



# **FRANKLIN REGIONAL RETIREMENT SYSTEM**

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

**Disclosures as of  
December 31, 2019**

KMS Actuarial, LLC  
52 Hunt Road  
Kingston, NH 03848

July, 2020





July 6, 2020

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, 2019. Results are based on liabilities developed in an actuarial valuation performed as of January 1, 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.

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.

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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](http://kmsactuaries.com)

Mr. Dale Kowacki  
July 6, 2020  
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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,



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



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Amanda J. Makarevich, ASA  
Member, American Academy of Actuaries  
(603) 702-8009

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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, 2019 (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, 2019	December 31, 2018	% Change
<b>Valuation Date</b>	January 1, 2020	January 1, 2018	
<b>Membership Data</b>			
Active Plan Members	1,044	1,023	2.1%
Inactive Members Currently in Receipt	656	633	3.6%
Inactive Members Deferred	611	604	1.2%
Total Plan Members	2,311	2,260	2.3%
Covered Payroll	\$31,398,150	\$30,220,970	3.9%
<b>Net Pension Liability</b>			
Discount Rate	7.75%	7.75%	
Total Pension Liability (TPL)	\$205,992,101	\$197,738,150	4.2%
Fiduciary Net Position (FNP)	157,113,481	136,400,418	15.2%
Net Pension Liability (NPL)	\$48,878,620	\$61,337,732	(20.3%)
FNP as % of TPL	76.3%	69.0%	10.6%
<b>Pension Expense</b>			
Pension Expense	\$9,162,201	\$10,642,507	(13.9%)
Deferred Outflows	\$2,553,418	\$12,037,156	
Deferred Inflows	\$5,315,215	\$49,611	
Recognition Period	4.65	4.47	

## EXECUTIVE SUMMARY

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### **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 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**

Most of the Actuarial Assumptions and Methods used in these disclosures are the same as the last measurement date, except the mortality and mortality improvement rates were updated. 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, 2019 is \$9,162,201 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.



## 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** **2019** **2018**

Trust Fund Composition at Fiscal Year-End		
Cash	\$ 1,579,892	\$ 1,548,623
Individually Owned Short Term Investments	0	0
Fixed Income Securities	0	0
Equities (at market value)	35,253,939	29,944,272
Pooled Short Term Funds	0	0
Pooled Domestic Equity Funds	15,440,205	6,754,525
Pooled International Equity Funds	8,197,922	6,635,297
Pooled Global Equity Funds	0	0
Pooled Domestic Fixed Income Funds	7,465,181	17,222,143
Pooled International Fixed Income Funds	0	0
Pooled Global Fixed Income Funds	6,604,240	0
Pooled Alternative/Private Equity	0	0
Pooled Real Estate Funds	16,659,579	15,062,715
Pooled Domestic Balanced Funds	0	0
Pooled International Balanced Funds	0	0
Hedge Funds	0	0
PRIT Cash	0	0
PRIT Fund	68,826,976	61,594,028
Interest Due and Accrued	1,149	1,695
Prepaid Expenses	6,610	7,202
Accounts Receivable (A)	65,878	90,611
Land	0	0
Buildings	0	0
Accumulated Depreciation - Buildings	0	0
Accounts Payable (A)	(2,988,090)	(2,460,693)
Auditor or Other Adjustments	0	0
<b>Total Market Value of Assets</b>	<b>\$ 157,113,481</b>	<b>\$ 136,400,418</b>

## SECTION 1 - PRINCIPAL VALUATION RESULTS

Fiscal Year Ended December 31	Fiduciary Net Position	
	2019	2018
<b>Asset Activity</b>		
Market value as of beginning of year	\$ 136,400,418	\$ 143,920,151
Contributions - employer	6,871,971	6,506,893
Contributions - member	3,639,392	3,281,580
Net investment income	23,505,988	(5,160,455)
Benefit payments, including refunds of member contributions	(12,736,941)	(11,605,484)
Administrative expenses	(567,347)	(542,267)
Other	0	0
<b>Market Value as of end of year</b>	<b>\$ 157,113,481</b>	<b>\$ 136,400,418</b>
<b>Money-Weighted Rate of Return</b>	<b>17.04%</b>	<b>-4.05%</b>
<b>(Gain) / Loss on Pension Plan Investments</b>		
Projected earnings	\$ 10,442,368	\$ 11,062,390
Actual earnings	23,505,988	(5,160,455)
<b>(Gain) / Loss on pension plan investments</b>	<b>\$ (13,063,620)</b>	<b>\$ 16,222,845</b>

## 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, 2019 measurement date was developed from an actuarial valuation as of January 1, 2020.

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, 2018 to the end of the measurement period, December 31, 2019 is shown below:

Measurement Date	December 31, 2019
<b>1. Total Pension Liability, beginning of year:</b>	
a. Actives	\$ 92,704,636
b. Retired and Disabled Members and Beneficiaries	100,826,390
c. Inactive Members	4,207,124
d. Total Pension Liability at 7.75% (a. + b. + c.)	\$ 197,738,150
<b>2. Service Cost</b>	<b>\$ 5,265,765</b>
<b>3. Benefit Payments</b>	<b>(12,736,941)</b>
<b>4. Interest [7.75% x (1.d. + 2. + .5 x 3)]</b>	<b>\$ 15,239,247</b>
<b>5. Changes of benefit terms</b>	<b>-</b>
<b>6. Differences between expected and actual experience</b>	<b>(999,252)</b>
<b>7. Changes of assumptions or other inputs</b>	<b>1,485,132</b>
<b>8. Total Pension Liability, end of year (1.d. + 2. + 3. + 4. + 5. + 6. + 7.)</b>	
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

## 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 38 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, 2019, pension plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefits	656
Inactive plan members entitled to but not yet receiving benefits	611
Active plan members	1,044
	<hr/>
	2,311

#### 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, 2019, were as follows:

Total Pension Liability	\$ 205,992,101
Fiduciary Net Position	(157,113,481)
Net Pension Liability	\$ 48,878,620

Fiduciary Net Position as a percentage of the Total Pension Liability 76.3%

### Actuarial assumptions

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

Inflation	2.5% 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, 2019 (see the discussion of the pension plan's investment policy) are summarized in the following table:

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-Term Expected Real Rates of Return<sup>1</sup></b>
PRIT Core	45%	4.80%
Domestic Equity	32%	6.82%
International Equity	5%	3.80%
Real Estate	10%	6.60%
Fixed Income	8%	2.90%
Total	100%	

<sup>1</sup> Provided by Dahab Associates, Inc. (inclusive of fees). Inflation of 2.5% 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:

	<b>1% Decrease (6.75%)</b>	<b>Current Discount Rate (7.75%)</b>	<b>1% Increase (8.75%)</b>
Total Pension Liability	\$ 228,815,018	\$ 205,992,101	\$ 186,667,342
Fiduciary Net Position	157,113,481	157,113,481	157,113,481
Net Pension Liability	\$ 71,701,537	\$ 48,878,620	\$ 29,553,861

## SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

### Exhibit 3.1 - Changes in Net Pension Liability and Related Ratios

Fiscal Year Ended December 31	2019	2018	2017	2016	2015
<b>Total Pension Liability</b>					
Service cost	\$ 5,265,765	\$ 5,063,236	\$ 5,207,589	\$ 5,089,632	\$ 4,703,273
Interest	15,239,247	14,639,832	13,899,079	12,791,108	12,116,265
Changes of benefit terms	-	-	(293,031)	1,003,761	962,410
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	(12,736,941)	(11,605,484)	(10,906,590)	(9,686,040)	(9,235,255)
Net change in Total Pension Liability	<u>\$ 8,253,951</u>	<u>\$ 8,097,584</u>	<u>\$ 10,051,894</u>	<u>\$ 14,788,713</u>	<u>\$ 8,546,693</u>
Total Pension Liability--beginning	<u>\$ 197,738,150</u>	<u>\$ 189,640,566</u>	<u>\$ 179,588,672</u>	<u>\$ 164,799,959</u>	<u>\$ 156,253,266</u>
Total Pension Liability--ending (a)	<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>
<b>Fiduciary Net Position</b>					
Contributions--employer	\$ 6,871,971	\$ 6,506,893	\$ 6,166,761	\$ 5,875,820	\$ 5,645,345
Contributions--member	3,639,392	3,281,580	3,310,425	3,098,432	2,971,069
Net investment income	23,505,988	(5,160,455)	18,794,508	10,050,389	579,359
Benefit payments, including refunds of member contributions	(12,736,941)	(11,605,484)	(10,906,590)	(9,686,040)	(9,235,255)
Administrative expenses	(567,347)	(542,267)	(495,399)	(498,301)	(469,365)
Other	-	-	-	-	-
Net change in Fiduciary Net Position	<u>\$ 20,713,063</u>	<u>\$ (7,519,733)</u>	<u>\$ 16,869,705</u>	<u>\$ 8,840,300</u>	<u>\$ (508,847)</u>
Fiduciary Net Position--beginning	<u>\$ 136,400,418</u>	<u>\$ 143,920,151</u>	<u>\$ 127,050,446</u>	<u>\$ 118,210,146</u>	<u>\$ 118,718,993</u>
Fiduciary Net Position--ending (b)	<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>
<b>Net Pension Liability and Related Ratios</b>					
Net Pension Liability--ending (a) -- (b)	<u>\$ 48,878,620</u>	<u>\$ 61,337,732</u>	<u>\$ 45,720,415</u>	<u>\$ 52,538,226</u>	<u>\$ 46,589,813</u>
Fiduciary Net Position as a percentage of the Total Pension Liability	76.27%	68.98%	75.89%	70.75%	71.73%
Covered Payroll	\$ 31,398,150	\$ 30,220,970	\$ 29,460,407	\$ 33,556,164	\$ 32,088,838
Net Pension Liability as a percentage of Covered Payroll	155.67%	202.96%	155.19%	156.57%	145.19%



## SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

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

Fiscal Year Ended December 31	2014	2013	2012	2011	2010
<b>Total Pension Liability</b>					
Service cost	\$ 4,703,273				
Interest	11,306,271				
Changes of benefit terms	-				
Differences between expected and actual experience	-				
Changes of assumptions	-				
Benefit payments, including refunds of member contributions	(11,287,291)				
Net change in Total Pension Liability	<u>\$ 4,722,253</u>				
Total Pension Liability--beginning	<u>\$ 151,531,013</u>				
Total Pension Liability--ending (a)	<u><u>\$ 156,253,266</u></u>				
<b>Fiduciary Net Position</b>					
Contributions--employer	\$ 5,418,158				
Contributions--member	3,270,956				
Net investment income	8,362,434				
Benefit payments, including refunds of member contributions	(11,287,291)				
Administrative expenses	(403,802)				
Other	-				
Net change in Fiduciary Net Position	<u>\$ 5,360,455</u>				
Fiduciary Net Position--beginning	<u>\$ 113,358,538</u>				
Fiduciary Net Position--ending (b)	<u><u>\$ 118,718,993</u></u>				
<b>Net Pension Liability and Related Ratios</b>					
Net Pension Liability--ending (a) -- (b)	<u>\$ 37,534,273</u>				
Fiduciary Net Position as a percentage of the Total Pension Liability	75.98%				
Covered Payroll	\$ 30,854,652				
Net Pension Liability as a percentage of Covered Payroll	121.65%				

Note: Only 6 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	2019	2018	2017	2016	2015
Actuarially Determined Contribution	\$ 6,871,971	\$ 6,506,893	\$ 6,166,761	\$ 5,875,820	\$ 5,645,345
Contributions in relation to the Actuarially Determined Contribution	<u>6,871,971</u>	<u>6,506,893</u>	<u>6,166,761</u>	<u>5,875,820</u>	<u>5,645,345</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered Payroll	\$ 31,398,150	\$ 30,220,970	\$ 29,460,407	\$ 33,556,164	\$ 32,088,838
Contributions as a percentage of Covered Payroll	21.89%	21.53%	20.93%	17.51%	17.59%

The contribution shown above, \$6,871,971, represents the actual contributions made by member units of the Franklin Regional Retirement System for the 2020 fiscal year.

## SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

### Exhibit 3.2 - Schedule of Employer Contributions (continued)

Fiscal Year Ended December 31	2014	2013	2012	2011	2010
Actuarially Determined Contribution	\$ 5,888,495				
Contributions in relation to the Actuarially Determined Contribution	5,888,495				
Contribution deficiency (excess)	\$ -				
Covered Payroll	\$ 30,854,652				
Contributions as a percentage of Covered Payroll	19.08%				

Note: Only 6 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	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Annual money-weighted rate of return, net of investment expense	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 6 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

Most of the Actuarial Assumptions and Methods used in these disclosures are the same as the last measurement date, except the mortality and mortality improvement rates were updated. 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	2.5% 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, 2019	
Year	Experience Losses	Experience Gains	Amounts Recognized in Pension Expense through December 31, 2019	Deferred Outflows of Resources	Deferred Inflows of Resources
	(a)	(b)	(c)	(a) - (c)	(b) - (c)
2015	\$ -	\$ -	\$ -	\$ -	\$ -
2016	-	146,259	(128,864)	-	17,395
2017	1,964,150	-	1,318,221	645,929	-
2018	-	-	-	-	-
2019	-	999,252	(214,893)	-	784,359
				<u>\$ 645,929</u>	<u>\$ 801,754</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, 2019	
Year	Increases in the Total Pension Liability	Decreases in the Total Pension Liability	Amounts Recognized in Pension Expense through December 31, 2019	Deferred Outflows of Resources	Deferred Inflows of Resources
	(a)	(b)	(c)	(a) - (c)	(b) - (c)
2015	\$ -	\$ -	\$ -	\$ -	\$ -
2016	5,736,511	-	5,054,196	682,315	-
2017	180,697	-	121,272	59,425	-
2018	-	-	-	-	-
2019	1,485,132	-	319,383	1,165,749	-
				<u>\$ 1,907,489</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, 2019	
Year	Investment Earnings Less Than Projected  (a)	Investment Earnings Greater Than Projected  (b)	Amounts Recognized in Pension Expense through December 31, 2019  (c)	Deferred Outflows of Resources  (a) - (c)	Deferred Inflows of Resources  (b) - (c)
2015	\$ 8,579,195	\$ -	\$ 8,579,195	\$ -	\$ -
2016	-	935,994	(748,796)	-	187,198
2017	-	9,022,685	(5,413,611)	-	3,609,074
2018	16,222,845	-	6,489,138	9,733,707	-
2019	-	13,063,620	(2,612,724)	-	10,450,896
Subtotal				<u>\$ 9,733,707</u>	<u>\$ 14,247,168</u>
Net				<u><u>\$ -</u></u>	<u><u>\$ 4,513,461</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 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, 2019	
Year	Proportionate Share* Outflows	Proportionate Share* Inflows	Amounts Recognized in Pension Expense through December 31, 2019	Deferred Outflows of Resources	Deferred Inflows of Resources	
Year	(a)	(b)	(c)	(a) - (c)	(b) - (c)	
2015	\$ 2,688,537	\$ 2,688,534	\$ 2,688,537	\$ -	\$ -	
2016	686,573	686,573	604,908	81,665	81,665	
2017	677,438	677,438	454,657	222,781	222,781	
2018	405,157	405,157	181,279	223,878	223,878	
2019	935,437	935,437	201,170	734,267	734,267	
				<u>\$ 1,262,591</u>	<u>\$ 1,262,591</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		
2020	\$	(110,649)
2021	\$	(842,679)
2022	\$	736,335
2023	\$	(2,544,804)
2024	\$	-
Thereafter	\$	-
Total Deferred Outflows	\$	3,816,009
Total Deferred Inflows	\$	6,577,806



## SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 68

### Exhibit 4.2 - Pension Expense

Fiscal Year Ended December 31, 2019

1. Service cost		\$ 5,265,765
2. Interest on the total pension liability		
a. Total Pension Liability, beginning of year	197,738,150	
b. Service cost, beginning of year	5,265,765	
c. Benefit payments, including refunds of employee contributions	<u>(12,736,941)</u>	
d. Interest on Total Pension Liability		15,239,247
3. Differences between expected and actual experience		192,298
4. Changes of benefit terms		-
5. Changes of assumptions		1,623,356
6. Employee contributions		(3,639,392)
7. Projected earnings on pension plan investments		
a. Fiduciary Net Position, beginning of year	136,400,418	
b. Employer contributions	6,871,971	
c. Employee contributions	3,639,392	
d. Benefit payments, including refunds of employee contributions	<u>(12,736,941)</u>	
e. Administrative expenses and other	<u>(567,347)</u>	
f. Total projected earnings		(10,442,368)
8. Differences between projected and actual earnings on plan investments		355,948
9. Pension plan administrative expenses		567,347
10. Other changes in Fiduciary Net Position		<u>-</u>
<b>11. Total Pension Expense</b>		<b><u><u>\$ 9,162,201</u></u></b>

## 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 2019 and 2018, based on employer contributions made for the 2020 fiscal year and 2019 fiscal year, respectively, shows the proportionate relationship of each employer to all employers and each employer's allocation percentage.

Entity	2019		2018	
	Employer Contribution	Proportionate Share of Total Employer Contribution	Employer Contribution	Proportionate Share of Total Employer Contribution
Town of Ashfield	96,204	1.399948%	87,704	1.347863%
Town of Bernardston	108,485	1.578659%	98,429	1.512688%
Bernardston Fire & Water District	3,411	0.049636%	3,155	0.048487%
Town of Buckland	139,482	2.029723%	129,523	1.990551%
Town of Charlemont	75,053	1.092161%	69,406	1.066653%
Town of Colrain	86,652	1.260948%	87,697	1.347755%
Town of Conway	191,043	2.780032%	175,407	2.695710%
Town of Deerfield	637,266	9.273409%	574,805	8.833786%
Town of Erving	317,268	4.616841%	287,086	4.412029%
Franklin County Regional Housing Authority	268,976	3.914103%	253,879	3.901693%
Franklin County Solid Waste Management District	29,191	0.424784%	27,638	0.424754%
Franklin Regional Council of Governments	-	0.000000%	-	0.000000%
Franklin Regional Transit Authority	82,708	1.203556%	73,914	1.135934%
Frontier Regional School District	425,072	6.185591%	403,160	6.195891%
Town of Gill	94,839	1.380084%	100,229	1.540351%
Hawlemont Regional School District	62,089	0.903511%	55,524	0.853310%
Town of Hawley	29,339	0.426937%	27,132	0.416973%
Town of Heath	62,772	0.913450%	56,786	0.872705%
Town of Leverett	193,090	2.809820%	198,131	3.044940%
Town of Leyden	30,703	0.446786%	27,762	0.426655%
Mahar Regional School District	351,384	5.113293%	325,575	5.003540%
Mohawk Regional School District	636,583	9.263470%	593,734	9.124692%
Town of Monroe	22,516	0.327650%	19,560	0.300604%
Town of New Salem	54,584	0.794299%	49,846	0.766049%
New Salem/Wendell Union School District	139,189	2.025460%	133,900	2.057818%
Town of Northfield	180,126	2.621169%	186,652	2.868527%
Town of Orange	925,592	13.469091%	922,264	14.173646%
Orange Housing Authority	8,870	0.129075%	8,833	0.135748%
Pioneer Valley Regional School District	472,833	6.880602%	472,874	7.267278%
Town of Rowe	144,357	2.100664%	137,449	2.112360%
Town of Shelburne	131,001	1.906309%	121,145	1.861795%
Shelburne Falls Fire District	44,350	0.645375%	41,643	0.639983%

## 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 2019 and 2018, based on employer contributions made for the 2020 fiscal year and 2019 fiscal year, respectively, shows the proportionate relationship of each employer to all employers and each employer's allocation percentage.

Entity	2019		2018	
	Employer Contribution	Proportionate Share of Total Employer Contribution	Employer Contribution	Proportionate Share of Total Employer Contribution
Town of Shutesbury	205,371	2.988531%	186,133	2.860551%
South Deerfield Fire District	13,646	0.198575%	11,988	0.184235%
South Deerfield Water Supply District	34,114	0.496422%	29,655	0.455747%
Town of Sunderland	272,919	3.971481%	246,075	3.781759%
Town of Warwick	56,630	0.824072%	52,370	0.804839%
Town of Wendell	52,537	0.764511%	50,637	0.778205%
Town of Whately	191,726	2.789971%	179,193	2.753895%
<b>Total</b>	<b>6,871,971</b>	<b>100.000000%</b>	<b>6,506,893</b>	<b>100.000000%</b>

## 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, inactives and retirees) as of the beginning of the measurement period

#### For 2019:

- ◆ 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 2019) 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

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### Exhibit 4.4 - Pension Amounts by Employer

For 2019 (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

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**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 <sub>mw</sub> ) <sup>(c)</sup>
Beginning value - January 1, 2019	\$ 136,400,418	12	1.00	\$ 159,641,456
Monthly net external cash flows:				
January	(957,128)	11	0.92	(1,105,620)
February	(515,573)	10	0.83	(587,803)
March	(1,340,466)	9	0.75	(1,508,354)
April	(805,327)	8	0.67	(894,387)
May	(669,081)	7	0.58	(733,395)
June	(373,385)	6	0.50	(403,945)
July	5,722,401	5	0.42	6,110,111
August	(621,363)	4	0.33	(654,820)
September	(858,959)	3	0.25	(893,418)
October	(828,688)	2	0.17	(850,706)
November	(658,710)	1	0.08	(667,403)
December	(338,235)	0	0.00	(338,235)
Ending value - December 31, 2019				<b>\$ 157,113,481</b>
Money-weighted rate of return				17.04%

Note: Beginning and ending values are based on amounts reported in the System's 2019 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)										
			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2015	-	4.67	-	-	-	-	-	-	-	-	-	-
2016	(146,259)	4.54	(32,216)	(17,395)	-	-	-	-	-	-	-	-
2017	1,964,150	4.47	439,407	439,407	206,522	-	-	-	-	-	-	-
2018	-	4.47	-	-	-	-	-	-	-	-	-	-
2019	(999,252)	4.65	(214,893)	(214,893)	(214,893)	(214,893)	(139,680)	-	-	-	-	-
Net Increase (Decrease) in Pension Expense			192,298	207,119	(8,371)	(214,893)	(139,680)	-	-	-	-	-

Year	Changes of Assumptions	Recognition Period (Years)										
			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2015	-	4.67	-	-	-	-	-	-	-	-	-	-
2016	5,736,511	4.54	1,263,549	682,315	-	-	-	-	-	-	-	-
2017	180,697	4.47	40,424	40,424	19,001	-	-	-	-	-	-	-
2018	-	4.47	-	-	-	-	-	-	-	-	-	-
2019	1,485,132	4.65	319,383	319,383	319,383	319,383	207,600	-	-	-	-	-
Net Increase (Decrease) in Pension Expense			1,623,356	1,042,122	338,384	319,383	207,600	-	-	-	-	-

Year	Differences between Projected and Actual Earnings on Pension Plan Investments	Recognition Period (Years)										
			2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2015	8,579,195	5	1,715,839	-	-	-	-	-	-	-	-	-
2016	(935,994)	5	(187,199)	(187,198)	-	-	-	-	-	-	-	-
2017	(9,022,685)	5	(1,804,537)	(1,804,537)	(1,804,537)	-	-	-	-	-	-	-
2018	16,222,845	5	3,244,569	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)	(2,612,724)	-	-	-	-	-
Net Increase (Decrease) in Pension Expense			355,948	(1,359,890)	(1,172,692)	631,845	(2,612,724)	-	-	-	-	-

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Ashfield
◆ Current Proportionate Share		1.399948%
◆ Prior Proportionate Share		1.347863%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 826,749</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 684,275</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 9,043
◆ Changes of Assumptions	1,907,489	26,704
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	28,414
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 64,161</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 11,224
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	63,186
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	2,966
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 77,376</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 128,266
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	8,981
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 137,247</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 443,231
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 684,275
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 1,003,784
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 413,739
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 7,767
◆ 2021	\$ (842,679)	\$ (4,416)
◆ 2022	\$ 736,335	\$ 15,469
◆ 2023	\$ (2,544,804)	\$ (32,035)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Bernardston
◆ Current Proportionate Share		1.578659%
◆ Prior Proportionate Share		1.512688%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 927,849</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 771,627</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 10,197
◆ Changes of Assumptions	1,907,489	30,113
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	39,264
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 79,574</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 12,657
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	71,252
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 83,909</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 144,640
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	15,392
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 160,032</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 497,931
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 771,627
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 1,131,923
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 466,555
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 12,532
◆ 2021	\$ (842,679)	\$ (1,353)
◆ 2022	\$ 736,335	\$ 20,110
◆ 2023	\$ (2,544,804)	\$ (35,624)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Bernardston Fire & Water District
◆ Current Proportionate Share		0.049636%
◆ Prior Proportionate Share		0.048487%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 29,741</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 24,262</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 321
◆ Changes of Assumptions	1,907,489	947
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	511
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 1,779</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 398
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	2,240
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	458
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 3,096</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 4,548
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(268)
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 4,280</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 17,203
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 24,262
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 35,590
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 14,669
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ (351)
◆ 2021	\$ (842,679)	\$ (273)
◆ 2022	\$ 736,335	\$ 491
◆ 2023	\$ (2,544,804)	\$ (1,184)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Buckland
◆ Current Proportionate Share		2.029723%
◆ Prior Proportionate Share		1.990551%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 1,220,959</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 992,101</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 13,111
◆ Changes of Assumptions	1,907,489	38,717
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	34,701
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 86,529</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 16,273
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	91,611
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 107,884</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 185,967
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	23,105
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 209,072</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 609,880
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 992,101
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 1,455,343
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 599,862
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 13,207
◆ 2021	\$ (842,679)	\$ (6,400)
◆ 2022	\$ 736,335	\$ 20,786
◆ 2023	\$ (2,544,804)	\$ (48,948)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Charlemont
◆ Current Proportionate Share		1.092161%
◆ Prior Proportionate Share		1.066653%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 654,261</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 533,833</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 7,055
◆ Changes of Assumptions	1,907,489	20,833
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	18,898
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 46,786</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 8,756
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	49,294
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	102
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 58,152</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 100,066
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	7,293
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 107,359</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 343,861</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 533,833
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 783,096
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 322,776
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 6,092
◆ 2021	\$ (842,679)	\$ (3,169)
◆ 2022	\$ 736,335	\$ 11,743
◆ 2023	\$ (2,544,804)	\$ (26,032)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Colrain
◆ Current Proportionate Share		1.260948%
◆ Prior Proportionate Share		1.347755%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 826,683</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 616,334</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 8,145
◆ Changes of Assumptions	1,907,489	24,052
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	13,365
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 45,562</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 10,110
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	56,912
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	33,627
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 100,649</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 115,531
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	6,936
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 122,467</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 399,449
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 616,334
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 904,119
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 372,659
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ (4,404)
◆ 2021	\$ (842,679)	\$ (14,680)
◆ 2022	\$ 736,335	\$ 2,075
◆ 2023	\$ (2,544,804)	\$ (38,078)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Conway
◆ Current Proportionate Share		2.780032%
◆ Prior Proportionate Share		2.695710%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 1,653,488</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 1,358,841</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 17,957
◆ Changes of Assumptions	1,907,489	53,029
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	44,244
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 115,230</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 22,289
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	125,476
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 147,765</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 254,712
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	20,675
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 275,387</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 880,405</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 1,358,841
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 1,993,326
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 821,607
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 14,703
◆ 2021	\$ (842,679)	\$ (11,913)
◆ 2022	\$ 736,335	\$ 29,603
◆ 2023	\$ (2,544,804)	\$ (64,928)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -



## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Deerfield
◆ Current Proportionate Share		9.273409%
◆ Prior Proportionate Share		8.833786%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 5,418,444</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 4,532,715</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 59,900
◆ Changes of Assumptions	1,907,489	176,889
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	251,578
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 488,367</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 74,350
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	418,552
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 492,902</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 849,648
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	113,294
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 962,942</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 2,932,948
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 4,532,715
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 6,649,177
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 2,740,651
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 85,939
◆ 2021	\$ (842,679)	\$ (6,340)
◆ 2022	\$ 736,335	\$ 121,529
◆ 2023	\$ (2,544,804)	\$ (205,663)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Erving
◆ Current Proportionate Share		4.616841%
◆ Prior Proportionate Share		4.412029%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 2,706,238</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 2,256,648</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 29,822
◆ Changes of Assumptions	1,907,489	88,066
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	133,777
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 251,665</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 37,016
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	208,379
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	74,869
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 320,264</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 423,004
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	43,520
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 466,524</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 1,458,730
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 2,256,648
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 3,310,346
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 1,364,455
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 9,115
◆ 2021	\$ (842,679)	\$ (33,610)
◆ 2022	\$ 736,335	\$ 59,255
◆ 2023	\$ (2,544,804)	\$ (103,359)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Franklin County Regional Housing Authority
◆ Current Proportionate Share		3.914103%
◆ Prior Proportionate Share		3.901693%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 2,393,210</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 1,913,159</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 25,282
◆ Changes of Assumptions	1,907,489	74,661
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	4,807
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 104,750</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 31,381
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	176,661
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	103,955
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 311,997</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 358,618
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(37,572)
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 321,046</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 1,216,077
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 1,913,159
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 2,806,472
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 1,156,768
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ (62,780)
◆ 2021	\$ (842,679)	\$ (65,336)
◆ 2022	\$ 736,335	\$ 19,620
◆ 2023	\$ (2,544,804)	\$ (98,751)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Franklin County Solid Waste Management District
◆ Current Proportionate Share		0.424784%
◆ Prior Proportionate Share		0.424754%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 260,534</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 207,628</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 2,744
◆ Changes of Assumptions	1,907,489	8,103
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	2,033
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 12,880</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 3,406
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	19,172
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	42
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 22,620</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 38,920
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	2,265
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 41,185</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 133,252
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 207,628
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 304,576
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 125,540
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 421
◆ 2021	\$ (842,679)	\$ (2,793)
◆ 2022	\$ 736,335	\$ 3,439
◆ 2023	\$ (2,544,804)	\$ (10,807)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Franklin Regional Council of Governments
◆ Current Proportionate Share		0.000000%
◆ Prior Proportionate Share		0.000000%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ -</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ -</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ -
◆ Changes of Assumptions	1,907,489	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ -</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ -
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	-
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ -</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ -
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(370,743)
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ (370,743)</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ -
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ -
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ -
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ -
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ -
◆ 2021	\$ (842,679)	\$ -
◆ 2022	\$ 736,335	\$ -
◆ 2023	\$ (2,544,804)	\$ -
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Franklin Regional Transit Authority
◆ Current Proportionate Share		1.203556%
◆ Prior Proportionate Share		1.135934%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 696,756</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 588,281</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 7,774
◆ Changes of Assumptions	1,907,489	22,958
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	65,942
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 96,674</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 9,650
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	54,322
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 63,972</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 110,272
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	29,909
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 140,181</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 372,671</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 588,281
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 862,968
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 355,697
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 28,788
◆ 2021	\$ (842,679)	\$ 10,011
◆ 2022	\$ 736,335	\$ 19,868
◆ 2023	\$ (2,544,804)	\$ (25,965)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Frontier Regional School District
◆ Current Proportionate Share		6.185591%
◆ Prior Proportionate Share		6.195891%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 3,800,419</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 3,023,431</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 39,955
◆ Changes of Assumptions	1,907,489	117,989
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	31,227
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 189,171</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 49,593
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	279,184
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	7,823
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 336,600</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 566,736
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	27,279
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 594,015</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 1,956,918</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 3,023,431
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 4,435,164
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 1,828,081
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 12,954
◆ 2021	\$ (842,679)	\$ (45,986)
◆ 2022	\$ 736,335	\$ 43,725
◆ 2023	\$ (2,544,804)	\$ (158,122)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -



## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Gill
◆ Current Proportionate Share		1.380084%
◆ Prior Proportionate Share		1.540351%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 944,816</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 674,566</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 8,914
◆ Changes of Assumptions	1,907,489	26,325
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	14,274
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 49,513</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 11,065
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	62,290
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	62,083
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 135,438</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 126,446
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	4,805
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 131,251</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 437,716
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 674,566
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 989,542
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 407,868
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ (9,562)
◆ 2021	\$ (842,679)	\$ (24,335)
◆ 2022	\$ 736,335	\$ (5,852)
◆ 2023	\$ (2,544,804)	\$ (46,176)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -



## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Hawlemont Regional School District
◆ Current Proportionate Share		0.903511%
◆ Prior Proportionate Share		0.853310%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 523,401</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 441,624</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 5,836
◆ Changes of Assumptions	1,907,489	17,234
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	19,748
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 42,818</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 7,244
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	40,780
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	5,201
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 53,225</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 82,781
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	1,049
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 83,830</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 284,908</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 441,624
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 647,831
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 267,022
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 304
◆ 2021	\$ (842,679)	\$ (3,219)
◆ 2022	\$ 736,335	\$ 12,039
◆ 2023	\$ (2,544,804)	\$ (19,531)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Hawley
◆ Current Proportionate Share		0.426937%
◆ Prior Proportionate Share		0.416973%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 255,762</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 208,681</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 2,758
◆ Changes of Assumptions	1,907,489	8,144
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	12,871
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 23,773</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 3,423
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	19,270
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 22,693</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 39,117
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	6,113
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 45,230</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 135,583
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 208,681
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 306,121
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 126,176
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 5,619
◆ 2021	\$ (842,679)	\$ 488
◆ 2022	\$ 736,335	\$ 5,152
◆ 2023	\$ (2,544,804)	\$ (10,179)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Heath
◆ Current Proportionate Share		0.913450%
◆ Prior Proportionate Share		0.872705%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 535,298</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 446,482</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 5,900
◆ Changes of Assumptions	1,907,489	17,424
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	24,307
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 47,631</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 7,324
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	41,228
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 48,552</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 83,692
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	10,869
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 94,561</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 288,014
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 446,482
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 654,957
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 269,960
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 9,057
◆ 2021	\$ (842,679)	\$ (1,113)
◆ 2022	\$ 736,335	\$ 11,570
◆ 2023	\$ (2,544,804)	\$ (20,435)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Leverett
◆ Current Proportionate Share		2.809820%
◆ Prior Proportionate Share		3.044940%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 1,867,697</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 1,373,401</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 18,149
◆ Changes of Assumptions	1,907,489	53,597
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 71,746</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 22,528
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	126,820
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	119,036
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 268,384</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 257,441
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(20,517)
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 236,924</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 888,311
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 1,373,401
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 2,014,684
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 830,410
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ (41,549)
◆ 2021	\$ (842,679)	\$ (58,619)
◆ 2022	\$ 736,335	\$ (8,746)
◆ 2023	\$ (2,544,804)	\$ (87,724)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Leyden
◆ Current Proportionate Share		0.446786%
◆ Prior Proportionate Share		0.426655%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 261,701</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 218,383</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 2,886
◆ Changes of Assumptions	1,907,489	8,522
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	13,381
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 24,789</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 3,582
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	20,166
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 23,748</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 40,935
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	6,149
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 47,084</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 139,841
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 218,383
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 320,352
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 132,042
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 5,674
◆ 2021	\$ (842,679)	\$ (109)
◆ 2022	\$ 736,335	\$ 5,455
◆ 2023	\$ (2,544,804)	\$ (9,979)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Mahar Regional School District
◆ Current Proportionate Share		5.113293%
◆ Prior Proportionate Share		5.003540%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 3,069,058</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 2,499,307</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 33,028
◆ Changes of Assumptions	1,907,489	97,535
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	95,323
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 225,886</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 40,996
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	230,786
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 271,782</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 468,490
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	63,093
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 531,583</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 1,616,689
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 2,499,307
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 3,666,310
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 1,511,175
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 36,488
◆ 2021	\$ (842,679)	\$ (14,076)
◆ 2022	\$ 736,335	\$ 54,245
◆ 2023	\$ (2,544,804)	\$ (122,553)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Mohawk Regional School District
◆ Current Proportionate Share		9.263470%
◆ Prior Proportionate Share		9.124692%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 5,596,879</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 4,527,856</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 59,835
◆ Changes of Assumptions	1,907,489	176,700
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	66,719
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 303,254</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 74,270
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	418,103
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	30,874
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 523,247</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 848,738
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	6,680
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 855,418</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 2,929,753</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 4,527,856
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 6,642,051
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 2,737,713
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ (16,062)
◆ 2021	\$ (842,679)	\$ (63,170)
◆ 2022	\$ 736,335	\$ 85,405
◆ 2023	\$ (2,544,804)	\$ (226,166)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -



## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Monroe
◆ Current Proportionate Share		0.327650%
◆ Prior Proportionate Share		0.300604%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 184,384</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 160,151</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 2,116
◆ Changes of Assumptions	1,907,489	6,250
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	10,477
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 18,843</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 2,627
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	14,788
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	4,049
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 21,464</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 30,020
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	2,088
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 32,108</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 102,837</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 160,151
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 234,930
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 96,833
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 788
◆ 2021	\$ (842,679)	\$ (1,498)
◆ 2022	\$ 736,335	\$ 4,561
◆ 2023	\$ (2,544,804)	\$ (6,472)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -



## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of New Salem
◆ Current Proportionate Share		0.794299%
◆ Prior Proportionate Share		0.766049%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 469,877</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 388,242</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 5,131
◆ Changes of Assumptions	1,907,489	15,151
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	24,183
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 44,465</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 6,368
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	35,850
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 42,218</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 72,775
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	11,669
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 84,444</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 251,587
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 388,242
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 569,525
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 234,746
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 9,318
◆ 2021	\$ (842,679)	\$ 912
◆ 2022	\$ 736,335	\$ 10,281
◆ 2023	\$ (2,544,804)	\$ (18,264)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	New Salem/Wendell Union School District
◆ Current Proportionate Share		2.025460%
◆ Prior Proportionate Share		2.057818%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 1,262,219</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 990,017</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 13,083
◆ Changes of Assumptions	1,907,489	38,635
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	9,640
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 61,358</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 16,239
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	91,418
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	13,467
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 121,124</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 185,577
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	6,601
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 192,178</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 641,615</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 990,017
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 1,452,286
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 598,602
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ (1,716)
◆ 2021	\$ (842,679)	\$ (16,905)
◆ 2022	\$ 736,335	\$ 12,632
◆ 2023	\$ (2,544,804)	\$ (53,777)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Northfield
◆ Current Proportionate Share		2.621169%
◆ Prior Proportionate Share		2.868527%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 1,759,489</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 1,281,191</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 16,931
◆ Changes of Assumptions	1,907,489	49,999
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	15,278
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 82,208</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 21,015
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	118,305
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	95,819
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 235,139</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 240,157
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(6,336)
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 233,821</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 828,575</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 1,281,191
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 1,879,419
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 774,657
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ (20,567)
◆ 2021	\$ (842,679)	\$ (42,906)
◆ 2022	\$ 736,335	\$ (5,692)
◆ 2023	\$ (2,544,804)	\$ (83,766)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Orange
◆ Current Proportionate Share		13.469091%
◆ Prior Proportionate Share		14.173646%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 8,693,790</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 6,583,507</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 86,998
◆ Changes of Assumptions	1,907,489	256,921
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 343,919</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 107,988
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	607,924
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	513,209
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 1,229,121</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 1,234,066
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(86,097)
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 1,147,969</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 4,148,020
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 6,583,506
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 9,657,545
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 3,980,636
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ (233,306)
◆ 2021	\$ (842,679)	\$ (262,909)
◆ 2022	\$ 736,335	\$ 2,374
◆ 2023	\$ (2,544,804)	\$ (391,361)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Orange Housing Authority
◆ Current Proportionate Share		0.129075%
◆ Prior Proportionate Share		0.135748%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 83,265</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 63,090</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 834
◆ Changes of Assumptions	1,907,489	2,462
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	437
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 3,733</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 1,035
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	5,826
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	6,193
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 13,054</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 11,826
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(1,991)
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 9,835</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 39,249</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 63,090
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 92,549
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 38,147
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ (2,215)
◆ 2021	\$ (842,679)	\$ (3,152)
◆ 2022	\$ 736,335	\$ (209)
◆ 2023	\$ (2,544,804)	\$ (3,745)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Pioneer Valley Regional School District
◆ Current Proportionate Share		6.880602%
◆ Prior Proportionate Share		7.267278%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 4,457,583</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 3,363,143</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 44,444
◆ Changes of Assumptions	1,907,489	131,247
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	27,160
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 202,851</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 55,166
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	310,553
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	149,787
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 515,506</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 630,415
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	947
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 631,362</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 2,174,860
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 3,363,143
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 4,933,498
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 2,033,484
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ (30,984)
◆ 2021	\$ (842,679)	\$ (90,421)
◆ 2022	\$ 736,335	\$ 10,524
◆ 2023	\$ (2,544,804)	\$ (201,774)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Rowe
◆ Current Proportionate Share		2.100664%
◆ Prior Proportionate Share		2.112360%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 1,295,674</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 1,026,775</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 13,569
◆ Changes of Assumptions	1,907,489	40,070
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	723
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 54,362</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 16,842
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	94,813
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	13,431
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 125,086</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 192,467
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	6,457
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 198,924</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 616,762
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 1,026,775
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 1,506,208
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 620,827
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ (6,731)
◆ 2021	\$ (842,679)	\$ (22,280)
◆ 2022	\$ 736,335	\$ 12,549
◆ 2023	\$ (2,544,804)	\$ (54,262)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -



## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Shelburne
◆ Current Proportionate Share		1.906309%
◆ Prior Proportionate Share		1.861795%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 1,141,983</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 931,778</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 12,313
◆ Changes of Assumptions	1,907,489	36,363
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	17,972
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 66,648</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 15,284
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	86,041
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	1,749
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 103,074</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 174,660
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	11,774
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 186,434</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 602,682</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 931,778
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 1,366,853
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 563,388
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 2,488
◆ 2021	\$ (842,679)	\$ (11,900)
◆ 2022	\$ 736,335	\$ 18,428
◆ 2023	\$ (2,544,804)	\$ (45,442)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -



## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Shelburne Falls Fire District
◆ Current Proportionate Share		0.645375%
◆ Prior Proportionate Share		0.639983%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 392,551</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 315,451</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 4,169
◆ Changes of Assumptions	1,907,489	12,310
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	4,111
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 20,590</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 5,174
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	29,129
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	2,255
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 36,558</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 59,131
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	(340)
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 58,791</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 203,848
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 315,451
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 462,744
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 190,733
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 282
◆ 2021	\$ (842,679)	\$ (5,107)
◆ 2022	\$ 736,335	\$ 4,907
◆ 2023	\$ (2,544,804)	\$ (16,050)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Shutesbury
◆ Current Proportionate Share		2.988531%
◆ Prior Proportionate Share		2.860551%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 1,754,597</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 1,460,753</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 19,304
◆ Changes of Assumptions	1,907,489	57,006
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	64,089
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 140,399</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 23,961
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	134,886
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	1,187
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 160,034</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 273,815
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	26,394
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 300,209</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 945,262</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 1,460,753
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 2,142,823
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 883,226
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 15,347
◆ 2021	\$ (842,679)	\$ (5,844)
◆ 2022	\$ 736,335	\$ 38,086
◆ 2023	\$ (2,544,804)	\$ (67,224)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	South Deerfield Fire District
◆ Current Proportionate Share		0.198575%
◆ Prior Proportionate Share		0.184235%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 113,006</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 97,061</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 1,283
◆ Changes of Assumptions	1,907,489	3,788
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	7,125
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 12,196</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 1,592
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	8,963
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	2,371
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 12,926</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 18,194
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	1,769
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 19,963</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 63,431</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 97,061
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 142,381
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 58,687
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 1,399
◆ 2021	\$ (842,679)	\$ (602)
◆ 2022	\$ 736,335	\$ 2,536
◆ 2023	\$ (2,544,804)	\$ (4,063)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	South Deerfield Water Supply District
◆ Current Proportionate Share		0.496422%
◆ Prior Proportionate Share		0.455747%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 279,545</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 242,644</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 3,207
◆ Changes of Assumptions	1,907,489	9,469
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	16,161
Total Deferred Outflows of Resources	<u><u>\$ 3,816,009</u></u>	<u><u>\$ 28,837</u></u>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 3,980
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	22,406
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	5,938
Total Deferred Inflows of Resources	<u><u>\$ 6,577,806</u></u>	<u><u>\$ 32,324</u></u>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 45,483
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	6,025
Total Employer Pension Expense	<u><u>\$ 9,162,201</u></u>	<u><u>\$ 51,508</u></u>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 157,061
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 242,644
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 355,942
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 146,712
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 754
◆ 2021	\$ (842,679)	\$ (1,956)
◆ 2022	\$ 736,335	\$ 7,543
◆ 2023	\$ (2,544,804)	\$ (9,828)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Sunderland
◆ Current Proportionate Share		3.971481%
◆ Prior Proportionate Share		3.781759%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 2,319,645</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 1,941,205</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 25,653
◆ Changes of Assumptions	1,907,489	75,756
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	88,220
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 189,629</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 31,842
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	179,251
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	5,810
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 216,903</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 363,875
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	21,458
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 385,333</b>
<b>Covered Payroll:</b>	\$ 31,398,150	\$ 1,255,125
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 1,941,205
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 2,847,613
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 1,173,726
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 16,909
◆ 2021	\$ (842,679)	\$ (7,683)
◆ 2022	\$ 736,335	\$ 51,479
◆ 2023	\$ (2,544,804)	\$ (87,979)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Warwick
◆ Current Proportionate Share		0.824072%
◆ Prior Proportionate Share		0.804839%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 493,670</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 402,795</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 5,323
◆ Changes of Assumptions	1,907,489	15,719
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	10,946
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 31,988</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 6,607
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	37,194
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	985
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 44,786</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 75,503
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	2,889
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 78,392</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 260,758</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 402,795
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 590,872
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 243,545
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 1,774
◆ 2021	\$ (842,679)	\$ (3,555)
◆ 2022	\$ 736,335	\$ 8,625
◆ 2023	\$ (2,544,804)	\$ (19,642)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -

## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Wendell
◆ Current Proportionate Share		0.764511%
◆ Prior Proportionate Share		0.778205%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 477,334</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 373,683</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 4,938
◆ Changes of Assumptions	1,907,489	14,583
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	11,370
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 30,891</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 6,130
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	34,506
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	5,305
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 45,941</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 70,046
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	10,799
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 80,845</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 241,855</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 373,683
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 548,166
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 225,943
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 5,075
◆ 2021	\$ (842,679)	\$ (4,510)
◆ 2022	\$ 736,335	\$ 4,787
◆ 2023	\$ (2,544,804)	\$ (20,402)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -



## APPENDIX C - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

Pension Amounts as of December 31, 2019	Franklin Regional Retirement System	Town of Whately
◆ Current Proportionate Share		2.789971%
◆ Prior Proportionate Share		2.753895%
<b>Beginning Net Pension Liability</b>	<b>\$ 61,337,732</b>	<b>\$ 1,689,177</b>
<b>Ending Net Pension Liability</b>	<b>\$ 48,878,620</b>	<b>\$ 1,363,699</b>
<b>Total Deferred Outflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 645,929	\$ 18,021
◆ Changes of Assumptions	1,907,489	53,218
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	39,315
Total Deferred Outflows of Resources	<b>\$ 3,816,009</b>	<b>\$ 110,554</b>
<b>Total Deferred Inflows of Resources:</b>		
◆ Differences Between Expected and Actual Experience	\$ 801,754	\$ 22,369
◆ Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	4,513,461	125,924
◆ Changes of Assumptions	-	-
◆ Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	1,262,591	-
Total Deferred Inflows of Resources	<b>\$ 6,577,806</b>	<b>\$ 148,293</b>
<b>Employer Pension Expense:</b>		
◆ Proportionate Share of Plan Pension Expense	\$ 9,162,201	\$ 255,623
◆ Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	-	17,587
Total Employer Pension Expense	<b>\$ 9,162,201</b>	<b>\$ 273,210</b>
<b>Covered Payroll:</b>	<b>\$ 31,398,150</b>	<b>\$ 881,252</b>
<b>Sensitivity of the Net Pension Liability to Changes in the Discount Rate:</b>		
◆ Current discount rate: 7.75%	\$ 48,878,620	\$ 1,363,699
◆ 1% decrease in the discount rate: 6.75%	\$ 71,701,537	\$ 2,000,452
◆ 1% increase in the discount rate: 8.75%	\$ 29,553,861	\$ 824,544
<b>Deferred Outflows of Resources and Deferred Inflows of Resources Recognized in Future Pension Expense:</b>		
◆ 2020	\$ (110,649)	\$ 16,784
◆ 2021	\$ (842,679)	\$ (11,952)
◆ 2022	\$ 736,335	\$ 25,943
◆ 2023	\$ (2,544,804)	\$ (68,514)
◆ 2024	\$ -	\$ -
◆ Thereafter	\$ -	\$ -



## APPENDIX D - CALCULATION OF SINGLE DISCOUNT RATE

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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 2.74%, based on the December 2019 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%.