford Pension Plan

Important Information About Actuarial Valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal Consulting (“Segal”) relies on a number of input items. These include:

- **Plan of benefits** Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
- **Participant data** An actuarial valuation for a plan is based on data provided to the actuary by the Town. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
- **Assets** The valuation is based on the market value of assets as of the valuation date, as provided by the Town. The Town uses an “actuarial value of assets” that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
- **Actuarial assumptions** In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan’s assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results, that does not mean that the previous assumptions were unreasonable.

SECTION 1: Valuation Summary for the Town of East Hartford Pension Plan

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The actuarial valuation is prepared at the request of the Pension Board. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.
- If the Town or Pension Board is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Pension Board should look to their other advisors for expertise in these areas.

As Segal Consulting has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

SECTION 2: Valuation Results for the Town of East Hartford Pension Plan

A. PARTICIPANT DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered participants, including active participants, vested terminated participants, retired participants and beneficiaries.

This section presents a summary of significant statistical data on these participant groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

The Plan was closed to new entrants from the Town and Board of Education groups in 2006 and new entrants in the Paraprofessional plan in 2015. Therefore, the active participant count has been declining over time, and as a result the ratio of non-actives to actives is increasing.

A historical perspective of how the participant population has changed over the past ten valuations can be seen in this chart.

CHART 1

Participant Population: 2007 – 2016

Year Ended June 30	Active Participants	Vested Terminated Participants*	Retired Participants and Beneficiaries**	Ratio of Non-Actives to Actives
2007	787	23	571	0.75
2008	770	17	582	0.78
2009	741	17	587	0.82
2010	727	18	592	0.84
2011	705	14	599	0.87
2012	672	20	608	0.93
2013	643	23	623	1.00
2014	620	23	650	1.09
2015	579	29	670	1.21
2016	549	27	682	1.29

*Excludes terminated participants due a refund of employee contributions (67 as of June 30, 2016)

**Includes disabled participants (38 as of June 30, 2016)

SECTION 2: Valuation Results for the Town of East Hartford Pension Plan

Active Participants

Plan costs are affected by the age, years of benefit service and pay of active participants. In this year's valuation, there were 549 active participants with an average age of 49.2, average years of benefit service of 15.2 years and average pay of \$70,959. The 579 active participants in the prior valuation had an average age of 49.2, average service of 14.7 years and average pay of \$69,186.

Inactive Participants

In this year's valuation, there were 27 participants with a vested right to a deferred or immediate vested benefit.

In addition, there were 67 participants entitled to a return of their employee contributions.

These graphs show a distribution of active participants by age and by years of benefit service.

CHART 2

Distribution of Active Participants by Age as of June 30, 2016

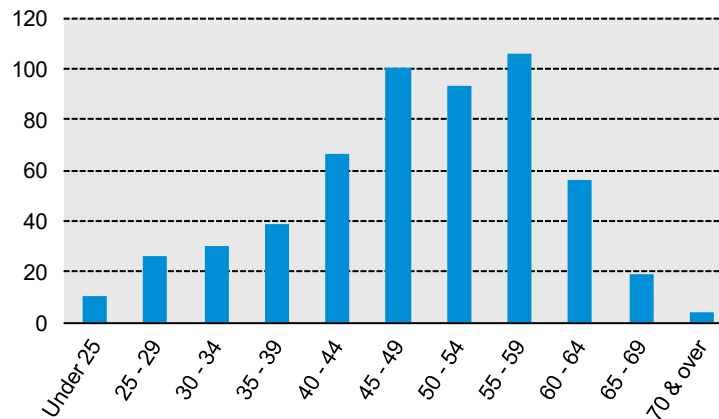
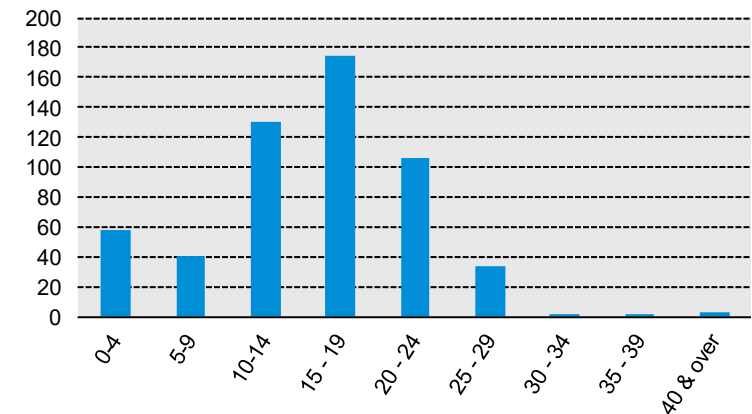


CHART 3

Distribution of Active Participants by Years of Benefit Service as of June 30, 2016



SECTION 2: Valuation Results for the Town of East Hartford Pension Plan

Retired Participants and Beneficiaries

As of June 30, 2016, 606 retired participants (including 38 disabled) and 76 beneficiaries were receiving total monthly benefits of \$1,838,872. For comparison, in the previous valuation, there were 593 retired participants and 77 beneficiaries receiving monthly benefits of \$1,747,278.

These graphs show a distribution of the current retired participants based on their monthly amount and age, by type of pension.

■ Disability

■ Regular

CHART 4

Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2016

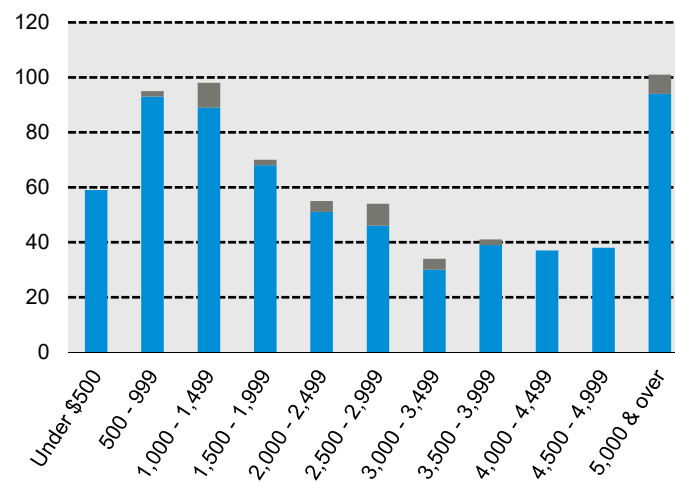
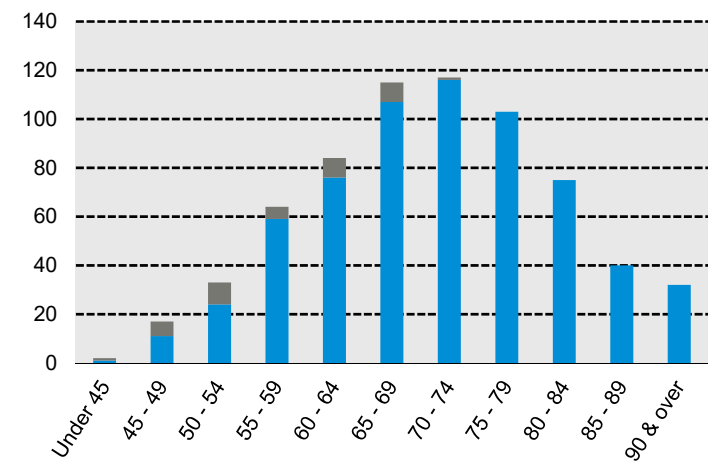


CHART 5

Distribution of Retired Participants by Type and by Age as of June 30, 2016



SECTION 2: Valuation Results for the Town of East Hartford Pension Plan

The chart shows the determination of the actuarial value of assets as of the valuation date.

B. FINANCIAL INFORMATION

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Pension Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

CHART 6

Determination of Actuarial Value of Assets for Year Ended June 30, 2016

1. Market value of assets, June 30, 2016			\$201,756,326
2. Calculation of unrecognized gain or (loss)	Original Amount *	Unrecognized Return**	
(a) Year ended June 30, 2016	(\$18,457,367)	(\$14,765,894)	
(b) Year ended June 30, 2015	(16,636,027)	(9,981,616)	
(c) Year ended June 30, 2014	14,164,859	5,665,944	
(d) Year ended June 30, 2013	8,887,183	1,777,437	
(e) Total unrecognized return			(17,304,129)
3. Preliminary actuarial value: (1) - (2e)			219,060,455
4. Adjustment to be within 20% corridor			0
5. Final actuarial value of assets as of June 30, 2016: (3) + (4)			<u>\$219,060,455</u>
6. Actuarial value as a percentage of market value: (5) ÷ (1)			108.6%
7. Amount deferred for future recognition: (1) - (5)			(\$17,304,129)

**Total return minus expected return on a market value*

***Recognition at 20% per year over 5 years*

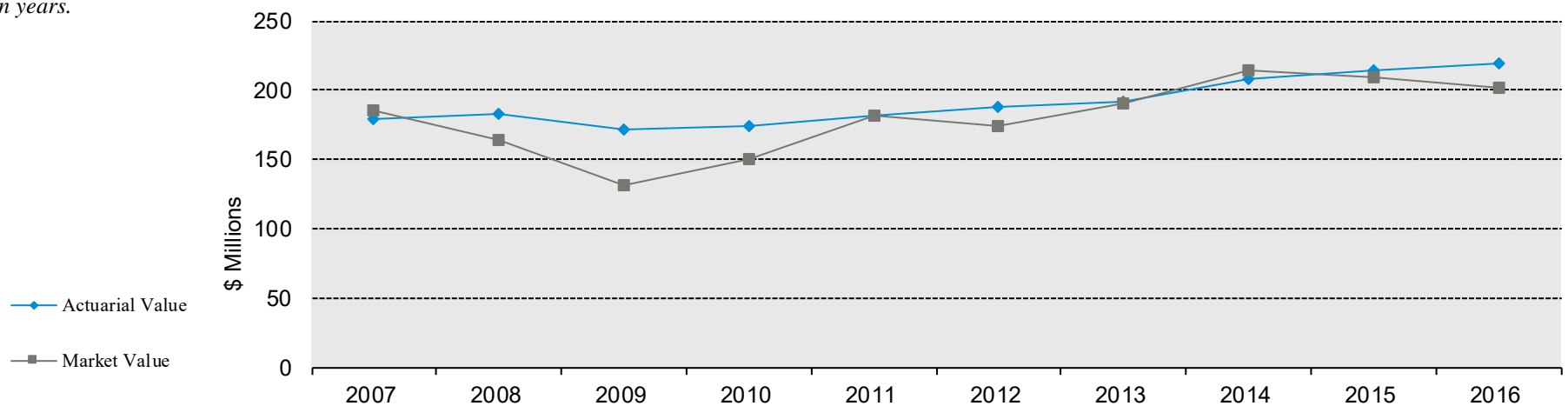
SECTION 2: Valuation Results for the Town of East Hartford Pension Plan

Both the actuarial value and market value of assets are representations of the Plan's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the Plan's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

This chart shows the change in the actuarial value of assets versus the market value over the past ten years.

CHART 7

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 2007 – 2016



SECTION 2: Valuation Results for the Town of East Hartford Pension Plan

C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term

development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total (loss) is (\$89,957), (\$5,803,039) from investment losses and \$5,713,082 in gains from all other sources. The net experience variation from individual sources other than investments was 1.5% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 8

Actuarial Experience for Year Ended June 30, 2016

1. Net gain/(loss) from investments*	(\$5,803,039)
2. Net gain/(loss) from administrative expenses	(10,730)
3. Net gain/(loss) from liability experience**	<u>5,723,812</u>
4. Net experience gain/(loss): (1) + (2) + (3)	(\$89,957)

* Details in Chart 9

** Details in Chart 12

SECTION 2: Valuation Results for the Town of East Hartford Pension Plan

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Plan's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 7.90% (8.00% last year). The actual rate of return on an actuarial basis for the 2015/2016 plan year was 5.25%, while the market rate of return was -0.94%.

Since the actual return for the year was less than the assumed return, the Plan experienced an actuarial loss during the year ended June 30, 2016 with regard to its investments.

This chart shows the gain/(loss) due to investment experience.

CHART 9

Actuarial Value Investment Experience for Year Ended June 30, 2016

1. Actual return	\$11,064,880
2. Average value of assets	210,848,997
3. Actual rate of return: (1) ÷ (2)	5.25%
4. Assumed rate of return	8.00%
5. Expected return: (2) x (4)	\$16,867,919
6. Actuarial gain/(loss): (1) – (5)	<u>(\$5,803,039)</u>

SECTION 2: Valuation Results for the Town of East Hartford Pension Plan

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the market value investment return for the last ten years, including five-year and ten-year averages.

CHART 10

Investment Return – Actuarial Value vs. Market Value: 2007 - 2016

Year Ended June 30	Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent
2007	\$15,696,700	9.52%	\$28,189,382	17.72%
2008	9,975,120	5.67	(16,658,929)	-9.12
2009	(7,244,535)	-4.01*	(26,780,198)	-16.65
2010	8,035,980	4.77	24,076,138	18.68
2011	13,936,901	8.16	36,693,049	24.88
2012	11,562,844	6.47	(551,766)	-0.31
2013	11,850,003	6.45**	22,570,696	13.20
2014	20,707,294	10.91**	29,182,221	15.55
2015	11,044,858	5.38	305,830	0.14
2016	11,064,880	5.25	(1,933,877)	-0.94
Five-year geometric average return		6.87%	5.28%	
Ten-year geometric average return		5.79%	5.51%	

Note: Each year's yield is weighted by the average asset value in that year.

**Includes effect of widening the corridor around the market value in the actuarial asset method from 20% to 30%.*

***Includes effect of change in asset method.*

SECTION 2: Valuation Results for the Town of East Hartford Pension Plan

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),

- the number of disability retirements, and
- salary increases different than assumed.

The net gain from this other experience for the year ended June 30, 2016 amounted to \$5,723,812, which is 1.5% of the actuarial accrued liability. This is mainly due to post-retirement mortality greater than expected and salary increases less than expected.

SECTION 2: Valuation Results for the Town of East Hartford Pension Plan

D. ACTUARIALLY DETERMINED CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded/(overfunded) actuarial accrued liability. This total amount is then divided by the projected pay for active members to determine the funding rate of 34.08% of pay.

The unfunded actuarial accrued liability is amortized on a level percent basis, with 3.25% (previously, 3.50%) annual increases in the payments anticipated. This methodology is generally tied to payroll with the contribution expected to remain constant as a percentage of pay. Payroll is decreasing,

since the Plan is partially closed to new entrants. Thus, the recommended contribution will increase as a percentage of pay over time, if all assumptions are met.

The recommended contribution is based on an amortization schedule adopted by the Town. As of July 1, 2013, the amortization period was reset to 30 years. There are 27 years remaining as of July 1, 2016.

The valuation results are used to determine the contributions for the subsequent fiscal year, and thus the recommended contribution is projected for a full year in the chart below.

The chart compares this valuation's recommended contribution with the prior valuation.

CHART 11

Actuarially Determined Contribution

	Year Beginning July 1			
	2016		2015	
	Amount	% of Pay	Amount	% of Pay
1. Total normal cost	\$5,896,360	15.14%	\$5,886,872	14.70%
2. Administrative expenses	200,000	0.51%	192,450	0.48%
3. Expected employee contributions	<u>(3,049,943)</u>	<u>-7.83%</u>	<u>(3,060,778)</u>	<u>-7.64%</u>
4. Employer normal cost: (1) + (2) + (3)	\$3,046,417	7.82%	\$3,018,544	7.54%
5. Actuarial accrued liability	384,162,998		368,914,089	
6. Actuarial value of assets	<u>219,060,455</u>		<u>213,702,418</u>	
7. Unfunded/(overfunded) actuarial accrued liability: (5) - (6)	\$165,102,543		\$155,211,671	
8. Payment on projected unfunded/(overfunded) actuarial accrued liability	10,228,906		9,288,068	
9. Total Town Cost: (4) + (8)	13,275,323	34.08%	12,306,612	30.72%
10. Total pay	38,956,281		40,058,612	
11. Actuarially Determined Contribution* for plan years ending June 30, 2018 and June 30, 2017	\$13,706,771		\$12,737,344	

*Actuarially Determined Contributions are assumed to be paid at the beginning of every year.

SECTION 2: Valuation Results for the Town of East Hartford Pension Plan

The contribution requirements as of July 1, 2016 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Reconciliation of Actuarially Determined Contribution

The chart below details the changes in the Actuarially Determined Contribution from the prior valuation to the current year's valuation.

CHART 12

Reconciliation of Actuarially Determined Contribution from July 1, 2016 to July 1, 2017

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

Actuarially Determined Contribution as of July 1, 2016	\$12,737,344
Expected amortization increase	340,000
Change due to mortality different than expected	(140,000)
Change due to pay different than expected	(110,000)
Change due to current year loss on investments (20% recognition)	210,000
Change due to recognition of prior years' gain/loss on investments	160,000
Change due to decrease in discount rate	295,000
Change due to decrease in amortization percentage	230,000
Change due to assumptions (mortality projection update)	120,000
Change due to increase in General Employee contributions rate	(60,000)
Change due to extension of 1% COLA for General and Fire Employees	50,000
Change due to other decreases in normal cost	(70,000)
Other plan actuarial experience	<u>(55,573)</u>
Total change	<u>\$969,427</u>
Actuarially Determined Contribution as of July 1, 2017	\$13,706,771

SECTION 3: Supplemental Information for the Town of East Hartford Pension Plan

EXHIBIT A

Table of Plan Coverage

Category	As of June 30		Change From Prior Year
	2016	2015	
Active participants in valuation:			
Number	549	579	-5.2%
Average age	49.2	49.2	N/A
Average years of benefit service	15.2	14.7	N/A
Projected total pay	\$38,956,281	\$40,058,612	-2.8%
Projected average pay	70,959	69,186	2.6%
Account balances	42,187,425	43,173,649	-2.3%
Total active vested participants	428	454	-5.7%
Vested terminated participants	27	29	-6.9%
Retired participants:			
Number in pay status	568	553	2.5%
Average age	71.2	71.1	N/A
Average monthly benefit	\$2,833	\$2,729	3.8%
Disabled participants:			
Number in pay status	38	40	-5.0%
Average age	58.1	57.6	N/A
Average monthly benefit	\$2,800	\$2,798	0.1%
Beneficiaries in pay status:			
Number in pay status	76	77	-1.3%
Average age	77.9	77.3	N/A
Average monthly benefit	\$1,657	\$1,642	0.9%
Inactive non-vested participants with balances	67	84	-20.2%

SECTION 3: Supplemental Information for the Town of East Hartford Pension Plan

EXHIBIT B

Participants in Active Service as of June 30, 2016 By Age, Years of Benefit Service, and Average Pay

Age	Years of Benefit Service									
	Total	0-4	5-9	10-14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 & over
Under 25	10	10	--	--	--	--	--	--	--	--
	\$61,348	\$61,348	--	--	--	--	--	--	--	--
25 - 29	26	22	4	--	--	--	--	--	--	--
	73,122	69,583	--	--	--	--	--	--	--	--
30 - 34	30	16	6	6	2	--	--	--	--	--
	73,711	74,161	--	--	--	--	--	--	--	--
35 - 39	39	3	8	21	7	--	--	--	--	--
	80,254	--	--	\$84,277	--	--	--	--	--	--
40 - 44	66	2	2	19	28	14	1	--	--	--
	87,555	--	--	79,479	\$89,702	\$101,479	--	--	--	--
45 - 49	100	3	7	18	30	41	1	--	--	--
	85,387	--	--	68,357	81,615	105,990	--	--	--	--
50 - 54	93	2	5	21	22	22	20	1	--	--
	72,269	--	--	55,062	63,299	98,568	\$84,733	--	--	--
55 - 59	106	--	4	27	48	18	7	1	1	--
	57,264	--	--	56,493	49,609	72,235	--	--	--	--
60 - 64	56	--	4	14	24	9	2	--	1	2
	52,199	--	--	56,076	39,856	--	--	--	--	--
65 - 69	19	--	--	3	11	2	2	--	--	1
	49,278	--	--	--	42,767	--	--	--	--	--
70 & over	4	--	--	1	3	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	549	58	40	130	175	106	33	2	2	3
	\$70,959	\$67,372	\$52,625	\$66,285	\$62,281	\$93,792	\$81,243	--	--	--

SECTION 3: Supplemental Information for the Town of East Hartford Pension Plan

EXHIBIT C

Reconciliation of Participant Data

	Active Participants	Vested Former Participants	Inactive Non- Vested Participants	Disabled	Retired Participants	Beneficiaries	Total
Number as of July 1, 2015	579	29	84	40	553	77	1,362
New participants	14	N/A	0	N/A	N/A	N/A	14
Terminations – with vested rights	(6)	6	0	0	0	0	0
Terminations – without vested rights	(6)	N/A	6	N/A	N/A	N/A	0
Retirements	(27)	(3)	0	N/A	30	N/A	0
New disabilities	0	0	0	0	N/A	N/A	0
Died with beneficiary	0	0	0	0	(3)	3	0
Died without beneficiary	(1)	0	0	0	(15)	(4)	(20)
Lump sum payoffs	(4)	(5)	(25)	0	0	0	(34)
Data adjustments	<u>0</u>	<u>0</u>	<u>2</u>	<u>(2)</u>	<u>3</u>	<u>0</u>	<u>3</u>
Number as of July 1, 2016	549	27	67	38	568	76	1,325

SECTION 3: Supplemental Information for the Town of East Hartford Pension Plan

EXHIBIT D

Summary Statement of Income and Expenses on a Market Value Basis

	Year Ended June 30, 2016	Year Ended June 30, 2015
Net assets at market value at the beginning of the year	\$209,397,046	\$214,455,200
Contribution income:		
Employer contributions	\$11,856,283	\$11,045,908
Employee contributions	3,182,165	3,284,777
Less administrative expenses	<u>(202,385)</u>	<u>(175,370)</u>
Net contribution income	14,836,063	14,155,315
Investment income:	<u>(\$1,933,877)</u>	<u>\$305,830</u>
Total income available for benefits	\$12,902,186	\$14,461,145
Less benefit payments	(\$20,542,906)	(\$19,519,299)
Change in reserve for future benefits	(\$7,640,720)	(\$5,058,154)
Net assets at market value at the end of the year	\$201,756,326	\$209,397,046

Note: Above figures do not include the DROP.

SECTION 3: Supplemental Information for the Town of East Hartford Pension Plan

EXHIBIT E

Development of the Fund Through June 30, 2016

Year Ended June 30	Employer Contributions	Employee Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
2007	\$6,759,000	\$3,073,000	\$15,696,700	\$136,000	\$13,925,000	\$178,466,743
2008	7,175,658	3,391,062	9,975,120	430,790	15,254,845	183,322,948
2009	7,407,017	3,243,280	(7,244,535)	197,387	15,608,801	170,922,521
2010	8,180,360	3,069,803	8,035,980	121,327	16,322,847	173,764,491
2011	8,450,588	3,202,897	13,936,902	168,672	17,226,184	181,960,021
2012	9,206,982	3,166,597	11,562,844	173,328	18,463,685	187,259,431
2013	9,371,591	3,201,993	11,850,003	169,296	19,311,391	192,202,331
2014	10,251,091	3,233,330	20,707,294	203,350	18,169,153	208,021,544
2015	11,045,908	3,284,777	11,044,858	175,370	19,519,299	213,702,418
2016	11,856,283	3,182,165	11,064,880	202,385	20,542,906	219,060,455

** Net of investment fees, actuarial basis*

Note: Above figures do not include the DROP.

SECTION 3: Supplemental Information for the Town of East Hartford Pension Plan

EXHIBIT F

Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended June 30, 2016

1. Unfunded/(overfunded) actuarial accrued liability at beginning of year		\$155,211,671
2. Normal cost at beginning of year, including expense load		6,079,322
3. Total contributions		(15,038,448)
4. Interest at 8.00%		
(a) For whole year on (1) + (2)	\$12,903,279	
(b) For half year on (3)	<u>(589,309)</u>	
(c) Total interest		<u>12,313,970</u>
5. Expected unfunded/(overfunded) actuarial accrued liability		\$158,566,515
6. Changes due to:		
(a) (Gain)/loss	\$89,957	
(b) Assumptions	5,618,786	
(c) Funding method	0	
(d) Plan provisions	<u>827,285</u>	
(e) Total changes		<u>6,536,028</u>
7. Unfunded/(overfunded) actuarial accrued liability at end of year		<u>\$165,102,543</u>

SECTION 3: Supplemental Information for the Town of East Hartford Pension Plan

EXHIBIT G

Allocation of Contributions for Fiscal Year Ending June 30, 2018

	Town and Board of Education	Police	Fire	Para- professionals	Dispatchers	Total
1. Employer normal cost						
a) Total normal cost	1,377,412	1,966,785	2,180,712	249,977	121,474	5,896,360
b) Administrative expenses *	89,214	37,311	39,728	29,909	3,927	200,000
c) Projected employee contributions	1,003,828	762,506	989,706	183,703	110,200	3,049,943
d) Employer normal cost: (a) + (b) – (c)	\$462,708	\$1,241,590	\$1,230,734	\$96,183	\$15,201	\$3,046,417
e) Number of total participants	591	247	263	198	26	1,325
2. Actuarial Accrued Liability						
a) Active	46,178,958	38,556,256	57,428,368	5,161,506	1,951,395	149,276,483
b) Inactive vested	2,015,401	19,734	86,289	428,482	117,768	2,667,674
c) Retirees, beneficiaries, and disabled	78,656,250	80,235,994	70,203,115	1,094,828	2,028,654	232,218,841
d) Total AAL: (a) + (b) + (c)	\$126,850,609	\$118,811,984	\$127,717,772	\$6,684,816	\$4,097,817	\$384,162,998
3. Assets at smoothed value	\$72,333,754	\$67,749,907	\$72,828,235	\$3,811,869	\$2,336,690	\$219,060,455
4. Unfunded accrued liability: (2d) – (3)	\$54,516,855	\$51,062,077	\$54,889,537	\$2,872,947	\$1,761,127	\$165,102,543
5. Payment on unfunded accrued liability (27- year amortization, effective interest rate 4.50%)						
a) Payment	3,377,584	3,163,544	3,400,675	177,993	109,110	10,228,906
b) Amortization years	27	27	27	27	27	27
c) Interest rate: $(1.079 \div 1.0325 - 1)$	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
6. Annual cost as of July 1, 2016: (1d) + (5a)	\$3,840,293	\$4,405,134	\$4,631,408	\$274,176	\$124,311	\$13,275,323
7. Payroll	\$12,458,864	\$9,531,331	\$12,526,874	\$3,061,716	\$1,377,496	\$38,956,281
8. Cost as a percent of payroll	30.82%	46.22%	36.97%	8.95%	9.02%	34.08%
9. Actuarially Determined Contribution (ADC) for fiscal year ending June 30, 2018						
a) Normal cost and expenses	477,746	1,281,942	1,270,733	99,309	15,696	3,145,426
b) Amortization payment	<u>3,487,356</u>	<u>3,266,359</u>	<u>3,511,196</u>	<u>183,778</u>	<u>112,656</u>	<u>10,561,345</u>
c) ADC payable July 1, 2017	\$3,965,102	\$4,548,301	\$4,781,929	\$283,087	\$128,352	\$13,706,771

* Allocated based on number of participants

SECTION 3: Supplemental Information for the Town of East Hartford Pension Plan

EXHIBIT H

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial

Assumptions:

The estimates on which the cost of the Plan is calculated including:

- (a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;
- (b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) Retirement rates — the rate or probability of retirement at a given age;
- (d) Withdrawal rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost:

The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability

For Actives:

The value of all projected benefit payments for current members less the portion that will be paid by future normal costs.

Actuarial Accrued Liability

For Pensioners:

The single-sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued

Liability:

The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

SECTION 3: Supplemental Information for the Town of East Hartford Pension Plan

Amortization of the Unfunded

Actuarial Accrued Liability: Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.

Investment Return:

The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

EXHIBIT I

History of Employer Contributions

Plan Year Ended June 30	Actuarially Determined Employer Contributions (ADEC)*	Actual Contributions	Percentage Contributed
2008	\$7,147,444	\$7,175,658	100.4%
2009	7,407,015	7,407,017	100.0%
2010	8,188,649	8,180,360	99.9%
2011	8,434,252	8,450,588	100.2%
2012	9,206,982	9,206,982	100.0%
2013	9,330,687	9,371,591	100.4%
2014	10,186,709	10,251,091	100.6%
2015	11,045,908	11,045,908	100.0%
2016	11,879,286	11,856,283	99.8%
2017	12,737,344	--	--
2018	13,706,771	--	--

**Prior to 2014, this amount was the Annual Required Contribution (ARC)*

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

EXHIBIT II

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
07/01/2007	\$178,466,743	\$227,288,386	\$48,821,643	78.52%	\$41,758,749	116.91%
07/01/2008	183,322,948	238,447,108	55,124,160	76.88%	41,999,715	131.25%
07/01/2009	170,922,522	250,681,901	79,759,379	68.18%	41,055,544	194.27%
07/01/2010	173,764,491	261,203,500	87,439,009	66.52%	41,404,040	211.18%
07/01/2011	181,960,021	269,046,695	87,086,674	67.63%	42,373,777	205.52%
07/01/2012	187,259,431	293,268,287	106,008,856	63.85%	41,163,691	257.53%
07/01/2013	192,202,331	330,793,117	138,590,786	58.10%	40,450,971	342.61%
07/01/2014	208,021,544	354,218,887	146,197,343	58.73%	40,940,891	357.09%
07/01/2015	213,702,418	368,914,089	155,211,671	57.93%	40,058,612	387.46%
07/01/2016	219,060,455	384,162,998	165,102,543	57.02%	38,956,281	423.81%

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

EXHIBIT III

Actuarial Assumptions and Actuarial Cost Method

Rationale for Demographic and

Noneconomic Assumptions:

Current data is reviewed in conjunction with each annual valuation. Based on professional judgment, the following assumptions were changed:

- The crediting rate assumption for employee contributions was lowered from 4.00% to 3.00% to better reflect current and future expected experience.
- The net investment return assumption as lowered from 8.00% to 7.90% to better reflect future expected experience.
- Mortality was projected two additional years using Scale BB to better reflect anticipated experience.

Mortality Rates:

Males:

RP-2000 Combined Healthy Mortality Table with Blue Collar Adjustment, projected 16 years (previously 14) with Scale BB

Females:

RP-2000 Combined Healthy Mortality Table, projected 16 years (previously 14) with Scale BB

The above mortality tables were determined to contain a margin of about 10% to reasonably reflect future mortality improvement, based on a five-year review of mortality experience ended June 30, 2013.

The mortality rates were based on historical and current data, adjusted to reflect estimated future experience and professional judgment

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Termination rates before retirement (unisex unless otherwise noted):

Age	Rate (%)					
	Mortality		Disability		Withdrawal	
	Male	Female	General Employees and Dispatchers	Police and Fire	General Employees and Dispatchers	Paraprofessionals
20	0.03	0.02	0.02	0.06	10.41	36.38
25	0.04	0.02	0.03	0.09	6.31	21.02
30	0.07	0.03	0.03	0.11	4.54	14.41
35	0.10	0.05	0.04	0.15	3.50	10.54
40	0.13	0.07	0.07	0.22	2.77	7.80
45	0.17	0.11	0.11	0.36	2.20	5.67
50	0.23	0.16	0.18	0.61	1.74	3.93
55	0.40	0.25	0.30	1.01	1.34	2.46
60	0.74	0.43	0.49	1.63	1.00	1.19

Note: Paraprofessionals are not eligible for disability benefits, and therefore have no disability assumption separate from the withdrawal rates.

The termination rates and disability rates were based on historical and current data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual number of terminations by age and the projected number based on the prior years' assumptions.

Withdrawal rates for Police and Fire:

2.50% per year for the first 10 years of service; none thereafter

Service-related benefits:

75% of Police and Fire deaths and disabilities are assumed to be service-related. For the other groups, no service-related decrements are assumed.

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Retirement rates:

General Employees		Paraprofessionals	
Age	Rate*	Age	Rate
Under 55	0%	Under 65	0%
55 – 59	2%	65-69	40%
60 - 61	5%	70	100%
62 – 63	10%		
64	25%		
65 – 69	30%		
70	100%		

**If age is less than 65, rates are increased to 25% upon eligibility for the Rule of 85.*

Police Employees		Fire Employees	
Years of Service	Rate*	Years of Service	Rate*
Less than 25	0%	Less than 25	0%
25	90%	25	25%
26-29	2%	26-29	2%
30+	35%	30+	35%

**Rate increases to 100% upon attainment of age 65.*

Retirement rates for Dispatchers: 100% upon first becoming eligible for Normal Retirement, but not prior to age 62

Retirement Age for Inactive Vested Participants:

Age 62; Age 65 for Paraprofessionals

The retirement rates were based on historical and current data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual number of retirements by age and the projected number based on the prior years' assumptions.

Percent Married:

75% of male participants and 65% of female participants are assumed to be married.

Age of Spouse:

Females three years younger than males

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Net Investment Return: 7.90% (previously, 8.00%). The net investment return assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes, as well as the Plan's target asset allocation.

Salary Increases:

<i>General, Dispatcher and Paraprofessional Employees</i>		<i>Police and Fire Employees</i>	
Age	Rate*	Age	Rate*
20	6.50%	20	22.00%
25	5.75%	25	14.50%
30	5.00%	30	7.00%
35	4.25%	35	4.00%
40	3.50%	40	4.00%
45	3.50%	45	4.00%
50	3.50%	50	4.00%
55	3.50%	55	4.00%
60	3.50%	60	4.00%

**Includes allowance for inflation of 3.50% per year*

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Liability load for unused sick and vacation pay:

To approximate the effect of including unused sick and vacation pay in the final average salary, plan liabilities are increased by the percentages listed below:

	<u>Retirement Liability</u>	<u>Death Liability</u>	<u>Disability Liability</u>	<u>Withdrawal Liability</u>
<i>General Employees and Dispatchers hired before 12/01/1996</i>	14.0%	6.0%	6.0%	2.0%
<i>General Employees and Dispatchers hired on or after 12/01/1996</i>	3.0%	2.0%	2.0%	2.0%
<i>Fire hired before 01/01/1995</i>	21.0%	12.0%	12.0%	2.0%
<i>Fire hired on or after 01/01/1995</i>	0.0%	0.0%	0.0%	0.0%
<i>Police</i>	13.5%	10.0%	10.0%	2.0%
<i>Paraprofessionals</i>	0.0%	0.0%	0.0%	0.0%
Administrative Expenses:	\$200,000 per year, added to normal cost. The annual administrative expenses were based on historical and current data, adjusted to reflect estimated future experience and professional judgment.			
Actuarial Value of Assets:	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value. On July 1, 2014, there was a one-time write-up to 97% of the market value of assets.			
Actuarial Cost Method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.			

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Changes in Assumptions:

The following actuarial assumptions have been changed:

- The crediting rate assumption for employee contributions was lowered from 4.00% to 3.00% to better reflect current and future expected experience.
- The net investment return assumption was lowered from 8.00% to 7.90% to better reflect future expected experience.
- Mortality was projected two additional years using Scale BB to better reflect anticipated experience.

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

EXHIBIT IV

Summary of Plan Provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

General Employees (Town & Board of Education)

Plan Status: Closed to new hires

Plan Year: July 1 through June 30

Normal retirement:

Eligibility requirement

For employees hired prior to March 1, 1983, the later of age 62 and 8 years of service. For employees hired on or after March 1, 1983, the later of age 65 and the completion of 10 years of service, or age 62 and the completion of 25 years of service if earlier.

Amount

2.33% of final average salary per year of service to a maximum of 70% of final average salary. Final average salary is defined as the average of salary earned during the highest 36 consecutive months of employment based upon the Plan Year prior to termination. Final average salary includes a lump sum amount for unused vacation (40 days maximum) and sick leave (90 days maximum) at retirement for those hired prior to December 1, 1996. For employees hired on or after December 1, 1996, final average salary includes a lump sum amount for unused vacation pay (40 days maximum) only. Minimum monthly benefit is \$125 after 20 years of service.

Early retirement:

Age requirement

For employees hired prior to March 1, 1983: age 52. For employees hired on or after March 1, 1983: age 55.

Service requirement

For employees hired prior to March 1, 1983: 8 years. For employees hired on or after March 1, 1983: 10 years.

Amount

Normal accrued pension reduced by 0.4167% for each month of age less than normal retirement age.

In addition, unreduced benefits are available upon meeting the Rule of 85.

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

General Employees (Town & Board of Education) continued

Non-service connected disability:

<i>Age requirement</i>	None
<i>Service requirement</i>	10 years
<i>Amount</i>	2.33% of final average salary multiplied by years and full months of credited service, payable immediately.

Service connected disability:

<i>Age requirement</i>	None
<i>Service requirement</i>	None
<i>Amount</i>	50% of final average salary or annual pay (whichever is greater) plus 2.33% of such salary for each year of service in excess of 25 years, subject to a maximum pension of 70% of final average salary, payable immediately. Payments from this benefit plus Workers' Compensation and Social Security may not exceed 100% of final average salary at disability.

Vesting:

<i>Age requirement</i>	None
<i>Service requirement</i>	For employees hired prior to March 1, 1983: 8 years. For employees hired on or after March 1, 1983: 10 years.
<i>Amount</i>	For employees hired prior to March 1, 1983: normal pension accrued payable at age 62, or a reduced early retirement benefit accrued payable as early as age 52. For employees hired on or after March 1, 1983: normal pension accrued payable at age 65 or a reduced early retirement benefit payable as early as age 55.
<i>Termination benefit</i>	Return of contributions with interest if not vested, or if vested, employee does not elect to receive a retirement benefit.

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

General Employees (Town & Board of Education) continued

Spouse's Pre-retirement death benefit:

<i>Age requirement</i>	None
<i>Service requirement</i>	10 years and active participant
<i>Amount</i>	80% of the benefit employee would have received upon retirement with a life annuity the day before the employee died. The benefit is payable immediately.

Pre-retirement death benefit:

<i>Eligibility</i>	Not eligible for Spouse's pre-retirement death benefit
<i>Amount</i>	Return of employee contributions

Post-retirement death benefit:

<i>Amount</i>	100% of employee contributions, with interest, less benefits paid.
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Employee contributions:

8% of regular compensation prior to February 1, 2016; after February 1, 2016, 8.5% of regular compensation. No contributions are required after 30 years of plan participation. Interest on employee contributions was credited at 4.00% per year prior to July 1, 2015. For the 2015 plan year, interest on employee contributions is credited at 0%. Effective July 1, 2016, the contributions are credited at 120% of the Federal Mid-Term rate as of July.

Employees who terminate after becoming vested will receive interest on their contributions through their retirement date. Employees who terminate before becoming vested will only receive interest on their contributions through their date of termination.

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Cost-of-Living:

Retirees and beneficiaries who retired prior to January 1, 1991 receive a 2% annual cost of living increase each year.

Retirees and beneficiaries who retired on or after January 1, 1991 but on or before July 1, 2005 receive a 1% annual cost-of-living increase each year.

Retirees and beneficiaries who retired on a Disability Pension after December 1, 1996 and prior to December 31, 2005 receive a 1% annual cost-of-living increase each year.

Participants retiring after July 1, 2005 but prior to July 2, 2025 receive a 2% annual cost-of-living increase; the first increase is paid with the January payment that is five full years after retirement.

Participants retiring after July 1, 2025 receive a 1.5% annual cost-of-living increase; the first increase is paid with the January payment that is five full years after retirement.

Participation:

The plan was closed to new entrants on July 1, 2006.

Plan Changes:

The employee contribution rate increased to 8.5% on February 1, 2016 and will increase again to 9.0% on July 1, 2019.

The window of eligibility for the 1% COLA for retirees and beneficiaries was extended from those retiring between January 1, 1991 through January 2, 2002 to those retiring between January 1, 1991 through July 1, 2005.

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

<u>Paraprofessional Employees</u>	
Plan Status:	Closed to new hires
Plan Year:	July 1 through June 30
Normal retirement:	
<i>Eligibility requirement</i>	The earliest of the following conditions: (1) attainment of age 65 and completion of 10 Years of Credited Service; (2) attainment of age 62 and completion of 25 Years of Credited Service; or (3) the Rule of 85.
<i>Amount</i>	2.2% of the employee's final average salary multiplied by the number of years and full months of his or her Credited Service, not to exceed 70% of the employee's final average salary. Final average salary is defined as the average of salary earned during the highest 36 consecutive months of employment based upon the Plan Year prior to termination. Lump sum payouts of sick and vacation pay are <u>not</u> included in the calculation of final average salary.
Vesting:	
<i>Age requirement</i>	None
<i>Service requirement</i>	10 years
<i>Amount</i>	Monthly benefit payable at Normal Retirement.
<i>Termination benefit</i>	Return of contributions with interest if not vested, or if vested employee does not elect to receive a retirement benefit.
Pre-retirement death benefit:	Return of employee contributions with interest

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Paraprofessional Employees *continued*

Post-retirement death benefit:	Return of employee contributions, with interest, less benefits paid.
Employee contributions:	<p>6% of regular compensation. Contributions are no longer required after 31 years and 10 months of plan participation. Interest on employee contributions was credited at 4.00% per year prior to July 1, 2015. For the 2015 plan year, interest on employee contributions is credited at 0%. Effective July 1, 2016, the contributions are credited at 120% of the Federal Mid-Term rate as of July.</p> <p>Employees who terminate after becoming vested will receive interest on their contributions through their retirement date. Employees who terminate before becoming vested will only receive interest on their contributions through their date of termination.</p>
Participation:	Paraprofessionals become participants in the plan upon date of hire. Participation is a condition of employment and participants are required to make contributions to the plan. Effective July 1, 2015, new hires are not eligible to participate.

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Dispatchers

Plan Status: Ongoing

Plan Year: July 1 through June 30

Normal Retirement:

Eligibility requirement

The earliest of the following conditions:

- (1) attainment of age 65 and completion of 5 Years of Credited Service;
- (2) 25 years of Credited Service; or
- (3) Rule of 75.

Amount

2.2% of final average salary multiplied by years and full months of Credited Service, not to exceed 70% of final average salary. Final average salary is the average of salary during the highest 36 consecutive months of employment based upon the Plan Year prior to termination. Final average salary includes a lump sum amount for unused vacation (40 days maximum) and sick leave (90 days maximum) at retirement for those hired prior to December 1, 1996. For employees hired on or after December 1, 1996, final average salary includes only a lump sum amount for unused vacation pay (40 days maximum).

Early retirement:

Age requirement

55

Service requirement

5 years

Amount

Normal accrued pension, reduced by 0.4167% for each month of age less than normal retirement age.

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Dispatchers continued

Vesting:

<i>Age requirement</i>	None
<i>Service requirement</i>	5 years
<i>Amount</i>	Monthly benefit payable at Normal Retirement.
<i>Termination benefit</i>	Return of contributions with interest if not vested, or if vested employee does not elect to receive a retirement benefit.

Non-service connected disability:

<i>Age Requirement</i>	None
<i>Service Requirement</i>	5 years
<i>Amount</i>	2.2% of final average salary multiplied by years and full months of credited service, payable immediately.

Service connected disability:

<i>Age Requirement</i>	None
<i>Service Requirement</i>	None
<i>Amount</i>	50% of final average salary or annual rate of pay, whichever is greater, plus 2.2% of such salary for each year of service in excess of 25 years, subject to a maximum pension of 70% of final average salary, payable immediately. Payments from this benefit plus Workers' Compensation and Social Security may not exceed 100% of final average salary at disability.

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Dispatchers continued

Spouse's pre-retirement death benefit:

<i>Age Requirement</i>	55
<i>Service Requirement</i>	5 years, die while in active service
<i>Amount</i>	100% of the benefit employee would have received upon retirement with a 100% Joint and Survivor the day before death.

Pre-retirement death for unmarried or non-vested participants:

Return of employee contributions with interest

Post-retirement death benefit:

<i>Amount</i>	100% of employee contributions, with interest, less benefits paid.
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Employee contributions:

8% of regular compensation. Contributions are no longer required after 31 years and 10 months of plan participation. Interest on employee contributions was credited at 4.00% per year prior to July 1, 2015. For the 2015 plan year, interest on employee contributions is credited at 0%. Effective July 1, 2016, the contributions are credited at 120% of the Federal Mid-Term rate as of July.

Employees who terminate after becoming vested will receive interest on their contributions through their retirement date. Employees who terminate before becoming vested will only receive interest on their contributions through their date of termination.

Participation:

New employees under age 45 are required to participate in the plan within three months of employment. New employees over age 45 are not required to participate, but must elect to do so within two years of their date of hire.

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Police and Fire Employees

Plan Status: Ongoing

Plan Year: July 1 through June 30

Normal retirement:

Eligibility requirement 25 years of service regardless of age, or mandatory retirement at age 65 with the completion of 10 years of service for Fire and 15 years of service for Police.

Amount

Police Plan: 2.5% of final average salary per year of service, to a maximum of 75% of final average salary. Final average salary is defined as the average of Regular Compensation (including overtime, holiday, longevity, and vacation) earned during the highest 36 consecutive months of employment based upon the Plan Year prior to termination. Final average salary includes a lump sum amount for unused vacation and accrued terminal / sick leave at retirement. The minimum monthly benefit is \$125.

Fire Plan: Same as Police except pay is based on Regular Compensation and a lump sum amount for unused vacation and sick leave is not included in the calculation of final average salary if the employee was hired on or after January 1, 1995.

Deferred Retirement Option Plan:

Eligibility requirement Employees in service on or after July 1, 2005 with 25 or more years of service but less than 30 years of service.

Amount 96% of the participant's benefit at Normal Retirement. During the DROP period, the payments will be made to a separately designated DROP account while the member remains active. At the end of the DROP period, the monthly benefit increases to 100% and the member is eligible to receive their accumulated DROP payments

Non-service connected disability:

Age requirement None

Service requirement 5 years

Amount Normal pension based on service accrued and final average salary at disability, payable immediately. The minimum benefit is 20% of final average salary.

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Police and Fire Employees *continued*

Service connected disability:

<i>Age requirement</i>	None
<i>Service requirement</i>	None
<i>Amount</i>	For employees with fewer than 20 years of credited service, 50% of the greater of the employee's final average salary or regular compensation. For employees with 20 or more years of credited service, this benefit is calculated in the same manner as the normal retirement benefit. Payments from this benefit plus Workers' Compensation may not exceed 100% of final average salary at disability. For <i>Police</i> only, regular compensation includes any lump sum of sick or unused vacation time.

Vesting:

<i>Age requirement</i>	None
<i>Service requirement</i>	Police: 15 years Fire: 10 years
<i>Amount</i>	Normal pension accrued, payable when employee would have met normal retirement criteria if he/she had continued working.
<i>Termination benefit</i>	Return of contributions with interest if not vested.

Dependent's benefit – Non-service connected:

<i>Age Requirement</i>	None
<i>Service Requirement</i>	5 years, die while in active service
<i>Amount</i>	Normal pension based on service accrued and final average salary at death. Minimum benefit is 20% of final average salary. If a participant passes away before becoming vested, return of employee contributions with interest

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Police and Fire Employees *continued*

Dependent's benefit – Service connected:

<i>Age Requirement</i>	None
<i>Service Requirement</i>	None, die while in active service
<i>Amount</i>	Same as above, except 50% minimum benefit.

Post-retirement death benefit:

<i>Lump - sum benefit</i>	100% of employee contributions, with interest, less benefits paid (if dependent's benefit is not paid).
<i>Dependent's benefit</i>	75% of the pension the employee was receiving with a minimum guarantee of the employee contributions with interest.

Employee contributions:

8% of regular compensation. No contributions are required after 30 years of plan participation. Interest on employee contributions was credited at 4.00% per year prior to July 1, 2015. For the 2015 plan year, interest on employee contributions is credited at 0%. Effective July 1, 2016, the contributions are credited at 120% of the Federal Mid-Term rate as of July.

Employees who terminate after becoming vested will receive interest on their contributions through their retirement date. Employees who terminate before becoming vested will only receive interest on their contributions through their date of termination.

SECTION 4: Reporting Information for the Town of East Hartford Pension Plan

Cost-of-Living:

Police:

2% annual COLA for retirements prior to January 1, 1991.
1% annual COLA for retirements between January 1, 1991 and December 31, 1999.
2% per year for participants retiring on or after January 1, 2000. The first increase is paid in the fifth year of retirement.

Fire:

2% annual COLA for retirements prior to January 1, 1991.
1% annual COLA for retirements between January 1, 1991 and June 30, 2005.
1% annual increase beginning in the fifth year of retirement, increasing to 2% annually beginning in the 9th year of retirement for participants retiring on or after July 1, 2005.

Participation:

New employees under age 45 are required to participate in the Plan within three months of employment. New employees over age 45 are not required to participate, but must elect to do so within two years of their date of hire.

Plan Changes:

The window of eligibility for the 1% COLA for Fire Plan retirees and beneficiaries was extended from those retiring between January 1, 1991 through January 2, 2002 to those retiring between January 1, 1991 through July 1, 2005.