

September 1, 2022

Personal and Confidential

Ms. Karen Calvert
Director of Finance
Foxborough Regional Charter School
131 Central Street
Foxborough, MA 02035

Re: Pay Matrix Design

Dear Ms. Calvert:

Per your request, we have analyzed various methods concerning Foxborough Regional Charter School's pay matrix design for their teacher employees and the impact on payroll over the next 5 years. For our analysis, we evaluated the following methods:

Method #1: All employees currently below the proposed pay matrix will be brought in line with this matrix in fiscal 2024.

Method #2: All employees currently below the proposed pay matrix will have their pay increased 33% of the difference in fiscal 2024, 67% of the difference in fiscal 2026 and in line with the matrix in fiscal 2028

Method #3: All employees currently below the proposed pay matrix will have their pay increased 50% of the difference in fiscal 2024, 75% of the difference in fiscal 2026 and in line with the matrix in fiscal 2028

Fiscal Year	Method #1	Method #2	Method #3
2024	100%	33%	50%
2025	100%	33%	50%
2026	100%	67%	75%
2027	100%	67%	75%
2028	100%	100%	100%

To perform this analysis, various assumptions need to be made. While there are many, the key assumptions that have the greatest impact are:

- When will employees leave employment, whether through termination or retirement?
- What are the demographics of the newly hired employees that will fill those vacant roles?
- What is the likelihood an employee will move up in grade / ladder between school years?

The results are as follows:

Fiscal Year	Baseline	Method 1	Method 2	Method 3
2023	\$ 7,765,466.15	\$ 7,765,466.15	\$ 7,765,466.15	\$ 7,765,466.15
2024	\$ 7,998,430.13	\$ 8,472,600.92	\$ 8,070,495.07	\$ 8,171,021.70
2025	\$ 8,238,383.04	\$ 8,739,928.46	\$ 8,254,381.49	\$ 8,375,768.45
2026	\$ 8,485,534.53	\$ 9,018,220.02	\$ 8,475,801.48	\$ 8,611,406.31
2027	\$ 8,740,100.57	\$ 9,231,182.92	\$ 8,651,199.55	\$ 8,796,195.53
2028	\$ 9,002,303.58	\$ 9,516,247.62	\$ 9,516,247.62	\$ 9,516,247.62

Change From Baseline			
	Method 1	Method 2	Method 3
Year 1 Cost	\$ 707,134.77	\$ 305,028.92	\$ 405,555.55
Year 2 Cost	\$ 501,545.42	\$ 15,998.45	\$ 137,385.41
Year 3 Cost	\$ 532,685.49	\$ (9,733.05)	\$ 125,871.78
Year 4 Cost	\$ 491,082.36	\$ (88,901.01)	\$ 56,094.97
Year 5 Cost	\$ 513,944.04	\$ 513,944.04	\$ 513,944.04

Data

We used historical and current census and pay information provided to us by Foxborough Regional Charter School. This data included the name, age, service, salary, position & educational level for all staff members.

Disclosures

The actuarial computations made above are for the purposes of evaluating the potential impacts of implementing a pay matrix used by Foxborough Regional Charter School for their teacher employees. Determinations for purposes other than that may yield results significantly different than those reported here. As such, additional determinations may be needed for other purposes.

It is important to note that any proposed pay matrix/grid is based on the current situation, a desired destination / goal, assumptions, budget, and other intangibles. The current pay structure contains various anomalies that make the imposition of a “no losers” grid impractical. The desire to move to a grid approach which is internally consistent that fits within your budget will yield one that shows salaries that increase with service up to some limit and provides for an educational premium for certain degrees or progress therein (our proposal grid only has two grades per our conversations, but you may wish to expand in the future once the structure is adopted).

So, if the starting point (current situation) and end point (proposed grid) are known, the question becomes one of how to navigate that transition – that is ultimately a balance of human resource and financial needs of the organization.

As always, if you or your team have questions regarding the analysis, please reach out at any time.

Sincerely,



Parker E. Elmore, ASA, EA, FCA, MAAA
President, CEO & Actuary



Andrew D. Taggart, ASA, EA, ACA, MAAA
Consulting Actuary

APPENDIX

ASSUMPTIONS

Mortality – 2022 IRS Optional Combined Mortality Table for Small Plans

Salary Increase Rate – 3.00% annually

Termination Rates – Sample rates below from 2006-2011 PERAC experience study.

Service	Male	Female
0	15.00%	15.00%
5	7.60%	7.60%
10	5.40%	5.40%
15	3.30%	3.30%
20	2.00%	2.00%

Retirement Rates – Sample rates below from 2006-2011 MTRS experience study

Age	Male Teachers	Female Teachers
45 - 49	0.00%	0.00%
50 - 51	2.00%	1.50%
52	2.00%	1.50%
53	2.00%	1.50%
54	2.00%	2.00%
55	6.00%	5.00%
56	20.00%	15.00%
57	40.00%	35.00%
58	50.00%	35.00%
59	50.00%	35.00%
60	40.00%	35.00%
61	40.00%	35.00%
62	35.00%	35.00%
63	35.00%	35.00%
64	35.00%	35.00%
65	35.00%	35.00%
66	40.00%	35.00%
67	40.00%	30.00%
68	40.00%	30.00%
69	40.00%	30.00%
70	100.00%	100.00%
71	100.00%	100.00%
72	100.00%	100.00%

APPENDIX

ASSUMPTIONS (CONTINUED)

Grade Change Matrix -

Grade Movement	
Steps	Grade
	Masters of Arts / Ph. D.
1	0%
2	0%
3	10%
4	10%
5	15%
6	15%
7	25%
8	25%
9	33%
10	33%
11	40%
12	40%
13	50%

New Hire Demographics -

Age	Percentage
25	45%
35	30%
45	20%
55	5%

Age 25		
Step	Grade	Age Weight
1	1	67%
2	2	33%

Age 35		
Step	Grade	Age Weight
1	2	25%
5	2	25%
6	2	15%
7	2	35%

Age 45		
Step	Grade	Age Weight
2	1	20%
2	2	30%
5	2	20%
9	2	30%

Age 55		
Step	Grade	Age Weight
2	1	20%
6	1	15%
5	2	20%
7	2	45%

APPENDIX
PROPOSED PAY MATRIX

Proposed Pay Matrix¹		
Steps²	Grades	
	Bachelor of Arts	Masters of Arts / Ph. D.
1	51,000	55,500
2	53,800	58,400
3	56,600	61,300
4	59,400	64,200
5	62,200	67,100
6	65,000	70,000
7	67,800	72,900
8	70,600	75,800
9	73,400	78,700
10	76,200	81,600
11	79,000	84,500
12	81,800	87,400
13	84,600	90,300

¹ The Proposed Pay Matrix was chosen based on Odyssey’s experience and data collected from working with many school districts and municipal entities across Massachusetts and the United States.

² Steps represent the number of years of service with the Foxborough Regional Charter School (This includes 100% of the service accumulated at Foxborough and 50% of the service accumulated at other organizations). 13 steps were chosen as it is industry practice to have between 10-15 steps.