POST RETIREMENT BENEFITS ACTUARIAL VALUATION OF THE TOWN OF FRANKLIN

June 30, 2023 Actuarial Valuation Report

GASB 74 & 75

Franklin FYE2023 GASB7475 v1

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Introduction

This report presents the Governmental Accounting Standards Statements 74 & 75 based on the findings of an actuarial valuation as of July 1, 2023, of the Franklin OPEB Plan.

The actuarial valuation is based on:

- Plan Provisions as of July 1, 2023.
- Employee data provided by the Town as of July 1, 2023
- Asset provided by the Town as of June 30, 2023
- Actuarial assumptions approved by the Sherman Actuarial Services and the Town

The valuation and forecast do not account for any subsequent changes in the plan.

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GASB Statements No. 74 and No. 75

Effective for periods beginning after June 15, 2015, the Governmental Accounting Standards Board (GASB) requires the disclosure of Other Post Employment Benefits (OPEB) related liabilities for public employer financial statements in accordance with Statements 74 and 75. These statements, which amend GASB Statements No. 43 and No. 45, must be adhered to by any public employee retirement system that follows Generally Accepted Accounting Principles (GAAP).

These disclosures are intended to establish a reporting framework that distinguishes between:

- current financial information about plan assets and financial activities,
- actuarially determined information from a long-term perspective,
- the funded status of the plan, and
- progress being made in accumulating sufficient assets to pay benefits when due.

The statement requires the system to present two financial statements – a statement of fiduciary net position and a statement of changes in fiduciary net position. The statement of fiduciary net position presents the following items as of the end of the plan's reporting period, as applicable:

- Assets
- Deferred outflows of resources (consumption of net assets by the employers that is applicable to a future reporting period)
- Liabilities
- Deferred inflows of resources (acquisition of net assets by the employers that is applicable to a future reporting period)
- Fiduciary net position (Assets + Deferred outflows Liabilities Deferred inflows)

The system is considered a single employer OPEB plan since obligations exist for employees of one employer and plan assets can be used to pay the benefits of the employees of the employer.

This report does not include all items required under GASB Statements No. 74 and No. 75. Rather, it provides all items required that are not readily available from other sources and investment reports prepared by the plan's investment consultant.

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Discount Rate

The discount rate, and all other actuarial assumptions, are those as those described in Exhibit 4. The discount rate was selected based on a projection of employer and employee contributions, benefit payments, expenses and the long term expected rate of return on trust assets.

Based on these laws and assumptions, the OPEBs plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

The Town selected 7.5% as the long term expectation of investment returns.

Net Position Restricted for OPEB

The Net Position Restricted for OPEB Plan Benefits as of June 30, 2023 is \$12,349,002. The 2023 Annual Statement of the Financial Condition contains the values for previous years and the changes in Net Position Restricted for OPEB Plan Benefits. Investments are reported at fair value.

June 30, 2022 Net Position	10,505,734
Employer Contributions	3,888,754
Employee Contributions	0
Other Payments	0
Benefit Payments	(2,684,754)
Expenses	(55,063)
Investment Income	694,331
June 30, 2023 Net Position	12,349,002

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OPEB Liability as of June 30, 2023

The following presents the changes in the OPEB liability during FYE 2023.

June 30, 2022 Liability	85,452,216
Service Cost	2,962,384
Interest on Liability and Service Cost	6,523,786
Change in Plan Provisions	0
Experience (Gain) and Loss	(18,507,183)
Change in Assumptions	0
Benefit Payments	(2,914,271)
Other	<u>0</u>
June 30, 2023 Liability	73,516,932

Net OPEB Liability as of June 30, 2023

The following presents the net OPEB liability of the system calculated using the discount rate of 7.5%, as well as what the system's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.5%) or 1-percentage-point higher (8.5%) than the current rate. The Plan Fiduciary Net Position as a percentage of the Total OPEB Liability is 16.8%.

	1% Decrease	Current Discount	1% Increase
	(6.5%)	Rate (7.5%)	(8.5%)
Total OPEB Liability	83,758,122	73,516,932	69,939,326
Plan Fiduciary Net Position	12,349,002	12,349,002	12,349,002
Net OPEB Liability	71,409,120	61,167,930	57,590,324
Water			
OPEB Liability	715,455	759,900	887,129
Plan Fiduciary Net Position	<u>320,365</u>	<u>320,365</u>	<u>320,365</u>
Net OPEB Liability	395,090	439,535	566,764
Sewer			
OPEB Liability	394,794	419,319	489,525
Plan Fiduciary Net Position	<u>133,177</u>	<u>133,177</u>	<u>133,177</u>
Net OPEB Liability	261,617	286,142	356,348

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Stormwater			
OPEB Liability	141,091	149,856	174,946
Plan Fiduciary Net Position	24,643	24,643	24,643
Net OPEB Liability	116,448	125,213	150,303
•	·		
Solid Waste			
OPEB Liability	55,871	59,342	69,277
Plan Fiduciary Net Position	9,758	9,758	9,758
Net OPEB Liability	46,113	49,584	59,519

The following presents the net OPEB liability of the system calculated using the current trend rates, as well as what the system's net OPEB liability would be if it were calculated using trend rates 1-percentage-point lower for all years or 1-percentage-point higher than the current rates.

1% Decrease	Current Trend	1% Increase
67,153,382	73,516,932	93,555,758
12,349,002	12,349,002	12,349,002
54,804,380	61,167,930	81,206,756
1,008,846	759,900	680,845
320,365	320,365	320,365
688,481	439,535	360,480
*	· · · · · · · · · · · · · · · · · · ·	375,696
	·	<u>133,177</u>
423,513	286,142	242,519
198.949	149.856	134,266
,		24,643
		109,623
•	•	,
78,783	59,342	53,168
9,758	9,758	9,758
69,024	49,584	43,410
	67,153,382 12,349,002 54,804,380 1,008,846 320,365 688,481 556,690 133,177 423,513 198,949 24,643 174,306 78,783 9,758	67,153,382 73,516,932 12,349,002 12,349,002 54,804,380 61,167,930 1,008,846 759,900 320,365 320,365 688,481 439,535 556,690 419,319 133,177 133,177 423,513 286,142 198,949 149,856 24,643 24,643 174,306 125,213 78,783 59,342 9,758 9,758

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OPEB Expense for FYE 2023

Service Cost	2,962,384
Interest	6,523,786
Difference in Experience - Amortization	(5,081,932)
Change in Assumptions - Amortization	(329,940)
Changes in Plan Provisions	0
Employee Contributions	0
Projected Earnings	(830,236)
Administration Expense	55,063
Other Changes in Fiduciary Net Position	0
Asset (Gain) / Loss Amortization	35,360
Total Expense	3,334,485

Schedules of Required Supplementary Information

	<u>2023</u>
Total OPEB Liability – Beginning	85,452,216
Total OPEB Liability – Ending (a)	73,516,932
Plan Fiduciary Net Position – Beginning	10,505,734
Plan Fiduciary Net Position – Ending (b)	12,349,002
Net OPEB Liability – Ending (a) – (b)	61,167,930
Plan Fiduciary Net Positions as a percentage	
of the Total OPEB Liability	16.8%
Covered-employee payroll	76,893,288
Net OPEB Liability as a percentage of	
Covered-employee Payroll	79.5%

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Schedule of Net Position Restricted for OPEB Plan Benefits Amortization Recognition

Below is the schedule of amortization adjustments to the OPEB Expense for the coming years. A positive number indicates that the actual return was less than the expected return and will be added to the OPEB Expense.

Investment Return

Increase	(Decrease)	arising from	(Gains	or Losses

<u>FYE</u>	(Gain) / Loss	<u>Period</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2026</u>
2023	135,905	5	27,181	27,181	27,181	27,181	27,181
2022	1,203,871	5	240,774	240,774	240,774	240,775	
2021	(1,572,987)	5	(314,597)	(314,597)	(314,599)		
2020	319,132	5	63,826	63,828			
2019	90,880	5	18,176				

Experience

Increase (Decrease) arising from (Gains) or Losses

<u>FYE</u>	(Gain) /	Period	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
	Loss								
2023	(18,507,183)	6.19	(2,989,852)	(2,989,852)	(2,989,852)	(2,989,852)	(2,989,852)	(2,989,852)	(568,071)
2021	(6,170,129)	6.68	(923,672)	(923,672)	(923,672)	(923,672)	(628,097)		
2019	(7,641,391)	6.54	(1,168,408)	(1,168,408)	(630,943)				

Assumptions

Increase (Decrease) arising from (Gains) or Losses

<u>FYE</u>	(Gain) /	Period	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2025</u>
	Loss					
2019	(2,157,806)	6.54	(329,940)	(329,940)	(178,166)	

Reconciliation of Net OPEB Liability for 2023

NOL Beginning of Year	74,946,482
OPEB Expense	3,334,485
Employer Contributions	(4,118,271)
Deferred Outflow Changes	(214,052)
Deferred Inflow Changes	(12,780,714)
Revenue	<u>0</u>
NOL End of Year	61,167,930

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EXHIBITS

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EXHIBIT 1 – MEDICAL PREMIUM

Monthly Premiums effective July 1, 2023

Health benefits are available to employees and retirees through a number of plans. The following are gross monthly rates per subscriber for plans in which current Town employees and/or retirees are enrolled:

Harvard Pilgrim HMO (individual)	\$1,067.78
Harvard Pilgrim HMO (family)	\$2,728.76
Harvard Pilgrim High Deductible (individual)	\$ 859.30
Harvard Pilgrim High Deductible (family)	\$2,196.04
Harvard Pilgrim PPO (individual)	\$1,319.68
Harvard Pilgrim PPO (family)	\$3,675.36
Harvard Pilgrim Medicare (individual)	\$290.00

Post 1990 retirees contribute towards their coverage in the amount of 32% of stated premiums, with the PPO plan and surviving spouses, which is paid at 50% by the Town. Pre-1990 retirees contribute 15% and 32%.

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EXHIBIT 2 – MEMBERSHIP DATA

As of July 1, 2023

Number of Participants included in valuation

	School	Town	DPW	Total
Actives	778	225	54	1,057
Retired & Spouses	323	370	21	714
Total	1,101	595	75	1,771

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EXHIBIT 3 – SUMMARY OF PLAN PROVISIONS:

Retirement Medical Insurance: All retirees not in the Blue Care Elect PPO plan pay a 32% share

of their post-retirement medical costs. Retirees in the Medex plan

pay 32% and surviving spouses pay a 50% cost share.

Life Insurance: The Town of Franklin contributes \$2.15 per month for each

retiree receiving \$5,000 basic life insurance. Retirees that opt for

life insurance pay \$2.15 per month for coverage.

Spousal Coverage: Current and future retirees may elect to include their spouses as

part of their post-retirement benefits. There is lifetime spousal

coverage for medical insurance.

Administrative Costs: The Town pays administrative costs for each member of the plan

as part of the monthly premium.

Section 18 Coverage: The Town has elected to adopt Section 18 under Chapter 32B of

the General Laws of Massachusetts, which requires that an employee or retiree must participate in the Medicare program as the primary payer once one reaches age 65 and is Medicare

eligible.

Retirement Eligibility: Age 55 with 10 years of service, or 20 years of service. For a

Group 1 employee hired on or after April 2, 2012, attainment of

age 60 and completion of ten years of service

Ordinary Disability Eligibility: 10 years of service and under age 55.

Termination Eligibility: 10 years of service.

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EXHIBIT 4 – ACTUARIAL METHODS AND ASSUMPTIONS:

All Groups

TOWN OF FRANKLIN, ALL GROUPS

Interest: Full Prefunding: 7.50% per year, net of investment expenses

Actuarial Cost Method: Entry Age Normal. Benefits are attributed ratably to service from

date of hire until full eligibility date. Full eligibility date is assumed

to be first eligibility for retiree medical benefits.

Healthcare Cost Trend Rate:

Year Inflation Rate 2023 & after 4.5%

Participation: 95% of future retiree teachers and are assumed to participate in the

retiree medical plan, 70% of future non-teacher retirees are expected to participate in the retiree medical plan and 75% of future

retirees are expected to elect life insurance.

Marital Status: 80% of male employees and 60% of female employees are

assumed to have a covered spouse at retirement. Wives are

assumed to be three years younger than their husbands.

Pre-Age 65 Retirees: Current retirees who are under age 65 are assumed to remain in

their current medical plan until age 65.

Current active employees who are assumed to retire prior to age 65 are valued with a weighted-average premium. This weighted-average premium is based on the medical plan coverage of current

retirees under age 65.

Post-Age 65 Retirees: Current retirees over age 65 remain in their current medical plan

until death for purposes of measuring their contributions. It is assumed that future retirees are Medicare eligible. It is furthermore assumed that all current retirees under 65 will participate in the Medex plan in the same proportion as current retirees over 65. Per capita costs were developed from the Town

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developed monthly costs. Amounts to be received in the future for the Medicare Part D Retiree Drug Subsidy are not reflected in the valuation.

Termination Benefit:

95% of current active teachers and 70% of current active nonteachers over age 50 with at least 10 years of service are expected to elect medical coverage starting at age 65.

Medical Plan Costs:

The estimated gross per capita incurred claim costs for all non-Teacher retirees and beneficiaries for 2023-24 at age 64 and 65 are \$20,205 and \$2,892, respectively. The estimated gross per capita incurred claim costs for all Teacher retirees and beneficiaries for 2023-24 at age 64 and 65 are \$18,172 and \$2,841, respectively. Medicare eligible retirees' per capita claims costs at age 65 is \$2,730. It is assumed that future retirees participate in the same manner as current retirees. Employee cost sharing is based on current rates. Future cost sharing is based on the weighted average of the current cost sharing of retirees and beneficiaries.

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TOWN OF FRANKLIN, NON-TEACHERS

SEPARATIONS FROM ACTIVE SERVICE: The below tables represent values of the assumed annual rates of withdrawal, disability, death and service retirement:

Group 1 and 2

		Service Retirement			
Age	Disability	Male	Female	Male Post	Female Post
				2012 Hire	2012 Hire
25	0.0001				
30	0.0002				
35	0.0003				
40	0.0007				
45	0.0010				
50	0.0013	0.0360	0.1019		
55	0.0016	0.0477	0.0469		
60	0.0018	0.1057	0.0774	0.0477	0.0469
62	0.0019	0.1473	0.1168	0.0632	0.0509
65	0.0016	0.2615	0.1939	0.1057	0.0774
69	0.0014	0.2500	0.2000	0.2136	0.1708

Years of Service	Rates of Withdrawal
0	0.2800
5	0.1020
10	0.0650
15	0.0417
20	0.0400
25	0.0400
30+	0.0000

Group 4

		Service Retirements		
Age	Disability	Pre 2012	Post 2012	
25	0.0005			
30	0.0010			
35	0.0020			
40	0.0025			
45	0.0040	.0443		
50	0.0076	.0382	0.0191	
55	0.0076	.1110	0.0370	
60	0.0065	.1871	0.0936	
62	0.0065	.2176	0.1741	
65	0.0000	1.0000	0.2500	

Years	Rates of
of Service	Withdrawal
0 - 1	0.150
2 - 3	0.125
4 - 5	0.100
6 - 7	0.075
8 - 9	0.050
10 - 19	0.060
20+	0.000

Mortality: It is assumed that mortality for is represented by the various SOA Pub-2010 Public Retirement Plans Mortality Tables specific to the Group, Pre-retirement versus Post, Disabled and Beneficiaries, with Scale MP-2019 improvements until 2025.

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SCHEDULE A - ACTUARIAL ASSUMPTIONS AND METHODS

TOWN OF FRANKLIN, TEACHERS

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal and vesting, disability, death and service retirement are as follows:

Age	Disability
25	0.0002
30	0.0003
35	0.0006
40	0.0010
45	0.0015
50	0.0019
55	0.0024
60	0.0028
62	0.0030
65	0.0030
69	

Years of	Rates of
Service	Withdrawal
0	0.150
1	0.120
2	0.100
3	0.090
4	0.080
5	0.076
10	0.054
15	0.033
20	0.020
25	0.010
30+	0.000

	Male		Female	
	Service Retirement Service Retire		Retirement	
Age	<20	20+	<20	20+
50	0.00	0.01	0.00	0.01
55	0.02	0.03	0.02	0.04
60	0.12	0.20	0.12	0.16
61	0.15	0.30	0.15	0.20
62	0.18	0.35	0.18	0.25
63	0.15	0.35	0.15	0.25
64	0.25	0.30	0.25	0.30
65	0.40	0.50	0.40	0.40
66	0.40	0.30	0.40	0.30
67	0.40	0.30	0.40	0.25
68	0.40	0.30	0.40	0.35
69	0.40	0.40	0.40	0.35
70	1.00	1.00	1.00	1.00

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Teachers electing the increased benefit under Chapter 114 of the Acts of 2000 were assumed to have higher rates of retirement from ages 54 to 62 if their service was greater than 30 years. These rates are the same for males and females. The rate at age 54 is 0.035. The rate increases to 0.06 at age 55, 0.18 at age 56 and 0.30 at age 57. The rate for ages 58, 59 and 62 is 0.40. The rate for ages 60 and 61 is 0.35.

Mortality: It is assumed that both pre-retirement mortality and beneficiary mortality is represented by the RP-2014 White Collar Mortality with Scale MP-2016, fully generational.

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CERTIFICATION:

This report fairly represents the actuarial position of the Franklin OPEB Plan as of June 30, 2023, in accordance with generally accepted actuarial principles applied consistently with the preceding valuation. In our opinion, the actuarial assumptions used to compute actuarial accrued liability and normal cost are reasonably related to plan experience and to reasonable expectations, and represents our best estimate of anticipated plan experience.

The funded status measure is appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations. The funded status measure is appropriate for assessing the need for or the amount of future contributions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of such future measurements.

The report was prepared under the supervision of Daniel Sherman, an Associate of the Society of Actuaries and a Member of the American Academy of Actuaries, who takes responsibility for the overall appropriateness of the analysis, assumptions and results. Daniel Sherman is deemed to meet the General Qualification Standard and the basic education and experience requirement in the OPEB area. Based on over thirty years of performing valuations of similar complexity, Mr. Sherman is qualified by experience. Daniel Sherman has met the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sherman Actuarial Services, LLC

Daniel W. Therman

Daniel W. Sherman, ASA, MAAA

December, 2024