Franklin Regional Retirement System

A Presentation
Regarding the Impact of the Increase
in the
Cost-of-Living Adjustment Base
for Retirees

March 2016

In compliance with section 19 of Chapter 188 of the Acts of 2010 (An Act Relative to Municipal Relief), and on behalf of the individual treasurers of each governmental unit of the Franklin Regional Retirement System, this presentation is made to the "Chief Executive Officers" of the various units - (Selectboards, Commissioners, Executive Directors, Superintendents, Boards of Directors, Administrators).

The Municipal Relief Act of 2010 included section 19, which allows retirement systems to increase the maximum COLA base for retirees by \$1,000 increments.

SECTION 19. Section 103 of said chapter 32, as so appearing, is hereby amended by adding the following paragraph: - (j) Notwithstanding paragraph (a), the board of any system that establishes a schedule pursuant to section 22D or 22F, may increase the maximum base amount on which the cost-of-living adjustment is calculated, in multiples of \$1,000. Each increase in the maximum base amount shall be accepted by a majority vote of the board of such system, subject to the approval of the legislative body. For the purpose of this section, "legislative body" shall mean, in the case of a city, the city council in accordance with its charter, in the case of a town, the town meeting, in the case of a district, the district members, and, in the case of an authority, the governing body. In the case of a county or region, acceptance shall be by the county or regional retirement board advisory council at a meeting called for that purpose by the county or regional retirement board that shall notify council members at least 60 days before the meeting. Upon receiving notice, the treasurer of a town belonging to the county or regional retirement system shall make a presentation to the town's chief executive officer, as defined in paragraph (c) of subdivision (8) of section 22, regarding the impact of the increase in the cost-of-living adjustment base, the failure of which by a treasurer shall not impede or otherwise nullify the vote by the advisory council. Acceptance of an increase in the maximum base amount shall be deemed to have occurred upon the filing of the certification of such vote with the commission. A decision to accept an increase in the maximum base amount may not be revoked.

At its January 26, 2016 meeting, the board voted to increase the COLA base from \$16,000 to \$17,000, thereby initiating an approval process that includes a vote by the Advisory Council 60 days or later from the date of this notification The Advisory Council, which is made up of the treasurers from the member units of the retirement system, will meet on May 25, 2016, at 11:30 am, in the meeting room at the retirement office (278 Main Street, Greenfield), for the purpose of voting approval, or not, of the increase to the COLA base.

The purpose of this presentation is to report the impact of raising the COLA base. The cost/benefit analysis is derived from calculations done by an actuary that uses accepted standards to arrive at true funding schedules.

In addition to this written report, there will be an information session: <u>Thursday, April 21, 2016, 9:00 am</u>

Location: Franklin Regional Retirement, 278 Main Street, Suite 311, Greenfield seating is limited – **call to reserve** – 413 774 4837 x 4

or email: ExDr@FRRSMA.com directions: www.FRRSMA.com

32,639

Annually the Board has the option to grant a COLA to the retirees. The COLA amount can be as much as 3%, however, it is limited to the first \$16,000 of the retiree's benefit. For example, a retiree receiving \$5,000 annually would receive a \$150 increase, \$10,000 annually would be \$300, and \$16,000 would be \$480 - as would any amount over \$16,000, e.g. \$22,000 would get \$480, \$37,123.56 would get \$480, \$41,555.09 would get \$480 - effectively eroding the actual COLA percentage of those whose benefit is greater than \$16,000.

The above stated section of Massachusetts Retirement Law, MGL 32 §103, provides the retirement board with a mechanism to increase the COLA base and reduce the number of retirees receiving less than the full 3%. With secondary approval of the Advisory Council, the Board can increase the COLA base in \$1,000 increments, which can be multiples of 1,000 each time. However, increasing the COLA base adds a permanent increase to the future expenses of the retirement system.

Every two years the board has a new actuarial analysis performed to update the calculation of the system's future liability for retirement benefits and to recalculate the annual assessments for the next 20 years. These regular updates provide the board with timely opportunities to adjust to changing/changed conditions (investments, retirements, employment trends) which they can address using a number of variables such as: assumed rate of return on investments, rate of salary increase for active employees, length of the funding schedule, and amortization rate. These options are also available to the board when it is working to accommodate an increase to the COLA base, allowing the board to minimize the cost impact while providing beneficial impacts. Using the latest data, an estimate of the costs is shown in this chart:

Normal Cost (current year liablity accrual)			
2014 Total Salaries of active members	30,854,652		30,854,652
Normal Cost (4%)	1,234,186		
Addition to NC due to COLA base increase (2%)	24,684	24,684	
Accrued Actuarial Liability (prior years liablity)			
1/1/2012 Actuarial Total	151,531,013		
Addition to AAL due to COLA base increase (1/2%)	757,655		
subtract funded percentage as of 12/31/2014 (79%)	(598,548)		
Unfunded COLA addition	159,108		
divided by years in funding schedule (20)	7,955 _	7,955	_
			_

Total estimated annual additional cost due to COLA base increase:

Barring options to adjust variables in the actuarial process, it is expected that funding for the increase will come from future investment returns. Otherwise, the increase would be funded by assessments to the employers.

The year 2015 was a flat year for investment returns. This system's earnings for the year were 1.1%, despite that, over the long-term this system's returns are ahead of its targets, and are in the top percentiles compared to other Massachusetts systems, and, they compare favorably with other state systems. Over the last 30 years, FRRS has averaged 8.51% versus its target average of 7.94%, and since the 2008 recession, FRRS as averaged 11.03% versus 7.86%. (The assumed target in the chart below is what was/is used in the actuarial calculation of future investment earnings available for funding future retirement costs.)

ASSUMED ACTUARIAL		ASSUMED		ASSUMED		
ASSET VALUE	YEAR	TARGET %	ACTUAL %	TARGET \$	ACTUAL \$	EXCESS
3,852,790	1983	7.50%		288,959	563,347	274,388
4,141,749	1984	7.50%		310,631	823,816	513,185
4,452,380	1985	7.50%		333,929	385,236	51,307
4,786,309	1986	7.50%	7.73%	358,973	429,708	70,735
5,145,282	1987	7.50%	-0.24%	385,896	143,376	(242,520)
5,531,178	1988	7.50%	9.51%	414,838	905,946	491,108
5,946,017	1989	7.50%	11.95%	445,951	1,035,616	589,665
11,034,406	1990	8.00%	5.61%	882,752	580,902	(301,850)
11,917,158	1991	8.00%	17.18%	953,373	1,624,378	671,005
12,870,531	1992	8.00%	8.51%	1,029,642	1,391,316	361,674
13,900,174	1993	8.00%	10.71%	1,112,014	1,760,130	648,116
15,012,188	1994	8.00%	-1.49%	1,200,975	541,992	(658,983)
16,213,163	1995	8.00%	22.46%	1,297,053	2,994,108	1,697,055
17,510,216	1996	8.00%	9.35%	1,400,817	2,661,366	1,260,549
18,911,033	1997	8.00%	19.14%	1,512,883	4,442,207	2,929,324
30,578,653	1998	8.50%	21.00%	2,599,186	5,609,315	3,010,129
36,705,396	1999	8.50%	6.82%	3,119,959	3,605,326	485,367
39,825,355	2000	8.50%	4.44%	3,385,155	983,606	(2,401,549)
42,002,146	2001	8.50%	2.48%	3,570,182	1,147,685	(2,422,497)
45,572,328	2002	8.50%	-8.39%	3,873,648	(3,377,482)	(7,251,130)
41,298,625	2003	8.00%	17.08%	3,303,890	6,828,788	3,524,898
44,602,515	2004	8.00%	8.77%	3,568,201	4,523,761	955,560
48,170,716	2005	8.00%	7.70%	3,853,657	4,296,447	442,790
61,538,920	2006	8.00%	13.40%	4,923,114	8,208,179	3,285,065
66,462,034	2007	8.00%	11.13%	5,316,963	7,871,946	2,554,983
77,859,319	2008	8.00%	-26.82%	6,228,746	(21,458,401)	(27,687,147)
84,088,065	2009	8.00%	18.20%	6,727,045	10,773,118	4,046,073
79,458,638	2010	7.88%	15.38%	6,257,368	11,096,450	4,839,082
85,716,006	2011	7.88%	0.92%	6,750,135	434,442	(6,315,693)
85,648,257	2012	7.88%	13.39%	6,744,800	11,727,623	4,982,823
92,393,057	2013	7.88%	19.80%	7,275,953	18,879,116	11,603,163
105,787,170	2014	7.75%	8.42%	8,198,506	9,063,706	865,200
113,985,676	2015	7.75%	1.10%	8,833,890	615,714	(8,218,176)
	AVG		8.51%			
Since 2008		7.86%	11.03%			

Z:\USERS\COLA\FY2016 July 2015 COLA\COLA justification to three percent\COLA versus Excess Returns.xlsx

Within the state, FRRS was ranked number 16 in 2014 (out of 106 systems), 7^{th} over five years, 8^{th} over ten years, and 67^{th} over thirty years (8.59%).

		Return (2014)	Retirement Board	5-Year Return		10-Year Return		30-Year Return
1	NORTHAMPTON	12.91%	NORTH ADAMS	11.82%	NORTH ADAMS	8.74%	HAVERHILL	10.27%
2	WEST SPRINGFIELD	12.29%	HOLYOKE	11.74%	NORTHAMPTON	8.58%	WELLESLEY	10.22%
3	NORTH ADAMS	12.28%	WEST SPRINGFIELD	11.59%	MALDEN	8.29%	WEYMOUTH	10.12%
4	MALDEN	12.27%	NORTHAMPTON	11.57%	BELMONT	8.27%	MALDEN	10.08%
5	MAYNARD	9.93%	SOMERVILLE	11.55%	SOMERVILLE	7.67%	NORTH ADAMS	9.98%
6	SHREWSBURY	9.64%	CHICOPEE	11.48%	MA WATER RESOURCES	7.43%	WAKEFIELD	9.90%
7	CONCORD	9.63%	FRANKLIN REGIONAL	11.39%	DUKES COUNTY	7.32%	NEEDHAM	9.89%
8	ESSEX REGIONAL	9.33%	ATTLEBORO	11.26%	FRANKLIN REGIONAL	7.25%	TAUNTON	9.87%
9	SWAMPSCOTT	9.23%	MALDEN	11.18%	WOBURN	7.24%	PRIM BOARD	9.78%
10	WALTHAM	9.07%	NORTH ATTLEBORO	11.15%	ATTLEBORO	7.22%	NORTHAMPTON	9.77%
11	DUKES COUNTY	8.97%	SHREWSBURY	11.09%	CHICOPEE	7.21%	DEDHAM	9.76%
12	METHUEN	8.66%	WESTFIELD	11.08%	READING	7.14%	MINUTEMAN REGIONAL	9.70%
13	WORCESTER REGIONAL	8.63%	CAMBRIDGE	11.06%	DEDHAM	7.14%	MA TEACHERS	9.70%
14	LYNN	8.46%	NATICK	10.96%	HAVERHILL	7.13%	STATE	9.69%
15	WESTFIELD	8.44%	FALMOUTH	10.92%	BLUE HILLS REGIONAL	7.12%	GARDNER	9.63%
16	FRANKLIN REGIONAL	8.42%	DUKES COUNTY	10.87%	MA TEACHERS	7.12%	BELMONT	9.63%
17	WINCHESTER	8.34%	TAUNTON	10.80%	STATE	7.12%	WOBURN	9.63%
18	HAMPDEN COUNTY	8.32%	METHUEN	10.78%	WAKEFIELD	7.12%	MILTON	9.61%

Across the country, compared with states with similar retirement systems (and Warren Buffet thrown-in for perspective), FRRS is keeping up.

	Return (2014)	Year 2014 ended	Retirement Board	5-Year Return		10-Year Return		Funded Ratio	Date of Most Recent Valuation
Warren Buffet (Berk. Hath.	27.04%	12/31/2014	Warren Buffet (Berk. Hath.)	18.65%	Warren Buffet (Berk. Hath	11.78%			
California	18.40%	6/30/2014	New York	13.78%	Illinois (Teachers)	7.30%	New York	88.50%	4/1/2013
Illinois (Employees)	17.90%	6/30/2014	Illinois (Teachers)	13.20%	Pennsylvania	7.28%	Texas (Teachers)	80.20%	6/30/2014
Illinois (Teachers)	17.40%	6/30/2014	California	12.50%	New York	7.26%	Texas (Employees)	77.20%	8/31/2014
Texas (Teachers)	16.30%	6/30/2014	Illinois (Employees)	12.30%	FRANKLIN REGIONAL	7.25%	FRANKLIN REGIONAL	69.80%	01/14
Pennsylvania	14.91%	6/30/2014	Pennsylvania	12.09%	California	7.20%	California	69.80%	6/30/2013
Texas (Employees)	14.70%	8/31/2014	FRANKLIN REGIONAL	11.39%	TEACHERS (MA)	7.12%	STATE (MA)	67.50%	01/15
New York	13.02%	3/31/2014	Texas (Teachers)	10.90%	STATE (MA)	7.12%	Pennsylvania	63.80%	6/30/2013
FRANKLIN REGIONAL	8.42%	12/31/2014	Texas (Employees)	10.41%	Texas (Teachers)	6.80%	TEACHERS (MA)	56.30%	01/14
TEACHERS (MA)	8.26%	12/31/2014	TEACHERS (MA)	10.16%	Illinois (Employees)	0.00%	Illinois (Teachers)	40.60%	6/30/2014
STATE (MA)	8.26%	12/31/2014	STATE (MA)	10.16%	Texas (Employees)	0.00%	Illinois (Employees)	33.70%	6/30/2014
			FRRS Custom Index	11.10%			1	1	

Z:\US ER S\UNVESTMENTS\Perform ance research various\History of Returns for All Systems\Other States Investment report.x lsx

Over time, FRRS has been steadily increasing its COLA base and is \$2,000 behind the Town of Montague, which has been at \$18,000 since 2012.

Name	amount	year
Bristol County Retirement Board	\$18,000	2016
Hampden County Retirement Board	\$18,000	2013
Montague Retirement Board	\$18,000	2012
Lowell Retirement Board	\$17,000	2018
Barnstable County Retirement Board	\$16,000	2016
Blue Hills Regional School Retirement Board	\$16,000	2012
Franklin Regional Retirement Board	\$16,000	2016
Medford Retirement Board	\$16,000	2014
Webster Retirement Board	\$16,000	2013
Arlington Retirement Board	\$15,000	2014
Chicopee Retirement Board	\$15,000	2014
Dedham Retirement Board	\$15,000	2016
Maynard Retirement Board	\$15,000	2012
Methuen Retirement Board	\$15,000	2016
Milton Retirement Board	\$15,000	2012
Norfolk County Retirement Board	\$15,000	2012
Taunton Retirement Board	\$15,000	2016
Wellesley Retirement Board	\$15,000	2014
Adams Retirement Board	\$14,000	2013
Berkshire County Retirement Board	\$14,000	2012
Cambridge Retirement Board	\$14,000	2013
Clinton Retirement Board	\$14,000	2013
Dukes County Contributory Retirement System	\$14,000	2014
Easthampton Retirement Board Everett Retirement Board	\$14,000	2016 2013
Gloucester Retirement Board	\$14,000 \$14,000	2013
Greenfield Retirement Board	\$14,000	2012
Lynn Retirement Board	\$14,000	2014
Malden Retirement Board	\$14,000	2015
Middlesex County Retirement Board	\$14,000	2013
Needham Retirement Board	\$14,000	2016
North Attleboro Retirement Board	\$14,000	2015
Northbridge Retirement Board	\$14,000	2012
Norwood Retirement Board	\$14,000	2013
Pittsfield Retirement Board	\$14,000	2012
Plymouth County Retirement Board	\$14,000	2017
Plymouth Retirement Board	\$14,000	2012
Waltham Retirement Board	\$14,000	2012
Worcester Regional Retirement Board	\$14,000	2012
	erage: \$13,308	2016
Boston Retirement Board	\$13,000	2013
Brookline Retirement Board	\$13,000	2013
Essex Regional Retirement Board	\$13,000	2013
Gardner Retirement Board	\$13,000	2013
Hampshire County Retirement Board	\$13,000	2014
Hingham Retirement Board	\$13,000	2016
Lexington Retirement Board	\$13,000	2016
Mass Housing Finance Agency Retirement Board	\$13,000	2013
Mass Water Resources Authority Retirement Board	\$13,000	2017
Massport Authority Retirement Board	\$13,000	2013
Milford Poticoment Board	643 000	2012

At the end of 2015, the average annual retiree benefit in this system was \$15,521 - which means that roughly half of the retirees (those receiving greater than \$16,000) are affected by the COLA base and are receiving less than a full COLA. For example: 3% for a \$16,000 retiree is \$480. A \$32,000 retiree would receive the same amount (\$480), but for them it represents only a 1.5% COLA.

	December benefits	Retirees	Average annual benefit	COLA Base	SS* Retirees
2015	713,965	552	15,521	16,000	waiting
2014	678,481	538	15,133	15,000	15,451
2013	630,070	522	14,543	14,000	15,053
2012	585,502	501	14,024	13,000	14,761
2011	532,828	476	13,433	13,000	14,405
2010	494,802	463	12,824	12,000	13,863
2009	456,003	444	12,324	12,000	13,779
2008	408,127	416	11,773	12,000	13,760

*Social Security retirees' benefits in Franklin County

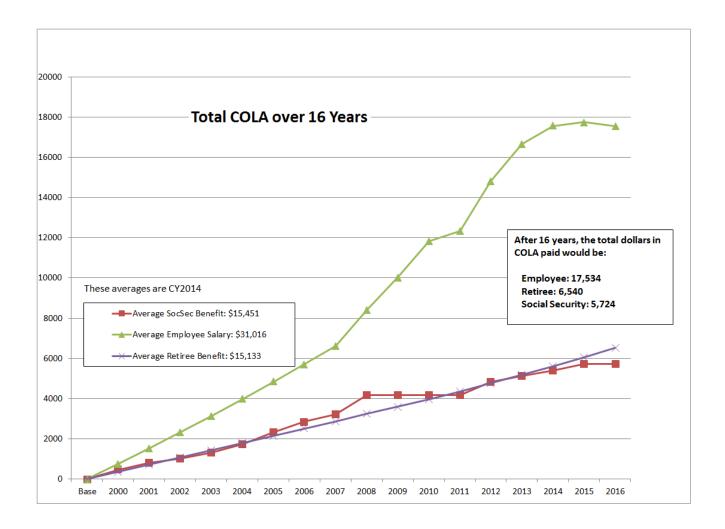
Comparing FRRS to Social Security is somewhat apples and oranges. Social Security applies the COLA increase to the full amount of the retirement allowance. FRRS is limited to the first \$16,000 of annual benefit for each retiree - the effect of which is to cause the average retiree of this system, over time, to fall farther and farther behind a like-benefited social security recipient (as well as active employees). Increasing the COLA base to \$17,000 will help FRRS retirees keep pace with Social Security in the coming years when it is anticipated that Social Security COLAs will return to normal.

The chart below is a "what-if" comparison of the effect of historical COLAs as applied to average retirees (and employee) using 2011 average benefits/salaries. One can see that it takes from the year 2000 until the year 2016 before the FRRS retiree's cumulative benefit builds enough to catch the Social Security retiree. One can also see that the "actual" percentage for FRRS retirees improves when the COLA base is increased (see yellow and green highlights in 2010 and beyond).

Using the average benefit/salary for the year 2011

				Desetions	1	D6		D4				
				Base/year 13,336	1	Base/year 12,672		Base/year 30,287				
Year		cal Perce h out lim			cSec FRRS		Employees			Actual Percentages (FRRS adjusted for the limit)		
	SocSec	FRRS	Empl.	\$'s	cumi.	\$'s	cuml.	\$'s	cuml.	SocSec	FRRS	Empl.
2000	3.5%	3.0%	2.5%	467	13,803	360	13,032	757	31,044	3.5%	2.84%	2.5%
2001	2.6%	3.0%	2.5%	359	14,162	360	13,392	776	31,820	2.6%	2.76%	2.5%
2002	1.4%	3.0%	2.5%	198	14,360	360	13,752	796	32,616	1.4%	2.69%	2.5%
2003	2.1%	3.0%	2.5%	302	14,661	360	14,112	815	33,431	2.1%	2.62%	2.5%
2004	2.7%	3.0%	2.5%	396	15,057	360	14,472	836	34,267	2.7%	2.55%	2.5%
2005	4.1%	3.0%	2.5%	617	15,675	360	14,832	857	35,124	4.1%	2.49%	2.5%
2006	3.3%	3.0%	2.5%	517	16,192	360	15,192	878	36,002	3.3%	2.43%	2.5%
2007	2.3%	3.0%	2.5%	372	16,564	360	15,552	900	36,902	2.3%	2.37%	2.5%
2008	5.8%	3.0%	4.85%	961	17,525	360	15,912	1,790	38,692	5.8%	2.31%	4.85%
2009	0.0%	3.0%	4.22%	-	17,525	360	16,272	1,633	40,324	0.0%	2.26%	4.22%
2010	0.0%	3.0%	4.46%	-	17,525	360	16,632	1,798	42,123	0.0%	2.21%	4.46%
2011	0.0%	3.0%	1.18%	-	17,525	390	17,022	497	42,620	0.0%	2.34%	1.18%
2012	3.6%	3.0%	5.81%	631	18,156	420	17,442	2,476	45,096	3.6%	2.47%	5.81%
2013	1.7%	3.0%	4.11%	309	18,465	420	17,862	1,853	46,949	1.7%	2.41%	4.11%
2014	1.5%	3.0%	1.91%	277	18,742	420	18,282	897	47,846	1.5%	2.35%	1.91%
2015	1.7%	3.0%	0.41%	319	19,060	450	18,732	196	48,042	1.7%	2.46%	0.41%
2016	0.0%	3.0%	-0.46%	-	19,060	480	19,212	(221)	47,821	0.0%	2.56%	-0.46%
averages	2.14%	3.00%	2.73%	337		385		1,031		2.14%	2.48%	2.73%

The net benefit to the three subjects is graphically represented in the line graph that follows.



Investment earnings (money from "Wall Street") fund a large part of each member's retirement. With the increase of the COLA base from \$16,000 to \$17,000, retirees will receive up to thirty extra dollars in the first year. In subsequent years it will be an additional \$30 (\$60, 90, 120, etc.). A retiree that lives another 20 years after retirement will have an additional \$6,300 to spend over the 20 years. Multiply that by the 172 retirees most effected and the total is over one million dollars.

Years of Retirement	Additional COLA (\$)
1	30
2	60
3	90
4	120
5	150
6	180
7	210
8	240
9	270
10	300
11	330
12	360
13	390
14	420
15	450
16	480
17	510
18	540
19	570
20	600
Total Inflow (\$):	6,300

Number of Retirees	Grand Total Inflow (\$)
50	315,000
100	630,000
150	945,000
172	1,083,600
200	1,260,000
250	1,575,000
300	1,890,000
350	2,205,000
400	2,520,000
450	2,835,000
500	3,150,000

The board has voted to increase the base to \$17,000 this July 1st. During the summer of 2016, a new actuarial valuation will be performed that will incorporate the increased base into the funding schedule. Because there are many factors effecting the valuation, it is not possible to know what options for mitigation might be available to the board until the valuation is complete. However, the amount in question will be around \$32,000 per year for the next 20 years.

This concludes the report.

Dale Kowacki, Executive Director

Jak Huwalki