

ANDOVER CONTRIBUTORY RETIREMENT SYSTEM

***AUDIT OF SPECIFIC ELEMENTS, ACCOUNTS
AND ITEMS OF FINANCIAL STATEMENTS***

YEAR ENDED DECEMBER 31, 2020

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***Audit of Specific Elements, Accounts and
Items of Financial Statements***



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Independent Auditor's Report

To the Honorable Andover Retirement Board
Andover Contributory Retirement System
Andover, Massachusetts

We have audited the accompanying schedule of employer allocations of the Andover Contributory Retirement System (ACRS) as of and for the year ended December 31, 2020, and the related notes. We have also audited the total for all entities of the rows titled total net pension liability, total deferred outflows of resources, total deferred inflows of resources, total pension expense and total contributions included in the accompanying schedule of pension amounts by employer of the ACRS Pension Plan as of and for the year ended December 31, 2020, and the related notes.

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.

Auditor's 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 the specified row 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 the specified row 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 the 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 the 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 total net pension liability, total deferred outflows of resources, total deferred inflows of resources, total pension expense and total contributions for the total of all participating entities for the Andover Contributory Retirement System as of and for the year ended December 31, 2020, in accordance with accounting principles generally accepted in the United States of America.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the Town of Andover, Massachusetts, which includes the Andover Contributory Retirement System reported as a fiduciary component unit, as of and for the year ended June 30, 2021 (except for the Andover Contributory Retirement System which is as of and for the year ended December 31, 2020), and our report thereon, dated January 26, 2022, expressed an unmodified opinion on those financial statements.

Restriction on Use

This report is intended solely for the information and use of the Andover Contributory Retirement System management, the Andover Contributory Retirement System employers and their auditors and is not intended to be and should not be used by anyone other than these specified parties.

A handwritten signature in black ink that reads "Ponce & Sullivan, LLC". The signature is written in a cursive, flowing style.

January 26, 2022

SCHEDULE OF EMPLOYER ALLOCATIONS

FOR THE YEAR ENDED DECEMBER 31, 2020

Employer	FY2021 Net Pension Liability	Proportionate Share of Net Pension Liability
Town of Andover.....	\$ 178,310,999	98.67%
Andover Housing Authority.....	<u>2,406,006</u>	<u>1.33%</u>
Total.....	<u>\$ 180,717,005</u>	<u>100.00%</u>

See notes to schedule of employer allocations and schedule of pension amounts by employer.

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2020

	<u>Town of Andover</u>	<u>Andover Housing Authority</u>	<u>Totals</u>
<u>Net Pension Liability</u>			
Beginning net pension liability.....	\$ 162,887,587	\$ 1,578,362	\$ 164,465,949
Ending net pension liability.....	\$ 178,310,999	\$ 2,406,006	\$ 180,717,005
<u>Deferred Outflows of Resources</u>			
Differences between expected and actual experience.....	\$ 4,631,941	\$ 62,500	\$ 4,694,441
Changes of assumptions.....	17,752,359	239,538	17,991,897
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	<u>2,576,169</u>	<u>558,046</u>	<u>3,134,215</u>
Total Deferred Outflows of Resources.....	\$ <u>24,960,469</u>	\$ <u>860,084</u>	\$ <u>25,820,553</u>
<u>Deferred Inflows of Resources</u>			
Differences between expected and actual experience.....	\$ 2,138,922	\$ 28,861	\$ 2,167,783
Net difference between projected and actual investment earnings on pension plan investments.....	13,959,199	188,356	14,147,555
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	<u>3,134,215</u>	<u>-</u>	<u>3,134,215</u>
Total Deferred Inflows of Resources.....	\$ <u>19,232,336</u>	\$ <u>217,217</u>	\$ <u>19,449,553</u>
<u>Pension Expense</u>			
Proportionate share of plan pension expense.....	\$ 21,263,204	\$ 286,910	\$ 21,550,114
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	<u>(155,074)</u>	<u>155,074</u>	<u>-</u>
Total Employer Pension Expense.....	\$ <u>21,108,130</u>	\$ <u>441,984</u>	\$ <u>21,550,114</u>

(Continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2020

	<u>Town of Andover</u>	<u>Andover Housing Authority</u>	<u>Totals</u>
Contributions			
Statorily required contribution.....	\$ 11,910,301	\$ 115,409	\$ 12,025,710
Contribution in relation to statorily required contribution.....	<u>(13,801,370)</u>	<u>(115,409)</u>	<u>(13,916,779)</u>
Contribution deficiency/(excess).....	<u>\$ (1,891,069)</u>	<u>\$ -</u>	<u>\$ (1,891,069)</u>
Contributions as a percentage of covered payroll.....	33.06%	20.74%	32.90%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense			
June 30, 2022.....	\$ 161,756	\$ 156,603	\$ 318,359
June 30, 2023.....	2,826,301	189,753	3,016,054
June 30, 2024.....	(1,166,636)	111,947	(1,054,689)
June 30, 2025.....	2,793,601	144,027	2,937,628
June 30, 2026.....	<u>1,113,111</u>	<u>40,537</u>	<u>1,153,648</u>
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	<u>\$ 5,728,133</u>	<u>\$ 642,867</u>	<u>\$ 6,371,000</u>
Discount Rate Sensitivity			
1% decrease (4.75%).....	\$ 223,766,294	\$ 3,019,348	\$ 226,785,642
Current discount rate (5.75%).....	\$ 178,310,999	\$ 2,406,006	\$ 180,717,005
1% increase (6.75%).....	\$ 140,225,880	\$ 1,892,112	\$ 142,117,992
Covered Payroll.....	\$ 41,749,908	\$ 556,323	\$ 42,306,231
			(Concluded)

See notes to schedule of employer allocations and schedule of pension amounts by employer.

**Notes to Schedule of Employer Allocations
and Schedule of Pension Amounts by Employer**

Year Ended December 31, 2020

NOTE 1 – Plan Description

The Andover Contributory Retirement System (System) is a multiple-employer, cost-sharing, contributory defined benefit pension plan covering all employees of the governmental member units deemed eligible by the Andover Contributory Retirement Board (Board), with the exception of school department employees who serve in a teaching capacity. The pensions of such school employees are administered by the Commonwealth of Massachusetts' Teachers Retirement System. Membership in the System is mandatory immediately upon the commencement of employment for all permanent employees working a minimum of 20 hours per week. The System has two participating employers.

The System is governed by a five-member board comprised of the Town Accountant (ex-officio), two members elected by the System's participants, one member appointed by the Select Board and one member appointed by the Board members.

The System is a component unit of the Town of Andover and is presented using the accrual basis of accounting and is reported as a pension trust fund in the fiduciary fund financial statements. That report may be obtained by contacting the Town Accountant located at 36 Bartlet Street, Andover, Massachusetts 01810.

NOTE 2 – Schedule of Employer Allocations

Governmental Accounting Standards Board (GASB) Statement #68 requires employers participating in a cost-sharing pension plan to recognize pension liabilities as employees provide services to the government and earn their pension benefits. Employers participating in cost-sharing plans are required to recognize their proportionate share of the plan's collective pension amounts for all benefits provided through the plan including the net pension liability, deferred outflows of resources, deferred inflows of resources, pension expense, and contributions.

GASB Statement #68 requires the allocation of the collective pension amounts be consistent with the manner in which contributions to the plan are determined. As permissible under GASB Statement #68, the Schedule of Employer Allocations is used to demonstrate the allocation of Andover Contributory Retirement System's collective pension amounts.

Massachusetts General Law (MGL) Chapter 32 Section 22 Paragraph 7c dictates that Massachusetts cost sharing defined benefit pension plans allocate the annual required pension fund appropriation to employer units based on their proportionate share of the aggregate of the annual rates of regular compensation of all members in service of the system. The Public Employee Retirement Administration Commission (PERAC) approves each system's proportionate share of the annual required contribution. PERAC can accept alternative allocation methodologies and as such the MCRS has elected to use an actuarial based allocation methodology.

For fiscal 2020 and prior years, the allocation of the net pension liability, deferred outflows, deferred inflows, and pension expense was based on each member's proportion of the actuarial accrued liability relative to the proportion of the actuarial accrued liability attributable to all participating members, which is the long-term expected contribution rate for the System.

The methodology discussed in the previous paragraph has been updated for fiscal 2021 and future years due to the Town making contributions in excess of the actuarially determined contribution. Accordingly, each member unit's proportionate share of the total pension liability has been calculated based on each member unit's actual current employees, retirees and inactive participants. Each member's share of the System's net position at year

**Notes to Schedule of Employer Allocations
and Schedule of Pension Amounts by Employer**

Year Ended December 31, 2020

end is calculated by starting with the balance carried forward from the prior year. Each member unit is then credited with the actual required contribution received during the year along with any excess contributions received. Each member unit's share is reduced by the actual payment made to their specific retirees. Net investment income is allocated based on each member's money-weighted rate of return. All other shared expenses are allocated based on the proportionate share of benefits paid. The difference between the total pension liability and the net position is reported as the net pension liability.

When a member unit accepts an Early Retirement Incentive Program (E.R.I. or ERIP), PERAC completes an analysis of the costs and liabilities attributable to the additional benefits payable in accordance with the ERIP. For employers that accept the ERIP, the increase in the liability attributable to each employer is amortized and separately identified in the System's actuarially determined funding schedule. Neither of the member units have accepted an ERIP.

NOTE 3 – Schedule of Pension Amounts by Employer

The Schedule of Pension Amounts by Employer presents the net pension liability, the various categories of deferred outflows of resources and deferred inflows of resources, and pension expense for all participating employers including differences between expected and actual economic experience, differences between projected and actual investment earnings, net changes in proportionate share of contributions, and changes of assumptions.

NOTE 4 – Pension Plan Information

Benefits Provided

The System provides retirement, disability, survivor and death benefits to plan members and beneficiaries. Massachusetts Contributory Retirement System benefits are, with certain minor exceptions, uniform from system to system. The Systems provide retirement allowance benefits up to a maximum of 80% of a member's highest three-year average annual rate of regular compensation. For persons who became members on or after April 2, 2012, average salary is the average annual rate of regular compensation received during the five consecutive years that produce the highest average, or, if greater, during the last five years (whether or not consecutive) preceding retirement. Benefit payments are based upon a member's age, length of creditable service, level of compensation, and group classification. Members become vested after ten years of creditable service.

Employees who resign from service and who are not eligible to receive a retirement allowance or are under the age of 55 are entitled to request a refund of their accumulated total deductions. Survivor benefits are extended to eligible beneficiaries of members whose death occurs prior to or following retirement.

Cost-of-living adjustments granted between 1981 and 1997 and any increase in other benefits imposed by the Commonwealth's state law during those years are borne by the Commonwealth and are deposited into the pension fund. Cost-of-living adjustments granted after 1997 must be approved by the Board and are borne by the System.

**Notes to Schedule of Employer Allocations
and Schedule of Pension Amounts by Employer**

Year Ended December 31, 2020

Contributions

Chapter 32 of the MGL governs the contributions of plan members and member units. Active plan members are required to contribute at rates ranging from 5% to 9% of gross regular compensation with an additional 2% contribution required for compensation exceeding \$30,000. The percentage rate is keyed to the date upon which an employee's membership commences as mandated by statute. The member units are required to pay into the System 100% of the actuarially determined contribution that, when combined with plan member contributions, is expected to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability.

Pension Liabilities

The net pension liability was measured as of December 31, 2020, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2021. The proportion of the net pension liability was based on a projection of the long-term share of contributions to the pension plan relative to the projected contributions of all participating members.

Investment Policy

The pension plan's policy in regard to the allocation of invested assets is established and may be amended by the Board. Plan 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.

The long-term expected rate of return on pension plan investments was selected by the Town. This rate is within a reasonable range for a 10-year expected return calculated 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 less investment expense and a risk factor. The System's expected future real rate of return is added to the expected inflation rate to produce the long-term nominal expected rate of return. Best estimates of the arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of December 31, 2020, are summarized in the following table:

<u>Asset Class</u>	<u>Long-Term Expected Asset Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Domestic equity.....	33.00%	4.20%
International equity.....	16.00%	5.10%
Private equity.....	5.50%	8.00%
Real estate.....	15.00%	3.80%
Timberland.....	2.00%	4.40%
Fixed income.....	22.00%	1.92%
Portfolio Completion Strategies.....	6.50%	3.00%
Total.....	<u>100.00%</u>	

**Notes to Schedule of Employer Allocations
and Schedule of Pension Amounts by Employer**

Year Ended December 31, 2020

Actuarial Assumptions

The total pension liability in the January 1, 2021, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement that was rolled back to December 31, 2020:

Valuation date.....	January 1, 2021
Actuarial cost method.....	Entry Age Normal Cost Method
Inflation rate.....	2.20%
Projected salary increases.....	Group 1: 6.00% - 4.25%, based on service Group 4: 7.00% - 4.75%, based on service
Cost of living adjustments.....	3.00% of first \$12,000 of the annual retirement allowance
Mortality Rates.....	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.
Investment rate of return/Discount rate.....	5.75%, net of pension plan investment expense, including inflation

Rate of Return

For the year ended December 31, 2020, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 12.12%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Discount Rate

The discount rate used to measure the total pension liability was 5.75% as of December 31, 2020, and 6.25% as of December 31, 2019. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that contributions will be made at rates equal to the actuarially determined contribution rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the separately issued Town of Andover, Massachusetts' annual comprehensive financial report.

**Notes to Schedule of Employer Allocations
and Schedule of Pension Amounts by Employer**

Year Ended December 31, 2020

Changes of Assumptions

The discount rate decreased from 6.25% to 5.75%, and the assumption for terminated vested benefits and refunds was revised to assume that 50% of terminated employees with 10 or more years of service will elect a refund. The mortality and mortality improvement rates were also updated.

Changes in plan provisions

None.

NOTE 5 – Subsequent Events

Management has evaluated subsequent events through January 26, 2022, which is the date the schedules were available to be issued.

Subsequent to year end, on December 16, 2021, the Town issued \$165,000,000 of pension obligation bonds as an overall strategy to fund the unfunded portion of the Town's pension liability. The assumption is that the bond proceeds, which will be invested in higher-yielding asset classes, will be able to achieve a rate of return that is greater than the interest rate owed over the term of the bonds. The average interest rate on the pension obligation bonds over the life of the debt is 2.37%, and the anticipated rate of return on pension assets is 5.75%. Principal and interest payments on the long-term pension obligation bonds are scheduled through 2040.