

FRANKLIN REGIONAL RETIREMENT SYSTEM
BOARD MEETING - SPECIAL
Thursday, June 16, 2022

A meeting of the Franklin Regional Retirement Board, duly posted to be held via remote participation on the above date, was called to order at 8:04 AM by Board Chair Sandra Hanks, with Board Members, Paul Mokrzecki, Gabriele Voelker, Angel Bragdon present. Also present in the Board office located at 101 Munson Street, Suite 108, Greenfield MA was Assistant Director Deborah Frentzos. Executive Director Dale Kowacki and staff Data Maintenance Clerk Patricia Hume joined remotely.

Also present: Greg McNeillie, Vice Chairman, Principal and Kevin Condry, Director of Research with Dahab Associates. Actuary Linda Bournival with KMS.

General Business:

Meet with Actuary (Linda Bournival, KMS) to discuss and decide actuarial funding schedule.

Executive Director Dale Kowacki, with Actuary Linda Bournival, presented the Board with information on various rates for the funding schedule. The Board discussed the options presented.

A motion was made by Paul Mokrzecki and seconded by Gabriele Voelker to adopt the B2 schedule as recommended by our Actuary Linda Bournival. All ayes.

The B2 schedule (see "Attachment A") consists of a 7.25% Investment return rate and a 5.94% per year limit on Annual Increase.

New Business:

No new business.

Adjournment

On a motion made by Gabriele Voelker and seconded by Angel Bragdon, the Board voted unanimously to adjourn the meeting at 9:39 AM

Respectfully submitted,
THESE MINUTES WERE APPROVED ON JUNE 29, 2022

Patricia Hume, Data Maintenance Clerk

Sandra A. Hanks, Chair and Treasurer

Angelina J. Bragdon, Council Member

Gabriele H. Voelker, Board Member

absent
Mary A. Stokarski, Board Member

Paul J. Mokrzecki, Vice Chair

Appendix A

Franklin Regional Retirement System 30-Year Forecast of Annual Appropriations						Funding Schedule B-2 5.94% Limit per year	
Based on Results of January 1, 2022 Valuation							
Fiscal Year					Increase Over Prior Year		Unfunded Actuarial Accrued Liability
Ending	Employer Normal Cost	Amortization Payment of UAL	Net 3(8)(c) Transfers	Total Employer Cost		2020 Schedule	
2023	\$3,112,910	\$4,157,176	1,000,000	\$8,270,086		\$8,270,086	\$50,930,396
2024	3,232,416	4,528,914	1,000,000	8,761,330	5.94%	8,745,616	50,391,643
2025	3,337,469	4,944,283	1,000,000	9,281,752	5.94%	9,248,489	49,435,474
2026	3,445,936	5,387,152	1,000,000	9,833,088	5.94%	9,780,277	47,987,216
2027	3,557,930	5,859,243	1,000,000	10,417,173	5.94%	10,342,643	45,983,204
2028	3,673,562	6,362,391	1,000,000	11,035,953	5.94%	10,937,345	43,353,403
2029	3,792,954	6,898,536	1,000,000	11,691,490	5.94%	11,566,242	40,020,833
2030	3,916,225	7,469,738	1,000,000	12,385,963	5.94%	12,231,301	35,900,959
2031	4,043,501	8,078,188	1,000,000	13,121,689	5.94%	12,934,601	30,901,020
2032	4,174,915	8,726,203	1,000,000	13,901,118	5.94%	13,678,341	24,919,300
2033	4,310,599	9,416,244	1,000,000	14,726,843	5.94%	14,464,846	17,844,352
2034	4,450,693	10,067,534	1,000,000	15,518,227	5.37%	15,166,974	9,554,140
2035	4,595,341	-	1,000,000	5,595,341	-63.94%	5,042,058	-
2036	4,744,690	-	1,000,000	5,744,690	2.67%	5,183,530	-
2037	4,898,893	-	1,000,000	5,898,893	2.68%	5,329,953	-
2038	5,058,107	-	1,000,000	6,058,107	2.70%	5,481,501	-
2039	5,222,496	-	1,000,000	6,222,496	2.71%	5,638,353	-
2040	5,392,227	-	1,000,000	6,392,227	2.73%	5,800,696	-
2041	5,567,474	-	1,000,000	6,567,474	2.74%	5,968,720	-
2042	5,748,417	-	1,000,000	6,748,417	2.76%	6,142,626	-
2043	5,935,240	-	1,000,000	6,935,240	2.77%	6,322,618	-
2044	6,128,135	-	1,000,000	7,128,135	2.78%	6,508,910	-
2045	6,327,300	-	1,000,000	7,327,300	2.79%	6,701,721	-
2046	6,532,936	-	1,000,000	7,532,936	2.81%	6,901,282	-
2047	6,745,256	-	1,000,000	7,745,256	2.82%	7,107,826	-
2048	6,964,476	-	1,000,000	7,964,476	2.83%	7,321,599	-
2049	7,190,822	-	1,000,000	8,190,822	2.84%	7,542,855	-
2050	7,424,523	-	1,000,000	8,424,523	2.85%	7,771,855	-
2051	7,665,820	-	1,000,000	8,665,820	2.86%	-	-
2052	7,914,959	-	1,000,000	8,914,959	2.87%	-	-
Total	155,106,222	81,895,602	30,000,000	267,001,824		238,132,864	

	Schedule B-2	Baseline	Increase
• Employer Normal Cost as of January 1, 2022:	2,954,167	2,511,934	442,233
• Administrative Expenses:	650,000	600,000	50,000
• Unfunded Actuarial Accrued Liability (UAL):	50,930,396	42,024,861	8,905,535
• Funded Status:	78.3%	81.4%	
• Investment Return Rate:	7.250%	7.750%	
• Amortization Payments Increase Annually:	4.00%	4.00%	
• Limit on Annual Increase:	5.94% per year	None	
• Fully Funded in Fiscal Year:	2034	2034	
• COLA Base:	17,000	17,000	

K M S A C T U A R I E S

5/12/2022

KMS ACTUARIES

5/12/2022

**FRANKLIN REGIONAL RETIREMENT SYSTEM
BOARD MEETING - SPECIAL**

To stem the spread of Covid-19, this meeting will be accomplished with remote participation by the members of the board, with remote live access by the public provided.

Thursday, June 16, 2022
8:00 am

Agenda

Call to Order

General Business:

1. Meet with Actuary (Linda Bournival, KMS) to discuss and decide actuarial funding schedule.

New Business: ?

How much more does Orange pay if you change the rate:

7.625%

7.25%

	1,008,777	more than 7.75 schd.		1,008,777
8,270,086	1,083,835	75,058		8,270,086
8,392,152	1,099,832	61,243	250,461	9,835,963
8,666,979	1,135,850	63,553	259,897	10,165,157
8,952,122	1,173,219	65,952	269,691	10,506,731
9,247,972	1,211,992	68,442	279,858	10,861,157
9,554,932	1,252,220	71,027	290,411	11,228,918
9,873,425	1,293,960	73,710	301,365	11,610,525
10,203,888	1,337,269	76,495	312,736	12,006,498
10,546,773	1,382,206	79,387	324,539	12,417,385
10,902,553	1,428,833	82,388	336,792	12,843,755
11,271,715	1,477,213	85,504	349,511	13,286,192
11,654,769	1,527,414	88,739	362,715	13,745,311
	(878,209)	Fully Funded Excess!		(1,068,093)
4,953,687	649,205			5,595,341
5,082,183	666,045			5,744,690
5,214,853	683,432			5,898,893
5,351,837	701,384			6,058,107
5,493,272	719,920			6,222,496
5,639,303	739,058			6,392,227
5,790,081	758,818			6,567,474
5,945,758	779,221			6,748,417
6,106,496	800,286			6,935,240
6,272,456	822,036			7,128,135
6,443,811	844,493			7,327,300
6,620,734	867,679			7,532,936
6,803,408	891,620			7,745,256
6,992,019	916,338			7,964,476
7,186,759	941,860			8,190,822
7,387,828	968,211			8,424,523

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Increased assessment if 7.25%

1,083,835794,811149,38387,681				Extra assessment charged						
OGE	DER	SHB	CHT			7.250%	7.500%	7.625%	7.750%	9.000%
13.35%	9.79%	1.84%	1.08%		-	-	-	-	-	-
250,461	187,098	35,165	20,640	26	1,911,116	9,881,682	10,617,616	11,001,949	11,397,604	16,051,765
259,897	194,147	36,489	21,418	25	1,983,115	9,426,748	10,110,594	10,467,105	10,833,693	15,117,446
269,691	201,463	37,864	22,225	24	2,057,848	8,981,629	9,616,065	9,946,242	10,285,358	14,221,959
279,858	209,058	39,292	23,063	23	2,135,424	8,545,825	9,133,405	9,438,667	9,751,830	13,363,215
290,411	216,941	40,773	23,932	22	2,215,947	8,118,803	8,661,966	8,943,662	9,232,314	12,539,159
301,365	225,124	42,311	24,835	21	2,299,534	7,700,078	8,201,150	8,460,566	8,726,078	11,747,877
312,736	233,619	43,908	25,772	20	2,386,298	7,289,141	7,750,341	7,988,699	8,232,375	10,987,496
324,539	242,436	45,565	26,745	19	2,476,363	6,885,516	7,308,959	7,527,424	7,750,504	10,256,257
336,792	251,589	47,285	27,754	18	2,569,857	6,488,728	6,876,434	7,076,113	7,279,774	9,552,468
349,511	261,090	49,071	28,803	17	2,666,909	6,098,301	6,452,193	6,634,141	6,819,502	8,874,495
362,715	270,954	50,925	29,891	16	2,767,658	5,713,775	6,035,690	6,200,909	6,369,032	8,220,791

(8,149,970) Fully Funded Excess! 2035

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DAHAB ASSOCIATES

NEW YORK PENNSYLVANIA MASSACHUSETTS FLORIDA

April 1, 2022

Linda L. Bournival, FSA, EA
Consulting Actuary
KMS Actuaries, LLC
814 Elm Street, Suite 204
Manchester, NH 03101

Re: Declaration of Returns

Dear Ms. Bournival:

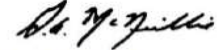
As investment consultants to the Franklin Regional Retirement System, we recommended to the Board a series of rates of investment return expectations. The chart below indicates the asset class, index and the nominal mean returns (arithmetic averages not adjusted for inflation) for the past 20 years as of December 31, 2021.

Asset Class	Index	Mean
PRIT Core	Custom Core Index	8.9
Domestic Equity	Russell 3000	11.3
Large Cap Equity	Russell 1000	11.4
Mid Cap Equity	Russell Mid Cap	12.8
Small Cap Equity	Russell 2000	11.2
International Equity	MSCI ACWI Ex US	9.5
Real Estate	NCREIF NFI-ODCE	9.0
Fixed Income	Barclays Aggregate	4.4
Inflation	CPI	2.2

Based on the 40.0% PRIT Core, 12.0% Large Cap Equity, 10.0% Mid Cap Equity, 10.0% Small Cap Equity, 5.0% International Equity, 10.0% Real Estate, and 13.0% Fixed Income policy target allocation of the System, we are comfortable with a long-term net return of 7.75%. For the short term, we assumed that the current volatility in the markets could persist and assigned a 50% discount to long-term expectations.

Please do not hesitate to contact us for any comments or questions.

Sincerely,



Greg McNeillie,
Vice Chairman

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	1,259,131	(7,574,759)
122,196,803	2016	7.75%	8.51%	9,470,252	10,744,197	1,273,945
131,667,055	2017	7.75%	15.41%	10,204,197	19,547,089	9,342,892
138,839,753	2018	7.75%	-3.13%	10,760,081	(4,375,884)	(15,135,965)
149,599,834	2019	7.75%	17.80%	11,593,987	24,332,593	12,738,606
153,191,035	2020	7.75%	12.26%	11,872,305	20,436,491	8,564,186
165,063,340	2021	7.75%	19.70%	12,792,409	35,121,918	22,329,509
AVG		7.91%	9.05%	Net excess		34,410,288
Since 2008		7.81%	10.67%	Since 2008		51,559,062

2021 RETURNS & ANNUALIZED PAST RETURNS (IN PERCENT)					FUNDED RATIOS		
System	Return (2021)	5-Year Return	10-Year Return	37-Year Return	Consultant	Funded Ratio	Date of Most Recent Valuation
SOMERVILLE	18.89%	16.79%	12.97%	9.84%	self consulted	69.7%	01/01/2021
GREATER LAWRENCE	19.07%	15.32%	12.23%	8.55%	BNY Mellon	97.0%	01/01/2021
HOLYOKE	16.07%	12.82%	11.90%	9.80%	Segal Marco	69.0%	01/01/2020
DUKES COUNTY	19.32%	13.85%	11.89%	8.57%	Dahab	78.2%	01/01/2020
NATICK	20.46%	13.00%	11.57%	8.72%	Fiducient	70.4%	01/01/2021
SHREWSBURY	19.64%	12.95%	11.55%	9.57%	Dahab 1997	101.4%	01/01/2021
LEOMINSTER	20.46%	12.36%	11.54%	9.06%	Prit	110.3%	01/01/2021
WESTFIELD	14.86%	11.99%	11.46%	9.19%	Depelteau	73.5%	01/01/2021
ATTLEBORO	16.12%	13.40%	11.38%	9.43%	Dahab	62.2%	01/01/2020
PLYMOUTH	21.19%	12.48%	11.36%	9.25%	Fiducient	51.9%	01/01/2020
SWAMPSCOTT	19.59%	12.85%	11.29%	9.46%	Dahab 2017	62.4%	01/01/2021
FRANKLIN REGIONAL	20.40%	12.32%	11.26%	8.89%	Dahab 1998	74.4%	01/01/2020

Last Year's Schedule					
Year	Normal Cost	Pay UAL	3(8)c	Assessment	of salaries
2023	2,674,966	4,595,120	1,000,000	8,270,086	22.77%
2024	2,768,590	4,977,026	1,000,000	8,745,616	23.32%
2025	2,865,490	5,382,999	1,000,000	9,248,489	23.88%
2026	2,965,783	5,814,494	1,000,000	9,780,277	24.46%
2027	3,069,586	6,273,057	1,000,000	10,342,643	25.05%
2028	3,177,021	6,760,324	1,000,000	10,937,345	25.66%
2029	3,288,217	7,278,025	1,000,000	11,566,242	26.28%
2030	3,403,305	7,827,996	1,000,000	12,231,301	26.92%
2031	3,522,420	8,412,181	1,000,000	12,934,601	27.57%
2032	3,645,705	9,032,636	1,000,000	13,678,341	28.24%
2033	3,773,305	9,691,541	1,000,000	14,464,846	28.92%
2034	3,905,371	10,261,603	1,000,000	15,166,974	29.37%
2035	4,042,058 -		1,000,000	5,042,058	9.46%
2036	4,183,530 -		1,000,000	5,183,530	9.42%
2037	4,329,953 -		1,000,000	5,329,953	9.38%
2038	4,481,501 -		1,000,000	5,481,501	9.34%
2039	4,638,353 -		1,000,000	5,638,353	9.30%
2040	4,800,696 -		1,000,000	5,800,696	9.27%
2041	4,968,720 -		1,000,000	5,968,720	9.24%
2042	5,142,626 -		1,000,000	6,142,626	9.21%
2043	5,322,618 -		1,000,000	6,322,618	9.18%
2044	5,508,910 -		1,000,000	6,508,910	9.15%
2045	5,701,721 -		1,000,000	6,701,721	9.13%
2046	5,901,282 -		1,000,000	6,901,282	9.10%
2047	6,107,826 -		1,000,000	7,107,826	9.08%
2048	6,321,599 -		1,000,000	7,321,599	9.06%
2049	6,542,855 -		1,000,000	7,542,855	9.04%
2050	6,771,855 -		1,000,000	7,771,855	9.02%

123,825,862 86,307,002

Last Year

A-4 7.75%					
Year	Normal Cost	Pay UAL	3(8)c	Assessment	of salaries
2023	2,541,026	4,729,060	1,000,000	8,270,086	22.77%
2024	2,639,679	4,285,168	1,000,000	7,924,847	21.13%
2025	2,725,469	4,456,573	1,000,000	8,182,042	21.13%
2026	2,814,047	4,634,836	1,000,000	8,448,883	21.13%
2027	2,905,503	4,820,230	1,000,000	8,725,733	21.14%
2028	2,999,932	5,013,039	1,000,000	9,012,971	21.14%
2029	3,097,430	5,213,561	1,000,000	9,310,991	21.16%
2030	3,198,097	5,422,103	1,000,000	9,620,200	21.17%
2031	3,302,035	5,638,987	1,000,000	9,941,022	21.19%
2032	3,409,351	5,864,547	1,000,000	10,273,898	21.21%
2033	3,520,154	6,099,129	1,000,000	10,619,283	21.23%
2034	3,634,559	6,343,094	1,000,000	10,977,653	21.26%
2035	3,752,683 -		1,000,000	4,752,683	8.91%
2036	3,874,645 -		1,000,000	4,874,645	8.85%
2037	4,000,571 -		1,000,000	5,000,571	8.80%
2038	4,130,590 -		1,000,000	5,130,590	8.74%
2039	4,264,834 -		1,000,000	5,264,834	8.69%
2040	4,403,441 -		1,000,000	5,403,441	8.64%
2041	4,546,553 -		1,000,000	5,546,553	8.59%
2042	4,694,316 -		1,000,000	5,694,316	8.54%
2043	4,846,881 -		1,000,000	5,846,881	8.49%
2044	5,004,404 -		1,000,000	6,004,404	8.44%
2045	5,167,047 -		1,000,000	6,167,047	8.40%
2046	5,334,976 -		1,000,000	6,334,976	8.36%
2047	5,508,363 -		1,000,000	6,508,363	8.32%
2048	5,687,384 -		1,000,000	6,687,384	8.28%
2049	5,872,224 -		1,000,000	6,872,224	8.24%
2050	6,063,071 -		1,000,000	7,063,071	8.20%

113,939,265 62,520,327

7.75%

-9,886,597 -23,786,675 compared to last year

-33,673,272

A-5

7.625%

Year	Normal Cost	Pay UAL	3(8)c	Assessment	of salaries
2023	\$2,677,416	\$4,592,670	1,000,000	\$8,270,086	22.77%
2024	2,781,067	4,611,085	1,000,000	8,392,152	22.37%
2025	2,871,451	4,795,528	1,000,000	8,666,979	22.38%
2026	2,964,773	4,987,349	1,000,000	8,952,122	22.39%
2027	3,061,129	5,186,843	1,000,000	9,247,972	22.40%
2028	3,160,615	5,394,317	1,000,000	9,554,932	22.42%
2029	3,263,336	5,610,089	1,000,000	9,873,425	22.43%
2030	3,369,395	5,834,493	1,000,000	10,203,888	22.45%
2031	3,478,900	6,067,873	1,000,000	10,546,773	22.48%
2032	3,591,965	6,310,588	1,000,000	10,902,553	22.51%
2033	3,708,704	6,563,011	1,000,000	11,271,715	22.53%
2034	3,829,237	6,825,532	1,000,000	11,654,769	22.57%

Dale Recommends A-5

2035	3,953,687 -		1,000,000	4,953,687	9.29%
2036	4,082,183 -		1,000,000	5,082,183	9.23%
2037	4,214,853 -		1,000,000	5,214,853	9.17%
2038	4,351,837 -		1,000,000	5,351,837	9.12%
2039	4,493,272 -		1,000,000	5,493,272	9.06%
2040	4,639,303 -		1,000,000	5,639,303	9.01%
2041	4,790,081 -		1,000,000	5,790,081	8.96%
2042	4,945,758 -		1,000,000	5,945,758	8.91%
2043	5,106,496 -		1,000,000	6,106,496	8.87%
2044	5,272,456 -		1,000,000	6,272,456	8.82%
2045	5,443,811 -		1,000,000	6,443,811	8.78%
2046	5,620,734 -		1,000,000	6,620,734	8.73%
2047	5,803,408 -		1,000,000	6,803,408	8.69%
2048	5,992,019 -		1,000,000	6,992,019	8.65%
2049	6,186,759 -		1,000,000	7,186,759	8.61%
2050	6,387,828 -		1,000,000	7,387,828	8.58%

120,042,473
66,779,378
7.625%

6,103,208
4,259,051 compared to 7.75%
10,362,259

B-1

7.25%

Year	Normal Cost	Pay UAL	3(8)c	Assessment	of salaries
2023	3,112,910	4,157,176	1,000,000	8,270,086	22.77%
2024	3,232,416	5,603,547	1,000,000	9,835,963	26.22%
2025	3,337,469	5,827,688	1,000,000	10,165,157	26.25%
2026	3,445,936	6,060,795	1,000,000	10,506,731	26.28%
2027	3,557,930	6,303,227	1,000,000	10,861,157	26.31%
2028	3,673,562	6,555,356	1,000,000	11,228,918	26.34%
2029	3,792,954	6,817,571	1,000,000	11,610,525	26.38%
2030	3,916,225	7,090,273	1,000,000	12,006,498	26.42%
2031	4,043,501	7,373,884	1,000,000	12,417,385	26.47%
2032	4,174,915	7,668,840	1,000,000	12,843,755	26.51%
2033	4,310,599	7,975,593	1,000,000	13,286,192	26.56%
2034	4,450,693	8,294,618	1,000,000	13,745,311	26.62%

2035	4,595,341		1,000,000	5,595,341	10.49%
2036	4,744,690		1,000,000	5,744,690	10.43%
2037	4,898,893		1,000,000	5,898,893	10.38%
2038	5,058,107		1,000,000	6,058,107	10.32%
2039	5,222,496		1,000,000	6,222,496	10.27%
2040	5,392,227		1,000,000	6,392,227	10.22%
2041	5,567,474		1,000,000	6,567,474	10.17%
2042	5,748,417		1,000,000	6,748,417	10.12%
2043	5,935,240		1,000,000	6,935,240	10.07%
2044	6,128,135		1,000,000	7,128,135	10.02%
2045	6,327,300		1,000,000	7,327,300	9.98%
2046	6,532,936		1,000,000	7,532,936	9.94%
2047	6,745,256		1,000,000	7,745,256	9.90%
2048	6,964,476		1,000,000	7,964,476	9.86%
2049	7,190,822		1,000,000	8,190,822	9.82%
2050	7,424,523		1,000,000	8,424,523	9.78%

139,525,443
79,728,568
7.25%

25,586,178
17,208,241 compared to 7.75%
42,794,419

Franklin Regional Retirement System

Preliminary Results of the January 1, 2022 Actuarial Valuation

May 25, 2022

Linda L. Bournival, FSA
Consulting Actuary
KMS Actuaries, LLC



Purpose of Valuation

- Periodic review of system experience
 - Updated Census Data
 - Develop Liabilities
 - Updated Assets
- Review assumptions and methods
 - Appropriate
 - Consistent
 - Reasonable
 - Conform to Actuarial Standards of Practice (ASOPs)
- Develop annual appropriations
- Adopt new funding schedule
- Determine cost for various benefit options



Key Findings

- **Market Value of Assets (MVA)**
 - 12.65% return for 2020 exceeded 7.75% expectation
 - 19.81% return for 2021 exceeded 7.75% expectation
 - \$28.3m asset gain on MV during 2-year period
- **Actuarial Value of Assets (AVA)**
 - 7.75% expected
 - 2020 and 2021 gains phased-in at 25% per year
 - \$13m asset gain on AVA during 2-year period
- **Demographic experience loss of \$8m**
 - Losses
 - new entrants with past service
 - Inactive ASF remains
 - Gains
 - Salary increases lower than expected
- **Funded Status (on an AVA basis) changed from 74.4% to**
 - 81.4% before assumption changes
 - 78.3% after recommended assumption changes



System Assets and Returns

(in millions)

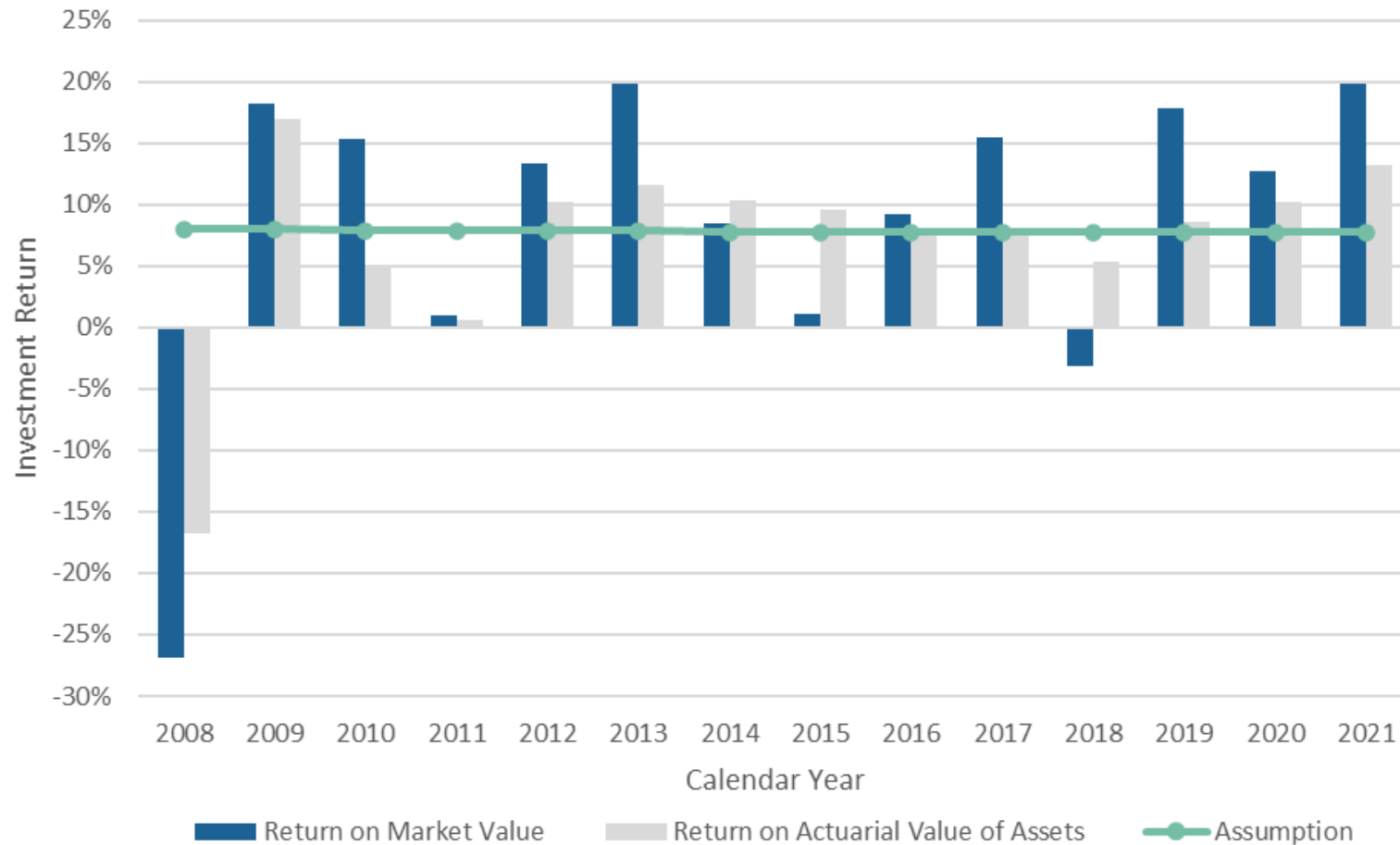
Calendar Year	2021	2020	2019
Market Value of Assets (MVA)	\$204.7	\$173.6	\$157.1
Market Value of Assets Return	19.81%	12.65%	17.80%
Gain/(Loss) – recognized over four years	\$20.7	\$7.6	\$13.0
Actuarial Value of Assets (AVA)	\$184.3	\$165.4	\$153.2
Actuarial Value of Assets Return	13.27%	10.16%	8.54%
AVA as Percentage of MVA	90.0%	95.3%	97.5%

AVA is the MVA adjusted to phase-in investment gains and losses over a 4-year period, further constrained to be within 10% of the MVA. Investment gains and losses are the excess or deficiency of the expected returns over the actual returns.



ACTUARIAL
LLC

Historical Rates of Return



Membership

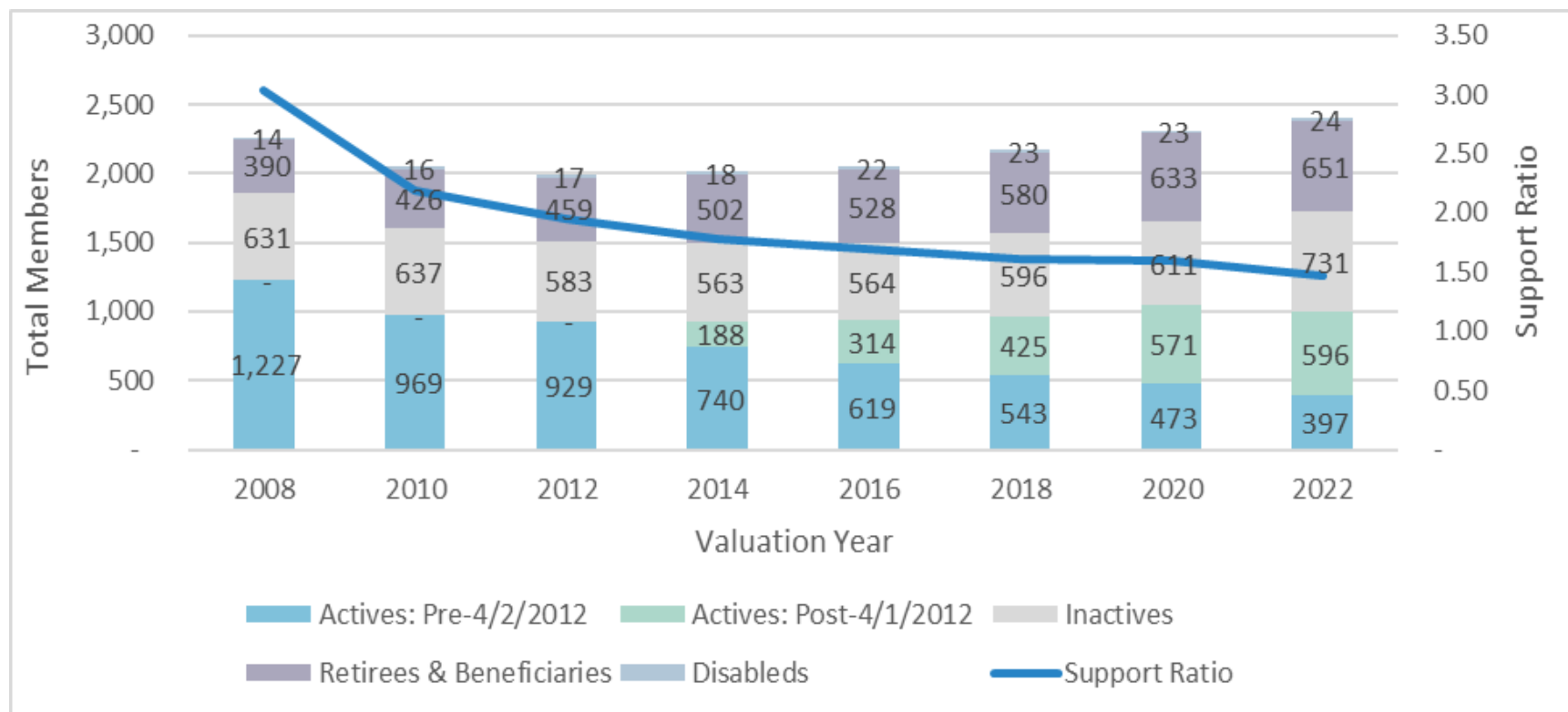
Valuation Date	January 1, 2022	January 1, 2020	Change
Active Members	993	1,044	-4.9%
Retired Members & Beneficiaries	651	633	2.8%
Disabled Members	24	23	4.3%
Inactive Members	731	611	19.6%
Total Annual Salary	\$41,377,157	\$39,653,264	4.3%
Annual Pensions*	\$13,026,909	\$11,558,986	12.7%
Average Pensions	\$19,299	\$17,620	9.5%

* Includes State reimbursed COLAs.



ACTUARIES
LLC

Historical Membership Counts

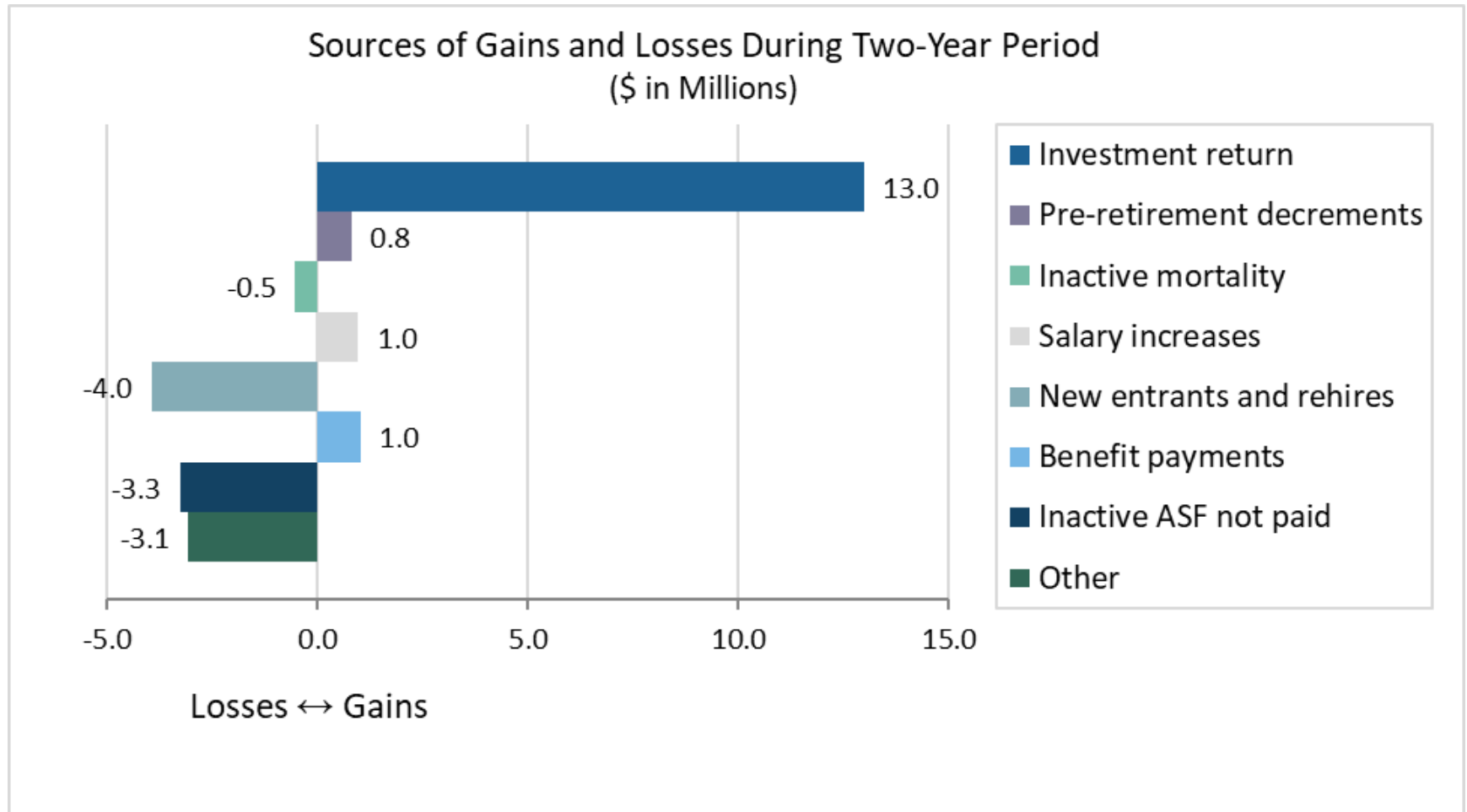


- Tier 1 average service is 18.53 years
- Tier 2 average service is 3.50 years

Plan Provisions

- Same as 2020 valuation
 - COLA Base of \$17,000
 - Chapter 176 of the Acts of 2011 continues to be reflected
 - Changes eligibility and benefit provisions for members hired after April 1, 2012
 - Impacts benefits for 596 current members
 - Previously, 571 members
 - Normal Cost is lower for these members

Sources of Gains and Losses



Prior Assumptions

- Mortality
 - RP-2014 Blue Collar Mortality Table with full generational mortality improvement using Scale MP-2018
- Salary Scale
 - 6%-4.25%, varies by service – Groups 1 and 2
 - 7%-4.75%, varies by service – Group 4
- Payroll Growth
 - 3.5% per year
- Administrative Expenses
 - \$600,000, added to normal cost
 - Increases 3.5% per year
- Investment Return
 - 7.75%
 - Sensitivity to 100 basis point decrease in investment return rate
 - Increases liabilities by 11% (\$24.79 million)



Mortality Rates Assumption

- Current Assumptions
 - Healthy Lives: RP-2014 Blue Collar Mortality Table with full generational mortality improvement using Scale MP-2018
 - Disabled Lives: RP-2014 Blue Collar Mortality Table set forward one year with full generational mortality improvement using Scale MP-2018

- Results

Status	Expected Deaths	Actual Deaths	Ratio Expected to Actual
Healthy lives	36.22	40	0.91
Survivors	9.91	12	0.83
Disabled	0.68	1	0.68
Total	46.81	53	0.88

- Recommendation
 - Healthy Lives: RP-2014 Blue Collar Mortality Table with full generational mortality improvement using **Scale MP-2020**
 - Disabled Lives: RP-2014 Blue Collar Mortality Table set forward one year with full generational mortality improvement using **Scale MP-2020**



Salary Scale and Pay Growth Assumptions

- Current Salary Scale Assumption
 - Groups 1 and 2: 6% increase in year 1 of service grading down to 4.25% increase for 9+ years of service
 - Group 4: 7% increase in year 1 of service grading down to 4.75% increase for 9+ years of service
- Current Pay Growth Assumption – 3.50%
- Salaries have consistently been slightly lower than expected over the last several valuations

Valuation Year	Actual Total Salary	Expected Total Salary	Ratio Expected to Actual
2022	\$32.1m	\$32.9m	1.025
2020	\$29.5m	\$30.0m	1.017
2018	\$28.0m	\$28.5m	1.018

- Recommendation
 - Reduce Group 1 salary increase assumption to 4% for 10+ years of service
 - Reduce Group 4 salary increase assumption to 4.5% for 10+ years of service
 - Reduce Pay Growth assumption from 3.50% to 3.25%

Expense Assumption

- Current Assumption

- Administrative expenses, excluding management fees and investment consultant expenses
- \$600,000 per year, increasing at 3.5% per year

- Results

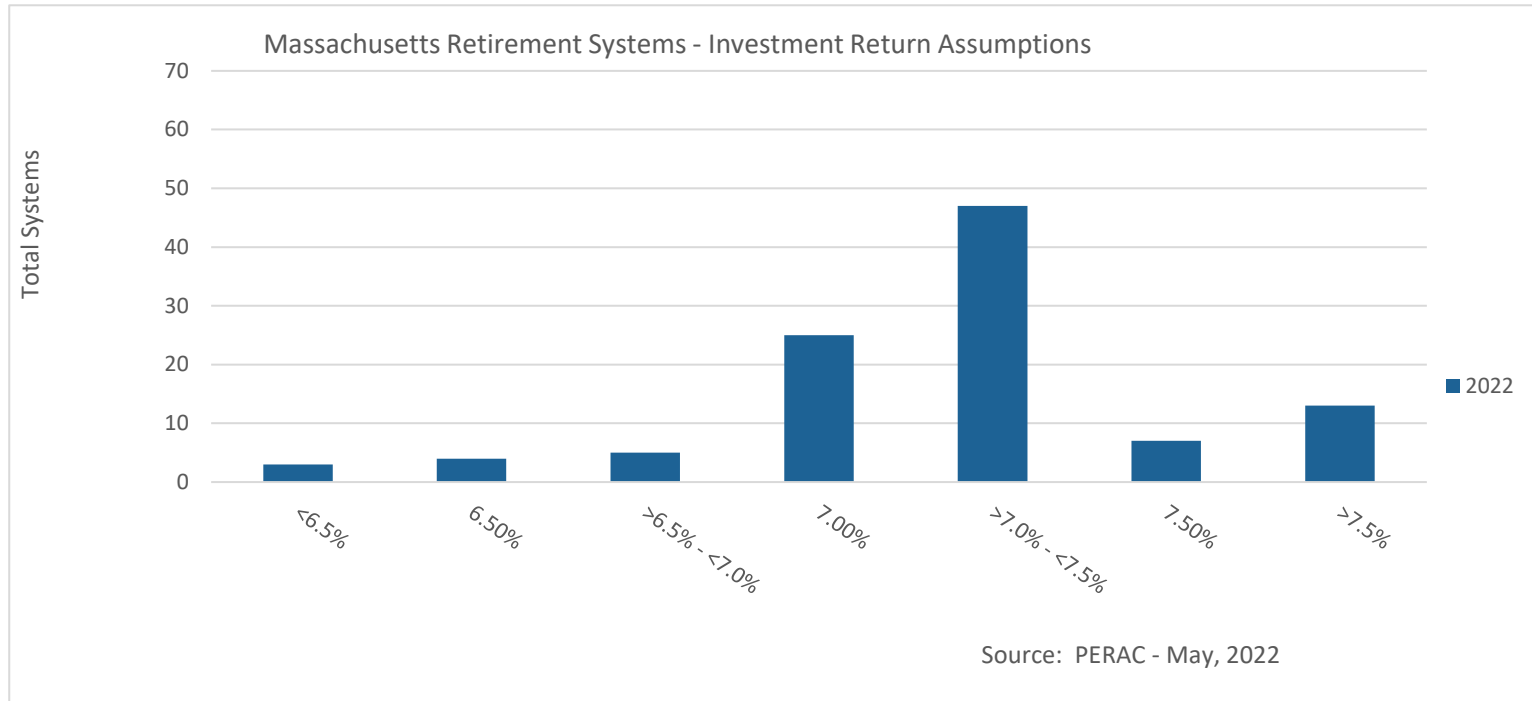
- Administrative Expenses have increased an average of 4% per year over the last five years

Year	Expenses	Increase
2021	605,897	2.56%
2020	590,757	4.13%
2019	567,347	4.62%
2018	542,267	9.46%
2017	495,399	-0.58%
2016	498,301	--

- Recommendation

- Increase administrative expense assumption to \$650,000 per year, increasing at 3.25% per year

Distribution of Investment Return Assumption



Investment Return Assumption

Sources of Expected Returns	Current	Previous
NEPC 30-Year PRIT Fund Expected Return	6.90%	6.80%
NEPC 10-Year PRIT Fund Expected Return	5.70%	5.80%
Commonwealth Assumption (PERAC)	7.00%	7.00%
PERAC Recommended Range	6.75%-7.15%	6.75%-7.15%
PERAC Reasonable Range	6.00%-7.35%	6.00%-7.45%
Horizon Actuarial Survey (CAPM, 2021 & 2020)		
10-Year horizon	5.84%	6.11%
20-Year horizon	6.66%	7.01%
National State, Teacher and City Plan Average (NASRA Survey released March 2022)	7.00%	7.18%
Recommendation: Reduce investment return assumption from 7.75% to 7.25%		

Recommended Assumptions

- Investment Return
 - Reduce to 7.25%
- Mortality and Mortality Improvement updated to PERAC standard
- Salary Scale
 - Reduce ultimate rates for 10+ years of service to 4% for Group 1 and 4.5% for Group 4
- Payroll Growth - reduce from 3.5% to 3.25%
- Administrative Expenses
 - Increase from \$600,000 to \$650,000 per year, increasing at 3.25%
- 3(8)(c) Transfers
 - Maintain \$1,000,000 annually

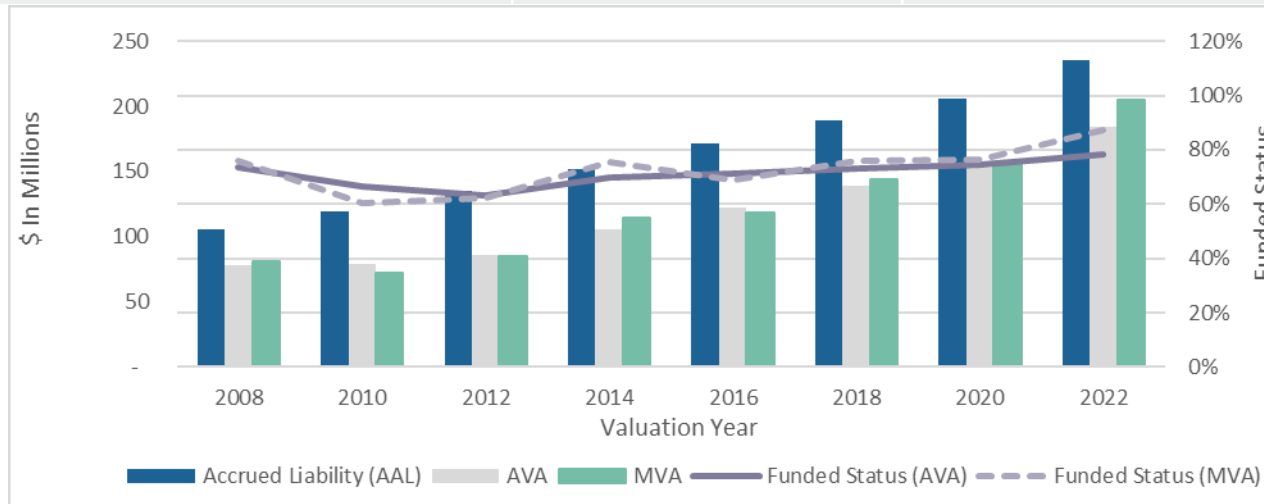


Assumption Change Impact

- Demographic changes
 - Update mortality improvement scale
 - Decreases accrued liability by \$1.7m
 - Decreases normal cost by \$17,400
- Economic changes
 - Update ultimate salary scale rates for 10+ years of service
 - Reduce investment return assumption to 7.25%
 - Increases accrued liability by \$10.6m
 - Increases normal cost by \$460,000

Funding Progress

Valuation Date	January 1, 2022	January 1, 2020	Change
Actuarial Accrued Liability (AL)	\$235.2	\$206.0	14.2%
Actuarial Value of Assets (AVA)	184.3	153.2	20.3%
Unfunded Actuarial Liability (UAL)	\$50.9	\$52.8	(3.5%)
Funded Status = AVA/AL	78.3%	74.4%	5.2%



Historical Appropriations

Fiscal Year	Appropriation	Increase over Prior Year
2023	8,270,086	5.75%
2022	7,820,413	5.75%
2021	7,395,189	5.75%
2020	6,993,085	5.75%
2019	6,612,848	5.50%
2018	6,268,103	5.50%
2017	5,941,329	3.74%
2016	5,727,313	-2.74%
2015	5,888,495	3.74%
2014	5,676,096	

FY2024 Appropriation

- Funding Schedule B-1
- Annual Appropriations Equal the sum of:
 - Employer Normal Cost (includes expenses)
 - Amortization Payment to fully fund UAAL by 2034
 - 3(8)(c) Transfers
- Normal Cost increases annually by assumed payroll growth of 3.25%
- UAAL payments increase by 4% per year
- 3(8)(c) Transfers are level

Valuation Date	January 1, 2022*
Employer Normal Cost	\$3,232,416
Amortization Payment	5,603,547
3(8)(c) Transfers	1,000,000
Total Appropriation	\$9,835,963
* Includes change to expenses, investment return assumption, mortality improvement scale and salary scale	

Funding Schedule Scenarios

Schedule	UAAL (\$m)	LTRR	Full Funded	FY2024 Increase	Comments
A-1	\$42.02	7.75%	2034	0.78%	Baseline
A-2	\$40.32	7.75%	2034	-2%	Mortality Updates
A-3	\$39.35	7.75%	2034	-4.8%	Change to Salary Scale
A-4	\$39.35	7.75%	2034	-4.17%	Increase Admin Expense to \$650,000
A-5	\$42.15	7.625%	2034	1.48%	Investment Return of 7.625%
B-1	\$50.93	7.25%	2034	18.93%	Investment Return of 7.25%
B-2	\$50.93	7.25%	2034	5.94%	Annual Limit Increase of 5.94%
C-1	\$57.09	7%	2034	31.02%	Investment Return of 7%
C-2	\$57.09	7%	2034	7.68%	Annual Limit Increase of 7.68%
C-3	\$57.09	7%	2037	5.75%	Extend Full Funded Year with 5.75% Annual Limit Increase
C-4	\$57.09	7%	2036	6%	Extend Full Funded Year with 6% Annual Limit Increase



Changes to Assumptions and Methods for Consideration

- Maintain current schedule
- Shorten or lengthen period UAAL is fully funded
 - If on or before 2030, UAAL payments can increase up to 4.5%
 - If after 2030, UAAL payments can not increase more than 4%
 - PERAC recommends 2035 and earlier
- Limit annual increases for specified period of time



Action Plan

- Discuss alternative assumptions
- Develop appropriation for FY2024
- Select Funding Schedule
- Finalize January 1, 2022 Valuation Report
- Prepare December 31, 2021 GASB 67/68 reports – based on January 1, 2022 valuation
- Other considerations?



Franklin Regional Retirement System
30-Year Forecast of Annual Appropriations

Funding Schedule A-1
Baseline

Based on Results of January 1, 2022 Valuation

Fiscal Year Ending	Employer Normal Cost	Amortization Payment of UAL	Net 3(8)(c) Transfers	Total Employer Cost	Increase Over Prior Year	2020 Schedule	Unfunded Actuarial Accrued Liability
2023	\$2,656,107	\$4,613,979	1,000,000	\$8,270,086		\$8,270,086	\$42,024,861
2024	2,706,875	4,627,603	1,000,000	8,334,478	0.78%	8,745,616	40,580,081
2025	2,794,849	4,812,706	1,000,000	8,607,555	3.28%	9,248,489	39,009,448
2026	2,885,681	5,005,214	1,000,000	8,890,895	3.29%	9,780,277	37,128,468
2027	2,979,466	5,205,423	1,000,000	9,184,889	3.31%	10,342,643	34,905,544
2028	3,076,299	5,413,640	1,000,000	9,489,939	3.32%	10,937,345	32,306,327
2029	3,176,279	5,630,185	1,000,000	9,806,464	3.34%	11,566,242	29,293,495
2030	3,279,508	5,855,394	1,000,000	10,134,902	3.35%	12,231,301	25,826,506
2031	3,386,091	6,089,609	1,000,000	10,475,700	3.36%	12,934,601	21,861,335
2032	3,496,140	6,333,194	1,000,000	10,829,334	3.38%	13,678,341	17,350,195
2033	3,609,764	6,586,521	1,000,000	11,196,285	3.39%	14,464,846	12,241,225
2034	3,727,081	6,849,982	1,000,000	11,577,063	3.40%	15,166,974	6,478,166
2035	3,848,211	-	1,000,000	4,848,211	58.12%	5,042,058	-
2036	3,973,278	-	1,000,000	4,973,278	2.58%	5,183,530	-
2037	4,102,409	-	1,000,000	5,102,409	2.60%	5,329,953	-
2038	4,235,737	-	1,000,000	5,235,737	2.61%	5,481,501	-
2039	4,373,398	-	1,000,000	5,373,398	2.63%	5,638,353	-
2040	4,515,533	-	1,000,000	5,515,533	2.65%	5,800,696	-
2041	4,662,288	-	1,000,000	5,662,288	2.66%	5,968,720	-
2042	4,813,813	-	1,000,000	5,813,813	2.68%	6,142,626	-
2043	4,970,262	-	1,000,000	5,970,262	2.69%	6,322,618	-
2044	5,131,795	-	1,000,000	6,131,795	2.71%	6,508,910	-
2045	5,298,578	-	1,000,000	6,298,578	2.72%	6,701,721	-
2046	5,470,781	-	1,000,000	6,470,781	2.73%	6,901,282	-
2047	5,648,582	-	1,000,000	6,648,582	2.75%	7,107,826	-
2048	5,832,161	-	1,000,000	6,832,161	2.76%	7,321,599	-
2049	6,021,706	-	1,000,000	7,021,706	2.77%	7,542,855	-
2050	6,217,412	-	1,000,000	7,217,412	2.79%	7,771,855	-
2051	6,419,478	-	1,000,000	7,419,478	2.80%	-	-
2052	6,628,111	-	1,000,000	7,628,111	2.81%	-	-
Total	129,937,673	67,023,450	30,000,000	226,961,123		238,132,864	

	Schedule A-1	Baseline	Increase
• Employer Normal Cost as of January 1, 2022:	2,511,934	2,511,934	-
• Administrative Expenses:	600,000	600,000	-
• Unfunded Actuarial Accrued Liability (UAL):	42,024,861	42,024,861	-
• Funded Status:	81.4%	81.4%	
• Investment Return Rate:	7.750%	7.750%	
• Amortization Payments Increase Annually:	4.00%	4.00%	
• Limit on Annual Increase:	None	None	
• Fully Funded in Fiscal Year:	2034	2034	
• COLA Base:	17,000	17,000	

Franklin Regional Retirement System
30-Year Forecast of Annual Appropriations

Funding Schedule A-2
Mortality

Based on Results of January 1, 2022 Valuation

Fiscal Year Ending	Employer Normal Cost	Amortization Payment of UAL	Net 3(8)(c) Transfers	Total Employer Cost	Increase Over Prior Year	2020 Schedule	Unfunded Actuarial Accrued Liability
2023	\$2,637,710	\$4,632,376	1,000,000	\$8,270,086		\$8,270,086	\$40,323,521
2024	2,687,880	4,416,415	1,000,000	8,104,295	-2.00%	8,745,616	38,728,141
2025	2,775,236	4,593,070	1,000,000	8,368,306	3.26%	9,248,489	37,229,186
2026	2,865,431	4,776,794	1,000,000	8,642,225	3.27%	9,780,277	35,434,048
2027	2,958,558	4,967,865	1,000,000	8,926,423	3.29%	10,342,643	33,312,570
2028	3,054,711	5,166,580	1,000,000	9,221,291	3.30%	10,937,345	30,831,973
2029	3,153,989	5,373,243	1,000,000	9,527,232	3.32%	11,566,242	27,956,636
2030	3,256,494	5,588,172	1,000,000	9,844,666	3.33%	12,231,301	24,647,869
2031	3,362,330	5,811,699	1,000,000	10,174,029	3.35%	12,934,601	20,863,656
2032	3,471,606	6,044,167	1,000,000	10,515,773	3.36%	13,678,341	16,558,390
2033	3,584,433	6,285,934	1,000,000	10,870,367	3.37%	14,464,846	11,682,577
2034	3,700,928	6,537,372	1,000,000	11,238,300	3.38%	15,166,974	6,182,525
2035	3,821,209	-	1,000,000	4,821,209	57.10%	5,042,058	-
2036	3,945,397	-	1,000,000	4,945,397	2.58%	5,183,530	-
2037	4,073,623	-	1,000,000	5,073,623	2.59%	5,329,953	-
2038	4,206,015	-	1,000,000	5,206,015	2.61%	5,481,501	-
2039	4,342,710	-	1,000,000	5,342,710	2.63%	5,638,353	-
2040	4,483,847	-	1,000,000	5,483,847	2.64%	5,800,696	-
2041	4,629,572	-	1,000,000	5,629,572	2.66%	5,968,720	-
2042	4,780,033	-	1,000,000	5,780,033	2.67%	6,142,626	-
2043	4,935,384	-	1,000,000	5,935,384	2.69%	6,322,618	-
2044	5,095,783	-	1,000,000	6,095,783	2.70%	6,508,910	-
2045	5,261,396	-	1,000,000	6,261,396	2.72%	6,701,721	-
2046	5,432,390	-	1,000,000	6,432,390	2.73%	6,901,282	-
2047	5,608,943	-	1,000,000	6,608,943	2.74%	7,107,826	-
2048	5,791,234	-	1,000,000	6,791,234	2.76%	7,321,599	-
2049	5,979,449	-	1,000,000	6,979,449	2.77%	7,542,855	-
2050	6,173,782	-	1,000,000	7,173,782	2.78%	7,771,855	-
2051	6,374,430	-	1,000,000	7,374,430	2.80%	-	-
2052	6,581,598	-	1,000,000	7,581,598	2.81%	-	-
Total	129,026,101	64,193,687	30,000,000	223,219,788		238,132,864	

	Schedule A-2	Baseline	Increase
• Employer Normal Cost as of January 1, 2022:	2,494,536	2,511,934	(17,398)
• Administrative Expenses:	600,000	600,000	-
• Unfunded Actuarial Accrued Liability (UAL):	40,323,521	42,024,861	(1,701,340)
• Funded Status:	82.0%	81.4%	
• Investment Return Rate:	7.750%	7.750%	
• Amortization Payments Increase Annually:	4.00%	4.00%	
• Limit on Annual Increase:	None	None	
• Fully Funded in Fiscal Year:	2034	2034	
• COLA Base:	17,000	17,000	

Franklin Regional Retirement System
30-Year Forecast of Annual Appropriations

Funding Schedule A-3
Mortality and Salary Scale

Based on Results of January 1, 2022 Valuation

Fiscal Year Ending	Employer Normal Cost	Amortization Payment of UAL	Net 3(8)(c) Transfers	Total Employer Cost	Increase Over Prior Year	2020 Schedule	Unfunded Actuarial Accrued Liability
2023	\$2,541,026	\$4,729,060	1,000,000	\$8,270,086		\$8,270,086	\$39,346,815
2024	2,588,054	4,285,168	1,000,000	7,873,222	-4.80%	8,745,616	37,577,218
2025	2,672,166	4,456,573	1,000,000	8,128,739	3.25%	9,248,489	36,122,809
2026	2,759,011	4,634,836	1,000,000	8,393,847	3.26%	9,780,277	34,381,019
2027	2,848,678	4,820,230	1,000,000	8,668,908	3.28%	10,342,643	32,322,587
2028	2,941,259	5,013,039	1,000,000	8,954,298	3.29%	10,937,345	29,915,708
2029	3,036,851	5,213,561	1,000,000	9,250,412	3.31%	11,566,242	27,125,821
2030	3,135,549	5,422,103	1,000,000	9,557,652	3.32%	12,231,301	23,915,383
2031	3,237,454	5,638,987	1,000,000	9,876,441	3.34%	12,934,601	20,243,629
2032	3,342,672	5,864,547	1,000,000	10,207,219	3.35%	13,678,341	16,066,306
2033	3,451,308	6,099,129	1,000,000	10,550,437	3.36%	14,464,846	11,335,393
2034	3,563,476	6,343,094	1,000,000	10,906,570	3.38%	15,166,974	5,998,792
2035	3,679,289	-	1,000,000	4,679,289	57.10%	5,042,058	-
2036	3,798,867	-	1,000,000	4,798,867	2.56%	5,183,530	-
2037	3,922,330	-	1,000,000	4,922,330	2.57%	5,329,953	-
2038	4,049,807	-	1,000,000	5,049,807	2.59%	5,481,501	-
2039	4,181,426	-	1,000,000	5,181,426	2.61%	5,638,353	-
2040	4,317,323	-	1,000,000	5,317,323	2.62%	5,800,696	-
2041	4,457,636	-	1,000,000	5,457,636	2.64%	5,968,720	-
2042	4,602,508	-	1,000,000	5,602,508	2.65%	6,142,626	-
2043	4,752,090	-	1,000,000	5,752,090	2.67%	6,322,618	-
2044	4,906,533	-	1,000,000	5,906,533	2.68%	6,508,910	-
2045	5,065,995	-	1,000,000	6,065,995	2.70%	6,701,721	-
2046	5,230,640	-	1,000,000	6,230,640	2.71%	6,901,282	-
2047	5,400,637	-	1,000,000	6,400,637	2.73%	7,107,826	-
2048	5,576,157	-	1,000,000	6,576,157	2.74%	7,321,599	-
2049	5,757,382	-	1,000,000	6,757,382	2.76%	7,542,855	-
2050	5,944,496	-	1,000,000	6,944,496	2.77%	7,771,855	-
2051	6,137,693	-	1,000,000	7,137,693	2.78%	-	-
2052	6,337,167	-	1,000,000	7,337,167	2.79%	-	-
Total	124,235,480	62,520,327	30,000,000	216,755,807		238,132,864	

	Schedule A-3	Baseline	Increase
• Employer Normal Cost as of January 1, 2022:	2,403,100	2,511,934	(108,834)
• Administrative Expenses:	600,000	600,000	-
• Unfunded Actuarial Accrued Liability (UAL):	39,346,815	42,024,861	(2,678,046)
• Funded Status:	82.4%	81.4%	
• Investment Return Rate:	7.750%	7.750%	
• Amortization Payments Increase Annually:	4.00%	4.00%	
• Limit on Annual Increase:	None	None	
• Fully Funded in Fiscal Year:	2034	2034	
• COLA Base:	17,000	17,000	

Franklin Regional Retirement System
30-Year Forecast of Annual Appropriations

Funding Schedule A-4
Admn Expense Increase to \$650,000

Based on Results of January 1, 2022 Valuation

Fiscal Year Ending	Employer Normal Cost	Amortization Payment of UAL	Net 3(8)(c) Transfers	Total Employer Cost	Increase Over Prior Year	2020 Schedule	Unfunded Actuarial Accrued Liability
2023	\$2,541,026	\$4,729,060	1,000,000	\$8,270,086		\$8,270,086	\$39,346,815
2024	2,639,679	4,285,168	1,000,000	7,924,847	-4.17%	8,745,616	37,577,218
2025	2,725,469	4,456,573	1,000,000	8,182,042	3.25%	9,248,489	36,122,809
2026	2,814,047	4,634,836	1,000,000	8,448,883	3.26%	9,780,277	34,381,019
2027	2,905,503	4,820,230	1,000,000	8,725,733	3.28%	10,342,643	32,322,587
2028	2,999,932	5,013,039	1,000,000	9,012,971	3.29%	10,937,345	29,915,708
2029	3,097,430	5,213,561	1,000,000	9,310,991	3.31%	11,566,242	27,125,821
2030	3,198,097	5,422,103	1,000,000	9,620,200	3.32%	12,231,301	23,915,383
2031	3,302,035	5,638,987	1,000,000	9,941,022	3.33%	12,934,601	20,243,629
2032	3,409,351	5,864,547	1,000,000	10,273,898	3.35%	13,678,341	16,066,306
2033	3,520,154	6,099,129	1,000,000	10,619,283	3.36%	14,464,846	11,335,393
2034	3,634,559	6,343,094	1,000,000	10,977,653	3.37%	15,166,974	5,998,792
2035	3,752,683	-	1,000,000	4,752,683	56.71%	5,042,058	-
2036	3,874,645	-	1,000,000	4,874,645	2.57%	5,183,530	-
2037	4,000,571	-	1,000,000	5,000,571	2.58%	5,329,953	-
2038	4,130,590	-	1,000,000	5,130,590	2.60%	5,481,501	-
2039	4,264,834	-	1,000,000	5,264,834	2.62%	5,638,353	-
2040	4,403,441	-	1,000,000	5,403,441	2.63%	5,800,696	-
2041	4,546,553	-	1,000,000	5,546,553	2.65%	5,968,720	-
2042	4,694,316	-	1,000,000	5,694,316	2.66%	6,142,626	-
2043	4,846,881	-	1,000,000	5,846,881	2.68%	6,322,618	-
2044	5,004,404	-	1,000,000	6,004,404	2.69%	6,508,910	-
2045	5,167,047	-	1,000,000	6,167,047	2.71%	6,701,721	-
2046	5,334,976	-	1,000,000	6,334,976	2.72%	6,901,282	-
2047	5,508,363	-	1,000,000	6,508,363	2.74%	7,107,826	-
2048	5,687,384	-	1,000,000	6,687,384	2.75%	7,321,599	-
2049	5,872,224	-	1,000,000	6,872,224	2.76%	7,542,855	-
2050	6,063,071	-	1,000,000	7,063,071	2.78%	7,771,855	-
2051	6,260,121	-	1,000,000	7,260,121	2.79%	-	-
2052	6,463,575	-	1,000,000	7,463,575	2.80%	-	-
Total	126,662,961	62,520,327	30,000,000	219,183,288		238,132,864	

	Schedule A-4	Baseline	Increase
• Employer Normal Cost as of January 1, 2022:	2,403,100	2,511,934	(108,834)
• Administrative Expenses:	650,000	600,000	50,000
• Unfunded Actuarial Accrued Liability (UAL):	39,346,815	42,024,861	(2,678,046)
• Funded Status:	82.4%	81.4%	
• Investment Return Rate:	7.750%	7.750%	
• Amortization Payments Increase Annually:	4.00%	4.00%	
• Limit on Annual Increase:	None	None	
• Fully Funded in Fiscal Year:	2034	2034	
• COLA Base:	17,000	17,000	

Franklin Regional Retirement System
30-Year Forecast of Annual Appropriations

Funding Schedule A-5
7.625% Investment Return

Based on Results of January 1, 2022 Valuation

Fiscal Year Ending	Employer Normal Cost	Amortization Payment of UAL	Net 3(8)(c) Transfers	Total Employer Cost	Increase Over Prior Year	2020 Schedule	Unfunded Actuarial Accrued Liability
2023	\$2,677,416	\$4,592,670	1,000,000	\$8,270,086		\$8,270,086	\$42,153,765
2024	2,781,067	4,611,085	1,000,000	8,392,152	1.48%	8,745,616	40,689,380
2025	2,871,451	4,795,528	1,000,000	8,666,979	3.27%	9,248,489	39,094,577
2026	2,964,773	4,987,349	1,000,000	8,952,122	3.29%	9,780,277	37,190,275
2027	3,061,129	5,186,843	1,000,000	9,247,972	3.30%	10,342,643	34,945,360
2028	3,160,615	5,394,317	1,000,000	9,554,932	3.32%	10,937,345	32,326,043
2029	3,263,336	5,610,089	1,000,000	9,873,425	3.33%	11,566,242	29,295,647
2030	3,369,395	5,834,493	1,000,000	10,203,888	3.35%	12,231,301	25,814,373
2031	3,478,900	6,067,873	1,000,000	10,546,773	3.36%	12,934,601	21,839,049
2032	3,591,965	6,310,588	1,000,000	10,902,553	3.37%	13,678,341	17,322,859
2033	3,708,704	6,563,011	1,000,000	11,271,715	3.39%	14,464,846	12,215,053
2034	3,829,237	6,825,532	1,000,000	11,654,769	3.40%	15,166,974	6,460,631
2035	3,953,687	-	1,000,000	4,953,687	57.50%	5,042,058	-
2036	4,082,183	-	1,000,000	5,082,183	2.59%	5,183,530	-
2037	4,214,853	-	1,000,000	5,214,853	2.61%	5,329,953	-
2038	4,351,837	-	1,000,000	5,351,837	2.63%	5,481,501	-
2039	4,493,272	-	1,000,000	5,493,272	2.64%	5,638,353	-
2040	4,639,303	-	1,000,000	5,639,303	2.66%	5,800,696	-
2041	4,790,081	-	1,000,000	5,790,081	2.67%	5,968,720	-
2042	4,945,758	-	1,000,000	5,945,758	2.69%	6,142,626	-
2043	5,106,496	-	1,000,000	6,106,496	2.70%	6,322,618	-
2044	5,272,456	-	1,000,000	6,272,456	2.72%	6,508,910	-
2045	5,443,811	-	1,000,000	6,443,811	2.73%	6,701,721	-
2046	5,620,734	-	1,000,000	6,620,734	2.75%	6,901,282	-
2047	5,803,408	-	1,000,000	6,803,408	2.76%	7,107,826	-
2048	5,992,019	-	1,000,000	6,992,019	2.77%	7,321,599	-
2049	6,186,759	-	1,000,000	7,186,759	2.79%	7,542,855	-
2050	6,387,828	-	1,000,000	7,387,828	2.80%	7,771,855	-
2051	6,595,433	-	1,000,000	7,595,433	2.81%	-	-
2052	6,809,784	-	1,000,000	7,809,784	2.82%	-	-
Total	133,447,690	66,779,378	30,000,000	230,227,068		238,132,864	

	Schedule A-5	Baseline	Increase
• Employer Normal Cost as of January 1, 2022:	2,534,278	2,511,934	22,344
• Administrative Expenses:	650,000	600,000	50,000
• Unfunded Actuarial Accrued Liability (UAL):	42,153,765	42,024,861	128,904
• Funded Status:	81.4%	81.4%	
• Investment Return Rate:	7.625%	7.750%	
• Amortization Payments Increase Annually:	4.00%	4.00%	
• Limit on Annual Increase:	None	None	
• Fully Funded in Fiscal Year:	2034	2034	
• COLA Base:	17,000	17,000	

Franklin Regional Retirement System
30-Year Forecast of Annual Appropriations

Funding Schedule B-1
7.25% Investment Return

Based on Results of January 1, 2022 Valuation

Fiscal Year Ending	Employer Normal Cost	Amortization Payment of UAL	Net 3(8)(c) Transfers	Total Employer Cost	Increase Over Prior Year	2020 Schedule	Unfunded Actuarial Accrued Liability
2023	\$3,112,910	\$4,157,176	1,000,000	\$8,270,086		\$8,270,086	\$50,930,396
2024	3,232,416	5,603,547	1,000,000	9,835,963	18.93%	8,745,616	50,391,643
2025	3,337,469	5,827,688	1,000,000	10,165,157	3.35%	9,248,489	48,341,704
2026	3,445,936	6,060,795	1,000,000	10,506,731	3.36%	9,780,277	45,915,011
2027	3,557,930	6,303,227	1,000,000	10,861,157	3.37%	10,342,643	43,075,124
2028	3,673,562	6,555,356	1,000,000	11,228,918	3.39%	10,937,345	39,782,596
2029	3,792,954	6,817,571	1,000,000	11,610,525	3.40%	11,566,242	35,994,741
2030	3,916,225	7,090,273	1,000,000	12,006,498	3.41%	12,231,301	31,665,382
2031	4,043,501	7,373,884	1,000,000	12,417,385	3.42%	12,934,601	26,744,586
2032	4,174,915	7,668,840	1,000,000	12,843,755	3.43%	13,678,341	21,178,371
2033	4,310,599	7,975,593	1,000,000	13,286,192	3.44%	14,464,846	14,908,397
2034	4,450,693	8,294,618	1,000,000	13,745,311	3.46%	15,166,974	7,871,634
2035	4,595,341	-	1,000,000	5,595,341	-59.29%	5,042,058	-
2036	4,744,690	-	1,000,000	5,744,690	2.67%	5,183,530	-
2037	4,898,893	-	1,000,000	5,898,893	2.68%	5,329,953	-
2038	5,058,107	-	1,000,000	6,058,107	2.70%	5,481,501	-
2039	5,222,496	-	1,000,000	6,222,496	2.71%	5,638,353	-
2040	5,392,227	-	1,000,000	6,392,227	2.73%	5,800,696	-
2041	5,567,474	-	1,000,000	6,567,474	2.74%	5,968,720	-
2042	5,748,417	-	1,000,000	6,748,417	2.76%	6,142,626	-
2043	5,935,240	-	1,000,000	6,935,240	2.77%	6,322,618	-
2044	6,128,135	-	1,000,000	7,128,135	2.78%	6,508,910	-
2045	6,327,300	-	1,000,000	7,327,300	2.79%	6,701,721	-
2046	6,532,936	-	1,000,000	7,532,936	2.81%	6,901,282	-
2047	6,745,256	-	1,000,000	7,745,256	2.82%	7,107,826	-
2048	6,964,476	-	1,000,000	7,964,476	2.83%	7,321,599	-
2049	7,190,822	-	1,000,000	8,190,822	2.84%	7,542,855	-
2050	7,424,523	-	1,000,000	8,424,523	2.85%	7,771,855	-
2051	7,665,820	-	1,000,000	8,665,820	2.86%	-	-
2052	7,914,959	-	1,000,000	8,914,959	2.87%	-	-
Total	155,106,222	79,728,568	30,000,000	264,834,790		238,132,864	

	Schedule B-1	Baseline	Increase
• Employer Normal Cost as of January 1, 2022:	2,954,167	2,511,934	442,233
• Administrative Expenses:	650,000	600,000	50,000
• Unfunded Actuarial Accrued Liability (UAL):	50,930,396	42,024,861	8,905,535
• Funded Status:	78.3%	81.4%	
• Investment Return Rate:	7.250%	7.750%	
• Amortization Payments Increase Annually:	4.00%	4.00%	
• Limit on Annual Increase:	None	None	
• Fully Funded in Fiscal Year:	2034	2034	
• COLA Base:	17,000	17,000	

Franklin Regional Retirement System
30-Year Forecast of Annual Appropriations

Funding Schedule B-2
5.94% Limit per year

Based on Results of January 1, 2022 Valuation

Fiscal Year Ending	Employer Normal Cost	Amortization Payment of UAL	Net 3(8)(c) Transfers	Total Employer Cost	Increase Over Prior Year	2020 Schedule	Unfunded Actuarial Accrued Liability
2023	\$3,112,910	\$4,157,176	1,000,000	\$8,270,086		\$8,270,086	\$50,930,396
2024	3,232,416	4,528,914	1,000,000	8,761,330	5.94%	8,745,616	50,391,643
2025	3,337,469	4,944,283	1,000,000	9,281,752	5.94%	9,248,489	49,435,474
2026	3,445,936	5,387,152	1,000,000	9,833,088	5.94%	9,780,277	47,987,216
2027	3,557,930	5,859,243	1,000,000	10,417,173	5.94%	10,342,643	45,983,204
2028	3,673,562	6,362,391	1,000,000	11,035,953	5.94%	10,937,345	43,353,403
2029	3,792,954	6,898,536	1,000,000	11,691,490	5.94%	11,566,242	40,020,833
2030	3,916,225	7,469,738	1,000,000	12,385,963	5.94%	12,231,301	35,900,959
2031	4,043,501	8,078,188	1,000,000	13,121,689	5.94%	12,934,601	30,901,020
2032	4,174,915	8,726,203	1,000,000	13,901,118	5.94%	13,678,341	24,919,300
2033	4,310,599	9,416,244	1,000,000	14,726,843	5.94%	14,464,846	17,844,352
2034	4,450,693	10,067,534	1,000,000	15,518,227	5.37%	15,166,974	9,554,140
2035	4,595,341	-	1,000,000	5,595,341	-63.94%	5,042,058	-
2036	4,744,690	-	1,000,000	5,744,690	2.67%	5,183,530	-
2037	4,898,893	-	1,000,000	5,898,893	2.68%	5,329,953	-
2038	5,058,107	-	1,000,000	6,058,107	2.70%	5,481,501	-
2039	5,222,496	-	1,000,000	6,222,496	2.71%	5,638,353	-
2040	5,392,227	-	1,000,000	6,392,227	2.73%	5,800,696	-
2041	5,567,474	-	1,000,000	6,567,474	2.74%	5,968,720	-
2042	5,748,417	-	1,000,000	6,748,417	2.76%	6,142,626	-
2043	5,935,240	-	1,000,000	6,935,240	2.77%	6,322,618	-
2044	6,128,135	-	1,000,000	7,128,135	2.78%	6,508,910	-
2045	6,327,300	-	1,000,000	7,327,300	2.79%	6,701,721	-
2046	6,532,936	-	1,000,000	7,532,936	2.81%	6,901,282	-
2047	6,745,256	-	1,000,000	7,745,256	2.82%	7,107,826	-
2048	6,964,476	-	1,000,000	7,964,476	2.83%	7,321,599	-
2049	7,190,822	-	1,000,000	8,190,822	2.84%	7,542,855	-
2050	7,424,523	-	1,000,000	8,424,523	2.85%	7,771,855	-
2051	7,665,820	-	1,000,000	8,665,820	2.86%	-	-
2052	7,914,959	-	1,000,000	8,914,959	2.87%	-	-
Total	155,106,222	81,895,602	30,000,000	267,001,824		238,132,864	

	Schedule B-2	Baseline	Increase
• Employer Normal Cost as of January 1, 2022:	2,954,167	2,511,934	442,233
• Administrative Expenses:	650,000	600,000	50,000
• Unfunded Actuarial Accrued Liability (UAL):	50,930,396	42,024,861	8,905,535
• Funded Status:	78.3%	81.4%	
• Investment Return Rate:	7.250%	7.750%	
• Amortization Payments Increase Annually:	4.00%	4.00%	
• Limit on Annual Increase:	5.94% per year	None	
• Fully Funded in Fiscal Year:	2034	2034	
• COLA Base:	17,000	17,000	

Franklin Regional Retirement System
30-Year Forecast of Annual Appropriations

Funding Schedule C-1
7% Investment Return

Based on Results of January 1, 2022 Valuation

Fiscal Year Ending	Employer Normal Cost	Amortization Payment of UAL	Net 3(8)(c) Transfers	Total Employer Cost	Increase Over Prior Year	2020 Schedule	Unfunded Actuarial Accrued Liability
2023	\$3,426,762	\$3,843,323	1,000,000	\$8,270,085		\$8,270,086	\$57,093,534
2024	3,557,603	6,278,120	1,000,000	10,835,723	31.02%	8,745,616	57,180,637
2025	3,673,225	6,529,244	1,000,000	11,202,469	3.38%	9,248,489	54,797,154
2026	3,792,605	6,790,414	1,000,000	11,583,019	3.40%	9,780,277	51,991,381
2027	3,915,865	7,062,030	1,000,000	11,977,895	3.41%	10,342,643	48,723,541
2028	4,043,130	7,344,511	1,000,000	12,387,641	3.42%	10,937,345	44,950,664
2029	4,174,533	7,638,292	1,000,000	12,812,825	3.43%	11,566,242	40,626,344
2030	4,310,205	7,943,823	1,000,000	13,254,028	3.44%	12,231,301	35,700,487
2031	4,450,286	8,261,576	1,000,000	13,711,862	3.45%	12,934,601	30,119,032
2032	4,594,921	8,592,039	1,000,000	14,186,960	3.46%	13,678,341	23,823,656
2033	4,744,255	8,935,721	1,000,000	14,679,976	3.48%	14,464,846	16,751,456
2034	4,898,443	9,293,150	1,000,000	15,191,593	3.49%	15,166,974	8,834,607
2035	5,057,642	-	1,000,000	6,057,642	-60.13%	5,042,058	-
2036	5,222,016	-	1,000,000	6,222,016	2.71%	5,183,530	-
2037	5,391,731	-	1,000,000	6,391,731	2.73%	5,329,953	-
2038	5,566,962	-	1,000,000	6,566,962	2.74%	5,481,501	-
2039	5,747,889	-	1,000,000	6,747,889	2.76%	5,638,353	-
2040	5,934,695	-	1,000,000	6,934,695	2.77%	5,800,696	-
2041	6,127,573	-	1,000,000	7,127,573	2.78%	5,968,720	-
2042	6,326,719	-	1,000,000	7,326,719	2.79%	6,142,626	-
2043	6,532,338	-	1,000,000	7,532,338	2.81%	6,322,618	-
2044	6,744,638	-	1,000,000	7,744,638	2.82%	6,508,910	-
2045	6,963,839	-	1,000,000	7,963,839	2.83%	6,701,721	-
2046	7,190,163	-	1,000,000	8,190,163	2.84%	6,901,282	-
2047	7,423,844	-	1,000,000	8,423,844	2.85%	7,107,826	-
2048	7,665,119	-	1,000,000	8,665,119	2.86%	7,321,599	-
2049	7,914,234	-	1,000,000	8,914,234	2.87%	7,542,855	-
2050	8,171,447	-	1,000,000	9,171,447	2.89%	7,771,855	-
2051	8,437,020	-	1,000,000	9,437,020	2.90%	-	-
2052	8,711,222	-	1,000,000	9,711,222	2.91%	-	-
Total	170,710,924	88,512,243	30,000,000	289,223,167		238,132,864	

	Schedule C-1	Baseline	Increase
• Employer Normal Cost as of January 1, 2022:	3,257,679	2,511,934	745,745
• Administrative Expenses:	650,000	600,000	50,000
• Unfunded Actuarial Accrued Liability (UAL):	57,093,534	42,024,861	15,068,673
• Funded Status:	76.3%	81.4%	
• Investment Return Rate:	7.000%	7.750%	
• Amortization Payments Increase Annually:	4.00%	4.00%	
• Limit on Annual Increase:	None	None	
• Fully Funded in Fiscal Year:	2034	2034	
• COLA Base:	17,000	17,000	

Franklin Regional Retirement System
30-Year Forecast of Annual Appropriations

Funding Schedule C-2
7.68% Limit per year

Based on Results of January 1, 2022 Valuation

Fiscal Year Ending	Employer Normal Cost	Amortization Payment of UAL	Net 3(8)(c) Transfers	Total Employer Cost	Increase Over Prior Year	2020 Schedule	Unfunded Actuarial Accrued Liability
2023	\$3,426,762	\$3,843,323	1,000,000	\$8,270,085		\$8,270,086	\$57,093,534
2024	3,557,603	4,347,627	1,000,000	8,905,230	7.68%	8,745,616	57,180,637
2025	3,673,225	4,915,926	1,000,000	9,589,151	7.68%	9,248,489	56,760,859
2026	3,792,605	5,532,993	1,000,000	10,325,598	7.68%	9,780,277	55,733,620
2027	3,915,865	6,202,739	1,000,000	11,118,604	7.68%	10,342,643	54,006,791
2028	4,043,130	6,929,383	1,000,000	11,972,513	7.68%	10,937,345	51,477,816
2029	4,174,533	7,717,469	1,000,000	12,892,002	7.68%	11,566,242	48,032,667
2030	4,310,205	8,571,903	1,000,000	13,882,108	7.68%	12,231,301	43,544,714
2031	4,450,286	9,497,968	1,000,000	14,948,254	7.68%	12,934,601	37,873,470
2032	4,594,921	10,501,359	1,000,000	16,096,280	7.68%	13,678,341	30,863,242
2033	4,744,255	11,588,218	1,000,000	17,332,473	7.68%	14,464,846	22,341,644
2034	4,898,443	12,746,937	1,000,000	18,645,380	7.57%	15,166,974	12,117,977
2035	5,057,642	-	1,000,000	6,057,642	-67.51%	5,042,058	-
2036	5,222,016	-	1,000,000	6,222,016	2.71%	5,183,530	-
2037	5,391,731	-	1,000,000	6,391,731	2.73%	5,329,953	-
2038	5,566,962	-	1,000,000	6,566,962	2.74%	5,481,501	-
2039	5,747,889	-	1,000,000	6,747,889	2.76%	5,638,353	-
2040	5,934,695	-	1,000,000	6,934,695	2.77%	5,800,696	-
2041	6,127,573	-	1,000,000	7,127,573	2.78%	5,968,720	-
2042	6,326,719	-	1,000,000	7,326,719	2.79%	6,142,626	-
2043	6,532,338	-	1,000,000	7,532,338	2.81%	6,322,618	-
2044	6,744,638	-	1,000,000	7,744,638	2.82%	6,508,910	-
2045	6,963,839	-	1,000,000	7,963,839	2.83%	6,701,721	-
2046	7,190,163	-	1,000,000	8,190,163	2.84%	6,901,282	-
2047	7,423,844	-	1,000,000	8,423,844	2.85%	7,107,826	-
2048	7,665,119	-	1,000,000	8,665,119	2.86%	7,321,599	-
2049	7,914,234	-	1,000,000	8,914,234	2.87%	7,542,855	-
2050	8,171,447	-	1,000,000	9,171,447	2.89%	7,771,855	-
2051	8,437,020	-	1,000,000	9,437,020	2.90%	-	-
2052	8,711,222	-	1,000,000	9,711,222	2.91%	-	-
Total	170,710,924	92,395,845	30,000,000	293,106,769		238,132,864	

	Schedule C-2	Baseline	Increase
• Employer Normal Cost as of January 1, 2022:	3,257,679	2,511,934	745,745
• Administrative Expenses:	650,000	600,000	50,000
• Unfunded Actuarial Accrued Liability (UAL):	57,093,534	42,024,861	15,068,673
• Funded Status:	76.3%	81.4%	
• Investment Return Rate:	7.000%	7.750%	
• Amortization Payments Increase Annually:	4.00%	4.00%	
• Limit on Annual Increase:	7.68% per year	None	
• Fully Funded in Fiscal Year:	2034	2034	
• COLA Base:	17,000	17,000	

Franklin Regional Retirement System
30-Year Forecast of Annual Appropriations

Funding Schedule C-4
Extend Full Funding Date

Based on Results of January 1, 2022 Valuation

Fiscal Year Ending	Employer Normal Cost	Amortization Payment of UAL	Net 3(8)(c) Transfers	Total Employer Cost	Increase Over Prior Year	2020 Schedule	Unfunded Actuarial Accrued Liability
2023	\$3,426,762	\$3,843,323	1,000,000	\$8,270,085		\$8,270,086	\$57,093,534
2024	3,557,603	4,188,014	1,000,000	8,745,617	5.75%	8,745,616	57,180,637
2025	3,673,225	4,575,264	1,000,000	9,248,489	5.75%	9,248,489	56,923,218
2026	3,792,605	4,987,672	1,000,000	9,780,277	5.75%	9,780,277	56,253,866
2027	3,915,865	5,426,778	1,000,000	10,342,643	5.75%	10,342,643	55,118,157
2028	4,043,130	5,894,215	1,000,000	10,937,345	5.75%	10,937,345	53,456,287
2029	4,174,533	6,391,709	1,000,000	11,566,242	5.75%	11,566,242	51,202,608
2030	4,310,205	6,921,096	1,000,000	12,231,301	5.75%	12,231,301	48,285,119
2031	4,450,286	7,291,286	1,000,000	12,741,572	4.17%	12,934,601	44,624,911
2032	4,594,921	7,582,938	1,000,000	13,177,859	3.42%	13,678,341	40,331,929
2033	4,744,255	7,886,255	1,000,000	13,630,510	3.43%	14,464,846	35,441,769
2034	4,898,443	8,201,705	1,000,000	14,100,148	3.45%	15,166,974	29,900,763
2035	5,057,642	8,529,773	1,000,000	14,587,415	3.46%	5,042,058	23,651,009
2036	5,222,016	8,870,964	1,000,000	15,092,980	3.47%	5,183,530	16,630,060
2037	5,391,731	9,225,803	1,000,000	15,617,534	3.48%	5,329,953	8,770,583
2038	5,566,962	-	1,000,000	6,566,962	-57.95%	5,481,501	-
2039	5,747,889	-	1,000,000	6,747,889	2.76%	5,638,353	-
2040	5,934,695	-	1,000,000	6,934,695	2.77%	5,800,696	-
2041	6,127,573	-	1,000,000	7,127,573	2.78%	5,968,720	-
2042	6,326,719	-	1,000,000	7,326,719	2.79%	6,142,626	-
2043	6,532,338	-	1,000,000	7,532,338	2.81%	6,322,618	-
2044	6,744,638	-	1,000,000	7,744,638	2.82%	6,508,910	-
2045	6,963,839	-	1,000,000	7,963,839	2.83%	6,701,721	-
2046	7,190,163	-	1,000,000	8,190,163	2.84%	6,901,282	-
2047	7,423,844	-	1,000,000	8,423,844	2.85%	7,107,826	-
2048	7,665,119	-	1,000,000	8,665,119	2.86%	7,321,599	-
2049	7,914,234	-	1,000,000	8,914,234	2.87%	7,542,855	-
2050	8,171,447	-	1,000,000	9,171,447	2.89%	7,771,855	-
2051	8,437,020	-	1,000,000	9,437,020	2.90%	-	-
2052	8,711,222	-	1,000,000	9,711,222	2.91%	-	-
Total	170,710,924	99,816,795	30,000,000	300,527,719		238,132,864	

	Schedule C-3	Baseline	Increase
• Employer Normal Cost as of January 1, 2022:	3,257,679	2,511,934	745,745
• Administrative Expenses:	650,000	600,000	50,000
• Unfunded Actuarial Accrued Liability (UAL):	57,093,534	42,024,861	15,068,673
• Funded Status:	76.3%	81.4%	
• Investment Return Rate:	7.000%	7.750%	
• Amortization Payments Increase Annually:	4.00%	4.00%	
• Limit on Annual Increase:	5.75% per year	None	
• Fully Funded in Fiscal Year:	2037	2034	
• COLA Base:	17,000	17,000	

Franklin Regional Retirement System
30-Year Forecast of Annual Appropriations

Funding Schedule C-4
Extend Full Funding Date

Based on Results of January 1, 2022 Valuation

Fiscal Year Ending	Employer Normal Cost	Amortization Payment of UAL	Net 3(8)(c) Transfers	Total Employer Cost	Increase Over Prior Year	2020 Schedule	Unfunded Actuarial Accrued Liability
2023	\$3,426,762	\$3,843,323	1,000,000	\$8,270,085		\$8,270,086	\$57,093,534
2024	3,557,603	4,208,688	1,000,000	8,766,291	6.00%	8,745,616	57,180,637
2025	3,673,225	4,619,043	1,000,000	9,292,268	6.00%	9,248,489	56,902,188
2026	3,792,605	5,057,200	1,000,000	9,849,805	6.00%	9,780,277	56,186,832
2027	3,915,865	5,524,927	1,000,000	10,440,792	6.00%	10,342,643	54,975,707
2028	4,043,130	6,024,110	1,000,000	11,067,240	6.00%	10,937,345	53,204,028
2029	4,174,533	6,556,741	1,000,000	11,731,274	6.00%	11,566,242	50,800,561
2030	4,310,205	7,124,944	1,000,000	12,435,149	6.00%	12,231,301	47,687,057
2031	4,450,286	7,730,973	1,000,000	13,181,259	6.00%	12,934,601	43,777,629
2032	4,594,921	8,377,214	1,000,000	13,972,135	6.00%	13,678,341	38,978,086
2033	4,744,255	9,066,208	1,000,000	14,810,463	6.00%	14,464,846	33,185,216
2034	4,898,443	9,480,087	1,000,000	15,378,530	3.84%	15,166,974	26,285,998
2035	5,057,642	9,859,289	1,000,000	15,916,931	3.50%	5,042,058	18,482,835
2036	5,222,016	10,253,662	1,000,000	16,475,678	3.51%	5,183,530	9,747,725
2037	5,391,731	-	1,000,000	6,391,731	-61.21%	5,329,953	-
2038	5,566,962	-	1,000,000	6,566,962	2.74%	5,481,501	-
2039	5,747,889	-	1,000,000	6,747,889	2.76%	5,638,353	-
2040	5,934,695	-	1,000,000	6,934,695	2.77%	5,800,696	-
2041	6,127,573	-	1,000,000	7,127,573	2.78%	5,968,720	-
2042	6,326,719	-	1,000,000	7,326,719	2.79%	6,142,626	-
2043	6,532,338	-	1,000,000	7,532,338	2.81%	6,322,618	-
2044	6,744,638	-	1,000,000	7,744,638	2.82%	6,508,910	-
2045	6,963,839	-	1,000,000	7,963,839	2.83%	6,701,721	-
2046	7,190,163	-	1,000,000	8,190,163	2.84%	6,901,282	-
2047	7,423,844	-	1,000,000	8,423,844	2.85%	7,107,826	-
2048	7,665,119	-	1,000,000	8,665,119	2.86%	7,321,599	-
2049	7,914,234	-	1,000,000	8,914,234	2.87%	7,542,855	-
2050	8,171,447	-	1,000,000	9,171,447	2.89%	7,771,855	-
2051	8,437,020	-	1,000,000	9,437,020	2.90%	-	-
2052	8,711,222	-	1,000,000	9,711,222	2.91%	-	-
Total	170,710,924	97,726,409	30,000,000	298,437,333		238,132,864	

	Schedule C-4	Baseline	Increase
• Employer Normal Cost as of January 1, 2022:	3,257,679	2,511,934	745,745
• Administrative Expenses:	650,000	600,000	50,000
• Unfunded Actuarial Accrued Liability (UAL):	57,093,534	42,024,861	15,068,673
• Funded Status:	76.3%	81.4%	
• Investment Return Rate:	7.000%	7.750%	
• Amortization Payments Increase Annually:	4.00%	4.00%	
• Limit on Annual Increase:	6.0% per year	None	
• Fully Funded in Fiscal Year:	2036	2034	
• COLA Base:	17,000	17,000	



May 16, 2022

Franklin Regional Retirement Board
278 Main Street
Suite 311
Greenfield, MA 01301

Dear Members of the Board:

As requested, we have analyzed the impact on the Franklin Regional Retirement System's liabilities and appropriations as a result of increasing the COLA base from \$17,000 to \$18,000 effective July 1, 2022. We used the data and results of the January 1, 2022 valuation to develop the change in the accrued liability and normal cost and the resulting impact on the FY2024 and later appropriations. Our results are based on an investment return rate of 7.25% and the proposed mortality and salary scale assumption updates and are provided below.

Cost-of-living adjustments (COLA) are granted by the retirement board each year. If an increase is given, the COLA percentage is applied to a retiree's retirement allowance up to \$17,000. If the Board elects to increase the COLA base from \$17,000 to \$18,000, the normal cost, accrued liability and FY2024 appropriations are expected to increase as follows, *without regard to any limits on the annual appropriations*:

Option	Increase/(Decrease)		
	Accrued Liability	Normal Cost	FY2024 Appropriation
1 - \$18,000 COLA Base	\$1,248,000	\$27,900	\$182,500

The FY2024 appropriation amount shown above will increase annually by 3.41% until the system is expected to be fully funded in 2034. The results assume that \$8,270,086 will be contributed for FY2023.

Franklin Regional Retirement Board

May 16, 2022

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In closing, we are happy to answer any questions you may have regarding the material we have provided in this supplemental report.

Sincerely,

A handwritten signature in black ink that reads "Linda Bournival". The script is cursive and fluid, with the first name "Linda" and last name "Bournival" clearly legible.

Linda L. Bournival, FSA, EA
Consulting Actuary

K M S A C T U A R I E S

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