

**FRANKLIN REGIONAL RETIREMENT SYSTEM**

Financial Statements,  
Required Supplementary Information,  
and Other Information

For the Year Ended December 31, 2018

## TABLE OF CONTENTS

	<u>PAGE</u>
<b>INDEPENDENT AUDITORS' REPORT</b>	1
<b>MANAGEMENT'S DISCUSSION AND ANALYSIS</b>	3
<b>BASIC FINANCIAL STATEMENTS:</b>	
Statement of Fiduciary Net Position	7
Statement of Changes in Fiduciary Net Position	8
Notes to Financial Statements	9
<b>REQUIRED SUPPLEMENTARY INFORMATION:</b>	
Schedule of Changes in the Net Pension Liability	22
Schedules of Net Pension Liability, Contributions, and Investment Returns	23
<b>OTHER INFORMATION:</b>	
Independent Auditors' Report	24
Schedule of Employer Allocations	26
Schedule of Pension Amounts by Employer	27

## INDEPENDENT AUDITORS' REPORT

To the Honorable Retirement Board  
Franklin Regional Retirement System

Additional Offices:  
Nashua, NH  
Manchester, NH  
Andover, MA  
Ellsworth, ME

We have audited the accompanying financial statements of the Franklin Regional Retirement System (the System), as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise the basic financial statements as listed in the table of contents.

### **Management's Responsibility for the Financial Statements**

The System's management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditors' Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such

opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Franklin Regional Retirement System as of December 31, 2018, and the respective changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## **Report on Summarized Comparative Information**

We have previously audited the System's fiscal year 2017 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated July 25, 2018. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2017 is consistent, in all material aspects, with the audited financial statements from which this has been derived.

## **Other Matters**

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, the Schedule of Changes in the Net Pension Liability, and the Schedules of Net Pension Liability, Contributions, and Investment Returns, listed in the foregoing table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the *Governmental Accounting Standards Board*, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with evidence sufficient to express an opinion or provide any assurance.

*Melanson Heath*

July 31, 2019

## **MANAGEMENT'S DISCUSSION AND ANALYSIS**

As management of the Franklin Regional Retirement System (the System), we offer readers this narrative overview and analysis of the financial activities of the System for the year ended December 31, 2018.

### **A. OVERVIEW OF THE FINANCIAL STATEMENTS**

This discussion and analysis is intended to serve as an introduction to the basic financial statements. The basic financial statements are comprised of two components: (1) fund financial statements and (2) notes to financial statements. This report also contains other supplementary information in addition to the basic financial statements themselves.

**Fund financial statements.** A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. Fund accounting is used to ensure and demonstrate compliance with finance-related legal requirements.

The Statement of Fiduciary Net Position presents information on the System's assets and liabilities and the resulting net position held in trust restricted for pension benefits. This statement reflects the System's investments at fair value, as well as cash, receivables, and liabilities.

The Statement of Changes in Fiduciary Net Position presents information showing how the System's net position restricted for pensions changed during the year ended December 31, 2018. It reflects contributions by members and participating employers, investment activity, along with deductions for retirement benefits, refunds, transfers, and administrative expenses.

**Notes to financial statements.** The Notes to Financial Statements provide additional information that is essential for the reader to gain a full understanding of the data provided in the financial statements.

The Required Supplementary Information includes this Management's Discussion and Analysis, the Schedule of Changes in the Net Pension Liability, and the Schedules of Net Pension Liability, Contributions, and Investment Returns.

### **B. FINANCIAL HIGHLIGHTS**

- The System's total net position restricted for pensions was \$136,400,418 at December 31, 2018.
- The System's net position decreased by \$(7,519,731), which is primarily due to investment losses of \$(5.1 million).

- Employer and employee contributions to the plan were \$10,261,624, which represents a \$412,441 increase over the prior year. The employer share of contributions represents 60.29% of the total contributions made to the System.
- Benefits paid to plan participants increased by \$626,594 or 5.66%, and totaled \$11,693,351 in 2018. At December 31, 2018, there were 633 retirees and beneficiaries in receipt of pension benefits, as further discussed on page 9.
- The System's funded ratio (based on the System's GASB 68 valuation) as of the January 1, 2018 actuarial valuation was 68.98%, with 16 years remaining in its amortization period.

### **C. FINANCIAL STATEMENT ANALYSIS**

The following is a summary of financial statement data for the current and prior years (in thousands):

	<u>FIDUCIARY NET POSITION</u>	
	<u>2018</u>	<u>2017</u>
<b>Assets</b>		
Cash and receivables	\$ 1,648	\$ 1,416
Investments	<u>137,213</u>	<u>144,523</u>
Total assets	138,861	145,939
<b>Liabilities</b>		
Accounts payable	<u>2,461</u>	<u>2,019</u>
<b>Net Position</b>		
Restricted for pensions	<u>\$ 136,400</u>	<u>\$ 143,920</u>

The System's total assets as of December 31, 2018 were \$138,861,111 and were mostly comprised of cash and investments. Total assets decreased \$(7,078,517) or 4.85% from the prior year primarily due to a decrease in investment values. Total liabilities increased by \$441,214 or 21.85% over the prior year.

CHANGES IN FIDUCIARY NET POSITION

	<u>2018</u>	<u>2017</u>
<b>Additions</b>		
Contributions	\$ 10,793	\$ 10,324
Investment income / (loss), net	<u>(5,107)</u>	<u>18,847</u>
Total additions	5,686	29,171
<b>Deductions</b>		
Benefit payments	11,693	11,067
Other	<u>1,513</u>	<u>1,234</u>
Total deductions	<u>13,206</u>	<u>12,301</u>
Changes in net position	(7,520)	16,870
<b>Net Position Restricted for Pensions</b>		
Beginning of year	<u>143,920</u>	<u>127,050</u>
End of year	<u>\$ 136,400</u>	<u>\$ 143,920</u>

The amount needed to finance benefits is accumulated through the collection of employers' and employee's contributions, reimbursements from the Commonwealth of Massachusetts for pre-1998 COLA and through earnings on investments. Contributions and net investment (loss) for calendar year 2018 resulted in total additions of approximately \$5.7 million. Employers' contributions increased by \$340,402, or 5.23% in calendar year 2018. The System had a net investment (loss) of \$(5,106,602) versus a gain of \$18,837,040 in 2017, primarily due to the market performing less favorably in 2018.

The primary deductions of the System include the payment of pension benefits to participants and beneficiaries, refunds and transfers of member contributions, reimbursement payments in accordance with Massachusetts General Law, Chapter 32, Section 3(8)c, more commonly referred to as 3(8)c reimbursements, and the costs of administering the System. Total deductions for calendar year 2018 were \$13,206,427, which represents an increase of \$905,156, or 7.36%, over deductions of \$12,301,271 in calendar year 2017. The payment of pension benefits increased by \$626,594 or 5.36% over the previous year, due to an increase in retirees and beneficiaries in 2018.

## **REQUESTS FOR INFORMATION**

This financial report is designed to provide a general overview of the Franklin Regional Retirement System's finances. Questions concerning any of the information provided in this report, or requests for additional financial information, should be addressed to:

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



# FRANKLIN REGIONAL RETIREMENT SYSTEM

## Statement of Fiduciary Net Position

December 31, 2018

### Assets

Cash and short-term investments	\$ 1,548,623
Investments:	
Equity mutual funds	29,944,272
External investment pool	107,268,708
Accounts receivable	<u>99,508</u>
Total assets	<u>\$ 138,861,111</u>

### Liabilities

Accounts payable	<u>\$ 2,460,693</u>
Total liabilities	2,460,693

### Net Position

Restricted for pensions	<u>136,400,418</u>
Total liabilities and net position	<u>\$ 138,861,111</u>

The accompanying notes are an integral part of these financial statements.

## FRANKLIN REGIONAL RETIREMENT SYSTEM

### Statement of Changes in Fiduciary Net Position

For the Year Ended December 31, 2018

#### **Additions**

##### Contributions:

Employers	\$ 6,507,162
Plan members	3,754,462
Other systems and Commonwealth of Massachusetts	<u>531,674</u>
Total contributions	10,793,298

##### Investment income (loss):

Appreciation (depreciation) in fair value of investments	(4,358,182)
Less: management fees	<u>(748,420)</u>
Net investment gain (loss)	<u>(5,106,602)</u>
Total additions	5,686,696

#### **Deductions**

Benefit payments to plan members and beneficiaries	11,693,351
Refunds to plan members	443,808
Transfers to other systems	472,882
Administrative expenses	<u>596,386</u>
Total deductions	<u>13,206,427</u>
Net increase (decrease)	(7,519,731)

#### **Net Position Restricted for Pensions**

Beginning of year	<u>143,920,149</u>
End of year	<u>\$ 136,400,418</u>

The accompanying notes are an integral part of these financial statements.

# FRANKLIN REGIONAL RETIREMENT SYSTEM

## Notes to Financial Statements

### 1. Description of Plan

Substantially all employees of the 38 member unit employers in Franklin County (except teachers and administrators under contract employed by School Departments) are members of the Franklin Regional Retirement System (the System), a cost sharing, multiple employer public employee retirement system (PERS). Eligible employees must participate in the System. The pension plan provides pension benefits, deferred allowances, and death and disability benefits. Chapter 32 of the Massachusetts General Laws establishes the authority of the System, contribution percentages, and benefits paid. The Franklin Regional Retirement Board does not have the authority to amend benefit provisions.

Membership of the plan consisted of the following at December 31, 2018:

Retirees and beneficiaries receiving benefits	633
Inactive plan members entitled to but not yet receiving benefits	604
Active plan members	<u>1,023</u>
Total	<u><u>2,260</u></u>
Number of participating employers	38

### Participant Contributions

Participants contribute a set percentage of their gross regular compensation annually. Employee contribution percentages are specified in Chapter 32 of the Massachusetts General Laws. The employee's individual contribution percentage is determined by their date of entry into the system. In addition, all employees hired on or after January 1, 1979 contribute an additional 2% on all gross regular compensation over the rate of \$30,000 per year. The percentages are as follows:

Before January 1, 1975	5%
January 1, 1975 – December 31, 1983	7%
January 1, 1984 – June 30, 1996	8%
July 1, 1996 – present	9%

For those members entering a Massachusetts System on or after April 2, 2012 in Group 1, the contribution rate will be reduced to 6% when at least 30 years of creditable service has been attained.

## Employer Contributions

Employers are required to contribute at actuarially determined rates as accepted by the Public Employee Retirement Administration Commission (PERAC).

## Participant Retirement Benefits

A retirement allowance consists of two parts: an annuity and a pension. A member's accumulated total deductions and a portion of the interest they generate constitute the annuity. The difference between the total retirement allowance and the annuity is the pension. The average retirement benefit is approximately 80-85% pension and 15-20% annuity.

The System provides for retirement allowance benefits up to a maximum of 80% of a member's highest 3-year average annual rate of regular compensation for those hired prior to April 2, 2012 and the highest 5-year average annual rate of regular compensation for those first becoming members of the Massachusetts System on or after that date. However, per Chapter 176 of the Acts of 2011, for members who retire on or after April 2, 2012, if in the 5 years of creditable service immediately preceding retirement, the difference in the annual rate of regular compensation between any 2 consecutive years exceeds 100%, the normal yearly amount of the retirement allowance shall be based on the average annual rate of regular compensation received by the member during the period of 5 consecutive years preceding retirement. Benefit payments are based upon a member's age, length of creditable service, level of compensation, and group classification.

There are 4 classes of membership in the retirement system, but one of these classes, Group 3, is made up exclusively of the Massachusetts State Police. The other three classes are as follows:

- Group 1 – General employees, including clerical, administrative, technical, and all other employees not otherwise classified.
- Group 2 – Certain specified hazardous duty positions.
- Group 4 – Police officers, firefighters, and other specified hazardous positions.

A retirement allowance may be received at any age, upon attaining 20 years of service. The plan also provides for retirement at age 55 if the participant was a member prior to January 1, 1978, with no minimum vesting requirements. If the participant was a member on or after January 1, 1978 and a member of Groups 1 or 2, then a retirement allowance may be received if the participant (1) has at least 10 years of creditable service, (2) is age 55, (3) voluntarily left System employment on or after that date, and (4) left accumulated annuity deductions in the fund. Members of Group 4 have no minimum vesting requirements, however, must be at least age 55. Groups 2 and 4 require that participants perform the duties of the Group position for at least 12 months immediately prior to retirement.

A participant who became a member on or after April 2, 2012 is eligible for a retirement allowance upon 10 years creditable service and reaching ages 60 or 55 for Groups 1 and 2, respectively. Participants in Group 4 must be at least age 55. Groups 2 and 4 require that participants perform the duties of the Group position for at least 12 months immediately prior to retirement.

### Methods of Payment

A member may elect to receive his or her retirement allowance in one of three forms of payment as follows:

- Option A – Total annual allowance, payable in monthly installments, commencing at retirement and terminating at the members death.
- Option B – A reduced annual allowance, payable in monthly installments, commencing at retirement and terminating at the death of the member, provided however, that if the total amount of the annuity portion received by the member is less than the amount of his or her accumulated deductions, including interest, the difference or balance of his accumulated deductions will be paid in a lump sum to the retiree's beneficiary or beneficiaries of choice.
- Option C – A reduced annual allowance, payable in monthly installments, commencing at retirement. At the death of the retired employee, 2/3 of the allowance is payable to the member's designated beneficiary (who may be the spouse, or former spouse who has not remarried, child, parent, sister, or brother of the employee) for the life of the beneficiary. For members who retired on or after January 12, 1988, if the beneficiary pre-deceases the retiree, the benefit payable increases (or "pops up" to Option A) based on the factor used to determine the Option C benefit at retirement. For members who retired prior to January 12, 1988, if the System has accepted Section 288 of Chapter 194 of the Acts of 1998 and the beneficiary pre-deceases the retiree, the benefit payable "pops up" to Option A in the same fashion. The Option C became available to accidental disability retirees on November 7, 1996.

### Participant Refunds

Employees who resign from service and who are not eligible to receive a retirement allowance are entitled to request a refund of their accumulated total deductions. Members voluntarily withdrawing with at least 10 years of service or involuntarily withdrawing, receive 100% of the regular interest that has accrued on those accumulated total deductions. Members voluntarily withdrawing with less than 10 years of service get credited interest each year at a rate of 3%.

## **2. Nature of Operations and Summary of Significant Accounting Policies**

### Nature of Operations

The System is organized under Chapter 34B of the Massachusetts General Laws (MGL) and is subject to the provisions of Chapter 32 of the Massachusetts General Laws. The System is governed by a five-member Board. The Board members are appointed or elected as specified by MGL Chapter 34B section 19(b) for terms ranging from 3 to 6 years. The System is also guided by an Advisory Council comprised of the official "Treasurers" of each member unit.

### Summary of Significant Accounting Policies

The accounting policies of the System as reflected in the accompanying financial statements for the year ended December 31, 2018 conform to generally accepted accounting principles for public employee retirement systems (PERS). The more significant accounting policies of the System are summarized below:

### Basis of Accounting

The System follows accounting policies mandated by the Commonwealth of Massachusetts. The accounting records are maintained on the accrual basis of accounting. Contributions from the members' employees are recognized as revenue in the period in which employees provide services to the respective member unit.

### Investments

#### *Investment Policy*

Investments are reported at fair value in accordance with PERAC requirements. System assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension plan.

#### *Rate of Return*

For the year ended December 31, 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was (4.05%). The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested throughout the year.

### Comparative Financial Information

The financial statements include certain prior year summarized comparative information. Such information does not include sufficient detail to constitute a presentation in conformity with generally accepted accounting principles.

Accordingly, such information should be read in conjunction with the System's financial statements for the year ended December 31, 2017.

### 3. Cash and Short-Term Investments

*Custodial Credit Risk - Deposits.* Custodial credit risk is the risk that in the event of a bank failure, the System's deposits may not be returned. Massachusetts General Law Chapter 32, Section 23, limits the System's deposits "in a bank or trust company to an amount not exceeding ten percent of the capital and surplus of such bank or trust company." The System does not have a deposit policy for custodial credit risk.

As of December 31, 2018, \$879,764 of the System's bank balance of \$1,634,992 was exposed to custodial credit risk as uninsured or uncollateralized, and collateral held by pledging bank's trust department not in the System's name.

### 4. Investments

The following is a summary of the System's investments as of December 31, 2018:

<u>Investment Type</u>	<u>Amount</u>
Equity mutual funds	\$ 29,944,272
External investment pools	<u>107,268,708</u>
Total investments	<u>\$ 137,212,980</u>

#### A. Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. Massachusetts General Law, Chapter 32, Section 23, limits the investment of System funds, to the extent not required for current disbursements, in the PRIT Fund or in securities, other than mortgages or collateral loans, which are legal for the investment of funds in savings banks under the laws of the Commonwealth, provided that no more than the established percentage of assets, is invested in any one security.

Due to their nature, none of the System's investments are subject to credit risk disclosure. Fair value of the PRIT fund is the same as the value of the pool share. The Pension Reserves Investment Trust (PRIT) was created under Massachusetts General Law, Chapter 32, Section 22, in December 1983. The PRIT is operated under contract with a private investment advisor, approved by the Pension Reserves Investment Management Board.

## B. Custodial Credit Risk

The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The System's policy on custodial credit risk is to diversify plan assets as described under Asset Allocation and Management Structure below.

## C. Concentration of Credit Risk

Massachusetts General Law Chapter 32, Section 23 limits the amount the System may invest in any one issuer or security type, with the exception of the PRIT Fund. The System's policy with respect to asset allocation and management structure is as follows:

### Asset Allocation

The Board of Trustees of the Retirement System originally adopted an asset allocation policy in 2002 and modified the policy in 2018 to the following. It should be noted that this is a target allocation policy and the Board of Trustees has the authority to override these targets if market conditions warrant such action.

	<u>Percentages of Allocation</u>			<u>Corresponding Index</u>
	<u>Target</u>	<u>Minimum</u>	<u>Maximum</u>	
Diversified Investment	45%	35%	55%	Customized
Separately Managed Domestic Stocks	28%	24%	32%	Customized
International Stocks	5%	3%	8%	MSCI ACWI-ex US
Separately Managed Domestic Bonds	12%	6%	18%	Barclay's Aggregate Bond Index
Real Estate	10%	0%	13%	NCREIF Real Estate Index

Although cash is not included in the above asset allocation, the Trustees realize the need to provide liquidity to pay obligations as they come due. Surplus cash flows, additional contributions, and investment manager cash will be utilized to pay obligations of the System and periodic re-balancing of the assets. The System's investment manager(s) shall be kept informed of the liquidity requirements of the System, and to the extent possible, avoid untimely sales of assets which could be detrimental to the performance of plan assets.

### Management Structure

To diversify plan assets so as to minimize the risk associated with dependence on the success of one enterprise, the Board of Trustees has decided to employ a multi-manager team approach to investing plan assets.



Investment managers will be employed to utilize individual expertise within their assigned area of responsibility. Each manager will be governed by individual investment guidelines. Separate manager guidelines for each investment manager shall serve as addenda to the Policy.

*D. Interest Rate Risk*

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. The System does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates; however, the System's investments consist of equities and pooled funds, neither of which has specified maturity dates. Consequently, none of the System's investments are subject to interest rate risk.

*E. Foreign Currency Risk*

Foreign currency risk is the risk that changes in foreign exchange rates will adversely affect the fair value of an investment. The System does not have a formal investment policy related to foreign currency risk.

*F. Fair Value*

The System categorizes its fair value measurements within the fair value hierarchy established by Governmental Accounting Standards Board Statement No. 72 *Fair Value Measurement and Application* (GASB 72).

The hierarchy is based on the valuation inputs used to measure the fair value of the asset. The hierarchy categorizes the inputs to valuation techniques used for fair value measurement into three levels as follows:

- Level 1 – Inputs that reflect quoted prices (unadjusted) in active markets for identical assets or liabilities that the fund has the ability to access at the measurement date.
- Level 2 – Inputs other than quoted prices that are observable for an asset or liability either directly or indirectly, including inputs in markets that are not considered to be active. Because they must often be priced on the basis of transactions involving similar but not identical securities or do not trade with sufficient frequency, certain directly held securities are categorized as level 2.
- Level 3 – Unobservable inputs based on the best information available, using assumptions in determining the fair value of investments and derivative instruments.

The System has the following fair value measurements as of December 31, 2018:

<u>Description</u>	<u>Amount</u>	Fair Value Measurements Using:
		Quoted prices in active markets for identical assets (Level 1)
Investments by fair value level:		
Equity securities		
Common stock	\$ 27,378,741	\$ 27,378,741
Foreign stock	1,828,713	1,828,713
ADR	342,126	342,126
Real Estate investment trusts	394,692	394,692
External investment pools	<u>107,268,708</u>	
Total	<u>\$ 137,212,980</u>	

<u>Description</u>	<u>Value</u>	Redemption Frequency (If currently eligible)	Redemption Notice Period
PRIT General Allocation*	\$ 61,594,028	Monthly	30 Days
PRIT International Equity*	3,830,904	Monthly	30 Days
PRIT Core Real Estate*	15,062,715	Monthly	30 Days
PRIT Emerging Markets*	2,804,393	Monthly	30 Days
PRIT Value Added Fixed Income*	5,965,390	Monthly	30 Days
Loomis Domestic Fixed Income	11,256,753	Monthly	5 Days
Aberdeen Pooled Domestic Equity	<u>6,754,525</u>	Monthly	30 Days
Total	<u>\$ 107,268,708</u>		

\* Fair value is the same as the value of the pool share. The Pension Reserves Investment Trust (PRIT) was created under Massachusetts General Law, Chapter 32, Section 22, in December 1983. The Pension Reserves Investment Trust is operated under contract with a private investment advisor, approved by the Pension Reserves Investment Management Board. The Pension Reserves Investment Management Board shall choose an investment advisor by requesting proposals from advisors and reviewing such proposals based on criteria adopted under Massachusetts General Law, Chapter 30B.

## 5. Accounts Receivable

Annually the Public Employee Retirement Administration (PERAC) determines the amount of employer contributions (pension appropriations) to be made to the System. The accounts receivable balance primarily consists of appropriations, member deductions and makeup payments, and other receivables.

### Member deductions and makeup payments – Balance \$76,658

This balance represents member deductions and makeup payments for 2018 that were not received by the System until after year end.

### Appropriation receivable – Balance \$13,953

This balance represents legal amounts due to pension appropriation not received until after year end.

### Other receivable – Balance \$8,897

This balance is comprised of miscellaneous amounts due for accrued interest and other items.

## 6. Accounts Payable

Accounts payable represents calendar year 2018 expenditures paid after December 31, 2018 of \$108,998. The remaining \$2,351,695 represents 3(8)(c) Reimbursement owed to the Massachusetts State Retirement Board, which will be paid once a final determination of the amount owed is verified.

## 7. Contingencies

There are various pending claims arising in the ordinary course of operations; however, management believes that the probable liability resulting from such claims and litigation would not materially affect the System's financial position.

## 8. Net Pension Liability of Participating Employers

The net pension liability was based on an actuarial valuation dated January 1, 2018, and rolled forward to December 31, 2018.

### A. Net Pension Liability of Employers

The components of the net pension liability of the participating employers at December 31, 2018 were as follows:

Total pension liability	\$ 197,738,150
Less plan fiduciary net position	<u>(136,400,418)</u>
Employers' net pension liability	<u>\$ 61,337,732</u>
Plan fiduciary net position as a percentage of total pension liability	68.98%

**B. Actuarial Assumptions**

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below:

Valuation date	1/1/2018
Actuarial cost method	Entry Age Normal Cost Method
Remaining amortization period	4
Actuarial assumptions:	
Investment rate of return	7.75%
Projected salary increases:	
Group 1 and 2	6% - 4.25%, based on service
Fire	7% - 4.75%, based on service
Police	7% - 4.75%, based on service
Inflation rate	3% per year
Post-retirement cost-of-living adjustment	3% on first \$17,000

Actuarial valuations of the ongoing System involves estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision, as actual results are compared with past expectations and new estimates are made about the future.

Mortality rates were based on the RP-2000 Mortality Table (base year 2009) with full generational mortality improvement using Scale BB.

Mortality for disabled lives, were based on the RP-2000 Mortality Table (base year 2012) with full generational mortality improvement using Scale BB.

**C. Target Allocations**

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates 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 System's targeted asset allocation as of December 31, 2018, are summarized in the following table.

<u>Asset Class</u>	<u>Target Asset Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
PRIT Core	45.00%	5.10%
Domestic equity	27.00%	5.40%
International equity	5.00%	5.00%
Real estate	10.00%	7.00%
Fixed income	<u>13.00%</u>	2.40%
Total	<u>100.00%</u>	

*D. Discount Rate*

The discount rate used to measure the total pension liability was 7.75%. The projection of cash flows used to determine the discount rate assumed that contributions from participating employers will be made based on the actuarially determined rates based on the Board's funding policy, which establishes the contractually required rates by Statute. Based on those assumptions, the System's fiduciary net position was projected to be available to make all the projected future 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.

*E. Sensitivity of Discount Rate*

The following presents the Net Pension Liability of the participating employers calculated using the discount rate of 7.75%, as well as what the participating employers' net pension liability would be if it were calculated using a discount rate that is one percentage-point lower or one percentage-point higher than the current rate:

1% Decrease <u>(6.75%)</u>	Current Discount Rate <u>(7.75%)</u>	1% Increase <u>(8.75%)</u>
\$83,412,315	\$61,337,732	\$42,649,017

*F. Deferred Outflows/(Inflows) of Resources*

The following schedule reflects the deferred outflows/(inflows) of resources for the System for the year ended December 31, 2018:

	<u>Deferred Outflows of Resources</u>	<u>Deferred (Inflows) of Resources</u>
Differences between expected and actual experience	\$ 1,085,336	\$ (49,611)
Changes of assumptions	2,045,713	-
Net difference between projected and actual investment earnings on pension plan investments	8,906,107	-
Changes in proportion and differences between employer contributions and proportionate share of contributions*	<u>1,307,462</u>	<u>(1,307,462)</u>
Total	<u>\$ 13,344,618</u>	<u>\$ (1,357,073)</u>

\* These amounts must be calculated separately by each member employer.

The following summarizes changes in deferred outflows/(inflows):

	<u>Measurement Year</u>	<u>Amortization Period</u>	<u>Beginning Balance on Prior Measurement Period Deferrals</u>	<u>Current Measurement Period Additions</u>	<u>Amortization of Amounts Recognized in Current Period Pension Expense</u>	<u>End of Year Balance</u>
<u>Deferred Outflows of Resources:</u>						
Difference between expected and actual experience	2017	4.47	\$ 1,524,743	\$ -	\$ (439,407)	\$ 1,085,336
Change in assumptions:	2016	4.54	3,209,413	-	(1,263,549)	1,945,864
	2017	4.47	140,273	-	(40,424)	99,849
Net differences between projected and actual earnings on pension plan investments:	2014	5.00	61,306	-	(61,306)	-
	2015	5.00	3,431,678	-	(1,715,839)	1,715,839
	2016	5.00	(561,596)	-	187,199	(374,397)
	2017	5.00	(7,218,148)	-	1,804,537	(5,413,611)
	2018	5.00	-	16,222,845	(3,244,569)	12,978,276
Changes in proportion and difference between contributions and proportionate share of contributions	2015	4.67	961,426	-	(575,706)	385,720
	2016	4.54	384,118	-	(151,227)	232,891
	2017	4.47	525,886	-	(151,553)	374,333
	2018	4.47	<u>-</u>	<u>405,157</u>	<u>(90,639)</u>	<u>314,518</u>
Total Deferred Outflows of Resources			2,459,099	16,628,002	(5,742,483)	13,344,618

	Measurement Year	Amortization Period	Beginning Balance on Prior Measurement Period Deferrals	Current Measurement Period Additions	Amortization of Amounts Recognized in Current Period Pension Expense	End of Year Balance
<u>Deferred (Inflows) of Resources:</u>						
Difference between expected and actual experience:	2017	4.47	(81,827)	-	32,216	(49,611)
Changes in proportion and difference between contributions and proportionate share of contributions	2015	4.67	(961,426)	-	575,706	(385,720)
	2016	4.54	(384,118)	-	151,227	(232,891)
	2017	4.47	(525,886)	-	151,553	(374,333)
	2018	4.47	-	(405,157)	90,639	(314,518)
Total Deferred (Inflows) of Resources			<u>(1,953,257)</u>	<u>(405,157)</u>	<u>1,001,341</u>	<u>(1,357,073)</u>
Total Collective Deferred Outflows and (Inflows) of Resources			<u>\$ 505,842</u>	<u>\$ 16,222,845</u>	<u>\$ (4,741,142)</u>	<u>\$ 11,987,545</u>

The following schedule reflects the amortization of the balance of deferred outflows/(inflows) of resources:

Fiscal Year*	Total
2019	\$ 4,679,836
2020	2,397,585
2021	1,665,555
2022	<u>3,244,569</u>
	<u>\$ 11,987,545</u>

\* Presented by member units' fiscal year to fairly present the fiduciary impact of related deferred outflows/(inflows) in the fiscal year affecting the member unit.

FRANKLIN REGIONAL RETIREMENT SYSTEM  
Schedule of Changes in the Net Pension Liability

Required Supplementary Information

For the Year Ended December 31, 2018

(Unaudited)

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
<b>Total Pension Liability</b>					
Service cost	\$ 5,063,236	\$ 5,207,589	\$ 5,089,632	\$ 4,703,273	\$ 4,703,273
Interest on unfunded liability - time value of money	14,639,832	13,899,079	12,791,108	12,116,265	11,306,271
Changes of benefit terms	-	(293,031)	1,003,761	962,410	-
Differences between expected and actual experience	-	1,964,150	(146,259)	-	-
Changes of assumptions	-	180,697	5,736,511	-	-
Benefit payments, including refunds of member contributions	<u>(11,605,484)</u>	<u>(10,906,590)</u>	<u>(9,686,040)</u>	<u>(9,235,255)</u>	<u>(11,287,291)</u>
Net change in total pension liability	8,097,584	10,051,894	14,788,713	8,546,693	4,722,253
Total pension liability - beginning	<u>189,640,566</u>	<u>179,588,672</u>	<u>164,799,959</u>	<u>156,253,266</u>	<u>151,531,013</u>
Total pension liability - ending (a)	<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>
<b>Plan Fiduciary Net Position</b>					
Contributions - employer	\$ 6,506,893	\$ 6,166,761	\$ 5,875,820	\$ 5,645,345	\$ 5,418,158
Contributions - member	3,281,580	3,310,425	3,098,432	2,971,069	3,270,956
Net investment income / (loss)	(5,160,455)	18,794,508	10,050,389	579,359	8,362,434
Benefit payments, including refunds of member contributions	(11,605,484)	(10,906,590)	(9,686,040)	(9,235,255)	(11,287,291)
Administrative expense	<u>(542,267)</u>	<u>(495,399)</u>	<u>(498,301)</u>	<u>(469,365)</u>	<u>(403,802)</u>
Net change in plan fiduciary net position	(7,519,733)	16,869,705	8,840,300	(508,847)	5,360,455
Plan fiduciary net position - beginning	<u>143,920,151</u>	<u>127,050,446</u>	<u>118,210,146</u>	<u>118,718,993</u>	<u>113,358,538</u>
Plan fiduciary net position - ending (b)	<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>
Net pension liability (asset) - ending (a-b)	<u>\$ 61,337,732</u>	<u>\$ 45,720,415</u>	<u>\$ 52,538,226</u>	<u>\$ 46,589,813</u>	<u>\$ 37,534,273</u>

*Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.*

See Independent Auditors' Report.



FRANKLIN REGIONAL RETIREMENT SYSTEM

Schedules of Net Pension Liability, Contributions, and Investment Returns

Required Supplementary Information

For the Year Ended December 31, 2018

(Unaudited)

<b>Schedule of Net Pension Liability</b>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability	\$ 197,738,150	\$ 189,640,566	\$ 179,588,672	\$ 164,799,959	\$ 156,253,266
Plan fiduciary net position	<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>
Net pension liability	<u>\$ 61,337,732</u>	<u>\$ 45,720,415</u>	<u>\$ 52,538,226</u>	<u>\$ 46,589,813</u>	<u>\$ 37,534,273</u>
Plan fiduciary net position as a percentage of the total pension liability	68.98%	75.89%	70.75%	71.73%	75.98%
Covered payroll	\$ 30,220,970	\$ 29,460,407	\$ 33,556,164	\$ 32,088,838	\$ 30,854,652
Participating employer net pension liability as a percentage of covered payroll	202.96%	155.19%	156.57%	145.19%	121.65%
 <b>Schedule of Contributions</b>	 <u>2018</u>	 <u>2017</u>	 <u>2016</u>	 <u>2015</u>	 <u>2014</u>
Actuarially determined contribution	\$ 6,506,893	\$ 6,166,761	\$ 5,875,820	\$ 5,645,345	\$ 5,888,495
Contributions in relation to the actuarially determined contribution	<u>(6,506,893)</u>	<u>(6,166,761)</u>	<u>(5,875,820)</u>	<u>(5,645,345)</u>	<u>(5,888,495)</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 30,220,970	\$ 29,460,407	\$ 33,556,164	\$ 32,088,838	\$ 30,854,652
Contributions as a percentage of covered payroll	21.53%	20.93%	17.51%	17.59%	19.08%
 <b>Schedule of Investment Returns</b>					
<i>Year Ended December 31</i>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money weighted rate of return, net of investment expense	(4.05%)	14.48%	8.24%	0.57%	7.37%

Schedules are intended to show information for 10 years. Additional years will be displayed as they become available.

See Independent Auditors' Report.

**Additional Offices:**

Nashua, NH  
Manchester, NH  
Andover, MA  
Ellsworth, ME

## INDEPENDENT AUDITORS' REPORT

To the Honorable Retirement Board  
Franklin Regional Retirement System

### **Report on Schedules**

We have audited the accompanying schedule of employer allocations of the Franklin Regional Retirement System as of and for the year ended December 31, 2018. We have also audited the total for all entities of the rows titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified totals) included in the accompanying schedule of pension amounts by employer of the Franklin Regional Retirement System as of and for the year ended December 31, 2018.

### **Management's Responsibility for the Schedules**

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedules that are free from material misstatement, whether due to fraud or error.

### **Auditors' Responsibility**

Our responsibility is to express opinions on the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule of employer allocations and specified row totals included in the schedule of pension amounts by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and specified totals included in the schedule of pension amounts by employer. The procedures selected depend on the

auditor's judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and specified totals included in the schedule of pension amounts by employer whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedule of employer allocations and specified row totals included in the schedule of pension amounts by employer in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule of employer allocations and specified row totals included in the schedule of pension amounts by employer.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

### **Opinions**

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities for the Franklin Regional Retirement System as of and for the year ended December 31, 2018, in accordance with accounting principles generally accepted in the United States of America.

### **Restriction on Use**

Our report is intended solely for the information and use of Franklin Regional Retirement System management, the Retirement Board, and System employers and their auditors as of and for the year ended December 31, 2018 and is not intended to be and should not be used by anyone other than these specified parties.

*Melanson Heath*

July 31, 2019

FRANKLIN REGIONAL RETIREMENT SYSTEM

Schedule of Employer Allocations

For the Year Ended December 31, 2018

<u>Employer</u>	FY 2018 Actual Employer Contributions	Allocation Percentage
Town of Ashfield	\$ 87,704	1.35%
Town of Bernardston	98,429	1.51%
Bernardston Fire & Water District	3,155	0.05%
Town of Buckland	129,523	1.99%
Town of Charlemont	69,406	1.07%
Town of Colrain	87,697	1.35%
Town of Conway	175,407	2.70%
Town of Deerfield	574,805	8.83%
Town of Erving	287,086	4.41%
Franklin County Regional Housing Authority	253,879	3.90%
Franklin County Solid Waste Management District	27,638	0.42%
Franklin Regional Transit Authority	73,914	1.14%
Frontier Regional School District	403,160	6.20%
Town of Gill	100,229	1.54%
Hawlemont Regional School District	55,524	0.85%
Town of Hawley	27,132	0.42%
Town of Heath	56,786	0.87%
Town of Leverett	198,131	3.04%
Town of Leyden	27,762	0.43%
Mahar Regional School District	325,575	5.00%
Mohawk Regional School District	593,734	9.12%
Town of Monroe	19,560	0.30%
Town of New Salem	49,846	0.77%
New Salem/Wendell Union School District	133,900	2.06%
Town of Northfield	186,652	2.87%
Town of Orange	922,264	14.17%
Orange Housing Authority	8,833	0.14%
Pioneer Valley Regional School District	472,874	7.27%
Town of Rowe	137,449	2.11%
Town of Shelburne	121,145	1.86%
Shelburne Falls Fire District	41,643	0.64%
Town of Shutesbury	186,133	2.86%
South Deerfield Fire District	11,988	0.18%
South Deerfield Water Supply District	29,655	0.46%
Town of Sunderland	246,075	3.78%
Town of Warwick	52,370	0.80%
Town of Wendell	50,637	0.78%
Town of Whately	179,193	2.75%
Total	<u>\$ 6,506,893</u>	<u>100%</u>

See actuarial assumptions in the Franklin Regional Retirement System audited financial statements.

FRANKLIN REGIONAL RETIREMENT SYSTEM  
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER  
As of and for the year ended December 31, 2018

	<b>Franklin Regional Retirement System Total</b>	<b>Town of Ashfield</b>	<b>Town of Bernardston</b>	<b>Bernardston Fire &amp; Water District</b>	<b>Town of Buckland</b>	<b>Town of Charlemont</b>
<b>Beginning Net Pension Liability, 12/31/17</b>	\$ 45,720,415	\$ 619,781	\$ 677,336	\$ 22,131	\$ 893,900	\$ 478,122
<b>Ending Net Pension Liability, 12/31/18</b>	\$ 61,337,732	\$ 826,749	\$ 927,849	\$ 29,741	\$ 1,220,959	\$ 654,261
<b>Total Deferred Outflows of Resources:</b>						
Differences Between Expected and Actual Experience	\$ 1,085,336	\$ 14,629	\$ 16,418	\$ 526	\$ 21,604	\$ 11,577
Earnings on Pension Plan Investments	8,906,107	120,042	134,722	4,318	177,281	94,997
Change of Assumptions	2,045,713	27,573	30,945	992	40,721	21,821
Contributions and Proportionate Share of Contributions	<u>1,307,462</u>	<u>14,392</u>	<u>22,100</u>	<u>524</u>	<u>38,475</u>	<u>13,790</u>
Total Deferred Outflows of Resources	<u>\$ 13,344,618</u>	<u>\$ 176,636</u>	<u>\$ 204,185</u>	<u>\$ 6,360</u>	<u>\$ 278,081</u>	<u>\$ 142,185</u>
<b>Total Deferred Inflows of Resources:</b>						
Differences Between Expected and Actual Experience	\$ 49,611	\$ 669	\$ 750	\$ 24	\$ 988	\$ 529
Contributions and Proportionate Share of Contributions	<u>1,307,462</u>	<u>5,668</u>	<u>-</u>	<u>1,306</u>	<u>-</u>	<u>291</u>
Total Deferred Inflows of Resources	<u>\$ 1,357,073</u>	<u>\$ 6,337</u>	<u>\$ 750</u>	<u>\$ 1,330</u>	<u>\$ 988</u>	<u>\$ 820</u>
<b>Employer Pension Expense:</b>						
Proportionate Share of Plan Pension Expense	\$ 10,642,507	\$ 143,446	\$ 160,988	\$ 5,160	\$ 211,844	\$ 113,519
Contributions and Proportionate Share of Contributions	<u>-</u>	<u>3,722</u>	<u>8,808</u>	<u>(186)</u>	<u>22,129</u>	<u>4,627</u>
Total Employer Pension Expense	<u>\$ 10,642,507</u>	<u>\$ 147,168</u>	<u>\$ 169,796</u>	<u>\$ 4,974</u>	<u>\$ 233,973</u>	<u>\$ 118,146</u>
<b>Covered Payroll:</b>	30,220,970	420,788	471,803	15,681	585,468	331,289
<b>Sensitivity of the Net Pension Liability to changes in the discount rate:</b>						
Current discount rate: 7.75%	61,337,732	826,749	927,849	29,741	1,220,959	654,261
1% decrease in the discount rate: 6.75%	83,412,315	1,124,284	1,261,768	40,444	1,660,364	889,720
1% increase in the discount rate: 8.75%	42,649,017	574,850	645,147	20,679	848,950	454,917
<b>Deferred Outflows of Resources and Deferred Inflows of Resources, to be recognized in Pension Expense:</b>						
FY 2020	\$ 4,679,836	\$ 66,529	\$ 79,182	\$ 1,879	\$ 112,103	\$ 54,503
FY 2021	2,397,585	36,104	43,545	744	59,021	30,167
FY 2022	1,665,555	24,301	30,143	831	39,702	21,093
FY 2023	<u>3,244,569</u>	<u>43,365</u>	<u>50,565</u>	<u>1,576</u>	<u>66,267</u>	<u>35,602</u>
Total	<u>\$ 11,987,545</u>	<u>\$ 170,299</u>	<u>\$ 203,435</u>	<u>\$ 5,030</u>	<u>\$ 277,093</u>	<u>\$ 141,365</u>

(Continued)

FRANKLIN REGIONAL RETIREMENT SYSTEM  
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

As of and for the year ended December 31, 2018

(Continued)

	<u>Town of Colrain</u>	<u>Town of Conway</u>	<u>Town of Deerfield</u>	<u>Town of Erving</u>	<u>Franklin County Regional Housing Authority</u>	<u>Franklin County Solid Waste Management District</u>
<b>Beginning Net Pension Liability, 12/31/17</b>	\$ 596,939	\$ 1,230,718	\$ 3,975,473	\$ 1,983,314	\$ 1,885,026	\$ 191,240
<b>Ending Net Pension Liability, 12/31/18</b>	\$ 826,683	\$ 1,653,488	\$ 5,418,444	\$ 2,706,238	\$ 2,393,210	\$ 260,534
<b>Total Deferred Outflows of Resources:</b>						
Differences Between Expected and Actual Experience	\$ 14,628	\$ 29,258	\$ 95,876	\$ 47,885	\$ 42,346	\$ 4,610
Earnings on Pension Plan Investments	120,033	240,083	786,746	392,940	347,489	37,829
Change of Assumptions	27,571	55,146	180,714	90,257	79,817	8,689
Contributions and Proportionate Share of Contributions	<u>29,513</u>	<u>23,660</u>	<u>147,916</u>	<u>128,458</u>	<u>32,262</u>	<u>4,361</u>
Total Deferred Outflows of Resources	<u>\$ 191,745</u>	<u>\$ 348,147</u>	<u>\$ 1,211,252</u>	<u>\$ 659,540</u>	<u>\$ 501,914</u>	<u>\$ 55,489</u>
<b>Total Deferred Inflows of Resources:</b>						
Differences Between Expected and Actual Experience	\$ 669	\$ 1,337	\$ 4,383	\$ 2,189	\$ 1,936	\$ 211
Contributions and Proportionate Share of Contributions	<u>-</u>	<u>354</u>	<u>-</u>	<u>127,105</u>	<u>175,106</u>	<u>121</u>
Total Deferred Inflows of Resources	<u>\$ 669</u>	<u>\$ 1,691</u>	<u>\$ 4,383</u>	<u>\$ 129,294</u>	<u>\$ 177,042</u>	<u>\$ 332</u>
<b>Employer Pension Expense:</b>						
Proportionate Share of Plan Pension Expense	\$ 143,435	\$ 286,891	\$ 940,136	\$ 469,550	\$ 415,238	\$ 45,204
Contributions and Proportionate Share of Contributions	<u>21,034</u>	<u>11,551</u>	<u>70,084</u>	<u>21,141</u>	<u>(22,998)</u>	<u>2,957</u>
Total Employer Pension Expense	<u>\$ 164,469</u>	<u>\$ 298,442</u>	<u>\$ 1,010,220</u>	<u>\$ 490,691</u>	<u>\$ 392,240</u>	<u>\$ 48,161</u>
<b>Covered Payroll:</b>	375,240	840,364	2,751,736	1,375,541	1,194,286	129,442
<b>Sensitivity of the Net Pension Liability to changes in the discount rate:</b>						
Current discount rate: 7.75%	826,683	1,653,488	5,418,444	2,706,238	2,393,210	260,534
1% decrease in the discount rate: 6.75%	1,124,194	2,248,554	7,368,465	3,680,175	3,254,492	354,297
1% increase in the discount rate: 8.75%	574,804	1,149,694	3,767,523	1,881,687	1,664,034	181,153
<b>Deferred Outflows of Resources and Deferred Inflows of Resources, to be recognized in Pension Expense:</b>						
FY 2020	\$ 79,221	\$ 137,881	\$ 480,043	\$ 228,260	\$ 143,704	\$ 22,139
FY 2021	38,517	73,463	261,341	98,269	33,780	11,071
FY 2022	27,607	47,464	172,280	57,044	31,314	7,859
FY 2023	<u>45,731</u>	<u>87,648</u>	<u>293,205</u>	<u>146,673</u>	<u>116,074</u>	<u>14,088</u>
Total	<u>\$ 191,076</u>	<u>\$ 346,456</u>	<u>\$ 1,206,869</u>	<u>\$ 530,246</u>	<u>\$ 324,872</u>	<u>\$ 55,157</u>

(Continued)

FRANKLIN REGIONAL RETIREMENT SYSTEM  
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

As of and for the year ended December 31, 2018

(Continued)

	<u>Franklin Regional Council of Government</u>	<u>Franklin Regional Transit Authority</u>	<u>Frontier Regional School District</u>	<u>Town of Gill</u>	<u>Hawlemont Regional School District</u>	<u>Town of Hawley</u>
<b>Beginning Net Pension Liability, 12/31/17</b>	\$ -	\$ 482,533	\$ 2,839,802	\$ 694,685	\$ 389,584	\$ 181,510
<b>Ending Net Pension Liability, 12/31/18</b>	\$ -	\$ 696,756	\$ 3,800,419	\$ 944,816	\$ 523,401	\$ 255,762
<b>Total Deferred Outflows of Resources:</b>						
Differences Between Expected and Actual Experience	\$ -	\$ 12,329	\$ 67,246	\$ 16,718	\$ 9,261	\$ 4,526
Earnings on Pension Plan Investments	-	101,167	551,813	137,185	75,997	37,136
Change of Assumptions	-	23,238	126,750	31,511	17,456	8,530
Contributions and Proportionate Share of Contributions	-	66,544	61,152	36,089	1,789	14,787
Total Deferred Outflows of Resources	<u>\$ -</u>	<u>\$ 203,278</u>	<u>\$ 806,961</u>	<u>\$ 221,503</u>	<u>\$ 104,503</u>	<u>\$ 64,979</u>
<b>Total Deferred Inflows of Resources:</b>						
Differences Between Expected and Actual Experience	\$ -	\$ 564	\$ 3,074	\$ 764	\$ 423	\$ 207
Contributions and Proportionate Share of Contributions	<u>370,743</u>	<u>4,063</u>	<u>5,385</u>	<u>-</u>	<u>10,967</u>	<u>719</u>
Total Deferred Inflows of Resources	<u>\$ 370,743</u>	<u>\$ 4,627</u>	<u>\$ 8,459</u>	<u>\$ 764</u>	<u>\$ 11,390</u>	<u>\$ 926</u>
<b>Employer Pension Expense:</b>						
Proportionate Share of Plan Pension Expense	\$ -	\$ 120,892	\$ 659,398	\$ 163,932	\$ 90,814	\$ 44,376
Contributions and Proportionate Share of Contributions	<u>(553,347)</u>	<u>20,731</u>	<u>30,483</u>	<u>27,214</u>	<u>(3,606)</u>	<u>4,702</u>
Total Employer Pension Expense	<u>\$ (553,347)</u>	<u>\$ 141,623</u>	<u>\$ 689,881</u>	<u>\$ 191,146</u>	<u>\$ 87,208</u>	<u>\$ 49,078</u>
<b>Covered Payroll:</b>	-	347,069	1,903,857	423,080	265,877	129,031
<b>Sensitivity of the Net Pension Liability to changes in the discount rate:</b>						
Current discount rate: 7.75%	-	696,756	3,800,419	944,816	523,401	255,762
1% decrease in the discount rate: 6.75%	-	947,509	5,168,136	1,284,842	711,766	347,807
1% increase in the discount rate: 8.75%	-	484,465	2,642,487	656,945	363,929	177,835
<b>Deferred Outflows of Resources and Deferred Inflows of Resources, to be recognized in Pension Expense:</b>						
FY 2020	\$ (370,743)	\$ 75,893	\$ 318,331	\$ 93,901	\$ 35,655	\$ 24,571
FY 2021	-	50,178	169,443	45,905	16,435	15,030
FY 2022	-	31,896	110,428	29,960	13,279	9,973
FY 2023	-	40,684	200,300	50,973	27,744	14,479
Total	<u>\$ (370,743)</u>	<u>\$ 198,651</u>	<u>\$ 798,502</u>	<u>\$ 220,739</u>	<u>\$ 93,113</u>	<u>\$ 64,053</u>

(Continued)

FRANKLIN REGIONAL RETIREMENT SYSTEM  
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

As of and for the year ended December 31, 2018

(Continued)

	<u>Town of Heath</u>	<u>Town of Leverett</u>	<u>Town of Leyden</u>	<u>Mahar Regional School District</u>	<u>Mohawk Regional School District</u>	<u>Town of Monroe</u>
<b>Beginning Net Pension Liability, 12/31/17</b>	\$ 394,003	\$ 1,435,270	\$ 194,788	\$ 2,240,076	\$ 4,148,130	\$ 144,381
<b>Ending Net Pension Liability, 12/31/18</b>	\$ 535,298	\$ 1,867,697	\$ 261,701	\$ 3,069,058	\$ 5,596,879	\$ 184,384
<b>Total Deferred Outflows of Resources:</b>						
Differences Between Expected and Actual Experience	\$ 9,472	\$ 33,048	\$ 4,631	\$ 54,305	\$ 99,034	\$ 3,263
Earnings on Pension Plan Investments	77,724	271,186	37,998	445,621	812,655	26,772
Change of Assumptions	17,853	62,291	8,728	102,358	186,665	6,150
Contributions and Proportionate Share of Contributions	<u>16,128</u>	<u>20,470</u>	<u>10,353</u>	<u>104,252</u>	<u>43,450</u>	<u>964</u>
Total Deferred Outflows of Resources	<u>\$ 121,177</u>	<u>\$ 386,995</u>	<u>\$ 61,710</u>	<u>\$ 706,536</u>	<u>\$ 1,141,804</u>	<u>\$ 37,149</u>
<b>Total Deferred Inflows of Resources:</b>						
Differences Between Expected and Actual Experience	\$ 433	\$ 1,511	\$ 212	\$ 2,482	\$ 4,527	\$ 149
Contributions and Proportionate Share of Contributions	<u>1,058</u>	<u>43,990</u>	<u>758</u>	<u>-</u>	<u>69,412</u>	<u>5,794</u>
Total Deferred Inflows of Resources	<u>\$ 1,491</u>	<u>\$ 45,501</u>	<u>\$ 970</u>	<u>\$ 2,482</u>	<u>\$ 73,939</u>	<u>\$ 5,943</u>
<b>Employer Pension Expense:</b>						
Proportionate Share of Plan Pension Expense	\$ 92,878	\$ 324,058	\$ 45,407	\$ 532,502	\$ 971,096	\$ 31,992
Contributions and Proportionate Share of Contributions	<u>6,023</u>	<u>14,518</u>	<u>3,641</u>	<u>59,489</u>	<u>4,384</u>	<u>(308)</u>
Total Employer Pension Expense	<u>\$ 98,901</u>	<u>\$ 338,576</u>	<u>\$ 49,048</u>	<u>\$ 591,991</u>	<u>\$ 975,480</u>	<u>\$ 31,684</u>
<b>Covered Payroll:</b>	272,836	884,987	133,882	1,558,480	2,844,714	94,864
<b>Sensitivity of the Net Pension Liability to changes in the discount rate:</b>						
Current discount rate: 7.75%	535,298	1,867,697	261,701	3,069,058	5,596,879	184,384
1% decrease in the discount rate: 6.75%	727,944	2,539,855	355,883	4,173,568	7,611,117	250,741
1% increase in the discount rate: 8.75%	372,200	1,298,637	181,964	2,133,961	3,891,592	128,205
<b>Deferred Outflows of Resources and Deferred Inflows of Resources, to be recognized in Pension Expense:</b>						
FY 2020	\$ 47,387	\$ 146,935	\$ 23,979	\$ 285,602	\$ 418,973	\$ 13,287
FY 2021	26,667	59,518	14,263	150,460	198,230	5,487
FY 2022	16,796	40,728	8,626	100,702	152,139	3,400
FY 2023	<u>28,836</u>	<u>94,313</u>	<u>13,872</u>	<u>167,290</u>	<u>298,523</u>	<u>9,032</u>
Total	<u>\$ 119,686</u>	<u>\$ 341,494</u>	<u>\$ 60,740</u>	<u>\$ 704,054</u>	<u>\$ 1,067,865</u>	<u>\$ 31,206</u>

(Continued)



FRANKLIN REGIONAL RETIREMENT SYSTEM  
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

As of and for the year ended December 31, 2018

(Continued)

	<u>Town of New Salem</u>	<u>New Salem/ Wendell Union School District</u>	<u>Town of Northfield</u>	<u>Town of Orange</u>	<u>Orange Housing Authority</u>	<u>Pioneer Valley Regional School District</u>
<b>Beginning Net Pension Liability, 12/31/17</b>	\$ 336,455	\$ 929,768	\$ 1,299,394	\$ 6,692,078	\$ 66,407	\$ 3,314,006
<b>Ending Net Pension Liability, 12/31/18</b>	\$ 469,877	\$ 1,262,219	\$ 1,759,489	\$ 8,693,790	\$ 83,265	\$ 4,457,583
<b>Total Deferred Outflows of Resources:</b>						
Differences Between Expected and Actual Experience	\$ 8,314	\$ 22,334	\$ 31,133	\$ 153,831	\$ 1,473	\$ 78,874
Earnings on Pension Plan Investments	68,225	183,271	255,474	1,262,320	12,090	647,232
Change of Assumptions	15,671	42,097	58,682	289,953	2,777	148,668
Contributions and Proportionate Share of Contributions	21,910	21,402	35,194	164,402	1,246	69,143
Total Deferred Outflows of Resources	<u>\$ 114,120</u>	<u>\$ 269,104</u>	<u>\$ 380,483</u>	<u>\$ 1,870,506</u>	<u>\$ 17,586</u>	<u>\$ 943,917</u>
<b>Total Deferred Inflows of Resources:</b>						
Differences Between Expected and Actual Experience	\$ 380	\$ 1,021	\$ 1,423	\$ 7,031	\$ 67	\$ 3,605
Contributions and Proportionate Share of Contributions	-	2,657	-	416,009	5,699	-
Total Deferred Inflows of Resources	<u>\$ 380</u>	<u>\$ 3,678</u>	<u>\$ 1,423</u>	<u>\$ 423,040</u>	<u>\$ 5,766</u>	<u>\$ 3,605</u>
<b>Employer Pension Expense:</b>						
Proportionate Share of Plan Pension Expense	\$ 81,527	\$ 219,003	\$ 305,283	\$ 1,508,433	\$ 14,447	\$ 773,421
Contributions and Proportionate Share of Contributions	9,044	13,418	25,478	69,652	(1,427)	53,321
Total Employer Pension Expense	<u>\$ 90,571</u>	<u>\$ 232,421</u>	<u>\$ 330,761</u>	<u>\$ 1,578,085</u>	<u>\$ 13,020</u>	<u>\$ 826,742</u>
<b>Covered Payroll:</b>	239,217	599,218	804,329	4,038,150	42,237	2,148,102
<b>Sensitivity of the Net Pension Liability to changes in the discount rate:</b>						
Current discount rate: 7.75%	469,877	1,262,219	1,759,489	8,693,790	83,265	4,457,583
1% decrease in the discount rate: 6.75%	638,979	1,716,473	2,392,705	11,822,566	113,231	6,061,805
1% increase in the discount rate: 8.75%	326,712	877,639	1,223,399	6,044,921	57,895	3,099,422
<b>Deferred Outflows of Resources and Deferred Inflows of Resources, to be recognized in Pension Expense:</b>						
FY 2020	\$ 44,521	\$ 106,339	\$ 154,158	\$ 651,979	\$ 5,071	\$ 382,080
FY 2021	25,565	53,297	77,360	196,200	1,891	191,905
FY 2022	17,366	37,871	53,211	161,439	905	129,638
FY 2023	26,288	67,919	94,331	437,848	3,953	236,689
Total	<u>\$ 113,740</u>	<u>\$ 265,426</u>	<u>\$ 379,060</u>	<u>\$ 1,447,466</u>	<u>\$ 11,820</u>	<u>\$ 940,312</u>

(Continued)

FRANKLIN REGIONAL RETIREMENT SYSTEM  
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

As of and for the year ended December 31, 2018

(Continued)

	<u>Town of Rowe</u>	<u>Town of Shelburne</u>	<u>Shelburne Falls Fire District</u>	<u>Town of Shutesbury</u>	<u>South Deerfield Fire District</u>	<u>South Deerfield Water Supply District</u>
<b>Beginning Net Pension Liability, 12/31/17</b>	\$ 981,904	\$ 854,420	\$ 296,612	\$ 1,283,839	\$ 88,538	\$ 212,493
<b>Ending Net Pension Liability, 12/31/18</b>	\$ 1,295,674	\$ 1,141,983	\$ 392,551	\$ 1,754,597	\$ 113,006	\$ 279,545
<b>Total Deferred Outflows of Resources:</b>						
Differences Between Expected and Actual Experience	\$ 22,926	\$ 20,207	\$ 6,946	\$ 31,047	\$ 2,000	\$ 4,946
Earnings on Pension Plan Investments	188,129	165,813	56,998	254,764	16,408	40,589
Change of Assumptions	43,213	38,087	13,092	58,519	3,769	9,323
Contributions and Proportionate Share of Contributions	<u>12,154</u>	<u>8,486</u>	<u>3,397</u>	<u>29,523</u>	<u>2,804</u>	<u>5,532</u>
Total Deferred Outflows of Resources	<u>\$ 266,422</u>	<u>\$ 232,593</u>	<u>\$ 80,433</u>	<u>\$ 373,853</u>	<u>\$ 24,981</u>	<u>\$ 60,390</u>
<b>Total Deferred Inflows of Resources:</b>						
Differences Between Expected and Actual Experience	\$ 1,048	\$ 924	\$ 318	\$ 1,419	\$ 91	\$ 226
Contributions and Proportionate Share of Contributions	<u>12,633</u>	<u>2,457</u>	<u>4,542</u>	<u>3,385</u>	<u>3,355</u>	<u>9,357</u>
Total Deferred Inflows of Resources	<u>\$ 13,681</u>	<u>\$ 3,381</u>	<u>\$ 4,860</u>	<u>\$ 4,804</u>	<u>\$ 3,446</u>	<u>\$ 9,583</u>
<b>Employer Pension Expense:</b>						
Proportionate Share of Plan Pension Expense	\$ 224,808	\$ 198,142	\$ 68,110	\$ 304,434	\$ 19,607	\$ 48,503
Contributions and Proportionate Share of Contributions	<u>13,088</u>	<u>10,472</u>	<u>(1,544)</u>	<u>17,121</u>	<u>329</u>	<u>3,865</u>
Total Employer Pension Expense	<u>\$ 237,896</u>	<u>\$ 208,614</u>	<u>\$ 66,566</u>	<u>\$ 321,555</u>	<u>\$ 19,936</u>	<u>\$ 52,368</u>
<b>Covered Payroll:</b>	608,781	580,390	200,686	892,959	57,116	143,091
<b>Sensitivity of the Net Pension Liability to changes in the discount rate:</b>						
Current discount rate: 7.75%	1,295,674	1,141,983	392,551	1,754,597	113,006	279,545
1% decrease in the discount rate: 6.75%	1,761,968	1,552,966	533,824	2,386,052	153,675	380,149
1% increase in the discount rate: 8.75%	900,901	794,037	272,946	1,219,997	78,575	194,372
<b>Deferred Outflows of Resources and Deferred Inflows of Resources, to be recognized in Pension Expense:</b>						
FY 2020	\$ 106,553	\$ 94,179	\$ 29,038	\$ 146,681	\$ 8,872	\$ 23,036
FY 2021	47,482	44,510	15,769	73,655	4,514	7,913
FY 2022	31,847	30,449	10,418	53,402	2,619	5,501
FY 2023	<u>66,859</u>	<u>60,074</u>	<u>20,348</u>	<u>95,311</u>	<u>5,530</u>	<u>14,357</u>
Total	<u>\$ 252,741</u>	<u>\$ 229,212</u>	<u>\$ 75,573</u>	<u>\$ 369,049</u>	<u>\$ 21,535</u>	<u>\$ 50,807</u>

(Continued)

FRANKLIN REGIONAL RETIREMENT SYSTEM  
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

As of and for the year ended December 31, 2018

(Continued)

	<u>Town of Sunderland</u>	<u>Town of Warwick</u>	<u>Town of Wendell</u>	<u>Town of Whately</u>
<b>Beginning Net Pension Liability, 12/31/17</b>	\$ 1,708,832	\$ 363,012	\$ 349,919	\$ 1,243,996
<b>Ending Net Pension Liability, 12/31/18</b>	\$ 2,319,645	\$ 493,670	\$ 477,334	\$ 1,689,177
<b>Total Deferred Outflows of Resources:</b>				
Differences Between Expected and Actual Experience	\$ 41,045	\$ 8,735	\$ 8,446	\$ 29,889
Earnings on Pension Plan Investments	336,807	71,680	69,308	245,265
Change of Assumptions	77,364	16,465	15,920	56,337
Contributions and Proportionate Share of Contributions	<u>26,810</u>	<u>6,166</u>	<u>23,621</u>	<u>44,246</u>
Total Deferred Outflows of Resources	<u>\$ 482,026</u>	<u>\$ 103,046</u>	<u>\$ 117,295</u>	<u>\$ 375,737</u>
<b>Total Deferred Inflows of Resources:</b>				
Differences Between Expected and Actual Experience	\$ 1,876	\$ 399	\$ 386	\$ 1,366
Contributions and Proportionate Share of Contributions	<u>16,570</u>	<u>2,810</u>	<u>-</u>	<u>5,149</u>
Total Deferred Inflows of Resources	<u>\$ 18,446</u>	<u>\$ 3,209</u>	<u>\$ 386</u>	<u>\$ 6,515</u>
<b>Employer Pension Expense:</b>				
Proportionate Share of Plan Pension Expense	\$ 402,474	\$ 85,655	\$ 82,821	\$ 293,083
Contributions and Proportionate Share of Contributions	<u>3,838</u>	<u>1,362</u>	<u>13,969</u>	<u>11,221</u>
Total Employer Pension Expense	<u>\$ 406,312</u>	<u>\$ 87,017</u>	<u>\$ 96,790</u>	<u>\$ 304,304</u>
<b>Covered Payroll:</b>	1,178,982	251,001	227,070	859,326
<b>Sensitivity of the Net Pension Liability to changes in the discount rate:</b>				
Current discount rate: 7.75%	2,319,645	493,670	477,334	1,689,177
1% decrease in the discount rate: 6.75%	3,154,452	671,335	649,119	2,297,087
1% increase in the discount rate: 8.75%	1,612,883	343,256	331,897	1,174,509
<b>Deferred Outflows of Resources and Deferred Inflows of Resources, to be recognized in Pension Expense:</b>				
FY 2020	\$ 178,303	\$ 38,511	\$ 48,670	\$ 142,635
FY 2021	91,838	19,943	26,032	82,069
FY 2022	68,636	14,753	16,346	53,596
FY 2023	<u>124,803</u>	<u>26,630</u>	<u>25,861</u>	<u>90,922</u>
Total	<u>\$ 463,580</u>	<u>\$ 99,837</u>	<u>\$ 116,909</u>	<u>\$ 369,222</u>