



The elements of success



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Retirement Plan for Employees of the Town of Brooklyn, CT

July 1, 2014 Valuation Review

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Purpose of the Valuation



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

<i>Town's</i>									
<i>Ultimate</i>	=	<i>Benefits</i>	+	<i>Expenses</i>	-	<i>Investment</i>	-	<i>Employee</i>	
<i>Cost</i>		<i>Paid</i>		<i>Incurred</i>		<i>Return</i>		<i>Contributions</i>	

- Actuarial Valuation utilizes an actuarial cost method to assign a portion of this "ultimate cost" to the budget year. The valuation does not determine the cost of the plan but is a tool used to determine the appropriate level of Town contributions.
- Annual Determined Contribution (ADC) developed from the valuation is comprised of two components: amortization of unfunded liability & normal cost (assignment of benefits "earned" for the budget year).



Assumption Changes



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Interest Rate

Current: 7.25% compounded annually

Prior: 7.50% compounded annually

Salary Scale

Current: 4.25% per annum (compounded)

Prior: 4.75% per annum (compounded)

Mortality Improvement

Current: Projected to date of decrement using Scale AA (Generational Mortality)

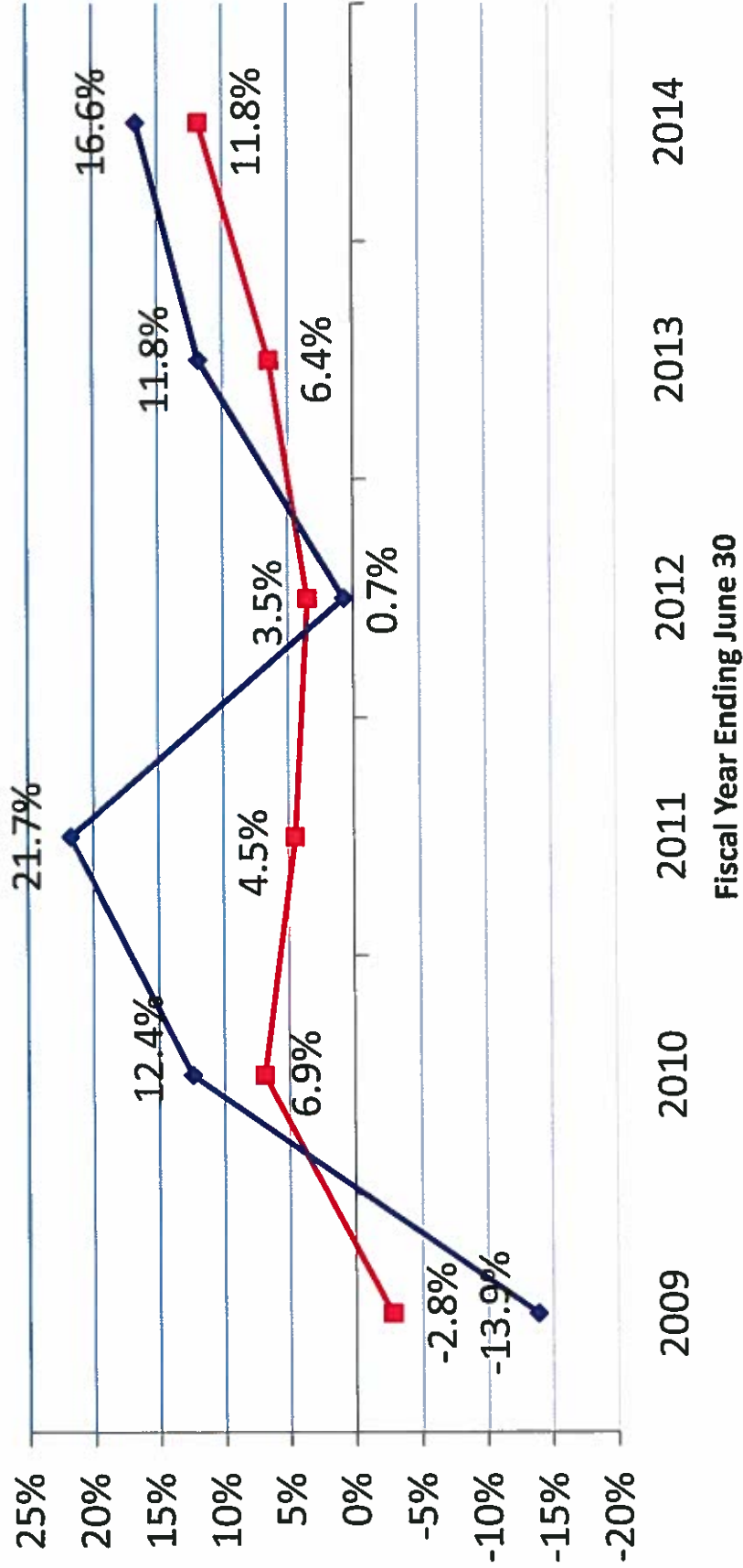
Prior: Projected using Scale AA for 10 years after the valuation date



Rates of Return



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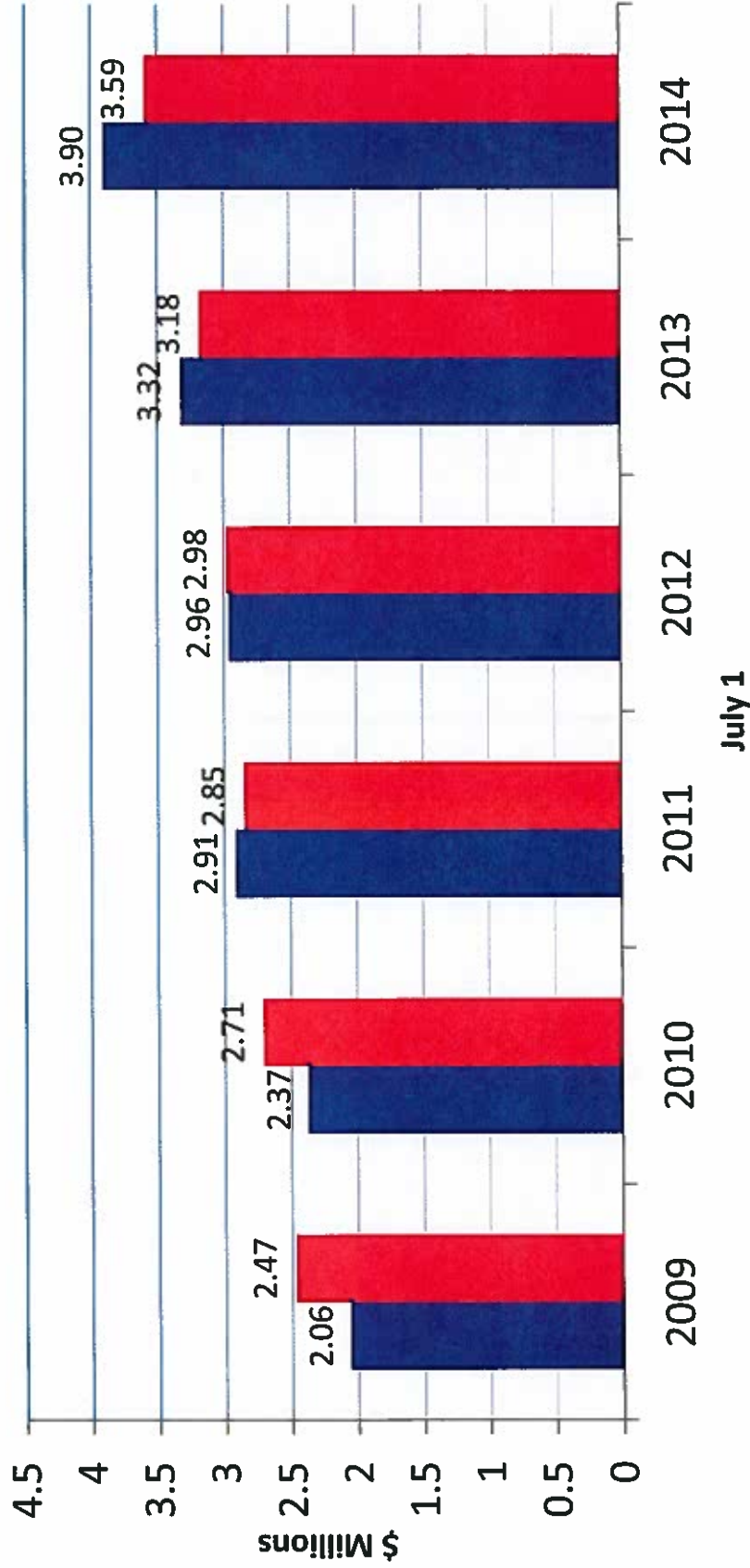
—◆— Market Value Return —■— Actuarial Value Return



Market and Actuarial Value of Assets



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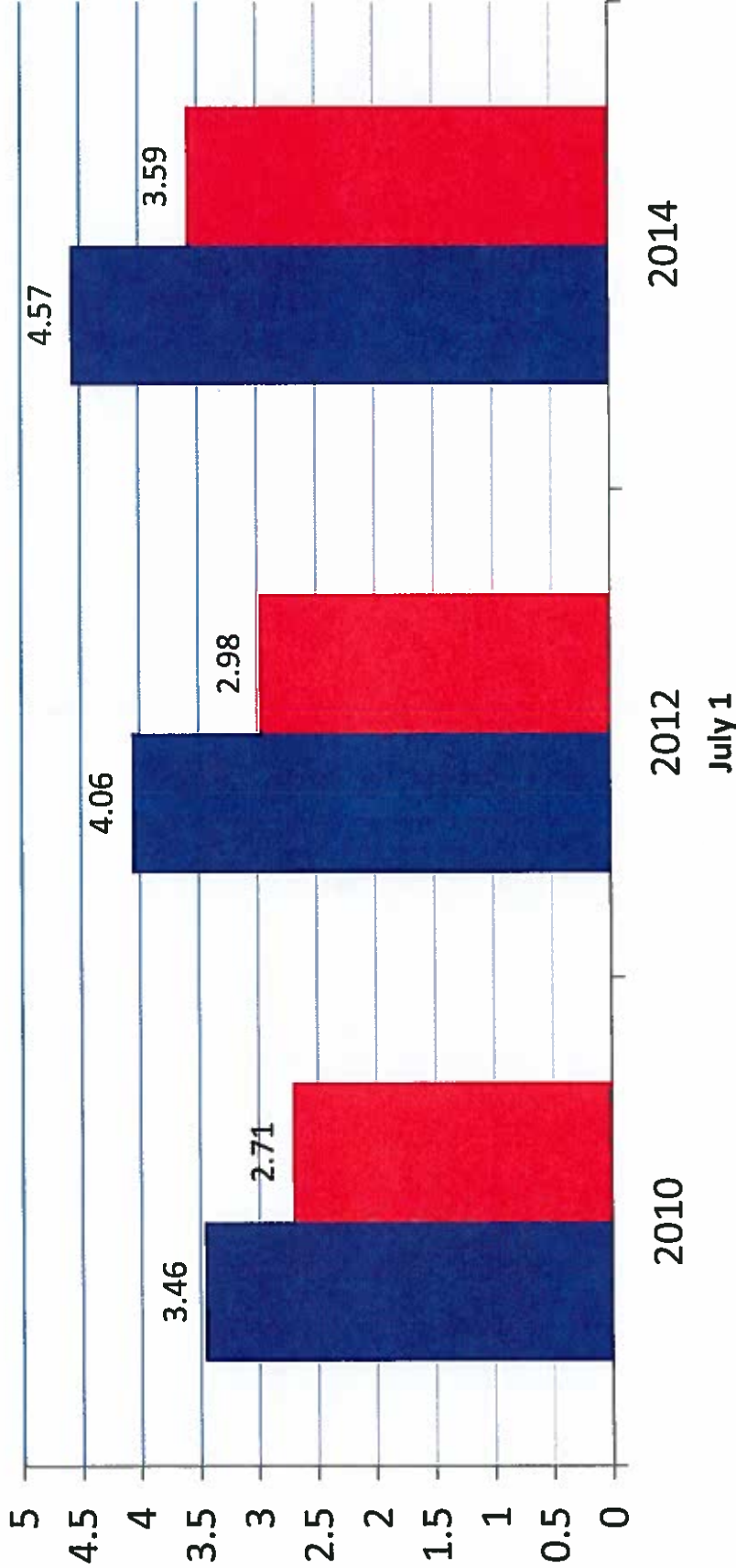
■ Market Value ■ Actuarial Value



Actuarial Accrued Liability and AVA



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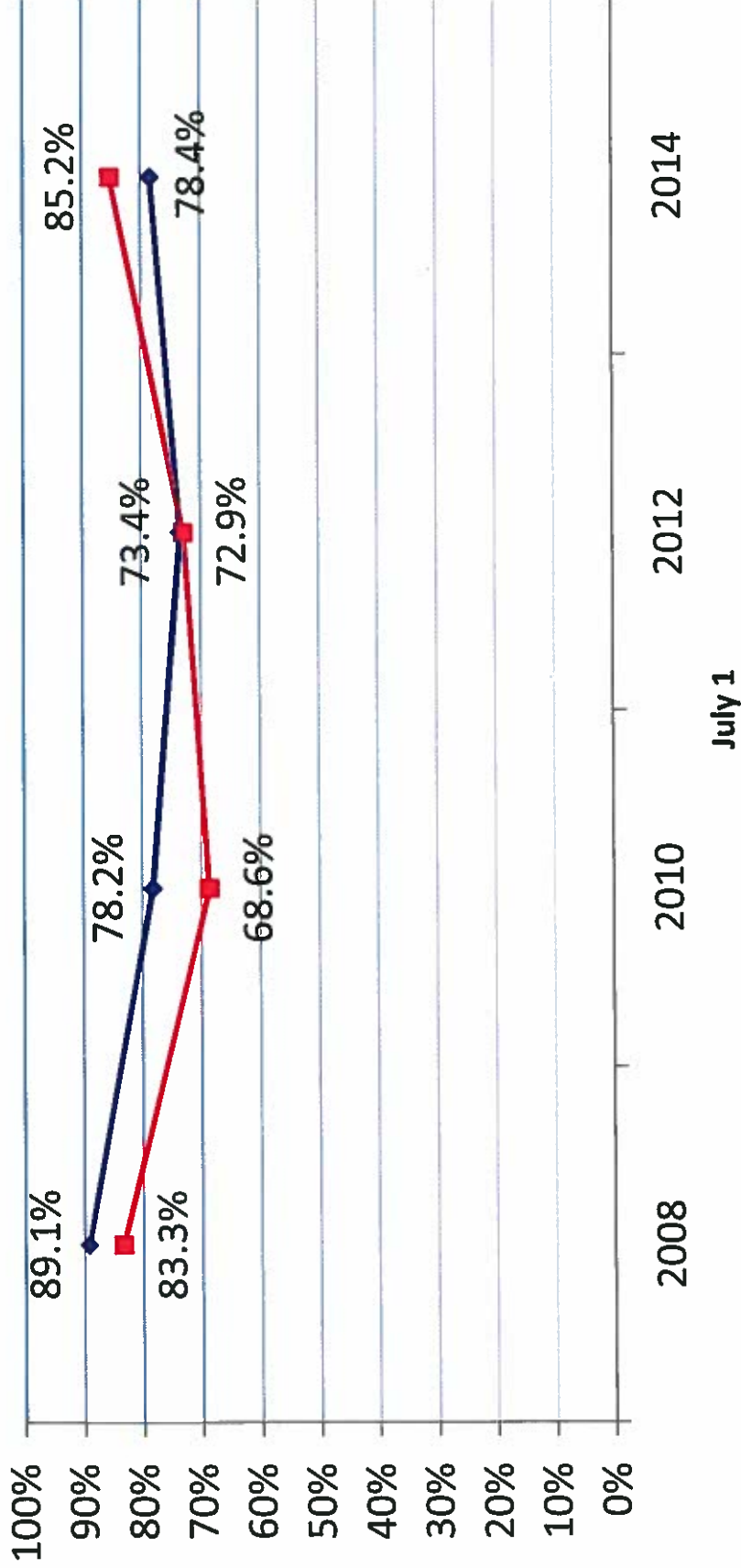
■ Actuarial Accrued Liability ■ Actuarial Value of Assets



Funded Ratio



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—◆— Actuarial Value —■— Market Value

Note: Interest rate assumption has moved down during this time period.



Actuarially Determined Contribution



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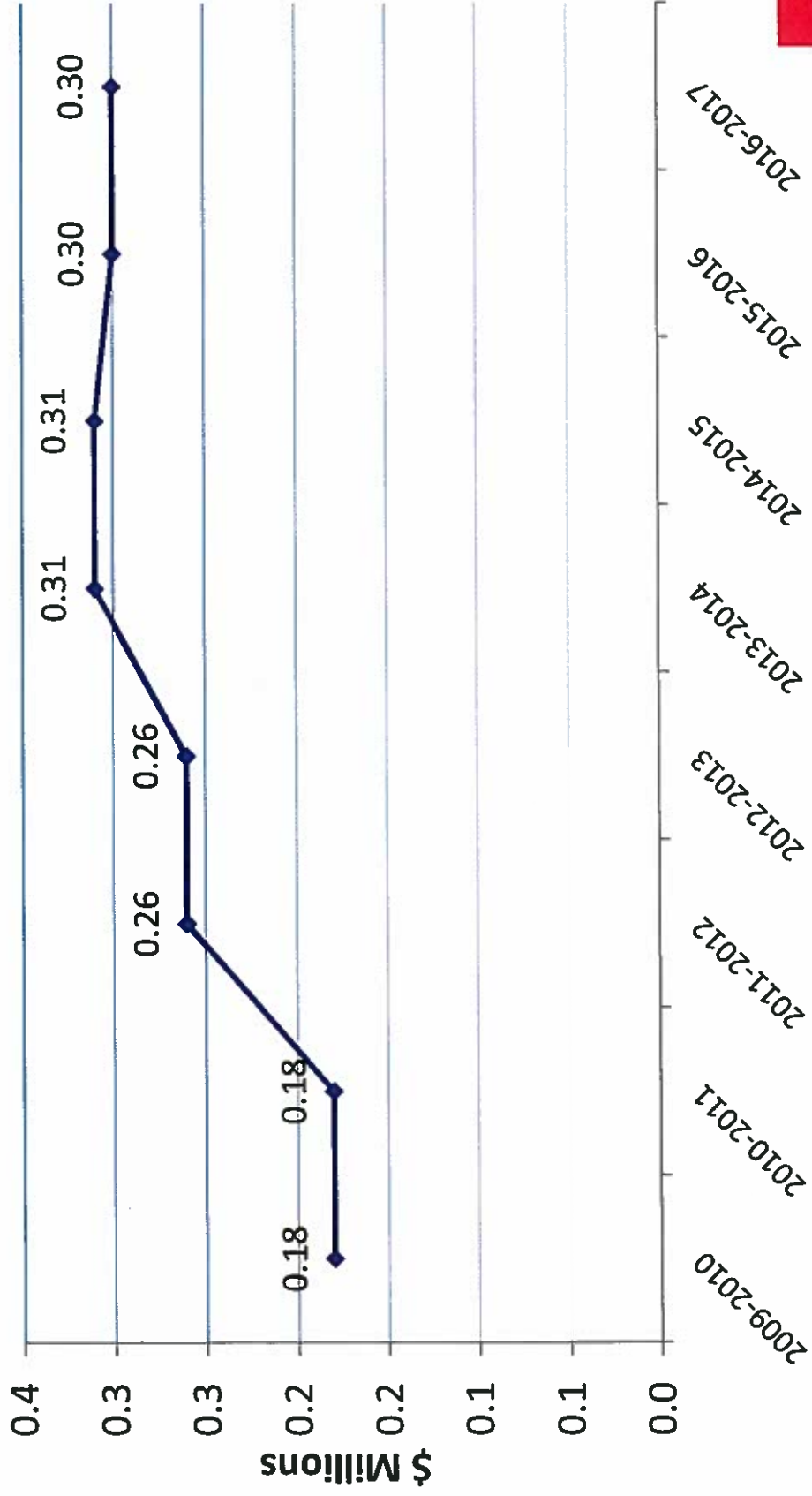
	July 1, 2014 for Fiscal Year Ending	July 1, 2014 for July 1, 2012 for Fiscal Year Ending
	June 30, 2017	June 30, 2016 June 30, 2015
1. Normal Cost	\$179,815	\$172,484 \$174,921
2. Interest to end of year	13,037	12,506 13,119
3. Town's Future Service Cost: (1) + (2)	192,852	184,990 188,040
4. Amortization of Unfunded Accrued Liability (15 years)	110,092	110,092 122,040
5. Town's Annual Contribution: (3) + (4)	302,944	295,082 310,080



Recommended Town Contribution



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Change in Contribution



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1. July 1, 2012 valuation contribution	310,000
2. Decrease due to assets	(12,500)
3. Decrease due to liabilities	(15,900)
4. Increase due to contributions less than recommended	11,000
5. Expected increase	8,900
6. Increase due to assumption changes	14,000
7. Fewer active participants	(20,500)
8. July 1, 2014 valuation contribution	295,000



Rate of Return Assumption



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Target Allocation of Plan Investments June 30, 2014

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*	Weighting
US Large Cap	28.00%	4.75%	1.33%
US Mid/Small Cap	12.00%	5.50%	0.66%
Emerging Market Equities	4.00%	6.00%	0.24%
Developed International Equities	16.00%	5.25%	0.84%
International Bonds	23.00%	2.00%	0.46%
Intermediate Corporate	12.00%	2.25%	0.27%
High-Yield Bonds	4.00%	3.25%	0.13%
Inflation/Cash	1.00%	0.00%	0.00%
Long-Term Inflation Expectation			3.93%
Long-Term Inflation Expectation			3.00%
Long-Term Expected Nominal Return			6.93%

*Long-Term Returns are provided by Hooker & Holcombe Investment Advisors. The returns are geometric means.

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

The information above is based on geometric means and does not reflect additional returns through investment selection, asset allocation and rebalancing. The results support a rate between 7.00% and 7.50%. An expected rate of return of 7.25% was used.



Actuarial Cost Methods and Assumptions



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Actuarial Assumptions

Mortality:

RP-2000 Mortality Table with separate male and female rates, with no collar adjustment, annuitant mortality, projected to the valuation date with Scale AA.

Mortality Improvement:

Projected to date of decrement using Scale AA.
(Generational Mortality)



Actuarial Cost Methods and Assumptions



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Actuarial Assumptions (continued)

Interest:

7.25% compounded annually

Salary Scale:

It is assumed that salaries will increase by 4.25% per annum (compounded) from present age to Normal Retirement Age.



Actuarial Cost Methods and Assumptions



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Actuarial Assumptions (continued)

Retirement Age:

Under age 55 on the date included in the plan – first day of the month coincident with or following 65th birthday

Age 55 through 59 on the date included in the plan – tenth anniversary of date of participation

Age 60 or over on the date included in the plan, first day of the month coincident with or following 70th birthday

Employees at retirement age are assumed to retire in one year.

Employee Turnover:

The following annual rates of termination are assumed:

Age	Probability
25	5.3%
35	4.5%
45	3.2%
55	0.3%
65	0.0%



Actuarial Cost Methods and Assumptions



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Actuarial Assumptions (continued)

Survivorship:

85% of all participants are assumed to be married.
Wives are assumed to be three years younger than their husbands.

Expense Loading:

No loading for expenses has been included.



Questions & Answers

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