



FRANKLIN REGIONAL RETIREMENT SYSTEM

FINANCIAL REPORTING AND DISCLOSURES Governmental Accounting Standards Board Statements 67 and 68

**Disclosures as of
December 31, 2020**

KMS Actuarial, LLC
52 Hunt Road
Kingston, NH 03848

June, 2021



June 18, 2021

Mr. Dale Kowacki
Executive Director
Franklin Regional Retirement System
278 Main Street, Suite 311
Greenfield, MA 01301

Dear Dale:

We are pleased to present the enclosed report providing financial reporting and disclosures under Governmental Accounting Standards Board (GASB) Statement No. 67, Financial Reporting for Pension Plans (GASB 67), and GASB Statement No. 68, Accounting and Financial Reporting for Pensions (GASB 68) for the Franklin Regional Retirement System and participating employers as of December 31, 2020. Results are based on liabilities developed in an actuarial valuation performed as of January 1, 2020 and rolled forward to the plan's measurement date of December 31, 2020.

The Principal Valuation Results are provided in Section 1. The Notes to the Financial Statements and the Required Supplementary Information are provided in Sections 2 and 3, respectively. Employer Reporting Amounts Under GASB 68 are provided in Section 4. Finally, a Glossary of Terms is provided in Section 5.

The financial reporting and disclosures contained in this report are based on the member data provided by the Franklin Regional Retirement Board, asset information reported to the Public Employee Retirement Administration Commission (PERAC) by the Retirement Board and plan provisions contained in Chapter 32 of the Massachusetts General Laws. Although we did not audit the data used in the valuation and disclosure calculations, we believe that the information is complete and reliable.

Liabilities presented in this report are based on a long-term investment return rate of 7.75%, net of investment expense, compounded annually. The long-term investment return rate was selected by the Retirement Board. While we have prepared this report using the Board's adopted assumption of 7.75%, we cannot support an assumed rate of return as high as 7.75%. In our professional opinion, use of a long-term investment return assumption of 7.75% as of the measurement date is not reasonable based on our review of analyses provided by various investment consultants and current inflation projections developed by expert forecasters.

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

52 Hunt Road • Kingston, New Hampshire 03848-3456 • phone: (603) 792-9494 • kmsactuaries.com

Mr. Dale Kowacki

June 18, 2021

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This report was completed in accordance with generally accepted actuarial standards and procedures, and conforms to the Code of Professional Conduct of the American Academy of Actuaries. The actuarial assumptions used in the determination of costs are reasonably related to the experience of the Plan and to reasonable expectations, and represent our best estimate of anticipated long-term experience under the Plan, except as noted in the preceding paragraph regarding the long-term investment return assumption.

Future actuarial valuation results may differ significantly from the current results presented in this report. Examples of potential sources of volatility include plan experience differing from that anticipated by the economic or demographic assumptions, the effect of new entrants, changes in economic or demographic assumptions, the effect of law changes and the delayed effect of smoothing techniques.

Our valuation follows generally accepted actuarial methods and we perform such tests as we consider necessary to assure the accuracy of the results. The amounts presented in this report have been appropriately determined according to the actuarial assumptions and methods stated herein.

This report is intended for the sole use of the Franklin Regional Retirement System and participating employers and is intended to provide information to comply with the stated purpose of the report. It may not be appropriate for other purposes.

The undersigned credentialed actuaries are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinion contained herein. They are available to answer any questions with regard to this report.

Respectfully submitted,



Linda L. Bournival, FSA
Member, American Academy of Actuaries
(603) 792-9494



Amanda J. Makarevich, ASA
Member, American Academy of Actuaries
(603) 792-9494

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EXECUTIVE SUMMARY

GASB 67 and GASB 68

In June 2012, the GASB approved two related Statements that significantly changed the way pension plans and governments account and report pension liabilities. Effective for plans with fiscal years beginning after June 15, 2013, **GASB Statement No. 67**, *Financial Reporting for Pension Plans*, replaced the requirements of Statement No. 25 and effective for employers with fiscal years beginning after June 15, 2014, **GASB Statement No. 68**, *Accounting and Financial Reporting for Pensions*, replaced the requirements of Statement No. 27.

The pension standards reflect changes from those previously in place regarding how governments calculate total pension liability and pension expense. Further, the standards contain requirements for disclosing information in the notes to financial statements and presenting required supplementary information following the notes.

GASB 67 requires defined benefit pension plans, such as the Franklin Regional Retirement System, to present a statement of fiduciary net position (pension plan assets) and a statement of changes in fiduciary net position. Further, the statement requires that notes to financial statements include descriptive information such as the types of benefits provided, the classes of plan members covered and the composition of the pension plan's retirement board. Finally, GASB 67 requires pension plans to present in required supplementary information the sources of the changes in the net pension liability and information about the actuarially determined contributions compared with the actual contributions made to the plan and related ratios.

GASB 67 and GASB 68 require projected benefit payments be discounted to their actuarial present value using the single rate that reflects a long-term expected rate of return on pension plan investments to the extent that the pension plan's assets are sufficient to pay benefits and pension plan assets are expected to be invested using a strategy to achieve that return and a tax-exempt, high-quality municipal bond rate to the extent that the conditions for use of the long-term expected rate of return are not met.

GASB 68 establishes standards for measuring and recognizing liabilities, deferred outflows of resources, deferred inflows of resources and pension expense by state and local governments.

The effective date for GASB 67 is for plan years beginning after June 15, 2013, which is the fiscal year ending December 31, 2014 for the Franklin Regional Retirement System. The effective date for GASB 68 is for employers' fiscal years beginning after June 15, 2014. The disclosures prepared as of December 31, 2020 (the measurement date) presents information to assist the Franklin Regional Retirement Board in providing the required information under GASB 68 to participating employers.

GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*, clarifies the application of certain provisions of Statements 67 and 68 with regard to the following issues:

- (1) Information about investment-related factors that significantly affect trends in the amounts reported for GASB 67 and GASB 68 should be limited to those factors over which the pension plan or participating governments have influence (such as an investment policy) and
- (2) The contribution-related schedules in the RSI should exclude amounts associated with payables to the pension plan that arose in a prior fiscal year.

GASB Statement No. 82, *Pension Issues - An Amendment of GASB Statements No. 67, No. 68, and No. 73*, clarifies the definition of covered payroll, that a deviation from the Actuarial Standards of Practice with respect to selection of assumptions is not considered to be in conformity with GASB 67, GASB 68 and GASB 73, and that employer-paid member contributions are to be classified as plan member contributions.

EXECUTIVE SUMMARY

A summary of principal results from the current disclosures and prior disclosures follows.

Disclosure Date	December 31, 2020	December 31, 2019	% Change
Valuation Date	January 1, 2020	January 1, 2020	
Membership Data			
Active Plan Members	1,066	1,044	2.1%
Inactive Members Currently in Receipt	666	656	1.5%
Inactive Members Deferred	625	611	2.3%
Total Plan Members	2,357	2,311	2.0%
Covered Payroll	\$32,646,666	\$31,398,150	4.0%
Net Pension Liability			
Discount Rate	7.75%	7.75%	
Total Pension Liability (TPL)	\$214,134,900	\$205,992,101	4.0%
Fiduciary Net Position (FNP)	173,563,336	157,113,481	10.5%
Net Pension Liability (NPL)	\$40,571,564	\$48,878,620	(17.0%)
FNP as % of TPL	81.1%	76.3%	6.3%
Pension Expense			
Pension Expense	\$4,930,734	\$9,162,201	(46.2%)
Deferred Outflows	\$1,071,889	\$2,553,418	
Deferred Inflows	\$9,803,220	\$5,315,215	
Recognition Period	4.65	4.65	

EXECUTIVE SUMMARY

Fiduciary Net Position

Pension plan investments are reported at market value as of the measurement date. The fiduciary net position as of the current and prior measurement dates are shown in Section 1, Fiduciary Net Position.

Total Pension Liability

The Total Pension Liability is based on liabilities developed in an actuarial valuation performed as of January 1, 2020 and rolled forward to the plan's measurement date of December 31, 2020 and is shown in Section 1, Total Pension Liability.

Benefit Changes

All benefit provisions remained the same from the prior measurement date. The Plan provisions used in these disclosures are detailed in Section 5, Summary of Plan Provisions, in the most recent funding actuarial report.

Assumption Changes

All of the Actuarial Assumptions and Methods used in these disclosures are the same as the last measurement date. The Actuarial Assumptions and Methods used in these disclosures are detailed in Section 6, Actuarial Assumptions and Methods, in the most recent funding valuation report.

Pension Expense

The Pension Expense for the fiscal year ending December 31, 2020 is \$4,930,734 and is developed in Exhibit 4.2. Pension Expense, as well as the Net Pension Liability and Deferred Outflows of Resources and Deferred Inflows of Resources, are developed for each member unit and are shown in Appendix C. Amounts by employer are developed using a proportionate share, the proportion of each employer's contribution to the aggregate amount of employer contributions, as shown in Exhibit 4.3.

COVID-19 Pandemic

The assumptions in this report do not reflect the potential impacts of the COVID-19 pandemic on the System. Especially in the short range, the pandemic is likely to materially affect the economic and demographic experience, in a way not anticipated by the assumptions on which the projections are based.

SECTION 1 - PRINCIPAL VALUATION RESULTS

Fiduciary Net Position

Asset information was provided by the Franklin Regional Retirement Board. The Trust Fund Composition, Asset Activity and the Gain or Loss on Pension Plan Investments for the current and prior fiscal years are as follows:

Fiscal Year Ended December 31 **2020** **2019**

Trust Fund Composition at Fiscal Year-End		
Cash	\$ 1,492,254	\$ 1,579,892
Individually Owned Short Term Investments	0	0
Fixed Income Securities	0	0
Equities (at market value)	40,147,813	35,253,939
Pooled Short Term Funds	0	0
Pooled Domestic Equity Funds	17,993,897	15,440,205
Pooled International Equity Funds	9,421,021	8,197,922
Pooled Global Equity Funds	0	0
Pooled Domestic Fixed Income Funds	13,716,973	7,465,181
Pooled International Fixed Income Funds	0	0
Pooled Global Fixed Income Funds	6,890,847	6,604,240
Pooled Alternative/Private Equity	0	0
Pooled Real Estate Funds	16,762,607	16,659,579
Pooled Domestic Balanced Funds	0	0
Pooled International Balanced Funds	0	0
Hedge Funds	0	0
PRIT Cash	0	0
PRIT Fund	69,246,008	68,826,976
Interest Due and Accrued	14	1,149
Prepaid Expenses	8,308	6,610
Accounts Receivable (A)	93,184	65,878
Land	0	0
Buildings	0	0
Accumulated Depreciation - Buildings	0	0
Accounts Payable (A)	(2,209,591)	(2,988,090)
Auditor or Other Adjustments	0	0
Total Market Value of Assets	\$ 173,563,335	\$ 157,113,481

SECTION 1 - PRINCIPAL VALUATION RESULTS

Fiduciary Net Position

Fiscal Year Ended December 31 2020 2019

Asset Activity		
Market value as of beginning of year	\$ 157,113,481	\$ 136,400,418
Contributions - employer	7,268,256	6,871,971
Contributions - member	3,318,356	3,639,392
Net investment income	19,627,421	23,505,988
Benefit payments, including refunds of member contributions	(13,173,421)	(12,736,941)
Administrative expenses	(590,757)	(567,347)
Other	0	0
Market Value as of end of year	\$ 173,563,336	\$ 157,113,481

Money-Weighted Rate of Return	13.19%	17.04%
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(Gain) / Loss on Pension Plan Investments		
Projected earnings	\$ 12,027,192	\$ 10,442,368
Actual earnings	19,627,421	23,505,988
(Gain) / Loss on pension plan investments	\$ (7,600,229)	\$ (13,063,620)

SECTION 1 - PRINCIPAL VALUATION RESULTS

Total Pension Liability

The Total Pension Liability, developed using the Entry Age Normal funding method, is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service. The total pension liability as of the December 31, 2020 measurement date was developed from an actuarial valuation as of January 1, 2020 and rolled forward to the pension plan's fiscal year-end.

The Service Cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year. Only active employees who have not reached the age at which the probability of retirement is 100% incur a service cost.

Actuarial gains and losses arise from the difference between estimates and actual experience, excluding amounts related to benefit changes and changes in assumptions or other inputs.

The development of the Total Pension Liability from the beginning of the measurement period, December 31, 2019 to the end of the measurement period, December 31, 2020 is shown below:

Measurement Date	December 31, 2020
1. Total Pension Liability, beginning of year:	
a. Actives	\$ 81,248,800
b. Retired and Disabled Members and Beneficiaries	120,386,879
c. Inactive Members	4,356,422
d. Total Pension Liability at 7.75% (a. + b. + c.)	\$ 205,992,101
2. Service Cost	\$ 5,440,652
3. Benefit Payments	(13,173,421)
4. Interest [7.75% x (1.d. + 2. + .5 x 3)]	\$ 15,875,568
5. Changes of benefit terms	-
6. Differences between expected and actual experience	-
7. Changes of assumptions or other inputs	-
8. Total Pension Liability, end of year (1.d. + 2. + 3. + 4. + 5. + 6. + 7.)	
a. Actives	\$ 93,407,885
b. Retired and Disabled Members and Beneficiaries	116,032,970
c. Inactive Members	4,694,045
d. Total Pension Liability at 7.75% (a. + b. + c.)	\$ 214,134,900

SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

Plan Description

Plan administration

The Franklin Regional Retirement System (the "System") is a cost-sharing, multiple-employer defined benefit pension plan that provides pensions for eligible employees of 37 participating employers. The System is a member of the Massachusetts Contributory Retirement System and is governed by Chapter 32 of the Massachusetts General Laws. The System does not have the authority to amend benefit provisions.

The System is governed by a Retirement Board made up of five elected and appointed members.

Plan membership

At December 31, 2020, pension plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefits	666
Inactive plan members entitled to but not yet receiving benefits	625
Active plan members	1,066
	<hr/>
	2,357

Benefits provided

The System provides retirement, disability and death benefits. Retirement benefits are determined as a percentage of the member's 3-year (5-year for members hired after April 1, 2012) final average compensation times the member's years of service. The percentage is based on the age of the member at retirement and his or her Group classification. Cost-of-living adjustments of 3% of the first \$17,000 of the annual retirement allowance are provided at the discretion of the System's Retirement Board. A summary of the benefits is outlined in the January 1, 2020 actuarial valuation report.

Contributions

Plan members are required to contribute a percentage of their annual compensation that varies according to their membership date, as follows:

Prior to 1975	5% of Salary
1975 - 1983	7% of Salary
1984 - June 30, 1996	8% of Salary
July 1, 1996 - present	9% of Salary
1979 - present	An additional 2% of Salary in excess of \$30,000.
Group 1 members hired on or after April 2, 2012	6% of Salary with 30 or more years of creditable service.

Employer contributions are determined in accordance with the requirements set forth in Section 22D and Section 22F of Chapter 32 of the Massachusetts General Laws ("M.G.L."). The appropriation is comprised of the annual employer normal cost and amortization payments to pay the unfunded actuarial accrued liability.

SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

Net Pension Liability

The components of the Net Pension Liability at December 31, 2020, were as follows:

Total Pension Liability	\$ 214,134,900
Fiduciary Net Position	(173,563,335)
Net Pension Liability	\$ 40,571,565

Fiduciary Net Position as a percentage of the Total Pension Liability 81.1%

Actuarial assumptions

The Total Pension Liability was determined by an actuarial valuation as of January 1, 2020, rolled forward to the measurement date of December 31, 2020 using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.2% per year
Salary increases	Group 1: 6% - 4.25%, based on service Group 4: 7% - 4.75%, based on service
Investment rate of return	7.75%, net of pension plan investment expense, including inflation

Mortality rates were based on the RP-2014 Blue Collar Mortality Table with full generational mortality improvement using Scale MP-2018. For disabled lives, the mortality rates were based on the RP-2014 Blue Collar Mortality Table set forward one year with full generational mortality improvement using Scale MP-2018.

SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

Long-Term Real Rates of Return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of December 31, 2020 (see the discussion of the pension plan's investment policy) are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rates of Return¹
PRIT Core	40%	5.60%
Domestic Equity	32%	8.20%
International Equity	5%	5.90%
Real Estate	10%	6.00%
Fixed Income	13%	2.70%
Total	100%	

¹ Provided by Dahab Associates, Inc. (inclusive of fees). Inflation of 2.2% is added to the long-term expected real rates of return to approximate the long-term expected rate of return.

SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

Discount Rate

The discount rate used to measure the Total Pension Liability is 7.75%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rates and that contributions from participating employers will be made in accordance with Sections 22D and 22F of Chapter 32 of the Massachusetts General Laws. Based on those assumptions, the pension plan's Fiduciary Net Position was projected to be available to make all projected benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate:

The following presents the Net Pension Liability calculated using the discount rate of 7.75%, as well as what the Net Pension Liability would be if it were calculated using a discount rate 1-percentage point lower (6.75%) or 1-percentage point higher (8.75%) than the current rate:

	1% Decrease (6.75%)	Current Discount Rate (7.75%)	1% Increase (8.75%)
Total Pension Liability	\$ 237,689,728	\$ 214,134,900	\$ 194,193,647
Fiduciary Net Position	173,563,336	173,563,336	173,563,336
Net Pension Liability	\$ 64,126,392	\$ 40,571,564	\$ 20,630,311

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.1 - Changes in Net Pension Liability and Related Ratios

Fiscal Year Ended December 31	2020	2019	2018	2017	2016
Total Pension Liability					
Service cost	\$ 5,440,652	\$ 5,265,765	\$ 5,063,236	\$ 5,207,589	\$ 5,089,632
Interest	15,875,568	15,239,247	14,639,832	13,899,079	12,791,108
Changes of benefit terms	-	-	-	(293,031)	1,003,761
Differences between expected and actual experience	-	(999,252)	-	1,964,150	(146,259)
Changes of assumptions	-	1,485,132	-	180,697	5,736,511
Benefit payments, including refunds of member contributions	(13,173,421)	(12,736,941)	(11,605,484)	(10,906,590)	(9,686,040)
Net change in Total Pension Liability	<u>\$ 8,142,799</u>	<u>\$ 8,253,951</u>	<u>\$ 8,097,584</u>	<u>\$ 10,051,894</u>	<u>\$ 14,788,713</u>
Total Pension Liability--beginning	<u>\$ 205,992,101</u>	<u>\$ 197,738,150</u>	<u>\$ 189,640,566</u>	<u>\$ 179,588,672</u>	<u>\$ 164,799,959</u>
Total Pension Liability--ending (a)	<u><u>\$ 214,134,900</u></u>	<u><u>\$ 205,992,101</u></u>	<u><u>\$ 197,738,150</u></u>	<u><u>\$ 189,640,566</u></u>	<u><u>\$ 179,588,672</u></u>
Fiduciary Net Position					
Contributions--employer	\$ 7,268,256	\$ 6,871,971	\$ 6,506,893	\$ 6,166,761	\$ 5,875,820
Contributions--member	3,318,356	3,639,392	3,281,580	3,310,425	3,098,432
Net investment income	19,627,421	23,505,988	(5,160,455)	18,794,508	10,050,389
Benefit payments, including refunds of member contributions	(13,173,421)	(12,736,941)	(11,605,484)	(10,906,590)	(9,686,040)
Administrative expenses	(590,757)	(567,347)	(542,267)	(495,399)	(498,301)
Other	-	-	-	-	-
Net change in Fiduciary Net Position	<u>\$ 16,449,855</u>	<u>\$ 20,713,063</u>	<u>\$ (7,519,733)</u>	<u>\$ 16,869,705</u>	<u>\$ 8,840,300</u>
Fiduciary Net Position--beginning	<u>\$ 157,113,481</u>	<u>\$ 136,400,418</u>	<u>\$ 143,920,151</u>	<u>\$ 127,050,446</u>	<u>\$ 118,210,146</u>
Fiduciary Net Position--ending (b)	<u><u>\$ 173,563,336</u></u>	<u><u>\$ 157,113,481</u></u>	<u><u>\$ 136,400,418</u></u>	<u><u>\$ 143,920,151</u></u>	<u><u>\$ 127,050,446</u></u>
Net Pension Liability and Related Ratios					
Net Pension Liability--ending (a) -- (b)	<u><u>\$ 40,571,564</u></u>	<u><u>\$ 48,878,620</u></u>	<u><u>\$ 61,337,732</u></u>	<u><u>\$ 45,720,415</u></u>	<u><u>\$ 52,538,226</u></u>
Fiduciary Net Position as a percentage of the Total Pension Liability	81.05%	76.27%	68.98%	75.89%	70.75%
Covered Payroll	\$ 32,646,666	\$ 31,398,150	\$ 30,220,970	\$ 29,460,407	\$ 33,556,164
Net Pension Liability as a percentage of Covered Payroll	124.27%	155.67%	202.96%	155.19%	156.57%

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.1 - Changes in Net Pension Liability and Related Ratios (continued)

Fiscal Year Ended December 31	2015	2014	2013	2012	2011
Total Pension Liability					
Service cost	\$ 4,703,273	\$ 4,703,273			
Interest	12,116,265	11,306,271			
Changes of benefit terms	962,410	\$ -			
Differences between expected and actual experience	-	-			
Changes of assumptions	-	\$ -			
Benefit payments, including refunds of member contributions	(9,235,255)	(11,287,291)			
Net change in Total Pension Liability	<u>\$ 8,546,693</u>	<u>\$ 4,722,253</u>			
Total Pension Liability--beginning	<u>\$ 156,253,266</u>	<u>\$ 151,531,013</u>			
Total Pension Liability--ending (a)	<u><u>\$ 164,799,959</u></u>	<u><u>\$ 156,253,266</u></u>			
Fiduciary Net Position					
Contributions--employer	\$ 5,645,345	\$ 5,418,158			
Contributions--member	2,971,069	3,270,956			
Net investment income	579,359	\$ 8,362,434			
Benefit payments, including refunds of member contributions	(9,235,255)	(11,287,291)			
Administrative expenses	(469,365)	\$ (403,802)			
Other	-	-			
Net change in Fiduciary Net Position	<u>\$ (508,847)</u>	<u>\$ 5,360,455</u>			
Fiduciary Net Position--beginning	<u>\$ 118,718,993</u>	<u>\$ 113,358,538</u>			
Fiduciary Net Position--ending (b)	<u><u>\$ 118,210,146</u></u>	<u><u>\$ 118,718,993</u></u>			
Net Pension Liability and Related Ratios					
Net Pension Liability--ending (a) -- (b)	<u><u>\$ 46,589,813</u></u>	<u><u>\$ 37,534,273</u></u>			
Fiduciary Net Position as a percentage of the Total Pension Liability	71.73%	75.98%			
Covered Payroll	\$ 32,088,838	\$ 30,854,652			
Net Pension Liability as a percentage of Covered Payroll	145.19%	121.65%			

Note: Only 7 years are presented here and on the previous page, beginning with the year of implementation; 10 years of information will be required.

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.2 - Schedule of Employer Contributions

Fiscal Year Ended December 31	2020	2019	2018	2017	2016
Actuarially Determined Contribution	\$ 7,268,256	\$ 6,871,971	\$ 6,506,893	\$ 6,166,761	\$ 5,875,820
Contributions in relation to the Actuarially Determined Contribution	<u>7,268,256</u>	<u>6,871,971</u>	<u>6,506,893</u>	<u>6,166,761</u>	<u>5,875,820</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 32,646,666	\$ 31,398,150	\$ 30,220,970	\$ 29,460,407	\$ 33,556,164
Contributions as a percentage of Covered Payroll	22.26%	21.89%	21.53%	20.93%	17.51%

The contribution shown above, \$7,268,256, represents the actual contributions made by member units of the Franklin Regional Retirement System for the 2021 fiscal year.

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.2 - Schedule of Employer Contributions (continued)

Fiscal Year Ended December 31	2015	2014	2013	2012	2011
Actuarially Determined Contribution	\$ 5,645,345	\$ 5,888,495			
Contributions in relation to the Actuarially Determined Contribution	5,645,345	\$ 5,888,495			
Contribution deficiency (excess)	\$ -	\$ -			
Covered Payroll	\$ 32,088,838	\$ 30,854,652			
Contributions as a percentage of Covered Payroll	17.59%	19.08%			

Note: Only 7 years are presented here and on the previous page, beginning with the year of implementation; 10 years of information will be required.

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 3.3 - Investment Returns

Fiscal Year Ended December 31	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Annual money-weighted rate of return, net of investment expense	13.19%	17.04%	-4.05%	14.48%	8.24%	0.57%	7.37%			

The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of pension plan investments by the proportion of time they are available to earn a return during that period. The rate of return is then calculated by solving, through an iterative process, for the rate that equates the sum of the weighted external cash flows into and out of the pension plan investments to the ending fair value of pension plan investments.

Appendix A shows the details of the calculation of the money-weighted rate of return for the current fiscal year.

Note: Only 7 years are presented here, beginning with the year of implementation; 10 years of information will be required.

SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

Notes to the Required Supplementary Information

Changes of benefit terms

All benefit provisions remained the same from the prior measurement date. The Plan provisions used in these disclosures are detailed in Section 5, Summary of Plan Provisions, in the most recent funding actuarial report.

Changes of assumptions

All of the Actuarial Assumptions and Methods used in these disclosures are the same as the last measurement date. The Actuarial Assumptions and Methods used in these disclosures are detailed in Section 6, Actuarial Assumptions and Methods, in the most recent funding valuation report.

Methods and assumptions used in calculations of Actuarially Determined Contributions

The Actuarially Determined Contributions in the schedule of employers' contributions are calculated as of July 1 of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contributions reported in that schedule:

Actuarial cost method	Entry Age Normal
Amortization method	UAAL Increasing dollar amount at 4% to reduce the Unfunded Actuarial Accrued Liability to zero on or before June 30, 2034. The annual increase in appropriation is further limited to 5.75%.
Asset valuation method	The Actuarial Value of Assets is the market value of assets as of the valuation date reduced by the sum of: a) 75% of gains and losses of the prior year, b) 50% of gains and losses of the second prior year, and c) 25% of gains and losses of the third prior year. Investment gains and losses are determined by the excess or deficiency of the expected return over the actual return on the market value. The actuarial valuation of assets is further constrained to be not less than 90% or more than 110% of market value.
Inflation	2.2% per year
Salary increases	Group 1: 6% - 4.25%, based on service Group 4: 7% - 4.75%, based on service
Payroll growth	3.5% per year
Investment rate of return	7.75%, net of pension plan investment expense, including inflation.

SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 68

Exhibit 4.1 - Deferred Outflows of Resources and Deferred Inflows of Resources

Deferred Outflows of Resources and Deferred Inflows of Resources arising from differences between expected and actual experience are recognized in Pension Expense over the average expected remaining service life of all active and inactive members.

					Balances at December 31, 2020	
	Experience Losses	Experience Gains	Amounts Recognized in Pension Expense through December 31, 2020	Deferred Outflows of Resources	Deferred Inflows of Resources	
Year	(a)	(b)	(c)	(a) - (c)	(b) - (c)	
2016	\$ -	\$ 146,259	\$ (146,259)	\$ -	\$ -	
2017	1,964,150	-	1,757,628	206,522	-	
2018	-	-	-	-	-	
2019	-	999,252	(429,786)	-	569,466	
2020	-	-	-	-	-	
Total				<u>\$ 206,522</u>	<u>\$ 569,466</u>	

Deferred Outflows of Resources and Deferred Inflows of Resources arising from changes of assumptions are recognized in Pension Expense over the average expected remaining service life of all active and inactive members.

					Balances at December 31, 2020	
	Increases in the Total Pension Liability	Decreases in the Total Pension Liability	Amounts Recognized in Pension Expense through December 31, 2020	Deferred Outflows of Resources	Deferred Inflows of Resources	
Year	(a)	(b)	(c)	(a) - (c)	(b) - (c)	
2016	\$ 5,736,511	\$ -	\$ 5,736,511	\$ -	\$ -	
2017	180,697	-	161,696	19,001	-	
2018	-	-	-	-	-	
2019	1,485,132	-	638,766	846,366	-	
2020	-	-	-	-	-	
Total				<u>\$ 865,367</u>	<u>\$ -</u>	

SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 68

Exhibit 4.1 - Deferred Outflows of Resources and Deferred Inflows of Resources

Deferred Outflows of Resources and Deferred Inflows of Resources arising from differences between projected and actual earnings on Pension Plan investments are recognized in Pension Expense over five years.

				Balances at December 31, 2020	
	Investment Earnings Less Than Projected	Investment Earnings Greater Than Projected	Amounts Recognized in Pension Expense through December 31, 2020	Deferred Outflows of Resources	Deferred Inflows of Resources
Year	(a)	(b)	(c)	(a) - (c)	(b) - (c)
2016	\$ -	\$ 935,994	\$ (935,994)	\$ -	\$ -
2017	-	9,022,685	(7,218,148)	-	1,804,537
2018	16,222,845	-	9,733,707	6,489,138	-
2019	-	13,063,620	(5,225,448)	-	7,838,172
2020	-	7,600,229	(1,520,046)	-	6,080,183
Subtotal				<u>\$ 6,489,138</u>	<u>\$ 15,722,892</u>
Net				<u>\$ -</u>	<u>\$ 9,233,754</u>

SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 68

Exhibit 4.1 - Deferred Outflows of Resources and Deferred Inflows of Resources

Deferred Outflows of Resources and Deferred Inflows of Resources arising from changes in proportion and differences between employer contributions and proportionate share of contributions are recognized in Pension Expense over the average expected remaining service life of all active and inactive members.

Balances at December 31, 2020					
	Proportionate Share* Outflows	Proportionate Share* Inflows	Amounts Recognized in Pension Expense through December 31, 2020	Deferred Outflows of Resources	Deferred Inflows of Resources
Year	(a)	(b)	(c)	(a) - (c)	(b) - (c)
2016	\$ 686,573	\$ 686,573	\$ 686,573	\$ -	\$ -
2017	677,438	677,438	606,207	71,231	71,231
2018	405,157	405,157	271,915	133,242	133,242
2019	935,437	935,437	402,340	533,097	533,097
2020	643,136	643,136	138,306	504,830	504,830
Total				<u>\$ 1,242,400</u>	<u>\$ 1,242,400</u>

* Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources will be recognized in Pension Expense as follows:

Year ended December 31		
2021	\$	(2,362,725)
2022	\$	(783,711)
2023	\$	(4,064,850)
2024	\$	(1,520,045)
2025	\$	-
Thereafter	\$	-
Total Deferred Outflows	\$	2,314,289
Total Deferred Inflows	\$	11,045,620

SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 68

Exhibit 4.2 - Pension Expense

Fiscal Year Ended December 31, 2020

1. Service cost		\$ 5,440,652
2. Interest on the total pension liability		
a. Total Pension Liability, beginning of year	205,992,101	
b. Service cost, beginning of year	5,440,652	
c. Benefit payments, including refunds of employee contributions	(13,173,421)	
d. Interest on Total Pension Liability		15,875,568
3. Differences between expected and actual experience		207,119
4. Changes of benefit terms		-
5. Changes of assumptions		1,042,122
6. Employee contributions		(3,318,356)
7. Projected earnings on pension plan investments		
a. Fiduciary Net Position, beginning of year	157,113,481	
b. Employer contributions	7,268,256	
c. Employee contributions	3,318,356	
d. Benefit payments, including refunds of employee contributions	(13,173,421)	
e. Administrative expenses and other	(590,757)	
f. Total projected earnings		(12,027,192)
8. Differences between projected and actual earnings on plan investments		(2,879,936)
9. Pension plan administrative expenses		590,757
10. Other changes in Fiduciary Net Position		-
11. Total Pension Expense		<u>\$ 4,930,734</u>

SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 68

Exhibit 4.3 - Proportionate Share of Contributions

The basis of an employer's allocation of the collective pension amount is consistent with the manner in which contributions to the plan are made. The schedule of employer allocations for 2020 and 2019, based on employer contributions made for the 2021 fiscal year and 2020 fiscal year, respectively, shows the proportionate relationship of each employer to all employers and each employer's allocation percentage.

Entity	2020		2019	
	Employer Contribution	Proportionate Share of Total Employer Contribution	Employer Contribution	Proportionate Share of Total Employer Contribution
Town of Ashfield	105,992	1.458287%	96,204	1.399948%
Town of Bernardston	116,882	1.608116%	108,485	1.578659%
Bernardston Fire & Water District	4,356	0.059932%	3,411	0.049636%
Town of Buckland	140,839	1.937728%	139,482	2.029723%
Town of Charlemont	79,599	1.095160%	75,053	1.092161%
Town of Colrain	95,828	1.318446%	86,652	1.260948%
Town of Conway	208,354	2.866630%	191,043	2.780032%
Town of Deerfield	691,853	9.518831%	637,266	9.273409%
Town of Erving	348,467	4.794369%	317,268	4.616841%
Franklin County Regional Housing Authority	279,538	3.846012%	268,976	3.914103%
Franklin County Solid Waste Management District	31,060	0.427338%	29,191	0.424784%
Franklin Regional Council of Governments	-	0.000000%	-	0.000000%
Franklin Regional Transit Authority	87,263	1.200604%	82,708	1.203556%
Frontier Regional School District	447,200	6.152783%	425,072	6.185591%
Town of Gill	98,733	1.358414%	94,839	1.380084%
Hawlemont Regional School District	69,694	0.958882%	62,089	0.903511%
Town of Hawley	32,668	0.449461%	29,339	0.426937%
Town of Heath	69,012	0.949499%	62,772	0.913450%
Town of Leverett	199,643	2.746780%	193,090	2.809820%
Town of Leyden	32,668	0.449461%	30,703	0.446786%
Mahar Regional School District	370,247	5.094028%	351,384	5.113293%
Mohawk Regional School District	679,511	9.349024%	636,583	9.263470%
Town of Monroe	26,135	0.359577%	22,516	0.327650%
Town of New Salem	58,078	0.799064%	54,584	0.794299%
New Salem/Wendell Union School District	154,633	2.127512%	139,189	2.025460%
Town of Northfield	188,753	2.596950%	180,126	2.621169%
Town of Orange	944,486	12.994672%	925,592	13.469091%
Orange Housing Authority	7,986	0.109875%	8,870	0.129075%
Pioneer Valley Regional School District	487,854	6.712119%	472,833	6.880602%
Town of Rowe	140,839	1.937728%	144,357	2.100664%
Town of Shelburne	138,661	1.907762%	131,001	1.906309%

SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 68

Exhibit 4.3 - Proportionate Share of Contributions

The basis of an employer's allocation of the collective pension amount is consistent with the manner in which contributions to the plan are made. The schedule of employer allocations for 2020 and 2019, based on employer contributions made for the 2021 fiscal year and 2020 fiscal year, respectively, shows the proportionate relationship of each employer to all employers and each employer's allocation percentage.

Entity	2020		2019	
	Employer Contribution	Proportionate Share of Total Employer Contribution	Employer Contribution	Proportionate Share of Total Employer Contribution
Shelburne Falls Fire District	45,737	0.629271%	44,350	0.645375%
Town of Shutesbury	216,340	2.976505%	205,371	2.988531%
South Deerfield Fire District	17,423	0.239714%	13,646	0.198575%
South Deerfield Water Supply District	39,203	0.539373%	34,114	0.496422%
Town of Sunderland	299,101	4.115169%	272,919	3.971481%
Town of Warwick	58,804	0.809052%	56,630	0.824072%
Town of Wendell	55,900	0.769098%	52,537	0.764511%
Town of Whately	198,916	2.736778%	191,726	2.789971%
Total	7,268,256	100.000000%	6,871,971	100.000000%

SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 68

Exhibit 4.4 - Pension Amounts by Employer

The Schedule of Pension Amounts by Employer is provided in Appendix C. The schedule shows the Net Pension Liability, the various categories of Deferred Outflows of Resources and Deferred Inflows of Resources and Pension Expense for each employer. The schedule includes the differences between expected and actual experience, differences between projected and actual investment earnings and changes of assumptions. Further, each employer is required to recognize Deferred Outflows of Resources and Deferred Inflows of Resources related to (1) the net impact from changes in proportion between periods and (2) differences between actual contributions made by an employer and their proportionate share of contributions.

Each employer's allocation of Pension Expense and Net Pension Liability can be based on the proportion of its contributions to the aggregate amount of employer contributions.

Under GASB 68, gains and losses (investment, experience or assumption changes) and changes in employer's proportionate shares related to pensions are recognized in Pension Expense systematically over time.

The first amortized amounts are recognized in Pension Expense for the year the gain or loss occurs. The remaining amounts are categorized as Deferred Inflows and Deferred Outflows to be recognized in future Pension Expense.

The amortization period differs depending on the source of the gain or loss:

Difference between projected and actual earnings	5 year straight-line amortization
All other amounts	Straight-line amortization over the average expected remaining service lives of all members that are provided with benefits (actives, inactive and retirees) as of the beginning of the measurement period

For 2020:

- ◆ Net Pension Liability, Deferred Outflows of Resources, Deferred Inflows of Resources and Pension Expense are allocated to each employer based on its proportionate share of Total Employer Contribution shown in Exhibit 4.3.
- ◆ The difference between expected and actual experience is amortized over the average of the expected future service lives of all participants, with the first amortized amount recognized in Pension Expense in the current year. Similar Deferred Outflows of Resources and Deferred Inflows of Resources were established during prior years, with the first amortized amount recognized in Pension Expense in 2016.
- ◆ Net difference between projected and actual investment earnings (gain on pension plan investments for 2020) is amortized over 5 years, with the first amortized amount recognized in Pension Expense in the current year. Similar Deferred Outflows of Resources and Deferred Inflows of Resources were established during prior years, with the first amortized amount recognized in Pension Expense in 2014.
- ◆ The change in Total Pension Liability as a result of changes in assumptions is amortized over the average of the expected future service lives of all participants, with the first amortized amount recognized in Pension Expense in the current year. Similar Deferred Outflows of Resources and Deferred Inflows of Resources were established during prior years, with the first amortized amount recognized in Pension Expense in 2016.

SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 68

Exhibit 4.4 - Pension Amounts by Employer

For 2020 (continued):

- ◆ There are no differences between employer contributions and the proportionate share of contributions because the Plan utilizes employer contributions as the method of allocation.

- ◆ The net effect of the change in the employer's proportionate shares of the collective Net Pension Liability, collective Deferred Outflows and Deferred Inflows is amortized over the average expected remaining service lives of all members, with the first amortized amount recognized in Pension Expense in the current year. Similar Deferred Outflows of Resources and Deferred Inflows of Resources were established during prior years, with the first amortized amount recognized in 2015.

- ◆ No adjustments have been made for employer contributions made subsequent to the measurement date as defined in paragraph 57 of GASB 68.

SECTION 5 - GLOSSARY OF TERMS

Actuarial Assumptions – Assumptions, based upon past experience or standard tables, used to predict the occurrence of future events affecting the commencement, amount and duration of pension benefits, such as: changes in compensation, mortality, withdrawal, disablement and retirement; rates of investment earnings and asset appreciation or depreciation; and any other relevant items.

Actuarial Cost Method (or Funding Method) – A procedure for allocating the Actuarial Present Value of projected benefit payments to the current year (Service Cost) and the past (Total Pension Liability).

Actuarial (Experience) Gain or Loss – A measure of the difference between actual experience and that expected based upon the set of Actuarial Assumptions during the period between the valuation date and the most recent immediately preceding valuation date.

Actuarial Present Value of Projected Benefit Payments – The dollar value on the valuation date of all benefits expected to be paid to current members based upon the Actuarial Assumptions and the terms of the Plan.

Actuarially Determined Contribution – A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

Actuarial Valuation Date – The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

Covered Payroll – The payroll on which contributions to a pension plan are based.

Deferred Inflow of Resources – Acquisition of resources by a government that is applicable to future reporting periods. Under GASB 68, deferred inflows of resources are made up of experience gains, assumption changes reducing the Total Pension Liability and investment gains that are recognized in future reporting periods.

Deferred Outflow of Resources – Consumption of resources by a government that is applicable to future reporting periods. Under GASB 68, deferred outflows of resources are made up of experience losses, assumption changes increasing the Total Pension Liability and investment losses that are recognized in future reporting periods.

Discount Rate – Single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the sum of:

- (1) a long-term expected rate of return on pension plan investments *to the extent that the pension plan's assets are sufficient to pay benefits and pension plan assets are expected to be invested using a strategy to achieve that return* and
- (2) a tax-exempt, high-quality municipal bond rate *to the extent that the conditions for use of the long-term expected rate of return are not met.*

Entry Age Normal Actuarial Cost Method – A method under which the actuarial present value of the projected benefits of each individual in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age.

SECTION 5 - GLOSSARY OF TERMS

Fiduciary Net Position – The fair market value of assets as of the measurement date.

Funded Ratio – The Actuarial Value of Assets expressed as a percentage of the Actuarial Accrued Liability.

GASB – Governmental Accounting Standards Board.

Long-Term Expected Rate of Return – Long-term expected rate of return on pension plan investments expected to be used to finance the payment of benefits, net of investment expenses.

Measurement Date – The date as of which the Total Pension Liability and Fiduciary Net Position are measured.

Municipal Bond Rate – Yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

Net Pension Liability – The liability of the employer for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Fiduciary Net Position.

Present Value of Future Benefits – The actuarial present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value of money and the probabilities of payment.

Reporting Date – The last day of the Plan or employer's fiscal year.

Service Cost – The portion of the actuarial present value of projected benefit amounts that is attributed to a valuation year.

Total Pension Liability – The portion of the actuarial present value of projected benefit amounts that is attributed to past periods of employee service using the Entry Age Normal cost method based on the requirements of GASB 67 and GASB 68.

Unfunded Actuarial Accrued Liability – The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

APPENDIX A - CALCULATION OF MONEY-WEIGHTED RATE OF RETURN

	Plan Investments/ Net External Cash Flows (a)	Periods Invested (b)	Period Weight (c)=(b)÷12	(d)=(a) x (1+r _{mw}) ^(c)
Beginning value - January 1, 2020	\$ 157,113,481	12	1.00	\$ 177,836,716
Monthly net external cash flows:				
January	(1,068,005)	11	0.92	(1,196,458)
February	(679,766)	10	0.83	(753,702)
March	(787,487)	9	0.75	(864,171)
April	(618,939)	8	0.67	(672,233)
May	(1,467,596)	7	0.58	(1,577,591)
June	(660,456)	6	0.50	(702,665)
July	6,038,445	5	0.42	6,358,359
August	(936,833)	4	0.33	(976,334)
September	(769,834)	3	0.25	(794,053)
October	(818,111)	2	0.17	(835,180)
November	(785,714)	1	0.08	(793,868)
December	(1,465,484)	0	0.00	(1,465,484)
Ending value - December 31, 2020				\$ 173,563,336
Money-weighted rate of return				13.19%

Note: Beginning and ending values are based on amounts reported in the System's 2020 Annual Statement, and monthly cash flows are based on amounts provided by the Retirement Board.

APPENDIX B - SCHEDULE OF DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES

Year	Differences between Expected and Actual Experience	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2016	(146,259)	4.54	(17,395)	-	-	-	-	-	-	-	-	-
2017	1,964,150	4.47	439,407	206,522	-	-	-	-	-	-	-	-
2018	-	4.47	-	-	-	-	-	-	-	-	-	-
2019	(999,252)	4.65	(214,893)	(214,893)	(214,893)	(139,680)	-	-	-	-	-	-
2020	-	4.65	-	-	-	-	-	-	-	-	-	-
Net Increase (Decrease) in Pension Expense			207,119	(8,371)	(214,893)	(139,680)	-	-	-	-	-	-

Year	Changes of Assumptions	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2016	5,736,511	4.54	682,315	-	-	-	-	-	-	-	-	-
2017	180,697	4.47	40,424	19,001	-	-	-	-	-	-	-	-
2018	-	4.47	-	-	-	-	-	-	-	-	-	-
2019	1,485,132	4.65	319,383	319,383	319,383	207,600	-	-	-	-	-	-
2020	-	4.65	-	-	-	-	-	-	-	-	-	-
Net Increase (Decrease) in Pension Expense			1,042,122	338,384	319,383	207,600	-	-	-	-	-	-

APPENDIX B - SCHEDULE OF DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES

Year	Differences between Projected and Actual Earnings on Pension Plan Investments	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2016	(935,994)	5	(187,198)	-	-	-	-	-	-	-	-	-
2017	(9,022,685)	5	(1,804,537)	(1,804,537)	-	-	-	-	-	-	-	-
2018	16,222,845	5	3,244,569	3,244,569	3,244,569	-	-	-	-	-	-	-
2019	(13,063,620)	5	(2,612,724)	(2,612,724)	(2,612,724)	(2,612,724)	-	-	-	-	-	-
2020	(7,600,229)	5	(1,520,046)	(1,520,046)	(1,520,046)	(1,520,046)	(1,520,045)	-	-	-	-	-
Net Increase (Decrease) in Pension Expense			(2,879,936)	(2,692,738)	(888,201)	(4,132,770)	(1,520,045)	-	-	-	-	-

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Ashfield
◆ Current Proportionate Share		1.458287%
◆ Prior Proportionate Share		1.399948%
Beginning Net Pension Liability	\$ 48,878,620	\$ 684,275
Ending Net Pension Liability	\$ 40,571,564	\$ 591,650
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 3,012
◆ Changes of Assumptions	865,367	12,620
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	40,930
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 56,562
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 8,304
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	134,655
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	1,149
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 144,108
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 71,904
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	15,795
Total Employer Pension Expense	\$ 4,930,734	\$ 87,699
Covered Payroll:	\$ 32,646,666	\$ 475,203
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 591,650
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 935,147
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 300,849
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (20,595)
◆ 2022	\$ (783,711)	\$ 211
◆ 2023	\$ (4,064,850)	\$ (49,205)
◆ 2024	\$ (1,520,045)	\$ (17,957)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Bernardston
◆ Current Proportionate Share		1.608116%
◆ Prior Proportionate Share		1.578659%
Beginning Net Pension Liability	\$ 48,878,620	\$ 771,627
Ending Net Pension Liability	\$ 40,571,564	\$ 652,438
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 3,321
◆ Changes of Assumptions	865,367	13,916
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	36,927
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 54,164
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 9,158
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	148,489
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 157,647
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 79,292
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	17,550
Total Employer Pension Expense	\$ 4,930,734	\$ 96,842
Covered Payroll:	\$ 32,646,666	\$ 525,698
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 652,438
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 1,031,227
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 331,759
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (22,774)
◆ 2022	\$ (783,711)	\$ (846)
◆ 2023	\$ (4,064,850)	\$ (57,546)
◆ 2024	\$ (1,520,045)	\$ (22,317)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Bernardston Fire & Water District
◆ Current Proportionate Share		0.059932%
◆ Prior Proportionate Share		0.049636%
Beginning Net Pension Liability	\$ 48,878,620	\$ 24,262
Ending Net Pension Liability	\$ 40,571,564	\$ 24,315
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 124
◆ Changes of Assumptions	865,367	519
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	4,524
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 5,167
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 341
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	5,534
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 5,875
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 2,955
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	847
Total Employer Pension Expense	\$ 4,930,734	\$ 3,802
Covered Payroll:	\$ 32,646,666	\$ 19,380
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 24,315
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 38,432
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 12,364
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (128)
◆ 2022	\$ (783,711)	\$ 799
◆ 2023	\$ (4,064,850)	\$ (1,214)
◆ 2024	\$ (1,520,045)	\$ (165)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Buckland
◆ Current Proportionate Share		1.937728%
◆ Prior Proportionate Share		2.029723%
Beginning Net Pension Liability	\$ 48,878,620	\$ 992,101
Ending Net Pension Liability	\$ 40,571,564	\$ 786,166
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 4,002
◆ Changes of Assumptions	865,367	16,768
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	19,248
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 40,018
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 11,035
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	178,925
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	37,291
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 227,251
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 95,544
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	5,236
Total Employer Pension Expense	\$ 4,930,734	\$ 100,780
Covered Payroll:	\$ 32,646,666	\$ 632,183
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 786,166
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 1,242,595
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 399,759
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (45,296)
◆ 2022	\$ (783,711)	\$ (19,563)
◆ 2023	\$ (4,064,850)	\$ (86,281)
◆ 2024	\$ (1,520,045)	\$ (36,093)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Charlemont
◆ Current Proportionate Share		1.095160%
◆ Prior Proportionate Share		1.092161%
Beginning Net Pension Liability	\$ 48,878,620	\$ 533,833
Ending Net Pension Liability	\$ 40,571,564	\$ 444,323
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 2,262
◆ Changes of Assumptions	865,367	9,477
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	12,710
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 24,449
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 6,237
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	101,124
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 107,361
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 53,999
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	7,633
Total Employer Pension Expense	\$ 4,930,734	\$ 61,632
Covered Payroll:	\$ 32,646,666	\$ 356,386
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 444,323
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 702,286
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 225,935
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (19,509)
◆ 2022	\$ (783,711)	\$ (4,549)
◆ 2023	\$ (4,064,850)	\$ (42,424)
◆ 2024	\$ (1,520,045)	\$ (16,430)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Colrain
◆ Current Proportionate Share		1.318446%
◆ Prior Proportionate Share		1.260948%
Beginning Net Pension Liability	\$ 48,878,620	\$ 616,334
Ending Net Pension Liability	\$ 40,571,564	\$ 534,914
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 2,723
◆ Changes of Assumptions	865,367	11,409
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	30,469
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 44,601
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 7,508
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	121,742
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	24,414
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 153,664
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 65,009
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	3,376
Total Employer Pension Expense	\$ 4,930,734	\$ 68,385
Covered Payroll:	\$ 32,646,666	\$ 429,394
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 534,914
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 845,472
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 271,999
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (28,820)
◆ 2022	\$ (783,711)	\$ (11,158)
◆ 2023	\$ (4,064,850)	\$ (53,196)
◆ 2024	\$ (1,520,045)	\$ (15,889)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Conway
◆ Current Proportionate Share		2.866630%
◆ Prior Proportionate Share		2.780032%
Beginning Net Pension Liability	\$ 48,878,620	\$ 1,358,841
Ending Net Pension Liability	\$ 40,571,564	\$ 1,163,037
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 5,920
◆ Changes of Assumptions	865,367	24,807
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	61,567
Total Deferred Outflows of Resources	<u><u>\$ 2,314,289</u></u>	<u><u>\$ 92,294</u></u>
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 16,324
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	264,698
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Inflows of Resources	<u><u>\$ 11,045,620</u></u>	<u><u>\$ 281,022</u></u>
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 141,346
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	27,396
Total Employer Pension Expense	<u><u>\$ 4,930,734</u></u>	<u><u>\$ 168,742</u></u>
Covered Payroll:	\$ 32,646,666	\$ 937,296
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 1,163,037
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 1,838,266
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 591,395
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (46,600)
◆ 2022	\$ (783,711)	\$ (3,716)
◆ 2023	\$ (4,064,850)	\$ (101,090)
◆ 2024	\$ (1,520,045)	\$ (37,322)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Deerfield
◆ Current Proportionate Share		9.518831%
◆ Prior Proportionate Share		9.273409%
Beginning Net Pension Liability	\$ 48,878,620	\$ 4,532,715
Ending Net Pension Liability	\$ 40,571,564	\$ 3,861,939
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 19,658
◆ Changes of Assumptions	865,367	82,373
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	254,858
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 356,889
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 54,207
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	878,945
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 933,152
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 469,348
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	123,455
Total Employer Pension Expense	\$ 4,930,734	\$ 592,803
Covered Payroll:	\$ 32,646,666	\$ 3,111,733
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 3,861,939
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 6,104,083
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 1,963,764
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (125,844)
◆ 2022	\$ (783,711)	\$ 5,901
◆ 2023	\$ (4,064,850)	\$ (329,344)
◆ 2024	\$ (1,520,045)	\$ (126,976)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Erving
◆ Current Proportionate Share		4.794369%
◆ Prior Proportionate Share		4.616841%
Beginning Net Pension Liability	\$ 48,878,620	\$ 2,256,648
Ending Net Pension Liability	\$ 40,571,564	\$ 1,945,150
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 9,901
◆ Changes of Assumptions	865,367	41,489
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	140,583
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 191,973
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 27,302
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	442,700
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	23,938
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 493,940
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 236,398
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	33,938
Total Employer Pension Expense	\$ 4,930,734	\$ 270,336
Covered Payroll:	\$ 32,646,666	\$ 1,568,409
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 1,945,150
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 3,074,456
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 989,093
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (88,268)
◆ 2022	\$ (783,711)	\$ 7,401
◆ 2023	\$ (4,064,850)	\$ (161,040)
◆ 2024	\$ (1,520,045)	\$ (60,060)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Franklin County Regional Housing Authority
◆ Current Proportionate Share		3.846012%
◆ Prior Proportionate Share		3.914103%
Beginning Net Pension Liability	\$ 48,878,620	\$ 1,913,159
Ending Net Pension Liability	\$ 40,571,564	\$ 1,560,387
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 7,943
◆ Changes of Assumptions	865,367	33,282
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	3,490
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 44,715
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 21,902
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	355,131
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	71,789
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 448,822
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 189,637
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(66,011)
Total Employer Pension Expense	\$ 4,930,734	\$ 123,626
Covered Payroll:	\$ 32,646,666	\$ 1,233,526
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 1,560,387
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 2,466,309
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 793,444
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (130,786)
◆ 2022	\$ (783,711)	\$ (46,905)
◆ 2023	\$ (4,064,850)	\$ (163,041)
◆ 2024	\$ (1,520,045)	\$ (63,375)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Franklin County Solid Waste Management District
◆ Current Proportionate Share		0.427338%
◆ Prior Proportionate Share		0.424784%
Beginning Net Pension Liability	\$ 48,878,620	\$ 207,628
Ending Net Pension Liability	\$ 40,571,564	\$ 173,378
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 883
◆ Changes of Assumptions	865,367	3,698
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	2,136
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 6,717
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 2,434
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	39,459
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 41,893
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 21,071
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	1,175
Total Employer Pension Expense	\$ 4,930,734	\$ 22,246
Covered Payroll:	\$ 32,646,666	\$ 136,039
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 173,378
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 274,036
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 88,161
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (9,026)
◆ 2022	\$ (783,711)	\$ (2,754)
◆ 2023	\$ (4,064,850)	\$ (17,085)
◆ 2024	\$ (1,520,045)	\$ (6,311)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Franklin Regional Council of Governments
◆ Current Proportionate Share		0.000000%
◆ Prior Proportionate Share		0.000000%
Beginning Net Pension Liability	\$ 48,878,620	\$ -
Ending Net Pension Liability	\$ 40,571,564	\$ -
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ -
◆ Changes of Assumptions	865,367	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Outflows of Resources	\$ 2,314,289	\$ -
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ -
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	-
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Inflows of Resources	\$ 11,045,620	\$ -
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ -
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	-
Total Employer Pension Expense	\$ 4,930,734	\$ -
Covered Payroll:	\$ 32,646,666	\$ -
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ -
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ -
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ -
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ -
◆ 2022	\$ (783,711)	\$ -
◆ 2023	\$ (4,064,850)	\$ -
◆ 2024	\$ (1,520,045)	\$ -
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Franklin Regional Transit Authority
◆ Current Proportionate Share		1.200604%
◆ Prior Proportionate Share		1.203556%
Beginning Net Pension Liability	\$ 48,878,620	\$ 588,281
Ending Net Pension Liability	\$ 40,571,564	\$ 487,104
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 2,480
◆ Changes of Assumptions	865,367	10,390
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	35,823
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 48,693
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 6,837
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	110,861
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	1,195
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 118,893
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 59,199
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	29,792
Total Employer Pension Expense	\$ 4,930,734	\$ 88,991
Covered Payroll:	\$ 32,646,666	\$ 386,714
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 487,104
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 769,904
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 247,688
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (8,542)
◆ 2022	\$ (783,711)	\$ 1,269
◆ 2023	\$ (4,064,850)	\$ (44,466)
◆ 2024	\$ (1,520,045)	\$ (18,461)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Frontier Regional School District
◆ Current Proportionate Share		6.152783%
◆ Prior Proportionate Share		6.185591%
Beginning Net Pension Liability	\$ 48,878,620	\$ 3,023,431
Ending Net Pension Liability	\$ 40,571,564	\$ 2,496,280
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 12,707
◆ Changes of Assumptions	865,367	53,244
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	8,784
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 74,735
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 35,038
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	568,133
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	18,476
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 621,647
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 303,377
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	16,155
Total Employer Pension Expense	\$ 4,930,734	\$ 319,532
Covered Payroll:	\$ 32,646,666	\$ 2,009,424
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 2,496,280
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 3,945,558
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 1,269,338
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (142,877)
◆ 2022	\$ (783,711)	\$ (53,685)
◆ 2023	\$ (4,064,850)	\$ (254,455)
◆ 2024	\$ (1,520,045)	\$ (95,895)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Gill
◆ Current Proportionate Share		1.358414%
◆ Prior Proportionate Share		1.380084%
Beginning Net Pension Liability	\$ 48,878,620	\$ 674,566
Ending Net Pension Liability	\$ 40,571,564	\$ 551,130
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 2,805
◆ Changes of Assumptions	865,367	11,755
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	5,300
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 19,860
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 7,736
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	125,433
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	53,858
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 187,027
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 66,980
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(10,441)
Total Employer Pension Expense	\$ 4,930,734	\$ 56,539
Covered Payroll:	\$ 32,646,666	\$ 444,554
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 551,130
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 871,102
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 280,245
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (47,207)
◆ 2022	\$ (783,711)	\$ (29,066)
◆ 2023	\$ (4,064,850)	\$ (68,679)
◆ 2024	\$ (1,520,045)	\$ (22,215)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Hawlemont Regional School District
◆ Current Proportionate Share		0.958882%
◆ Prior Proportionate Share		0.903511%
Beginning Net Pension Liability	\$ 48,878,620	\$ 441,624
Ending Net Pension Liability	\$ 40,571,564	\$ 389,033
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 1,980
◆ Changes of Assumptions	865,367	8,298
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	36,743
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 47,021
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 5,461
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	88,541
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	1,055
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 95,057
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 47,280
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	7,453
Total Employer Pension Expense	\$ 4,930,734	\$ 54,733
Covered Payroll:	\$ 32,646,666	\$ 314,637
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 389,033
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 614,896
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 197,820
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (12,112)
◆ 2022	\$ (783,711)	\$ 4,020
◆ 2023	\$ (4,064,850)	\$ (29,365)
◆ 2024	\$ (1,520,045)	\$ (10,579)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Hawley
◆ Current Proportionate Share		0.449461%
◆ Prior Proportionate Share		0.426937%
Beginning Net Pension Liability	\$ 48,878,620	\$ 208,681
Ending Net Pension Liability	\$ 40,571,564	\$ 182,353
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 928
◆ Changes of Assumptions	865,367	3,889
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	15,910
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 20,727
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 2,560
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	41,502
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 44,062
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 22,162
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	8,592
Total Employer Pension Expense	\$ 4,930,734	\$ 30,754
Covered Payroll:	\$ 32,646,666	\$ 146,512
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 182,353
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 288,223
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 92,725
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (4,033)
◆ 2022	\$ (783,711)	\$ 987
◆ 2023	\$ (4,064,850)	\$ (15,082)
◆ 2024	\$ (1,520,045)	\$ (5,207)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Heath
◆ Current Proportionate Share		0.949499%
◆ Prior Proportionate Share		0.913450%
Beginning Net Pension Liability	\$ 48,878,620	\$ 446,482
Ending Net Pension Liability	\$ 40,571,564	\$ 385,226
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 1,961
◆ Changes of Assumptions	865,367	8,217
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	28,852
Total Deferred Outflows of Resources	<u><u>\$ 2,314,289</u></u>	<u><u>\$ 39,030</u></u>
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 5,407
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	87,674
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Inflows of Resources	<u><u>\$ 11,045,620</u></u>	<u><u>\$ 93,081</u></u>
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 46,817
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	14,071
Total Employer Pension Expense	<u><u>\$ 4,930,734</u></u>	<u><u>\$ 60,888</u></u>
Covered Payroll:	\$ 32,646,666	\$ 306,780
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 385,226
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 608,879
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 195,885
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (11,847)
◆ 2022	\$ (783,711)	\$ 1,406
◆ 2023	\$ (4,064,850)	\$ (31,782)
◆ 2024	\$ (1,520,045)	\$ (11,828)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Leverett
◆ Current Proportionate Share		2.746780%
◆ Prior Proportionate Share		2.809820%
Beginning Net Pension Liability	\$ 48,878,620	\$ 1,373,401
Ending Net Pension Liability	\$ 40,571,564	\$ 1,114,412
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 5,673
◆ Changes of Assumptions	865,367	23,770
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 29,443
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 15,642
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	253,631
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	106,150
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 375,423
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 135,436
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(45,441)
Total Employer Pension Expense	\$ 4,930,734	\$ 89,995
Covered Payroll:	\$ 32,646,666	\$ 896,811
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 1,114,412
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 1,761,411
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 566,669
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (106,841)
◆ 2022	\$ (783,711)	\$ (57,964)
◆ 2023	\$ (4,064,850)	\$ (134,873)
◆ 2024	\$ (1,520,045)	\$ (46,302)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Leyden
◆ Current Proportionate Share		0.449461%
◆ Prior Proportionate Share		0.446786%
Beginning Net Pension Liability	\$ 48,878,620	\$ 218,383
Ending Net Pension Liability	\$ 40,571,564	\$ 182,353
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 928
◆ Changes of Assumptions	865,367	3,889
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	8,293
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 13,110
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 2,560
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	41,502
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 44,062
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 22,162
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	6,465
Total Employer Pension Expense	\$ 4,930,734	\$ 28,627
Covered Payroll:	\$ 32,646,666	\$ 146,428
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 182,353
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 288,223
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 92,725
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (6,667)
◆ 2022	\$ (783,711)	\$ (1,060)
◆ 2023	\$ (4,064,850)	\$ (16,584)
◆ 2024	\$ (1,520,045)	\$ (6,641)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Mahar Regional School District
◆ Current Proportionate Share		5.094028%
◆ Prior Proportionate Share		5.113293%
Beginning Net Pension Liability	\$ 48,878,620	\$ 2,499,307
Ending Net Pension Liability	\$ 40,571,564	\$ 2,066,727
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 10,520
◆ Changes of Assumptions	865,367	44,082
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	53,179
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 107,781
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 29,009
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	470,370
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	7,809
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 507,188
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 251,173
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	40,007
Total Employer Pension Expense	\$ 4,930,734	\$ 291,180
Covered Payroll:	\$ 32,646,666	\$ 1,663,590
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 2,066,727
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 3,266,616
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 1,050,914
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (93,484)
◆ 2022	\$ (783,711)	\$ (25,467)
◆ 2023	\$ (4,064,850)	\$ (201,633)
◆ 2024	\$ (1,520,045)	\$ (78,823)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Mohawk Regional School District
◆ Current Proportionate Share		9.349024%
◆ Prior Proportionate Share		9.263470%
Beginning Net Pension Liability	\$ 48,878,620	\$ 4,527,856
Ending Net Pension Liability	\$ 40,571,564	\$ 3,793,045
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 19,308
◆ Changes of Assumptions	865,367	80,903
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	81,424
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 181,635
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 53,240
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	863,266
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	5,085
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 921,591
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 460,975
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	3,689
Total Employer Pension Expense	\$ 4,930,734	\$ 464,664
Covered Payroll:	\$ 32,646,666	\$ 3,054,267
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 3,793,045
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 5,995,192
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 1,928,733
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (196,500)
◆ 2022	\$ (783,711)	\$ (46,573)
◆ 2023	\$ (4,064,850)	\$ (360,949)
◆ 2024	\$ (1,520,045)	\$ (135,934)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Monroe
◆ Current Proportionate Share		0.359577%
◆ Prior Proportionate Share		0.327650%
Beginning Net Pension Liability	\$ 48,878,620	\$ 160,151
Ending Net Pension Liability	\$ 40,571,564	\$ 145,886
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 743
◆ Changes of Assumptions	865,367	3,112
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	20,547
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 24,402
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 2,048
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	33,202
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	2,329
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 37,579
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 17,730
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	4,696
Total Employer Pension Expense	\$ 4,930,734	\$ 22,426
Covered Payroll:	\$ 32,646,666	\$ 115,943
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 145,886
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 230,584
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 74,182
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (3,688)
◆ 2022	\$ (783,711)	\$ 2,875
◆ 2023	\$ (4,064,850)	\$ (9,205)
◆ 2024	\$ (1,520,045)	\$ (3,159)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of New Salem
◆ Current Proportionate Share		0.799064%
◆ Prior Proportionate Share		0.794299%
Beginning Net Pension Liability	\$ 48,878,620	\$ 388,242
Ending Net Pension Liability	\$ 40,571,564	\$ 324,193
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 1,650
◆ Changes of Assumptions	865,367	6,915
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	15,918
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 24,483
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 4,550
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	73,784
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 78,334
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 39,400
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	10,726
Total Employer Pension Expense	\$ 4,930,734	\$ 50,126
Covered Payroll:	\$ 32,646,666	\$ 262,697
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 324,193
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 512,411
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 164,849
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (10,746)
◆ 2022	\$ (783,711)	\$ (1,301)
◆ 2023	\$ (4,064,850)	\$ (30,003)
◆ 2024	\$ (1,520,045)	\$ (11,801)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	New Salem/Wendell Union School District
◆ Current Proportionate Share		2.127512%
◆ Prior Proportionate Share		2.025460%
Beginning Net Pension Liability	\$ 48,878,620	\$ 990,017
Ending Net Pension Liability	\$ 40,571,564	\$ 863,165
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 4,394
◆ Changes of Assumptions	865,367	18,411
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	46,115
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 68,920
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 12,115
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	196,449
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	9,101
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 217,665
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 104,902
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	11,858
Total Employer Pension Expense	\$ 4,930,734	\$ 116,760
Covered Payroll:	\$ 32,646,666	\$ 694,308
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 863,165
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 1,364,297
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 438,912
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (38,771)
◆ 2022	\$ (783,711)	\$ (7,623)
◆ 2023	\$ (4,064,850)	\$ (77,379)
◆ 2024	\$ (1,520,045)	\$ (24,972)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Northfield
◆ Current Proportionate Share		2.596950%
◆ Prior Proportionate Share		2.621169%
Beginning Net Pension Liability	\$ 48,878,620	\$ 1,281,191
Ending Net Pension Liability	\$ 40,571,564	\$ 1,053,623
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 5,363
◆ Changes of Assumptions	865,367	22,473
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	6,693
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 34,529
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 14,789
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	239,796
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	79,385
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 333,970
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 128,049
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(20,357)
Total Employer Pension Expense	\$ 4,930,734	\$ 107,692
Covered Payroll:	\$ 32,646,666	\$ 847,896
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 1,053,623
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 1,665,331
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 535,759
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (84,867)
◆ 2022	\$ (783,711)	\$ (48,036)
◆ 2023	\$ (4,064,850)	\$ (125,316)
◆ 2024	\$ (1,520,045)	\$ (41,222)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Orange
◆ Current Proportionate Share		12.994672%
◆ Prior Proportionate Share		13.469091%
Beginning Net Pension Liability	\$ 48,878,620	\$ 6,583,507
Ending Net Pension Liability	\$ 40,571,564	\$ 5,272,143
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 26,836
◆ Changes of Assumptions	865,367	112,452
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 139,288
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 73,998
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	1,199,896
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	487,115
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 1,761,009
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 640,731
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(271,084)
Total Employer Pension Expense	\$ 4,930,734	\$ 369,647
Covered Payroll:	\$ 32,646,666	\$ 4,262,644
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 5,272,142
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 8,333,014
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 2,680,841
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (509,113)
◆ 2022	\$ (783,711)	\$ (251,328)
◆ 2023	\$ (4,064,850)	\$ (629,500)
◆ 2024	\$ (1,520,045)	\$ (231,780)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Orange Housing Authority
◆ Current Proportionate Share		0.109875%
◆ Prior Proportionate Share		0.129075%
Beginning Net Pension Liability	\$ 48,878,620	\$ 63,090
Ending Net Pension Liability	\$ 40,571,564	\$ 44,578
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 227
◆ Changes of Assumptions	865,367	951
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 1,178
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 626
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	10,146
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	11,468
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 22,240
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 5,418
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(4,204)
Total Employer Pension Expense	\$ 4,930,734	\$ 1,214
Covered Payroll:	\$ 32,646,666	\$ 36,273
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 44,578
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 70,459
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 22,668
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (6,792)
◆ 2022	\$ (783,711)	\$ (4,152)
◆ 2023	\$ (4,064,850)	\$ (7,058)
◆ 2024	\$ (1,520,045)	\$ (3,060)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Pioneer Valley Regional School District
◆ Current Proportionate Share		6.712119%
◆ Prior Proportionate Share		6.880602%
Beginning Net Pension Liability	\$ 48,878,620	\$ 3,363,143
Ending Net Pension Liability	\$ 40,571,564	\$ 2,723,212
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 13,862
◆ Changes of Assumptions	865,367	58,084
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	9,494
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 81,440
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 38,223
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	619,781
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	177,042
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 835,046
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 330,957
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(42,082)
Total Employer Pension Expense	\$ 4,930,734	\$ 288,875
Covered Payroll:	\$ 32,646,666	\$ 2,192,803
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 2,723,212
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 4,304,240
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 1,384,731
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (209,740)
◆ 2022	\$ (783,711)	\$ (111,455)
◆ 2023	\$ (4,064,850)	\$ (318,223)
◆ 2024	\$ (1,520,045)	\$ (114,188)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Rowe
◆ Current Proportionate Share		1.937728%
◆ Prior Proportionate Share		2.100664%
Beginning Net Pension Liability	\$ 48,878,620	\$ 1,026,775
Ending Net Pension Liability	\$ 40,571,564	\$ 786,166
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 4,002
◆ Changes of Assumptions	865,367	16,768
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	231
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 21,001
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 11,035
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	178,925
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	74,580
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 264,540
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 95,544
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(22,502)
Total Employer Pension Expense	\$ 4,930,734	\$ 73,042
Covered Payroll:	\$ 32,646,666	\$ 631,972
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 786,166
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 1,242,595
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 399,759
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (68,456)
◆ 2022	\$ (783,711)	\$ (36,200)
◆ 2023	\$ (4,064,850)	\$ (97,668)
◆ 2024	\$ (1,520,045)	\$ (41,215)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Shelburne
◆ Current Proportionate Share		1.907762%
◆ Prior Proportionate Share		1.906309%
Beginning Net Pension Liability	\$ 48,878,620	\$ 931,778
Ending Net Pension Liability	\$ 40,571,564	\$ 774,009
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 3,940
◆ Changes of Assumptions	865,367	16,509
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	13,256
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 33,705
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 10,864
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	176,158
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	1,041
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 188,063
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 94,067
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	4,759
Total Employer Pension Expense	\$ 4,930,734	\$ 98,826
Covered Payroll:	\$ 32,646,666	\$ 623,361
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 774,009
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 1,223,379
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 393,577
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (40,749)
◆ 2022	\$ (783,711)	\$ (10,398)
◆ 2023	\$ (4,064,850)	\$ (74,315)
◆ 2024	\$ (1,520,045)	\$ (28,896)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Shelburne Falls Fire District
◆ Current Proportionate Share		0.629271%
◆ Prior Proportionate Share		0.645375%
Beginning Net Pension Liability	\$ 48,878,620	\$ 315,451
Ending Net Pension Liability	\$ 40,571,564	\$ 255,305
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 1,300
◆ Changes of Assumptions	865,367	5,446
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	2,162
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 8,908
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 3,583
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	58,105
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	7,832
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 69,520
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 31,028
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(793)
Total Employer Pension Expense	\$ 4,930,734	\$ 30,235
Covered Payroll:	\$ 32,646,666	\$ 206,750
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 255,305
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 403,529
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 129,820
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (16,326)
◆ 2022	\$ (783,711)	\$ (6,566)
◆ 2023	\$ (4,064,850)	\$ (26,996)
◆ 2024	\$ (1,520,045)	\$ (10,724)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Shutesbury
◆ Current Proportionate Share		2.976505%
◆ Prior Proportionate Share		2.988531%
Beginning Net Pension Liability	\$ 48,878,620	\$ 1,460,753
Ending Net Pension Liability	\$ 40,571,564	\$ 1,207,615
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 6,147
◆ Changes of Assumptions	865,367	25,758
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	44,249
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 76,154
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 16,950
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	274,843
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	4,875
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 296,668
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 146,764
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	17,319
Total Employer Pension Expense	\$ 4,930,734	\$ 164,083
Covered Payroll:	\$ 32,646,666	\$ 971,358
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 1,207,615
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 1,908,725
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 614,062
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (52,322)
◆ 2022	\$ (783,711)	\$ (8,582)
◆ 2023	\$ (4,064,850)	\$ (113,496)
◆ 2024	\$ (1,520,045)	\$ (46,114)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	South Deerfield Fire District
◆ Current Proportionate Share		0.239714%
◆ Prior Proportionate Share		0.198575%
Beginning Net Pension Liability	\$ 48,878,620	\$ 97,061
Ending Net Pension Liability	\$ 40,571,564	\$ 97,256
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 495
◆ Changes of Assumptions	865,367	2,074
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	21,210
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 23,779
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 1,365
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	22,135
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	1,400
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 24,900
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 11,820
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	6,187
Total Employer Pension Expense	\$ 4,930,734	\$ 18,007
Covered Payroll:	\$ 32,646,666	\$ 77,900
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 97,256
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 153,720
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 49,454
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (25)
◆ 2022	\$ (783,711)	\$ 3,763
◆ 2023	\$ (4,064,850)	\$ (4,187)
◆ 2024	\$ (1,520,045)	\$ (672)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	South Deerfield Water Supply District
◆ Current Proportionate Share		0.539373%
◆ Prior Proportionate Share		0.496422%
Beginning Net Pension Liability	\$ 48,878,620	\$ 242,644
Ending Net Pension Liability	\$ 40,571,564	\$ 218,832
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 1,114
◆ Changes of Assumptions	865,367	4,668
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	28,850
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 34,632
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 3,072
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	49,804
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	2,519
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 55,395
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 26,595
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	6,073
Total Employer Pension Expense	\$ 4,930,734	\$ 32,668
Covered Payroll:	\$ 32,646,666	\$ 175,290
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 218,832
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 345,880
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 111,274
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (5,747)
◆ 2022	\$ (783,711)	\$ 4,431
◆ 2023	\$ (4,064,850)	\$ (14,349)
◆ 2024	\$ (1,520,045)	\$ (5,098)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Sunderland
◆ Current Proportionate Share		4.115169%
◆ Prior Proportionate Share		3.971481%
Beginning Net Pension Liability	\$ 48,878,620	\$ 1,941,205
Ending Net Pension Liability	\$ 40,571,564	\$ 1,669,588
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 8,499
◆ Changes of Assumptions	865,367	35,611
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	119,353
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 163,463
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 23,434
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	379,985
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	-
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 403,419
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 202,908
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	37,260
Total Employer Pension Expense	\$ 4,930,734	\$ 240,168
Covered Payroll:	\$ 32,646,666	\$ 1,343,931
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 1,669,588
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 2,638,909
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 848,972
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (55,489)
◆ 2022	\$ (783,711)	\$ 5,942
◆ 2023	\$ (4,064,850)	\$ (138,230)
◆ 2024	\$ (1,520,045)	\$ (52,179)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Warwick
◆ Current Proportionate Share		0.809052%
◆ Prior Proportionate Share		0.824072%
Beginning Net Pension Liability	\$ 48,878,620	\$ 402,795
Ending Net Pension Liability	\$ 40,571,564	\$ 328,245
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 1,671
◆ Changes of Assumptions	865,367	7,001
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	7,273
Total Deferred Outflows of Resources	<u><u>\$ 2,314,289</u></u>	<u><u>\$ 15,945</u></u>
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 4,607
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	74,706
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	6,087
Total Deferred Inflows of Resources	<u><u>\$ 11,045,620</u></u>	<u><u>\$ 85,400</u></u>
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 39,892
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	1,018
Total Employer Pension Expense	<u><u>\$ 4,930,734</u></u>	<u><u>\$ 40,910</u></u>
Covered Payroll:	\$ 32,646,666	\$ 263,398
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 328,245
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 518,816
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 166,910
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (17,395)
◆ 2022	\$ (783,711)	\$ (5,452)
◆ 2023	\$ (4,064,850)	\$ (33,228)
◆ 2024	\$ (1,520,045)	\$ (13,380)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Wendell
◆ Current Proportionate Share		0.769098%
◆ Prior Proportionate Share		0.764511%
Beginning Net Pension Liability	\$ 48,878,620	\$ 373,683
Ending Net Pension Liability	\$ 40,571,564	\$ 312,035
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 1,588
◆ Changes of Assumptions	865,367	6,656
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	5,855
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 14,099
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 4,380
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	71,017
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	3,851
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 79,248
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 37,922
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	6,430
Total Employer Pension Expense	\$ 4,930,734	\$ 44,352
Covered Payroll:	\$ 32,646,666	\$ 251,169
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 312,035
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 493,195
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 158,667
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (15,731)
◆ 2022	\$ (783,711)	\$ (6,361)
◆ 2023	\$ (4,064,850)	\$ (31,699)
◆ 2024	\$ (1,520,045)	\$ (11,358)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2020	Franklin Regional Retirement System	Town of Whately
◆ Current Proportionate Share		2.736778%
◆ Prior Proportionate Share		2.789971%
Beginning Net Pension Liability	\$ 48,878,620	\$ 1,363,699
Ending Net Pension Liability	\$ 40,571,564	\$ 1,110,353
Total Deferred Outflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 206,522	\$ 5,652
◆ Changes of Assumptions	865,367	23,683
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	19,444
Total Deferred Outflows of Resources	\$ 2,314,289	\$ 48,779
Total Deferred Inflows of Resources:		
◆ Differences Between Expected and Actual Experience	\$ 569,466	\$ 15,585
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	9,233,754	252,707
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,242,400	21,561
Total Deferred Inflows of Resources	\$ 11,045,620	\$ 289,853
Employer Pension Expense:		
◆ Proportionate Share of Plan Pension Expense	\$ 4,930,734	\$ 134,943
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	13,964
Total Employer Pension Expense	\$ 4,930,734	\$ 148,907
Covered Payroll:	\$ 32,646,666	\$ 894,009
Sensitivity of the Net Pension Liability to Changes in the Discount Rate:		
◆ Current discount rate: 7.75%	\$ 40,571,564	\$ 1,110,353
◆ 1% decrease in the discount rate: 6.75%	\$ 64,126,392	\$ 1,754,997
◆ 1% increase in the discount rate: 8.75%	\$ 20,630,311	\$ 564,606
Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:		
◆ 2021	\$ (2,362,725)	\$ (59,012)
◆ 2022	\$ (783,711)	\$ (21,956)
◆ 2023	\$ (4,064,850)	\$ (114,664)
◆ 2024	\$ (1,520,045)	\$ (45,442)
◆ 2025	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

APPENDIX D - CALCULATION OF SINGLE DISCOUNT RATE

Under GASB 67, a series of projections and calculations are used to determine the discount rate for the purpose of the measurement of the Total Pension Liability. The discount rate is the single rate that reflects (1) the long-term expected rate of return on pension plan investments that are expected to be used to finance the payment of benefits, to the extent that the pension plan's Fiduciary Net Position is projected to be sufficient to make projected benefit payments and pension plan assets are expected to be invested using a strategy to achieve that return, and (2) a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher, to the extent that the conditions for use of the long-term expected rate of return are not met.

Projected cash flows into and out of the pension plan are assumed to be contributions to the pension plan, benefit payments, pension plan administrative expenses and pension plan investment earnings. These projected cash flows are used to project the pension plan's Fiduciary Net Position at the beginning of each period. The pension plan's projected Fiduciary Net Position at the beginning of each period is compared to the amount of benefit payments projected to occur in that period.

It is assumed that the pension plan's Fiduciary Net Position is expected to always be invested using a strategy to achieve the long-term expected rate of return on pension plan investments.

The benefit payments that are projected to occur in a period are discounted using the long-term expected rate of return on pension plan investments if the amount of the pension plan's beginning Fiduciary Net Position is projected to be sufficient to make the benefit payments in that period. In periods in which benefit payments are projected to be greater than the amount of the pension plan's Fiduciary Net Position, they are discounted using a municipal bond rate as required by GASB 67.

For purposes of this valuation, the long-term expected rate of return on pension plan investments is 7.75%; the municipal bond rate is 2.12%, based on the December 2020 Bond Buyer Index as published by the Federal Reserve. For each period, the pension plan's Fiduciary Net Position is projected to be sufficient to make the benefit payments in that period, therefore, the resulting single discount rate is based solely on the long-term expected rate of return of 7.75%.