

The logo for nyhart, featuring the word "nyhart" in a lowercase, sans-serif font. The letters are white and are set against a solid black rectangular background. A vertical red line is positioned to the left of the black box, extending from the top to the bottom of the page.

nyhart

Pension Plan of Town of West Warwick

***Management Summary of
7/1/2013 Actuarial Valuation
January 13, 2014***

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➤ **Benefit Changes**

There have been no changes to the benefit provisions since the 7/1/2012 valuation.

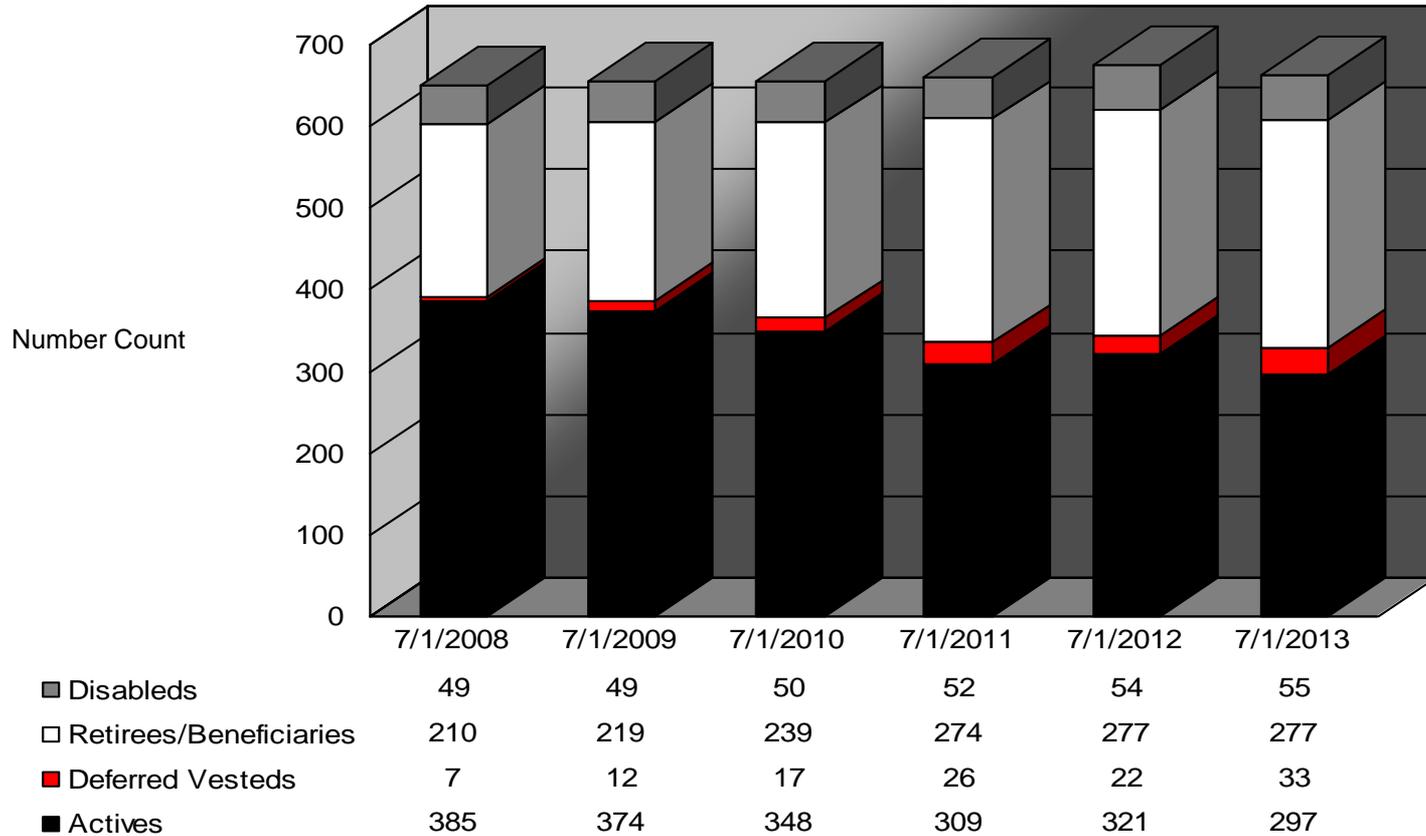
➤ **Actuarial Assumptions and Methods**

- The interest rate used to measure the plan's liabilities has changed from 8.00% to 7.50%.
- The salary increase assumption has been lowered to 2.0% over the next five years based on town management informing us that merit increases will be 0% over this time period. Salary increases revert to 3.5% thereafter.
- The mortality table for non-disabled police and fire members has been updated to the RP-2000 Blue Collar Combined Mortality Table with generational projection per Scale AA.
- The disability benefit for police and firemen has been adjusted from the prior year's valuation to reflect the current administration of the disability benefit.

➤ **Population Changes**

The number of active participants has been declining in recent years. At the same time, the number of inactive participants has been steadily increasing.

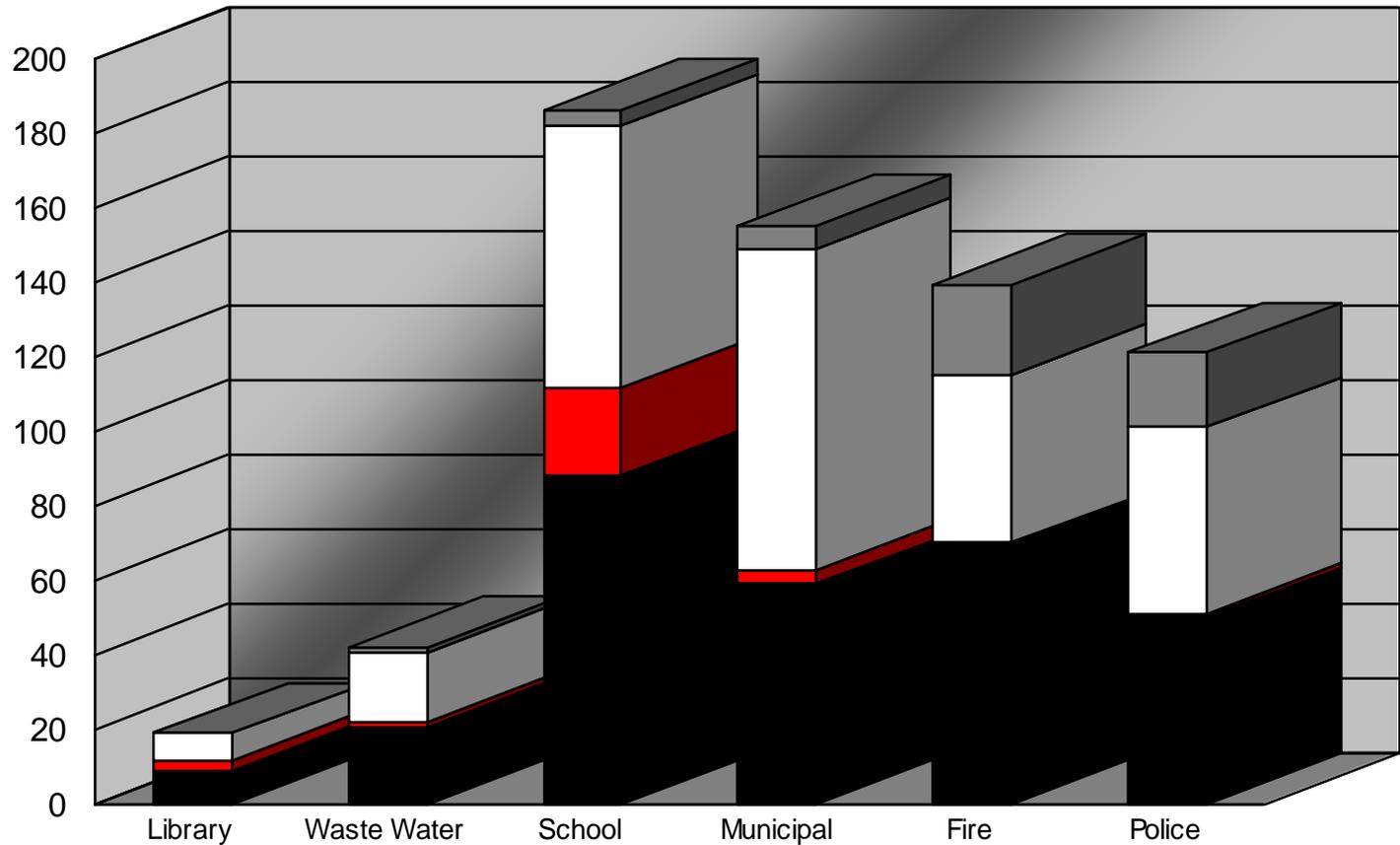
Participant Information



Active Demographics

Average Age	44.4	44.9	45.2	44.8	44.5	45.0
Average Service	11.1	11.4	12.0	11.1	10.9	11.8
Average Plan Compensation	\$44,280	\$45,170	\$46,850	\$49,078	\$46,278	\$46,991
Active Payroll (\$000's)	\$17,047	\$16,892	\$16,303	\$15,165	\$14,855	\$13,956

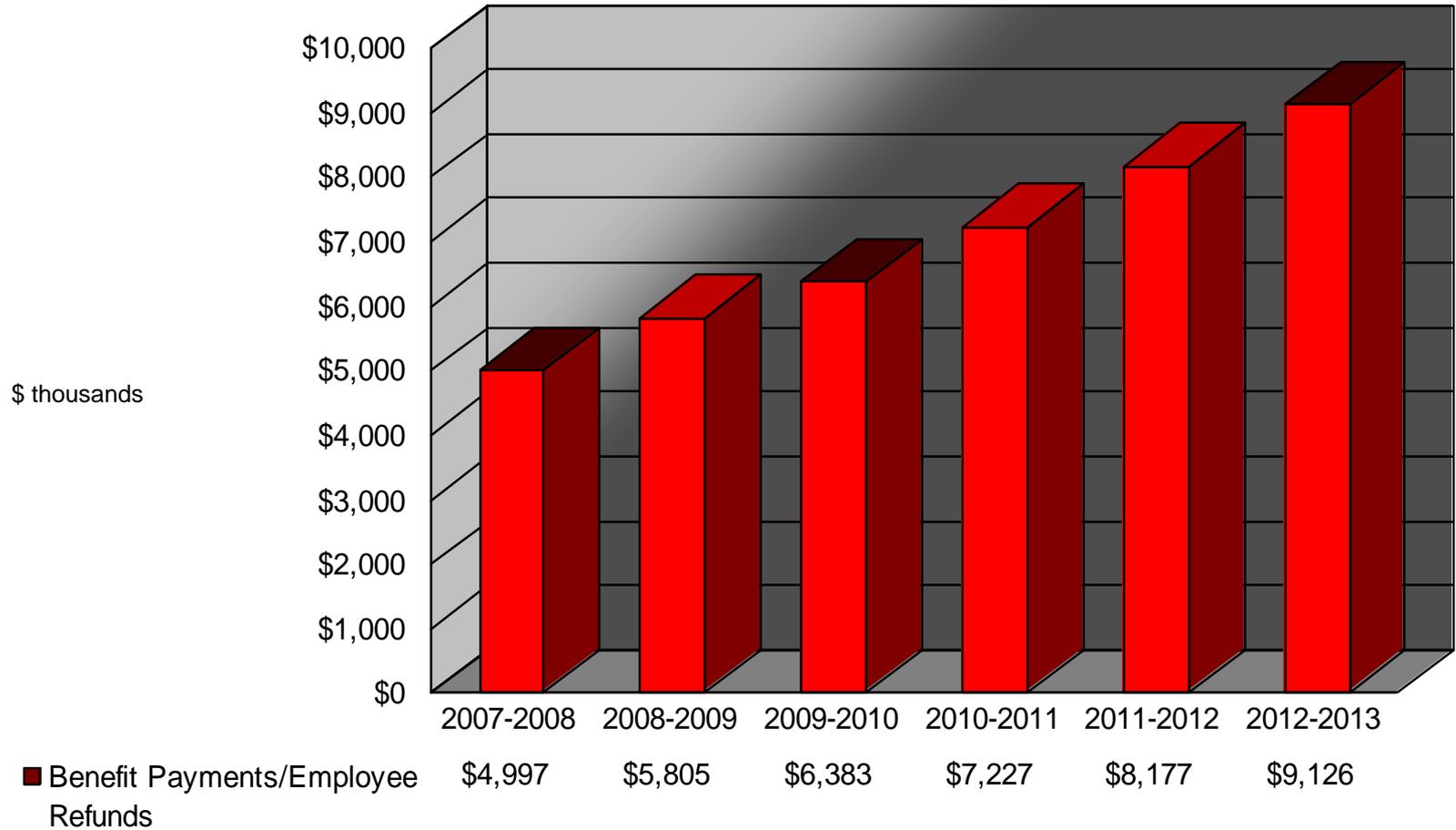
Participant Information – by Division



■ Disableds	0	1	4	6	24	20
□ Retirees/Beneficiaries	7	19	70	86	45	50
■ Deferred Vesteds	3	1	24	4	0	1
■ Actives	9	21	88	59	70	50

Actuary's Comment – The cost projection reports we have created for the Town have been grouped by individual unions and do not necessarily match the groupings shown in the actuarial report and above. Of the 88 active School members, 4 are "non-union." Of the 59 active Municipal members, 7 are "non-union."

Annual Benefit Payments



Actuary's Comment – Annual benefit payments have steadily been increasing. This pattern will likely continue due to an increasing number of retirees, beneficiaries, and disabled members. Annual cost of living adjustments are also playing a part in the benefit payment increases.

Summary of Plan Provisions

➤ **Effective Date**

Police and Fire – April 1, 1957

School – March 1, 1970

Others – July 1, 1969

➤ **Participation**

Employees are eligible to participate in the Plan upon date of hire.

➤ **Normal Retirement**

Eligibility –

Fire hired before 7/1/2011 – age 62.5 or 20 years of credited service

Fire hired on or after 7/1/2011 – age 62.5 or age 50 with 20 years of credited service; benefits cannot start until 23-year anniversary of membership

Police hired before 7/1/2011 – age 62 or 20 years of credited service

Police hired on or after 7/1/2011 – age 62 or age 50 with 25 years of credited service

All other participants – age 60 with 10 years of credited service or 25 years of credited service

Benefit –

Fire – 2.5% of Average Annual Compensation x credited service up to 28 years

Police hired before 7/1/2011 – 2.5% of Average Annual Compensation x credited service up to 28 years

Benefit (continued) –

Police hired on or after 7/1/2011 – 2.5% of Average Annual Compensation x credited service up to 20 years, plus 2.0% of Average Annual Compensation x up to 10 additional years of credited service

All Other Participants – 2.5% of Average Annual Compensation x credited service

➤ **Vesting**

Eligibility – 100% vested at 10 years of service

Benefit – Normal Retirement Benefit commencing at normal retirement age.

➤ **Average Annual Compensation**

Average compensation over the last 12 months of employment

➤ **Credited Service**

Contributing employees receive credit for all service from date of membership

➤ **Participant Contributions**

Police – 9% of compensation up to 28 years

Fire hired before 7/1/2011 – 9% of compensation up to 28 years

Fire hired on or after 7/1/2011 – 9% of compensation up to 30 years

All Other Participants – 9% of compensation

➤ **Payment Form Options**

For married participants, the unreduced payment form is a 67.5% joint and survivor annuity. For single participants, the unreduced payment form is a life annuity.

Summary of Actuarial Assumptions and Methods – Funding Valuation

➤ **Interest Rate**
7.50%

➤ **Annual Pay Increases**
2.0% for next 5 years; 3.5% thereafter

➤ **Mortality Rates**
Police and Fire (Healthy) – RP-2000 Combined Blue-Collar Mortality Table with generational projection per Scale AA
Others and Beneficiaries of All Participants (Healthy) – RP-2000 Combined Healthy Mortality Table with generational projection per Scale AA
Disabled – RP-2000 Disabled Mortality Table with generational projection per Scale AA

➤ **Actuarial Cost Method**
Entry Age Normal

➤ **Asset Valuation Method**
Smoothed Value – investment gains/losses recognized over five years, subject to a 15% corridor

➤ **Eligible Spouse**
80% of participants are assumed to be married with female spouse 3 years younger

➤ **Cost of Living Adjustment**
Police – 2.25% for 15 years effective 7/1/2000
Fire – 2.25% for 15 years effective 7/1/2002
Others – 2.25% for 15 years effective 7/1/2002

➤ **Retirement Rates**
Police and Fire – 25% at 20 years of service; 50% at 25 years of service; 100% at age 62; 5% at all other age/service combinations
Others –

Age	< 56	56-59	60	61	62-64	65-66	67-69	70
Rate	2%	4%	25%	10%	30%	25%	50%	100%

➤ **Withdrawal Rates**
Police and Fire – None
Others –

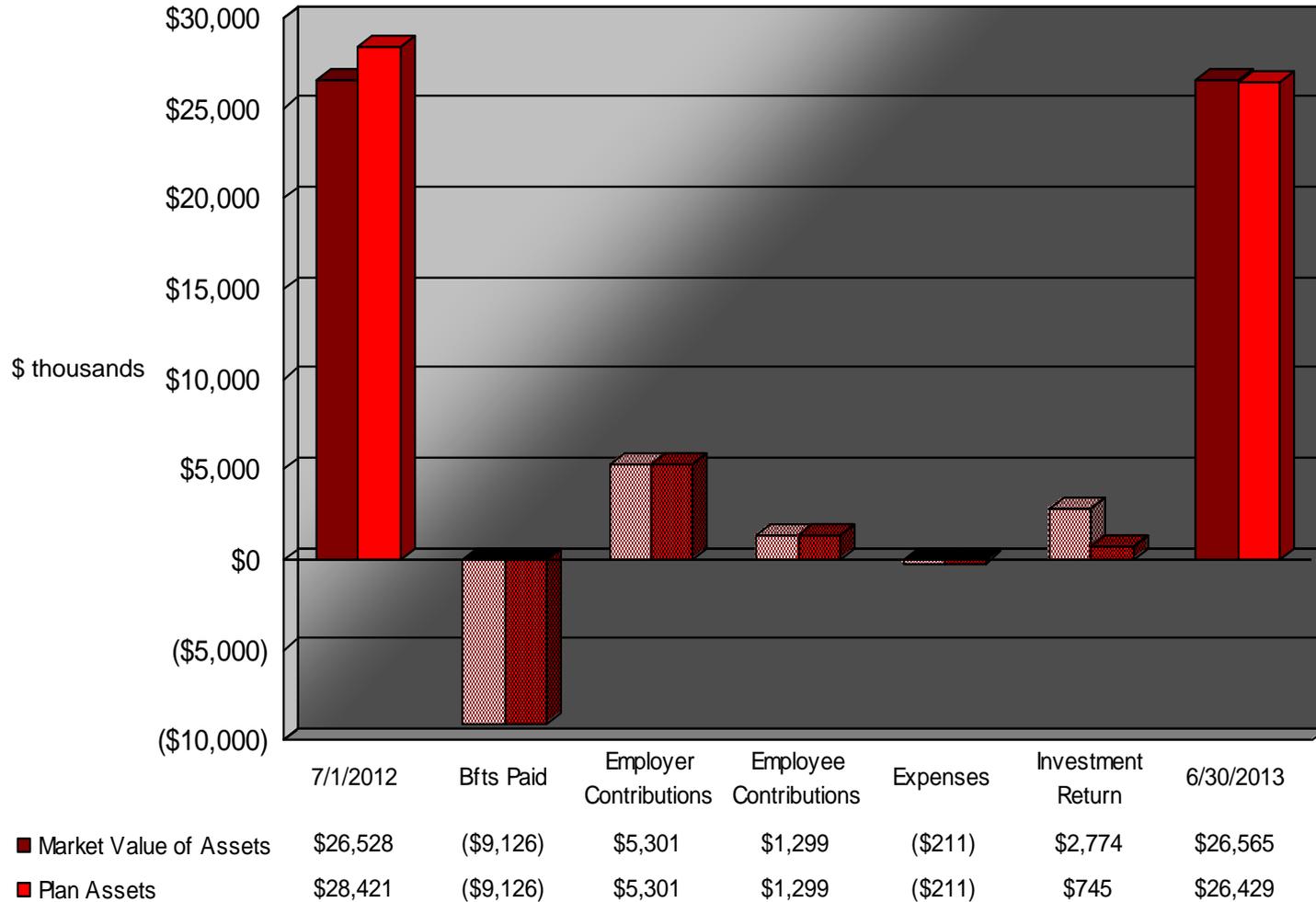
Age	25	30	35	40	45	50	55	60
Rate	5.27%	4.83%	4.47%	3.84%	3.21%	1.52%	0.33%	0.00%

➤ **Disability Rates**

Age	Police/Fire	Others
25	0.28%	0.09%
30	0.44%	0.15%
35	0.66%	0.22%
40	0.99%	0.33%
45	1.53%	0.51%
50	2.51%	0.84%
55	4.49%	0.00%
60	6.32%	0.00%

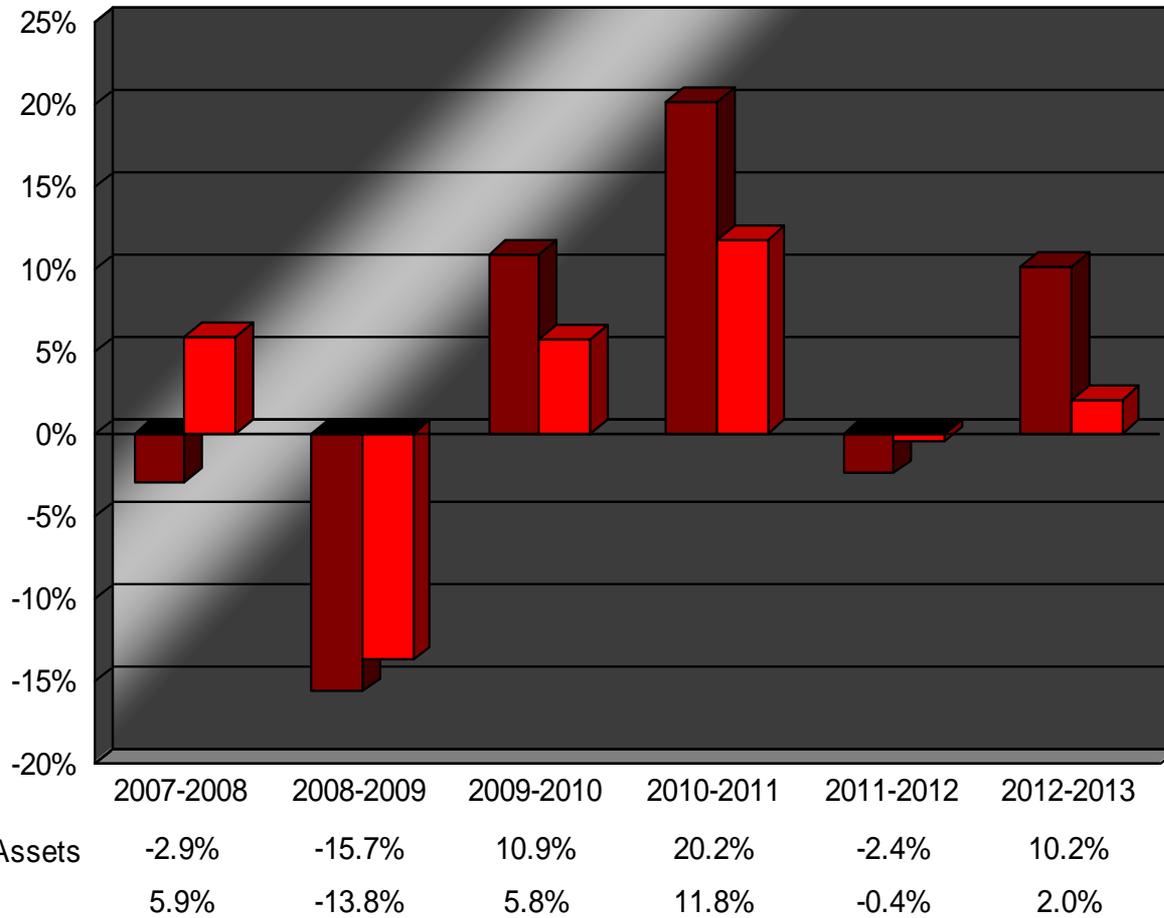
➤ **Cost of Living Adjustment for Police and Fire Disability**
90% of assumed active salary increase rate (3.15%)

2012 - 2013 Asset Reconciliation



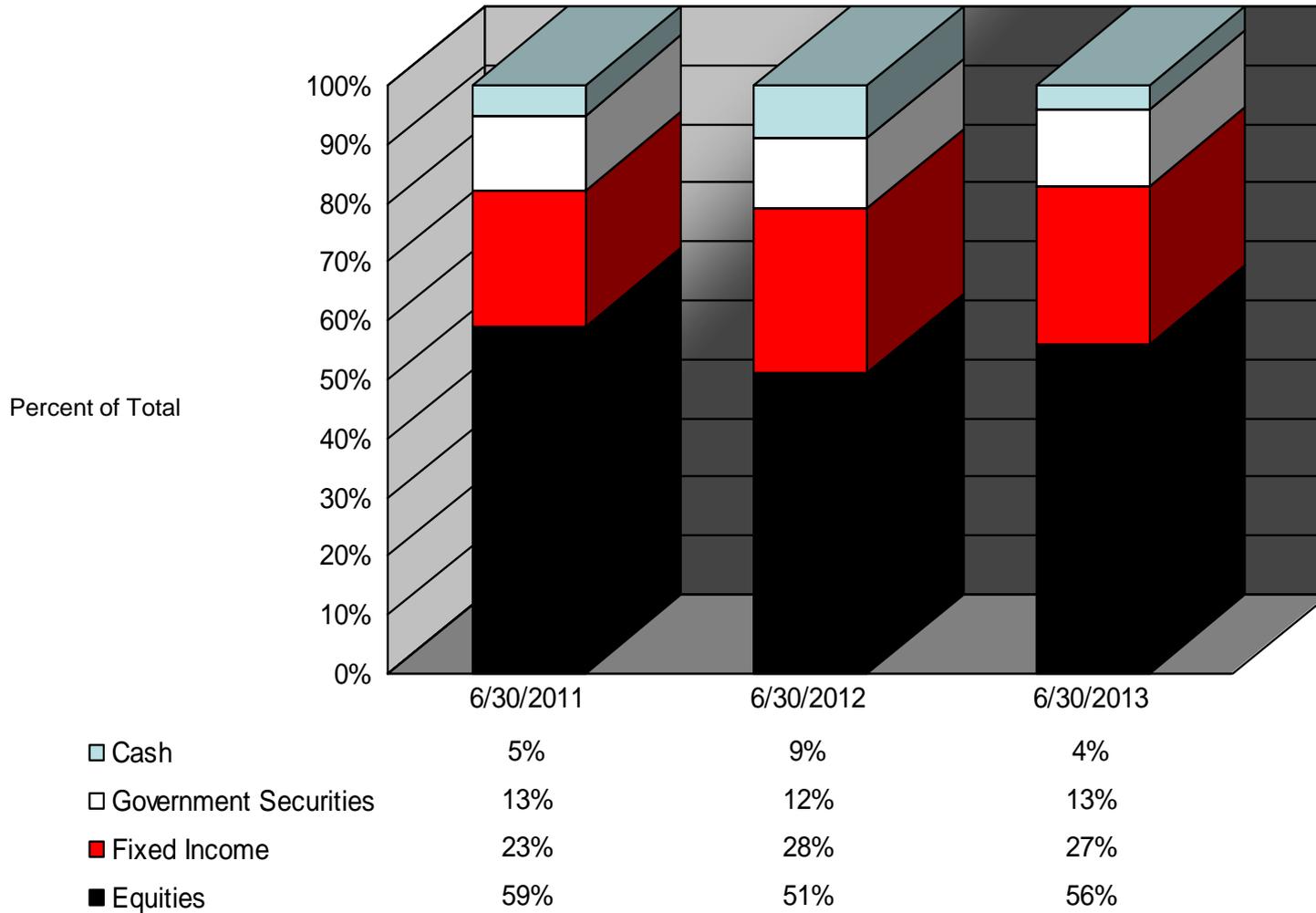
Actuary's Comment – The 2012-2013 return was approximately 10%, resulting in a market value of assets which is approximately \$540,200 higher than projected under last year's valuation. The plan's funding requirements are based on the Plan Assets, not the Market Value of Assets. While this "smoothing" approach will not reduce long-term costs, it will change the timing at which costs are accounted for. The theoretical rationale for this approach is that gains and losses will offset one another before they must be paid for.

Annual Investment Return Rates



Actuary's Comment – Over the past six plan years, the plan's average annual investment return was 2.7%.

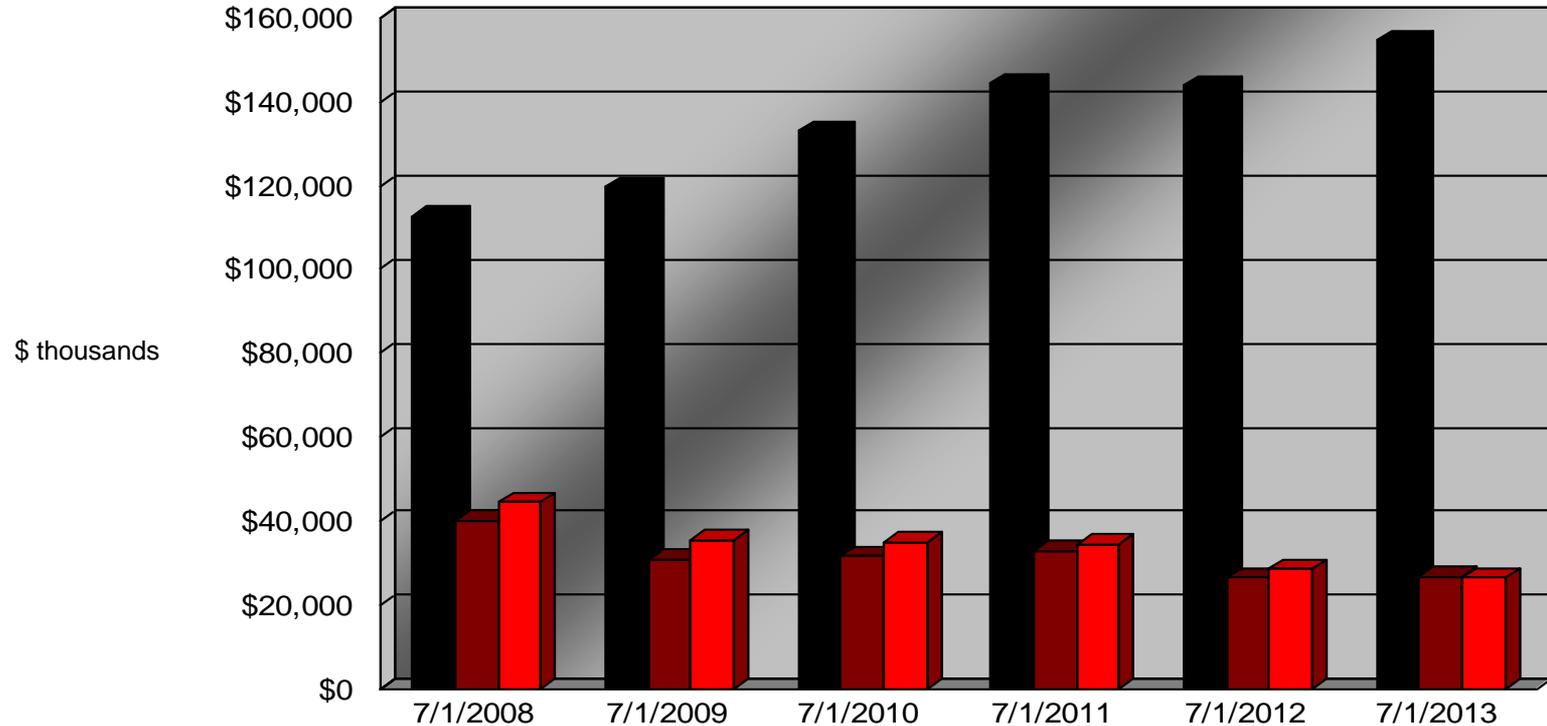
Asset Class Allocation



Actuary's Comment – The plan asset mix should be considered when setting the expected investment return assumption.

Funded Status

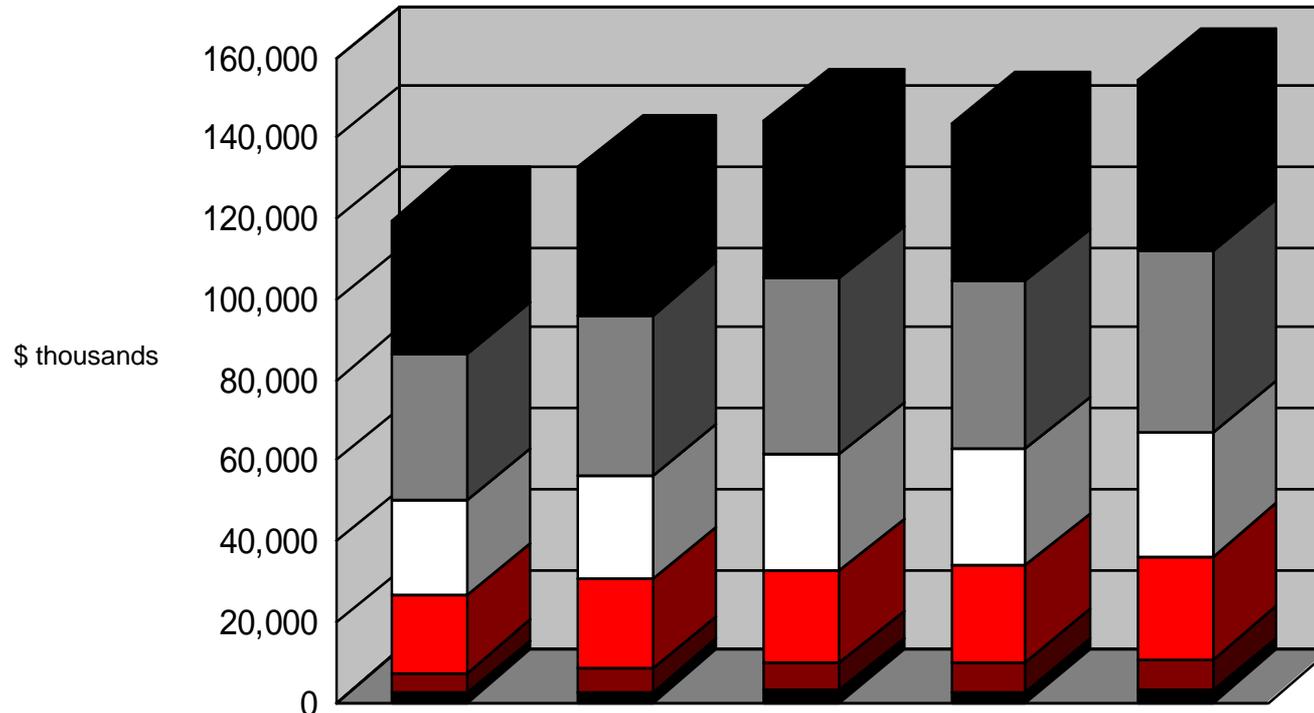
The Accrued Liability is the present value of benefits to be paid in the future, based on pay and service earned to date. The future benefits are discounted at the valuation interest rate.



■ Accrued Liability	\$112,770	\$119,658	\$133,014	\$144,369	\$143,760	\$154,589
■ Market Value of Assets	\$40,009	\$30,946	\$31,624	\$32,976	\$26,528	\$26,565
■ Plan Assets	\$44,537	\$35,588	\$35,008	\$34,278	\$28,421	\$26,429

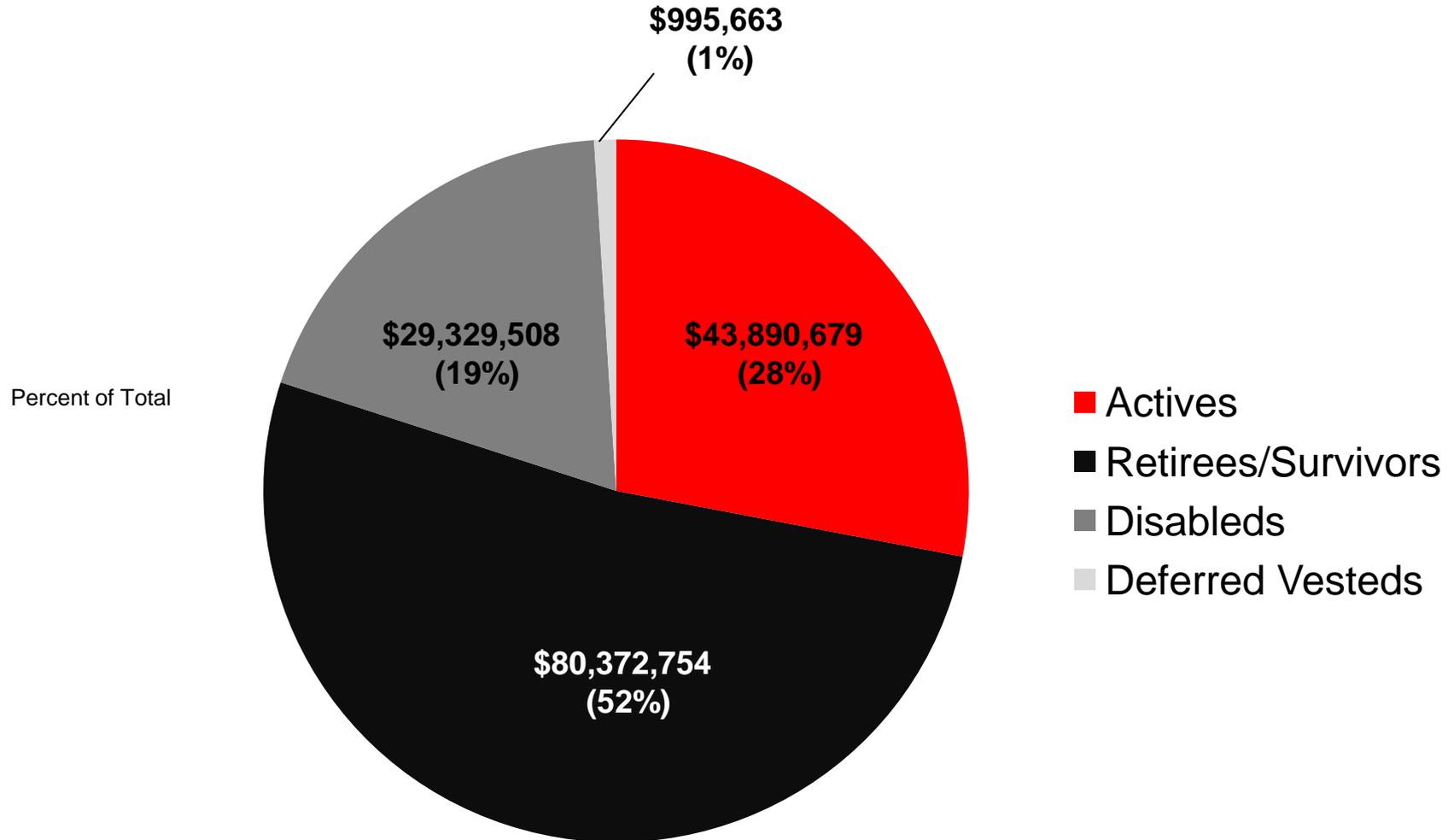
Funded Percentage	7/1/2008	7/1/2009	7/1/2010	7/1/2011	7/1/2012	7/1/2013
Market Value	35.5%	25.9%	23.8%	22.8%	18.5%	17.2%
Plan Assets	39.5%	29.7%	26.3%	23.7%	19.8%	17.1%

Accrued Liability- by Division



	7/1/2009	7/1/2010	7/1/2011	7/1/2012	7/1/2013
■ Police	\$33,203	\$36,850	\$39,149	\$39,329	\$42,821
■ Fire	\$36,617	\$39,825	\$43,896	\$41,803	\$44,801
□ Municipal	\$23,113	\$25,986	\$28,699	\$28,662	\$30,727
■ School	\$19,422	\$21,791	\$22,768	\$24,025	\$25,613
■ Waste Water	\$5,075	\$5,990	\$7,119	\$7,311	\$7,684
■ Library	\$2,228	\$2,572	\$2,738	\$2,630	\$2,943

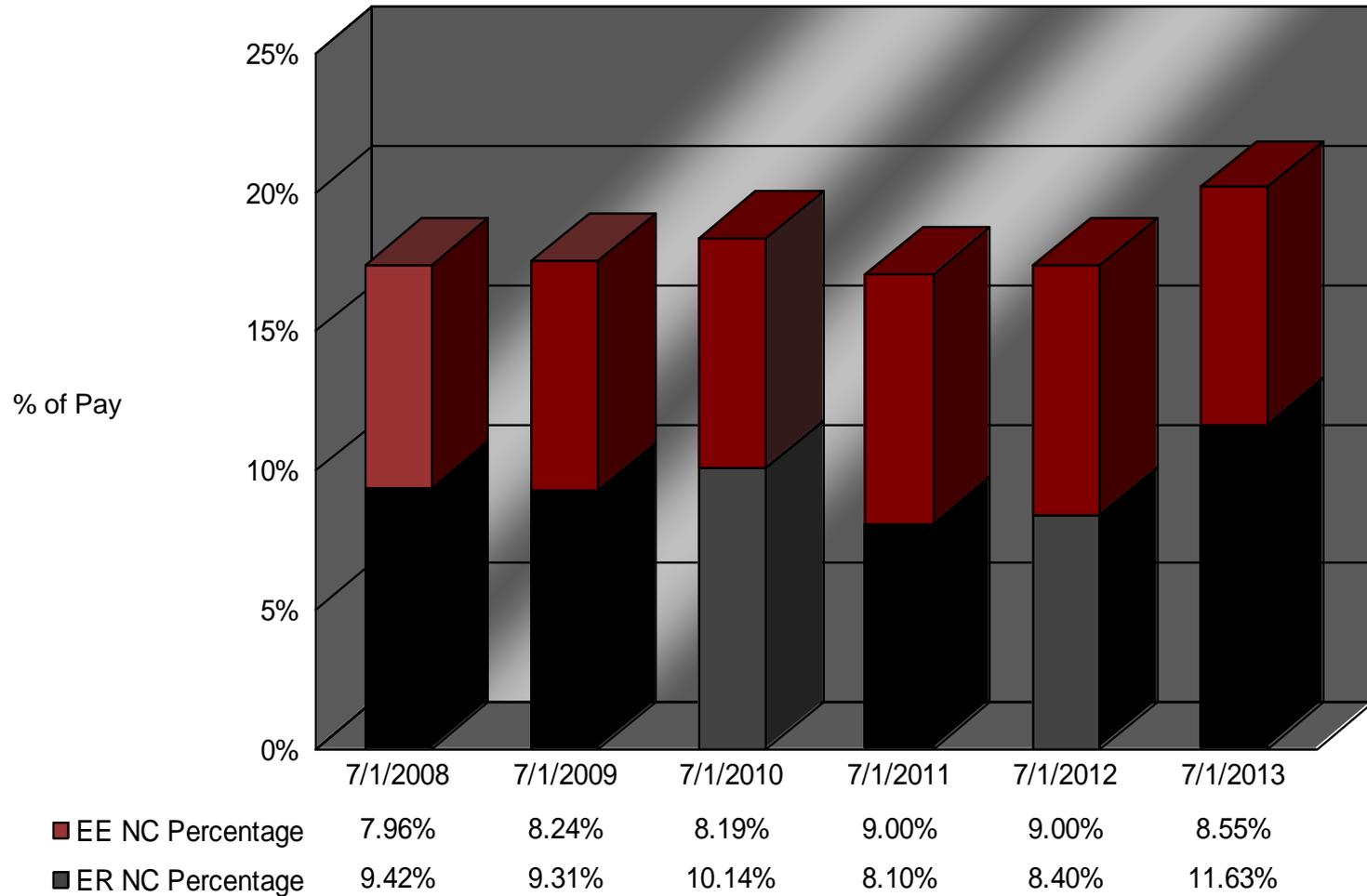
Accrued Liability- by Status



Actuary's Comment – Over 70% of the plan's liability is for participants who no longer work for the Town. This makes the plan very leveraged and highly volatile with regards to asset returns. Also, if any meaningful cost savings are to be achieved, benefits for those people no longer working for the Town will need to be affected.

Normal Cost Percentage

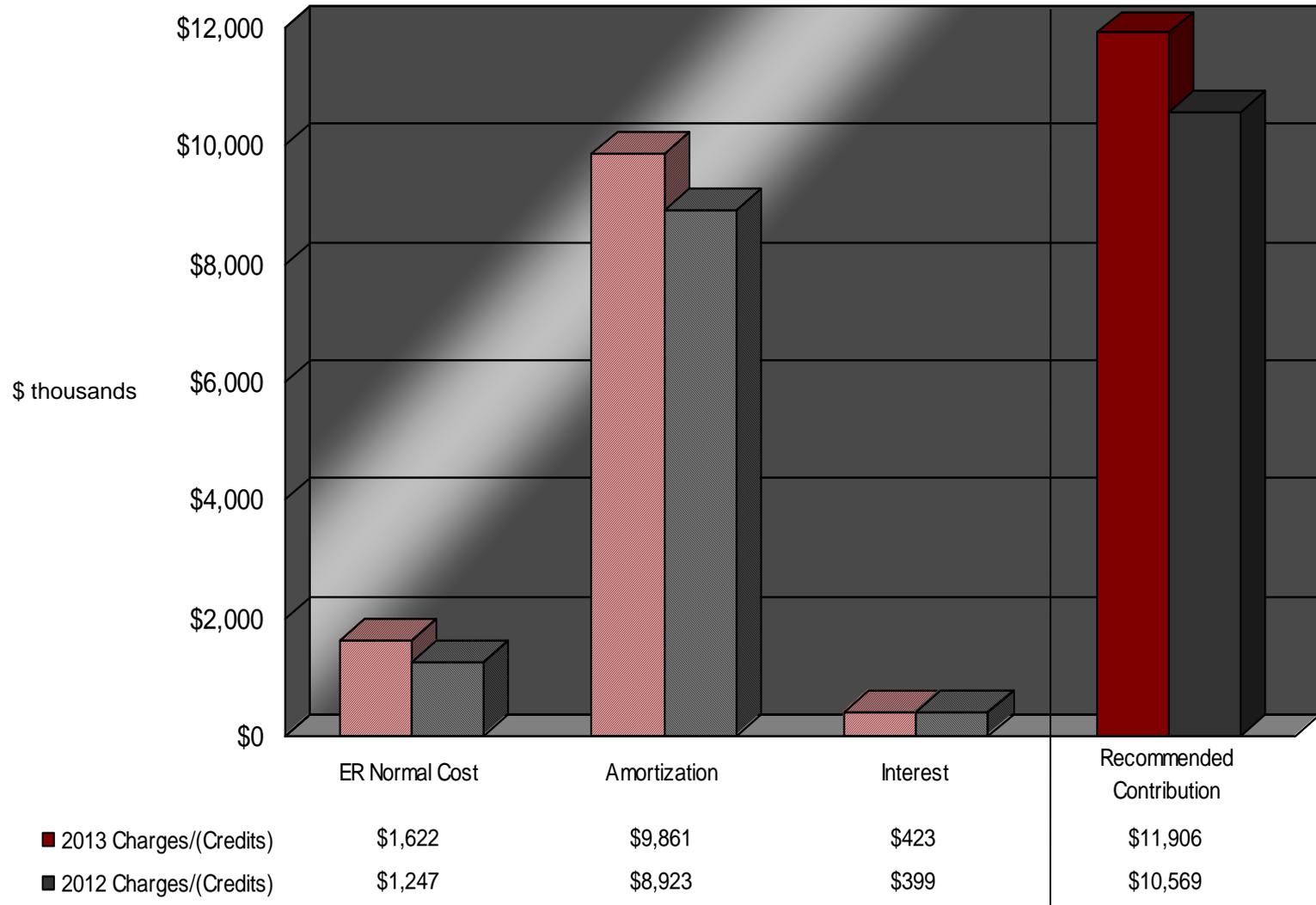
The Normal Cost Percentage is the ratio of present value of benefits earned during the current year to the active participant payroll.



Actuary's Comment – The Normal Cost Percentage indicates the cost of benefits earned in the current year as a percentage of pay. The increase in Total Normal Cost Percentage from 2012 to 2013 is largely due to the discount rate change from 8.00% to 7.50%.

Recommended Contribution

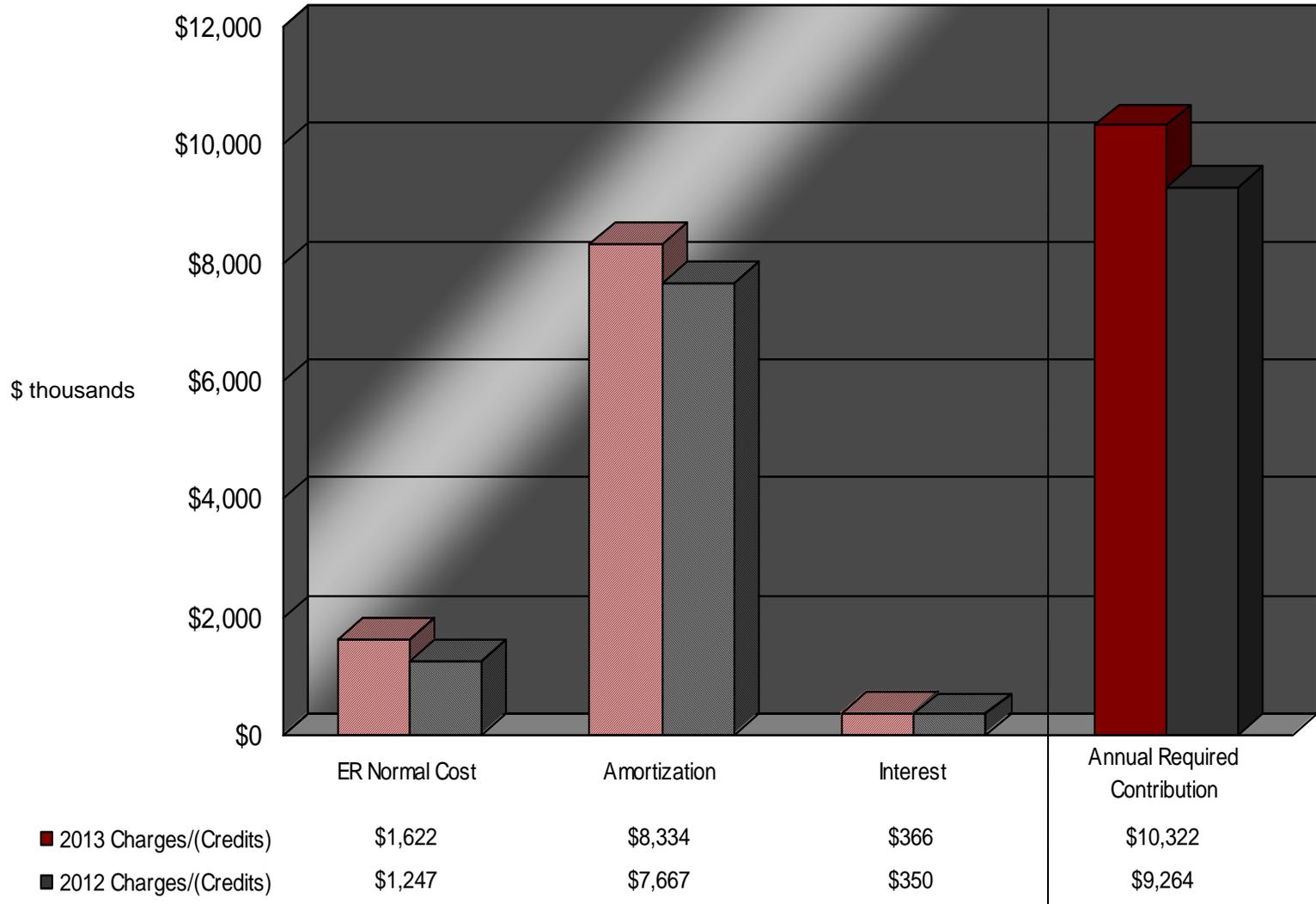
The recommended contribution consists of the annual normal cost and an amortization (over a closed 20-year period as a level % of pay) of unfunded past service liability. These components add up (along with interest to the middle of the plan year) to determine the recommended contribution for the year.



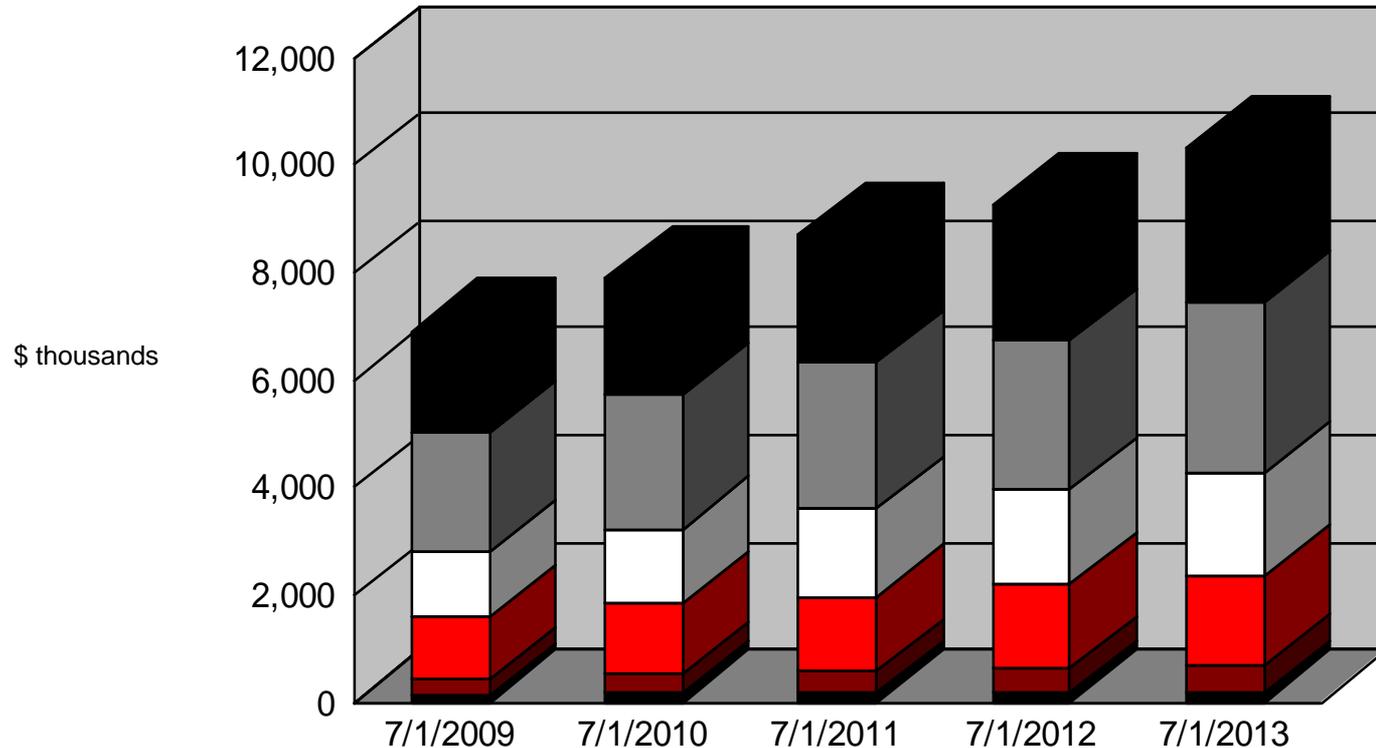
Actuary's Comment – The amortization of the large unfunded past service liability is keeping the recommended cash contribution level high.

Annual Required Contribution (GASB) nyhart

The annual required contribution consists of the annual normal cost and an amortization (over a closed 25-year period as a level % of pay) of past service liability. These components add up (along with interest to the middle of the plan year) to determine the annual required contribution for the year.

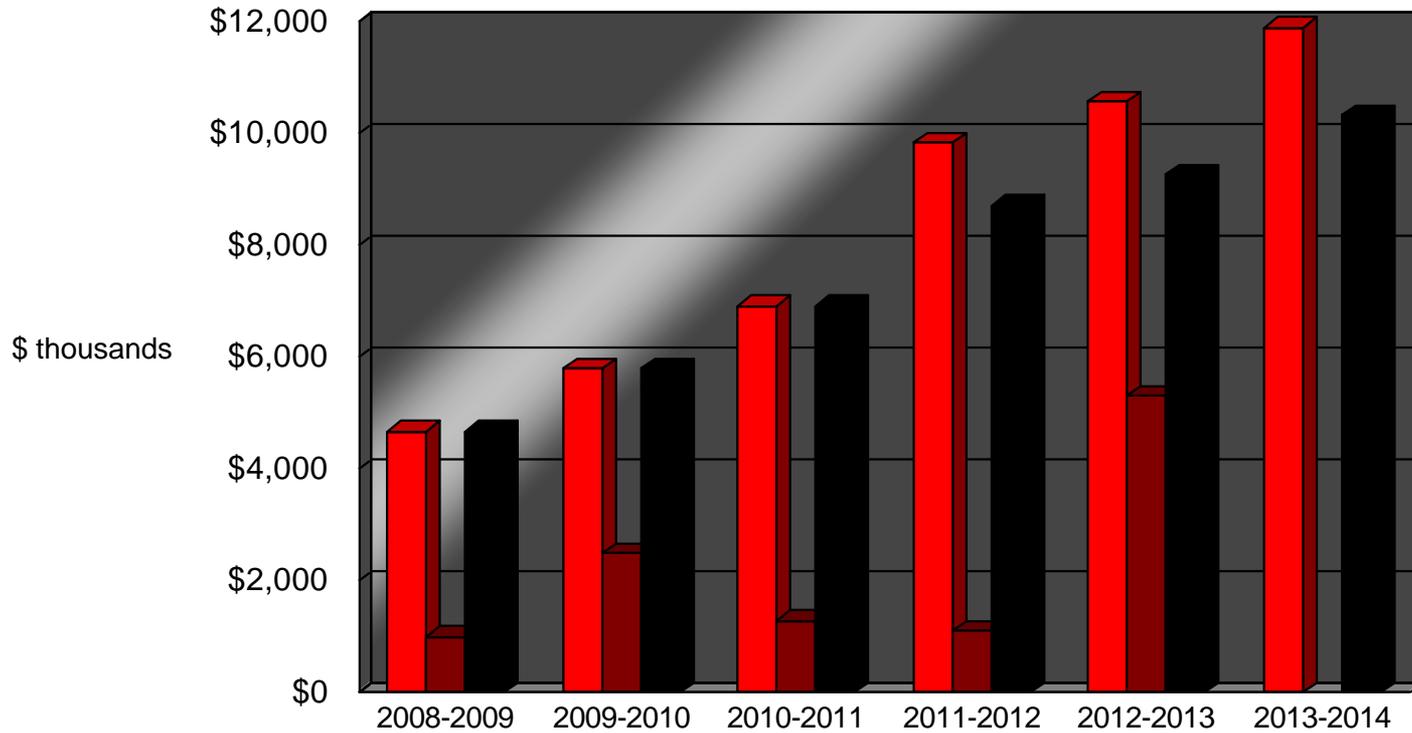


Annual Required Contribution (GASB)- nyhart by Division



	7/1/2009	7/1/2010	7/1/2011	7/1/2012	7/1/2013
■ Police	\$1,906	\$2,180	\$2,379	\$2,551	\$2,882
■ Fire	\$2,228	\$2,489	\$2,719	\$2,770	\$3,162
□ Municipal	\$1,180	\$1,386	\$1,647	\$1,766	\$1,943
■ School	\$1,163	\$1,322	\$1,371	\$1,555	\$1,654
■ Waste Water	\$301	\$354	\$430	\$462	\$499
■ Library	\$134	\$157	\$163	\$160	\$182

Summary of Annual Costs



■ Recommended Contribution	\$4,676	\$5,799	\$6,912	\$9,845	\$10,569	\$11,906
■ Employer Contributions Paid	\$1,000	\$2,500	\$1,289	\$1,101	\$5,301	N/A
■ ARC	\$4,676	\$5,799	\$6,912	\$8,709	\$9,264	\$10,322

➤ **Benefit Changes?**

The Town has recently been negotiating with the individual unions regarding the pension benefits. While final resolutions have not yet occurred, some of the changes modeled and considered include:

- Retirement Age
- COLA
- Employee Contribution Rate
- Benefit Formula
- Definition of Average Pay
- Disability Benefit
- Number of Active Employees

Unless employer contribution levels increase significantly, the plan will need to make significant changes to benefit levels soon. Otherwise, the plan will likely exhaust its assets. The items above are some of the “levers” that can be utilized in reducing the plan’s liabilities and costs.

➤ **Accounting Reform**

GASB has adopted new accounting standards for pension plans. These new standards take effect in two pieces – the first piece is effective for plan years beginning 7/1/2013 and the second piece is effective for plan years beginning 7/1/2014 and later.

➤ **Population Growth?**

Any future expectations of significant changes to the population?

Important Comments About Cost Information Included in this Report

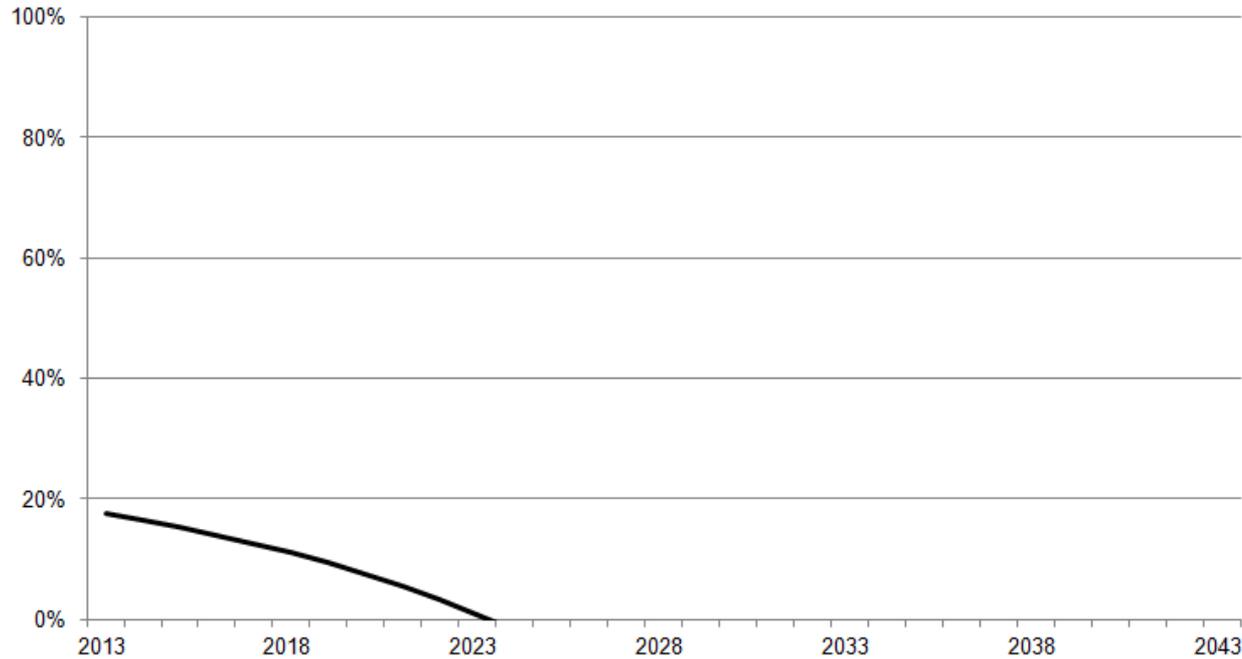
The cost projections contained in this report are based on data as of July 1, 2013. Assumptions used in measuring the liabilities are consistent with the July 1, 2013 actuarial report unless stated otherwise. Reasonable actuarial techniques and assumptions were used to produce the cost projections. Data was provided by the Town.

The following pages show cost projections under specific economic scenarios and are meant to be used for illustration purposes only. Actual results will vary from projections shown in this report due to actual participant data, actual asset returns, and any assumption changes that may be warranted. These projections are not meant to provide a definitive cost savings or increase related to plan changes.

These projections reflect numerous assumptions and one should focus on the general trend of the results rather than the absolute dollar amounts.

Scenario 1 – Baseline Projection

Funded Percentage - Current Plan Provisions



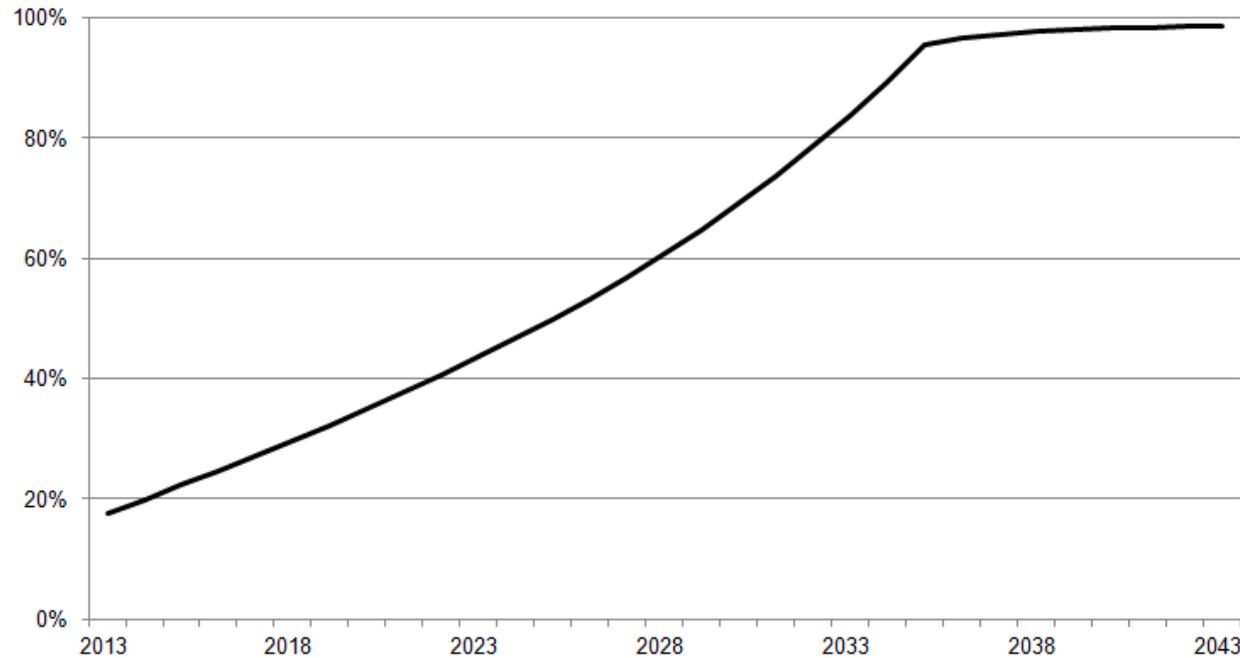
Contribution Rates:	
Full ARC?	<input type="checkbox"/>
Contribution as % of Pay	36%

Asset Return:	
2013 Annual Return	7.50%
2014+ Annual Return	7.50%

	2013	2018	2023	2028	2033	2038	2043	2013-2043
Funded %	18%	11%	1%					
Payroll (in \$000's)	13,956	15,490	17,826					
ARC	10,322	14,266	20,771					
ARC as % of pay	74%	92%	117%					
Actual Cont.	5,024	5,576	6,417					
Actual Cont. as % of pay	36%	36%	36%					
Assets	26,429	19,923	1,600					
Liability	154,589	181,665	212,592					
Benefits Paid	9,012	10,705	13,406					

Scenario 2 – Actuarially Determined Contribution

Funded Percentage - Current Plan Provisions



Contribution Rates:

Full ARC?

Contribution as % of Pay

Asset Return:

2013 Annual Return

2014+ Annual Return

	2013	2018	2023	2028	2033	2038	2043	2013-2043
Funded %	18%	30%	43%	61%	84%	98%	99%	
Payroll (in \$000's)	13,956	15,490	17,826	20,614	23,828	27,731	32,594	
ARC	10,322	12,023	14,366	17,113	20,312	4,153	4,577	373,630
ARC as % of pay	74%	78%	81%	83%	85%	15%	14%	
Actual Cont.	10,322	12,023	14,366	17,113	20,312	4,153	4,577	
Actual Cont. as % of pay	74%	78%	81%	83%	85%	15%	14%	
Assets	26,429	53,861	92,467	147,631	229,407	298,282	336,645	
Liability	154,589	181,665	212,592	243,186	273,610	304,924	341,108	
Benefits Paid	9,012	10,705	13,406	16,229	18,975	21,309	23,473	500,032