

# Middlesex County Retirement System



Town of Sherborn- Board of Selectmen Meeting

September 13, 2016

# Agenda

- Introduction
- Selectmen Questions and Answers
- Contributions and Benefits

# The Middlesex County Retirement Board

Chairman

Thomas F. Gibson

Advisory Council Member

Brian P. Curtin

Elected Member

John Brown

Elected Member

Vacant

Appointed Member

Robert W. Healy

*Chief Administrative Officer*

*Lisa M. Maloney*

[www.middlesexretirement.org](http://www.middlesexretirement.org)

# System Membership



# MCRS Membership

- 71 governmental employers, including 31 municipalities, 20 housing authorities, 9 school districts and 9 water districts
- Approximately 9,000 active members, 5,000 retired/survivor/beneficiary members, and 3,000 inactive members
- As of 01/01/2014 Sherborn's membership consisted of 79 active members, 37 retired/survivor/beneficiary members and 25 inactive members

# Selectmen Questions and Answers



# Question 1 –Part 1

- “Our unfunded liability was \$1.1M in 1993, \$5.3M in 2010, and \$9.6M as of the last valuation report in 2014. Aren’t we legally mandated to be amortizing the unfunded liability since the early 1990s?...”

# Answer- Part 1

Effective 1988, Chapter 32 originally required full funding by amortization over a period not to exceed 40 years, but no later than June 30, 2028.

After the worldwide economic collapse in 2008, the maximum date was extended first to June 30, 2030, then to the current maximum of June 30, 2040.

# Question 1 –Part 2

- “... If so, why does it appear to be growing, most recently at almost \$1M per year, instead of going down?”

## Answer- Part 2

The funding schedules adopted by MCRS under Chapter 32 allow for payments on the unfunded liability that increase over the duration of the funding schedule.

When amortization payments increase, the dollar amount of the unfunded liability is projected to grow in the early years of the funding schedule.

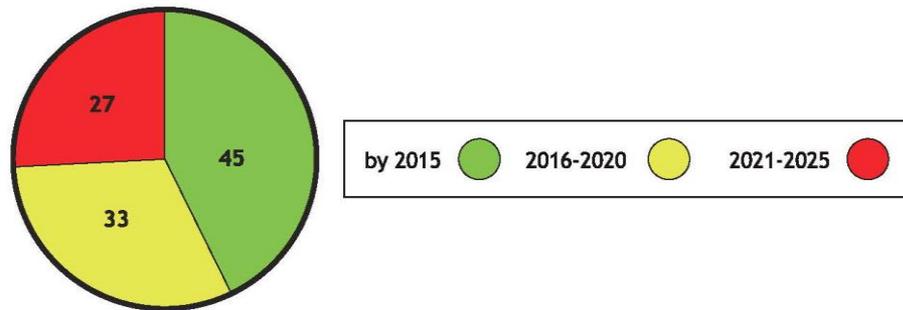
During this period, when the unfunded liability is increasing, projected funded ratios are increasing slightly.

## Answer- Part 2

The more significant drivers to the increase in the unfunded liability have been the 2008 financial collapse and revisions and updates to the actuarial assumptions used to determine the unfunded liability.

## Negative Amortization in Current Funding Schedules

- Unfunded actuarial liability begins decreasing



\*26 Systems estimated, projected Unfunded Actuarial Liability not provided

23

### Source : Actuarial Hodgepodge

Jim Lamenzo, PERAC Actuary

John Boorack, Senior Actuarial Associate

PERAC/Winter 2015

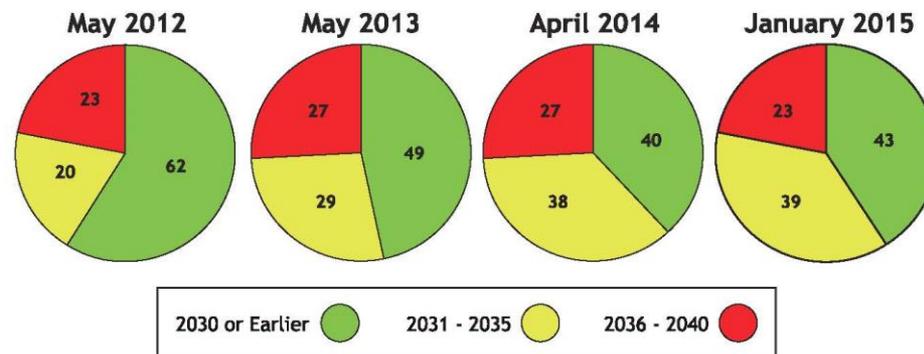
# Question 2

- “What is the year that we are legally mandated to be fully funded?”

# Answer

We are legally mandated to be fully funded by June 30, 2040.

## Funding Schedules Adopted



15

**Source : Actuarial Hodgepodge**

Jim Lamenzo, PERAC Actuary

John Boorack, Senior Actuarial Associate

PERAC/Winter 2015

# Question 3

- “PRIT return was 5.7%, gross of fees, for the 10 years ending 6/30/16, which included the most recent market crash. In the past 5 years the return was 7.1%, gross of fees. In the Middlesex Financial Statement (12/31/15), return assumptions are presented that yield an expectation of 9.8% (including inflation of 4%). Why should we expect future returns of 9.8%, rather than either a full market cycle of 5.7% or even the more favorable recent 5 year return of 7.1%?”

# Answer

The financial statements likely show a long-term expectation (30 years).

Shorter term expectations (5-7 years) are lower.

The System's liabilities are long term and the interest rate used to discount the liabilities is based on long term expectations.

# PRIM Asset Allocation Policy Target: 2016 v. 2015

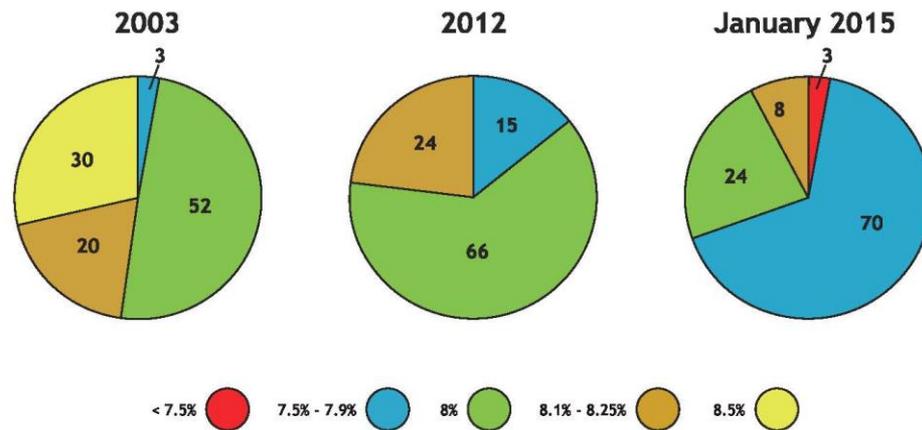
	PRIM Target	2015 Expected 5-7 Yr. Return	2016 Expected 5-7 Yr. Return	Difference
Large Cap Equities	14.5%	6.00%	6.00%	0.00%
Small/Mid Cap Equities	3.5%	6.00%	6.25%	0.25%
Int'l Equities	16%	7.00%	7.25%	0.25%
Emerging Int'l Equities	6%	9.00%	9.75%	0.75%
<b>Global Equity</b>	<b>40%</b>			
Core Bonds	5%	2.30%	2.46%	0.15%
20+ Yr. Treasury STRIPS <sup>1</sup>	5%	2.50%	2.00%	-0.50%
TIPS	3%	2.25%	2.50%	0.25%
<b>Core Fixed Income</b>	<b>13%</b>			
High-Yield Bonds	1.5%	4.00%	5.25%	1.25%
Bank Loans	1.5%	4.50%	5.50%	1.00%
EMD (External)	1%	4.50%	4.75%	0.25%
EMD (Local Currency)	2%	5.50%	6.50%	1.00%
Private Debt	4%	7.50%	7.50%	0.00%
<b>Value-Added Fixed Income</b>	<b>10%</b>			
<b>Private Equity</b>	<b>10%</b>	8.50%	8.50%	0.00%
<b>Real Estate</b>	<b>10%</b>	6.50%	6.50%	0.00%
Timberland <sup>2</sup>	4%	7.06%	6.76%	-0.30%
Hedge Funds	9%	5.75%	5.75%	0.00%
<b>Portfolio Completion<sup>3</sup></b>	<b>4%</b>	5.56%	5.74%	0.18%
<b>Expected Return 5-7 Yr.</b>		<b>6.8%</b>	<b>6.8%</b>	<b>0.07%</b>
<b>Expected Return 30 Yr.</b>		<b>7.9%</b>	<b>7.8%</b>	<b>-0.12%</b>
<b>Standard Deviation</b>		<b>12.5%</b>	<b>12.2%</b>	<b>-0.35%</b>
<b>Sharpe Ratio (30 Yr.)</b>		<b>0.37</b>	<b>0.39</b>	<b>0.02</b>

1: The 2016 assumption is modeled as 20+ Yr. Treasury STRIPS portfolio, prior assumptions were based on a 20 Yr. LDI strategy

2: The Timberland portfolio is modeled as 50% Commodities and 50% Private Real Assets (Illiquid)

3: For the Portfolio Completion strategies, the risk/return assumptions are modeled as 50% Hedge Fund (Credit) and 50% GAA

## Investment Return Assumptions



**Source : Actuarial Hodgepodge**

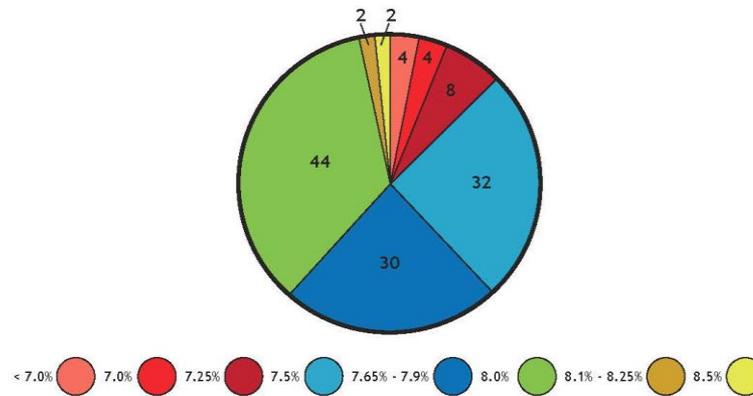
Jim Lamenzo, PERAC Actuary

John Boorack, Senior Actuarial Associate

PERAC/Winter 2015

## Investment Return Assumptions *(continued)*

National State, Teacher, and City Plans



Source: NASRA Public Fund Survey of 126 Large Plans, October 2014

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### Source : Actuarial Hodgepodge

Jim Lamenzo, PERAC Actuary

John Boorack, Senior Actuarial Associate

PERAC/Winter 2015

# Question 4

- “How much would the pension liability grow, if we used recent past 10 year investment returns as our discount assumption, rather than 7.875%?”

# Answer

Lowering the investment return assumption would increase the unfunded pension liability.

The Advisory Council and the Retirement Board are committed to lowering the investment return assumption, but prefer to do so gradually as recommended by PERAC, so as to minimize the budget impact.

From 01/01/2002 to 01/01/2014 the assumption has been decreased from 8.5% to 7.875%

# Question 5

- “Should we be concerned about hitting the “crossover point” as defined by GASB, since our funded ration is only 46.1%?”

# Answer

No. Because the System has adopted a funding schedule that will fully fund the liabilities by June 30, 2035, the crossover point is never reached.

# Question 6

- “How does our funded ratio of 46.1% compare to other municipalities across the nation?”

# Answer

We have not undertaken a nationwide comparison. PERAC statistics demonstrate that the funding ratios for the 104 Massachusetts Retirement Systems range from a low of 26.2% to a high of 98.3% , with the average at 62.03%.

The Middlesex County Retirement System is projected to be fully funded in 19 years.

# Question 7

- “How much more should we contribute each year if we wanted to ensure our unfunded liability does not grow larger? \$500,000? \$1,000,000?”

# Answer

We will better be able to address this after the 2016 System Valuation is complete.

# Contributions and Benefits

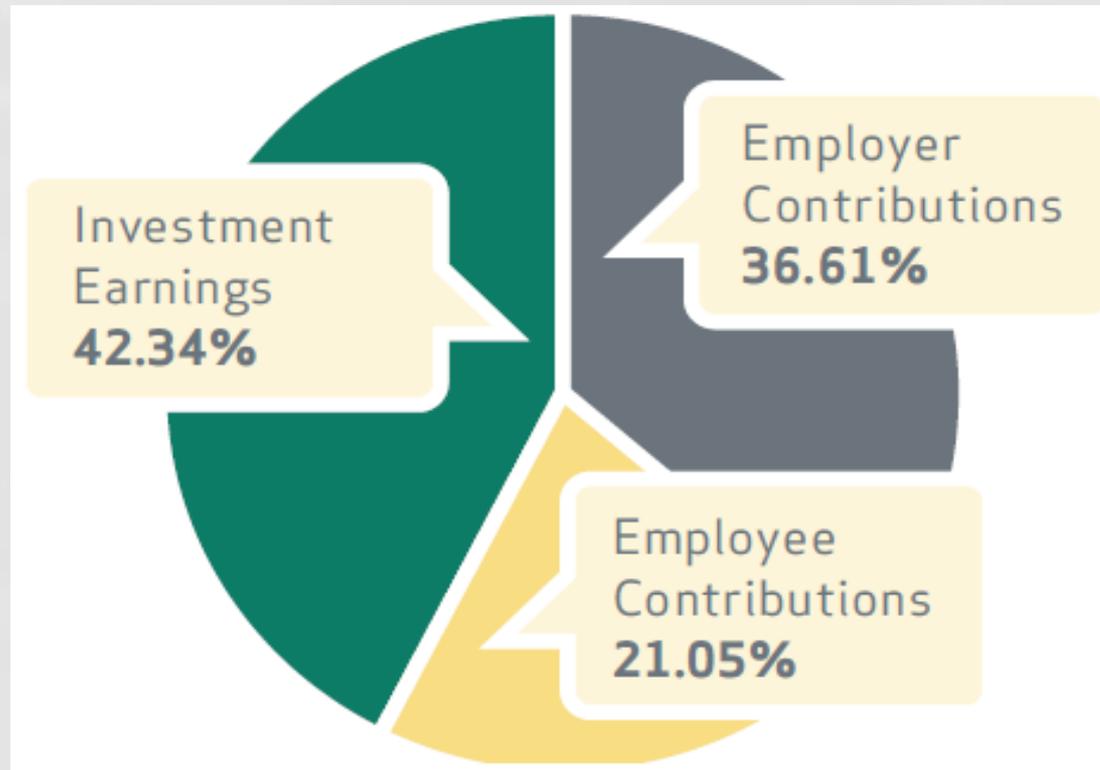


# MCRS Assets

- \$1.08 Billion in Assets as of 01/01/16
- Assets are accumulated from three sources:
  - Member Contributions
  - Governmental Appropriations
  - Investment Returns
- Assets invested through the Pension Reserves Investment Management (PRIM) Board

# Massachusetts Pension Fund Assets

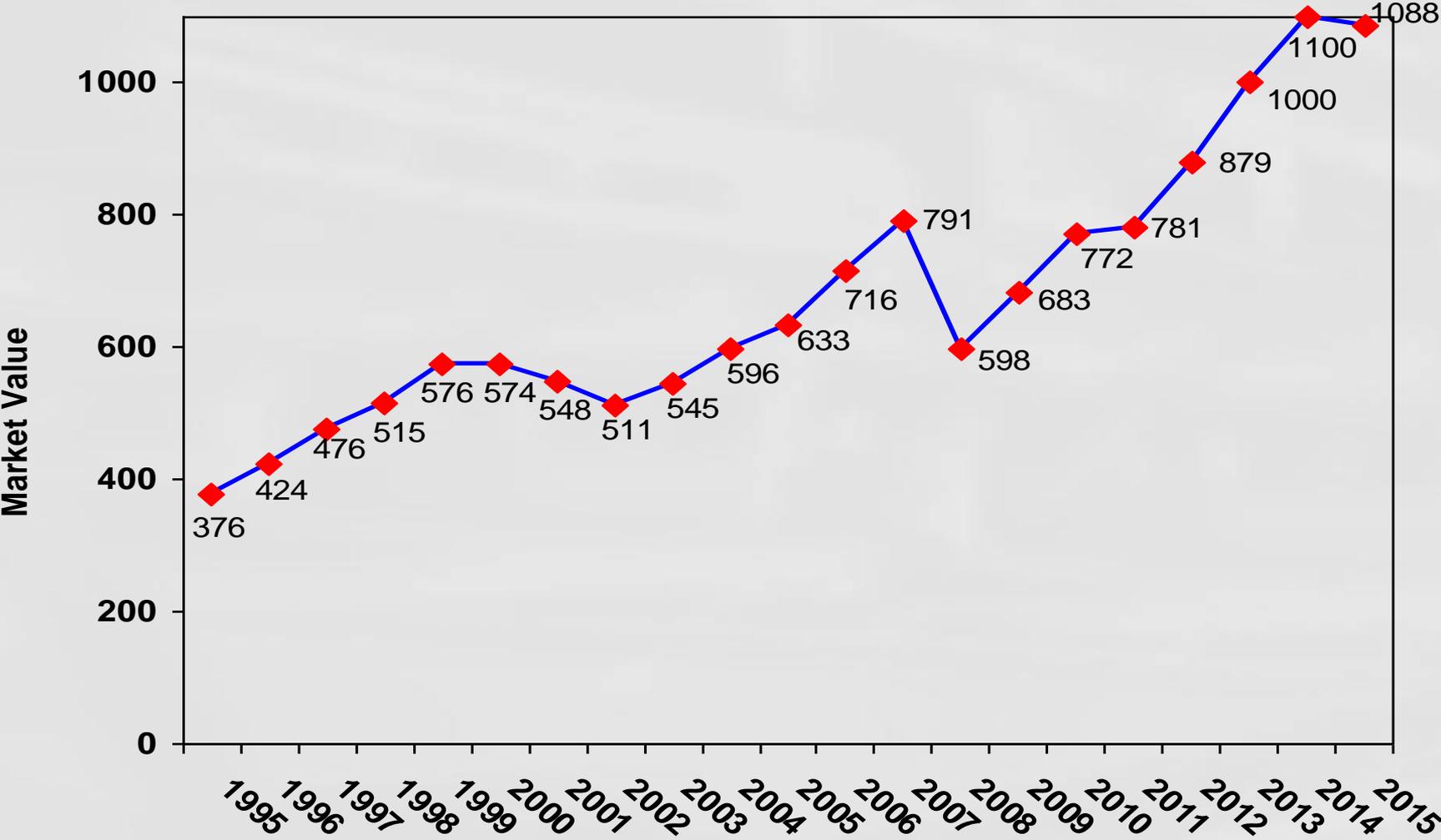
**Total Massachusetts Pension Fund Receipts – 1993 to 2012:**



*Source: National Institute on Retirement Security, "Pensionomics 2014: Measuring the Economic Impact of DB Pension Expenditures" (<http://www.nirsonline.org>)*

# MCRS Asset Growth – 1995 to 2015

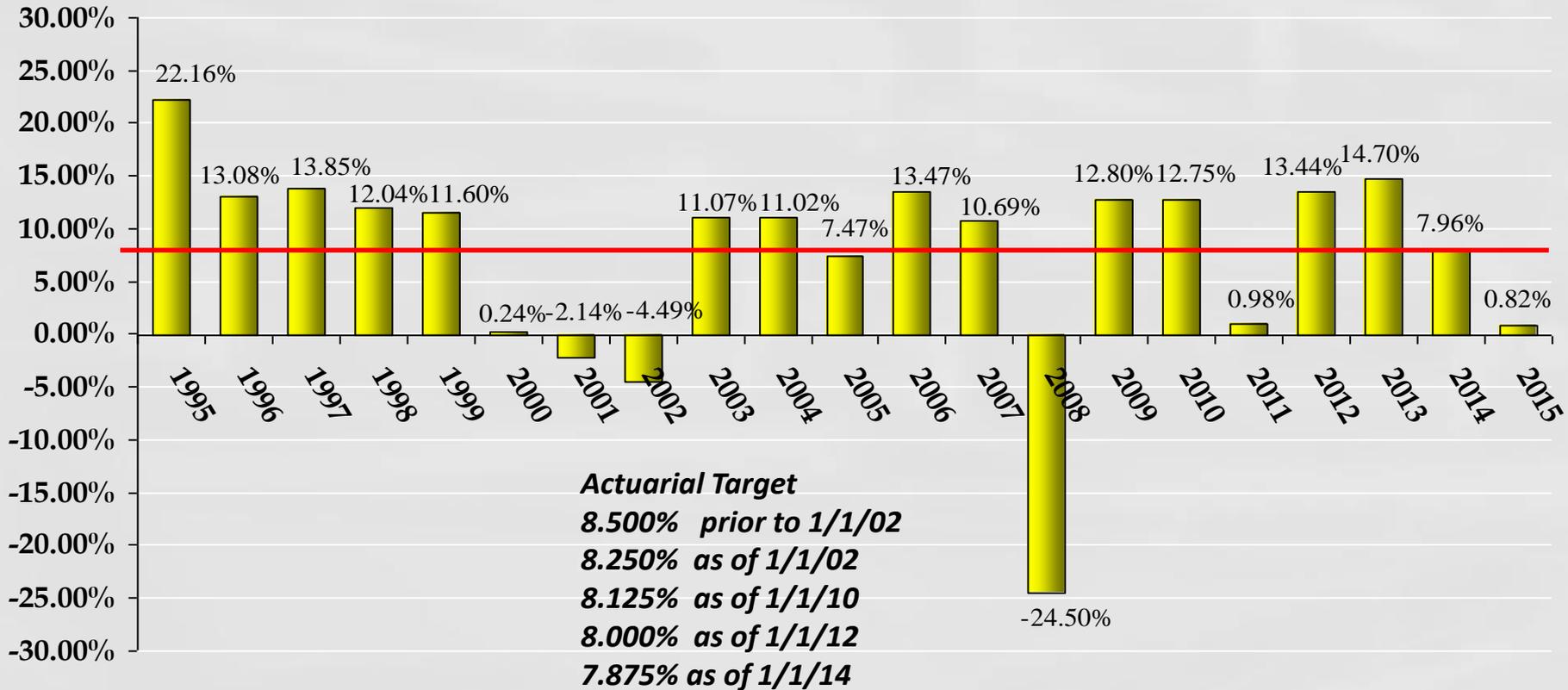
Year End Market Value in Millions



# Middlesex County Retirement System

## Calendar Year Returns

### 1995 to 2015



# MCRS Benefits Summary – 12/31/15

Type of Benefit	# of Recipients	Annual Payment	Median Allowance
Section 5 – Superannuation	4,818	\$103,621,013	\$15,884
Section 6 – Ordinary disability	112	\$1,606,042	\$12,108
Section 7 – Accidental disability	561	\$15,878,108	\$26,262
Section 9 – Accidental death	44	\$1,040,630	\$21,600
Section 10 – Termination Allowance	24	\$477,432	\$19,271
Section 12 Option C – Retiree survivor	204	\$3,792,678	\$14,091
Section 12(2)(d) – Active member survivor	214	\$2,013,354	\$6,655
Section 12B	1	\$6,144	\$6,144
Accidental Death 100	2	\$143,977	\$71,989
Section 101 – Survivor of pre-1997 disability retiree precluded from selecting Option C	61	\$997,344	\$12,000
<b>Total</b>	<b>6,041</b>	<b>\$129,576,722</b>	<b>\$14,988</b>

# Town of Sherborn Benefits Summary – 12/31/15

Type of Benefit	# of Recipients	Annual Payment	Median Allowance
Section 5 – Superannuation	36	\$759,946.68	\$16,641.54
Section 6 – Ordinary disability	0	\$0	\$0
Section 7 – Accidental disability	3	\$127,125.84	\$45,632.16
Section 9 – Accidental death	0	\$0	\$0
Section 12 Option C – Retiree survivor	3	\$30,571.32	\$4,537.80
Section 12(2)(d) – Active member survivor	0	\$0	\$0
<b>Total</b>	<b>42</b>	<b>\$917,643.84</b>	<b>\$16,868.22</b>

# Superannuation Retirees as of 12/31/15

	Town of Sherborn	Middlesex County Retirement System
Less than \$9,999	7	1,538
\$10,000 to \$19,999	16	1,356
\$20,000 to \$29,999	5	745
\$30,000 to \$39,999	2	436
\$40,000 to \$49,999	4	329
\$50,000 to \$59,999	1	201
\$60,000 to \$69,999	0	89
\$70,000 to \$79,999	1	58
\$80,000 to \$89,999	0	27
\$90,000 to \$99,999	0	20
Greater than \$100,000	0	19
<b>Total</b>	<b>36</b>	<b>4,818</b>

Thank You For  
Your Time And  
Attention

