

DUKES COUNTY CONTRIBUTORY RETIREMENT SYSTEM

FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2022

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Financial Section

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Independent Auditor's Report

To the Honorable Dukes County Retirement Board Dukes County Contributory Retirement System Vineyard Haven, Massachusetts

Opinion

We have audited the accompanying financial statements of the Dukes County Contributory Retirement System (System) as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the System's financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the System as of December 31, 2022, and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to the financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management's for the Financial Statements

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, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a

guarantee that an audit conducted in accordance with generally accepted auditing standards and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgement made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgement and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or
 error, and design and perform auditing procedures responsive to those risks. Such procedures include
 examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgement, there are conditions or events, considered in the aggregate, that
 raise substantial doubt about the System's ability to continue as a going concern for a reasonable period
 of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis; the Schedule of Changes in the Net Pension Liability and Related Ratios; the Schedule of Contributions; and the Schedule of Investment Returns be presented to supplement the financial statements. Such information is the responsibility of management and, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the 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 financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 12, 2023, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

Restriction on Use

This report is intended solely for the information and use of the System, the Public Employee Retirement Administration Commission and all member units and is not intended to be and should not be used by anyone other than these specified parties.

October 12, 2023

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Management's Discussion and Analysis

As management of the Dukes County Contributory Retirement System, we offer readers of these financial statements this narrative overview and analysis of the financial activities for the year ended December 31, 2022. The System complies with financial reporting requirements issued by the Governmental Accounting Standards Board (GASB).

The GASB is the authoritative standard setting body that provides guidance on how to prepare financial statements in conformity with generally accepted accounting principles (GAAP). Users of these financial statements rely on the GASB to establish consistent reporting standards for all governments in the United States. This consistent application is the only way users can assess the financial condition of a public retirement system compared to others.

Financial Highlights

- The System's assets exceeded its liabilities at the close of the most recent year by \$210.6 million (net position).
- The System's net position decreased by \$36.8 million for the year ended December 31, 2022.
- Investments realized a loss of \$34.1 million; investment expenses were \$1.3 million; resulting in net investment loss of \$35.4 million.
- Total contributions were \$13.6 million including \$8.4 million from employers, \$4.7 million from members and \$544,000 from other sources.
- Retirement benefits, refunds and transfers amounted to \$14.5 million.
- Administrative expenses were \$467,000 or 3.1% of total deductions.
- The Total Pension Liability is \$265.9 million as of December 31, 2022, while the Net Pension Liability is \$55.3 million.
- The Plan fiduciary net position as a percentage of the total pension liability is 79.22%.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the System's fiduciary financial statements. These fiduciary financial statements comprise of four components: 1) management's discussion and analysis, 2) fiduciary financial statements, 3) notes to the financial statements, and 4) required supplementary information.

Fiduciary Financial Statements

The *statement of net position* presents information on all assets and deferred outflows less deferred inflows and liabilities with the difference reported as *net position*. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position is improving or deteriorating.

The statement of changes in fiduciary net position presents information showing how the system's net position changed during the most recent year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, additions and deductions are reported in this statement for some items that will only result in cash flows in future periods.

Notes to the financial statements

The notes provide additional information that is essential to a full understanding of the data provided in the fiduciary financial statements.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Schedule of Changes in the Net Pension Liability and Related Ratios; the Schedule of Contributions; and the Schedule of Investment Return be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context.

Financial Analysis

As noted earlier, net position may serve over time as a useful indicator of the System's financial position. The System's net position was \$210.6 million at the close of 2022.

The assets accumulated are held to provide pension benefits for qualified retirees along with active and inactive employees of the member units. At year-end, the system's net position includes investments of \$204.6 million, cash of \$5.7 million and accounts receivable of \$518,000.

In 2022, the System experienced a \$36.8 million decrease in net position, which was the result of contributions of \$13.6 million, deductions of \$15.0 million, and a \$35.4 million net investment loss. In 2021, the System experienced a \$38.2 million increase in net position, which was the result of contributions of \$13.0 million, deductions of \$13.6 million, and \$38.8 million of net investment income.

The change in net position primarily relates to each year's investment performance. The annual money weighted rate of return was -14.36% in 2022 and 18.66% in 2021. The system's investment policy is designed to achieve a long-term rate of return of 7.00% and fluctuation in annual investment returns is expected.

The following tables present summarized financial information for the past two years:

	2022		2021
Statement of Fiduciary Net Position			
Assets:			
Cash\$	5,670,310	\$	26,119,125
Investments	204,638,836		220,938,724
Receivables	518,237		508,656
Total Assets	210,827,383		247,566,505
Liabilities:			
Accounts payable	212,756		163,094
Net Position Restricted for Pension Benefits\$	210,614,627	\$	247,403,411
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	2022	2021
Statement of Changes in Fiduciary Net Position		
Additions:		
Contributions:		
Member contributions\$	4,701,382	4,518,747
Employer contributions	8,376,456	7,895,088
Other contributions	543,666	594,921
Total contributions	13,621,504	13,008,756
Net investment income (loss):		
Total investment income (loss)	(34,149,066)	40,131,470
Less, investment expenses	(1,266,527)	(1,309,755)
Net investment income (loss)	(35,415,593)	38,821,715
Total additions	(21,794,089)	51,830,471
Deductions:		
Administration	467,487	440,660
Retirement benefits, refunds and transfers	14,527,208	13,206,528
Total deductions	14,994,695	13,647,188
Net increase (decrease) in fiduciary net position	(36,788,784)	38,183,283
Fiduciary net position at beginning of year	247,403,411	209,220,128
Fiduciary net position at end of year\$	210,614,627	247,403,411

Requests for Information

This financial report is designed to provide a general overview of the System's finances for all those with an interest in the System's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the System's Board, 9 Airport Road, Suite 1, Vineyard Haven, Massachusetts, 02568.

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STATEMENT OF FIDUCIARY NET POSITION

DECEMBER 31, 2022

Assets		
Cash and cash equivalents	\$	5,670,310
Investments:	_	<u> </u>
U.S. Government agencies		5,760,411
Government sponsored agencies		2,784,055
Corporate bonds		10,108,721
Equities		54,680,920
Pooled domestic equity funds		18,173,538
PRIT pooled alternative investments		970,333
PRIT pooled international equity funds		9,271,444
PRIT pooled real estate funds		21,790,252
PRIT core fund		81,099,162
Total investments	_	204,638,836
Receivables, net of allowance for uncollectibles: Member deductions		402 904
Other accounts receivable		493,894 2,528
Interest and dividends		21,815
Total Receivables		518,237
Total Assets		210,827,383
Liabilities		
Accounts payable		212,756
Accounts payable		212,730
Net Position Restricted for Pensions	\$	210,614,627

See notes to financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

YEAR ENDED DECEMBER 31, 2022

Additions:	
Contributions:	
Employer pension appropriation	\$ 8,376,456
Member contributions	4,701,382
Transfers from other systems	86,695
3(8)c contributions from other systems	298,628
State COLA reimbursements	10,388
Member makeup payments and redeposits	39,583
Reimbursement of 91A overearnings	108,372
Total contributions	13,621,504
Net investment income:	
Investment income (loss)	(34,149,066)
Less: investment expense	(1,266,527)
Net investment income (loss)	(35,415,593)
Total additions	(21,794,089)
Deductions:	
Administration	467,487
Retirement benefits and refunds	13,685,186
Transfers to other systems	222,160
3(8)c transfers to other systems	619,862
Total deductions	14,994,695
Net increase (decrease) in fiduciary net position	(36,788,784)
Fiduciary net position at beginning of year	247,403,411
Fiduciary net position at end of year	\$ 210,614,627

See notes to financial statements.

NOTE 1 – PLAN DESCRIPTION

The Dukes County Contributory Retirement System (System) is a multiple-employer, cost-sharing, contributory defined benefit pension plan covering eligible employees of the 15 member units deemed eligible by the Dukes County 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 non-teaching, permanent, full-time employees. Part-time, provisional, temporary, seasonal or intermittent employees who are regularly employed for an average of at least 20 hours per week, minimum of 520 hours and have completed 6 months of service must also become members of the System.

Originally established in 1939, the System is governed by a five-member Board who establish the policies under which the System operates. Board members also approve all of the System's financial transactions, including the approval of retirement benefits to members. Board members are appointed or elected as specified by Massachusetts General Laws (MGL) Ch. 32, Section 20 for terms not to exceed 3 years.

The day-to-day operations of the System are managed by the Executive Director. The legislative body for the System is an Advisory Council consisting of treasurers of the member units. The Advisory Council meets semi-annually and is responsible for supervising and certifying the procedures involved in the election of members to the retirement board.

The System is a member of the Massachusetts Contributory Retirement System and is governed by Chapter 32 of the MGL. The Public Employee Retirement Administration Commission (PERAC) is the state agency responsible for oversight of the Commonwealth's public retirement systems.

Massachusetts Contributory Retirement System benefits are uniform from system to system, with certain exceptions such as cost of living adjustments which can be adopted by the Board from time to time. The System provides for 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, veteran status, cost of living adjustments and group classification.

There are three classes of membership in the retirement system: group 1, group 2, and group 4. Group 1 consists of general employees which includes clerical and administrative positions. Group 2 consists of positions that have been specified as hazardous. Lastly, group 4 consists of police officers, firefighters, and other hazardous positions.

Members normally become vested after ten years of creditable service. However, if hired prior to 1978 a superannuation retirement allowance may be received at age 55 with no vesting requirement. If hired after January 1, 1978, and before April 2, 2012, a superannuation retirement allowance may be received upon the completion of 20 years of service or upon reaching age 55 with ten years of service. A person who became a member after April 2, 2012, is eligible for a superannuation retirement allowance upon reaching age 60 with ten years of service if in Group 1, 55 years of age with ten years of service if in Group 2 or age 55 in Group 4. Normal retirement for most employees occurs at age 65 (except for certain hazardous duty and public safety positions whose normal retirement age is 55).

A retirement allowance consists of two parts: an annuity and a pension. A member's accumulated total deductions and the interest they generate constitute the annuity. The differential between the total retirement benefit and the annuity is the pension.

Active members contribute between 5% and 11% of their gross regular compensation. The rate is keyed to the date upon which an employee's membership commences. These deductions are deposited in the Annuity Savings Fund and earn interest at a rate determined by the PERAC actuary. When a member's retirement becomes effective, his/her deductions and related interest are transferred to the Annuity Reserve Fund. Any cost-of-living adjustments granted between 1981 and 1997 and any increase in other benefits imposed by the Commonwealth of Massachusetts' 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 System and all costs are borne by the System.

The pension portion of any retirement benefit is paid from the Pension Fund of the System. The governmental unit employing the member must annually appropriate and contribute the amount of current-year pension assessment. MGL Chapter 32 requires that systems be on an actuarially determined funding schedule to be fully funded by 2040. Under the current funding schedule, the System will be fully funded by 2031.

In the January 1, 2022, actuarial valuation, the administrative expenses were assumed to be \$550,000 and are anticipated to increase at 3.25% per year.

Members who become permanently and totally disabled for further duty may be eligible to receive a disability retirement allowance. The amount of benefits to be received in such cases is dependent on several factors, including whether or not the disability is work related, the member's age, years of creditable service, level of compensation, veterans' status and group classification.

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.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accompanying financial statements of the Dukes County Contributory Retirement System have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). The Governmental Accounting Standards Board (GASB) is the recognized standard-setting body for establishing governmental accounting and financial reporting principles.

The System is a special-purpose government engaged only in fiduciary activities. Accordingly, the financial statements are reported using the flow of economic resources measurement focus and use the accrual basis of accounting. Under this method, additions are recorded when earned and deductions are recorded when the liabilities are incurred.

Cash and Investments

Cash and cash equivalents are considered to be cash on hand, demand deposits and short-term investments with an original maturity of three months or less from the date of acquisition. Investments are carried at fair value.

Fair Value Measurements

The System reports required types of financial instruments in accordance with the fair value standards. These standards require an entity to maximize the use of observable inputs (such as quoted prices in active markets) and minimize the use of unobservable inputs (such as appraisals or valuation techniques) to determine fair value. Fair value standards also require the government to classify these financial instruments into a three-level hierarchy, based on the priority of inputs to the valuation technique or in accordance with net asset value practical expedient rules, which allow for either Level 2 or Level 3 depending on lock up and notice periods associated with the underlying funds.

Instruments measured and reported at fair value are classified and disclosed in one of the following categories:

Level 1 – Quoted prices are available in active markets for identical instruments as of the reporting date. Instruments, which are generally included in this category, include actively traded equity and debt securities, U.S. government obligations, and mutual funds with quoted market prices in active markets.

Level 2 – Pricing inputs are other than quoted in active markets, which are either directly or indirectly observable as of the reporting date, and fair value is determined through the use of models or other valuation methodologies. Certain fixed income securities, primarily corporate bonds, are classified as Level 2 because fair values are estimated using pricing models, matrix pricing, or discounted cash flows.

Level 3 – Pricing inputs are unobservable for the instrument and include situations where there is little, if any, market activity for the instrument. The inputs into the determination of fair value require significant management judgment or estimation.

In some instances, the inputs used to measure fair value may fall into different levels of the fair value hierarchy and is based on the lowest level of input that is significant to the fair value measurement.

Market price is affected by a number of factors, including the type of instrument and the characteristics specific to the instrument. Instruments with readily available active quoted prices generally will have a higher degree of market price observability and a lesser degree of judgment used in measuring fair value. It is reasonably possible that change in values of these instruments will occur in the near term and that such changes could materially affect amounts reported in these financial statements. For more information on the fair value of the System's financial instruments, see Note 4 – Cash and Investments.

Accounts Receivable

Accounts receivable consist of member deductions, interest and dividends, and other receivables. These receivables are considered 100% collectible and therefore do not report an allowance for uncollectibles.

Deferred Outflows/Inflows of Resources

In addition to assets, the statement of fiduciary net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of fiduciary net position that applies to a future period(s) and so will not be recognized as an outflow of resources (deduction) until then. The System did not have any items that qualify for reporting in this category.

In addition to liabilities, the statement of fiduciary net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an

inflow of resources (addition) until that time. The System did not have any items that qualify for reporting in this category.

NOTE 3 - PLAN ADMINISTRATION

The System is administered by a five-person Board of Retirement consisting of the County Treasurer, who shall be a member ex-officio, a second member appointed by the governing authority (the County Commission), a third and fourth member who shall be elected by the members in or retired from the service of such System, and a fifth member appointed by the Advisory Council.

Ex-Officio Member.....Judith E.O. SoulesTerm Expires:Not applicableElected Member.....Jo Ann MurphyTerm Expires:December 31, 2022Elected Member.....David B. RossiTerm Expires:December 31, 2022Appointed Member....Jonathan V. Snyder, appointed by the Retirement Board Advisory CouncilTerm Expires:December 31, 2023Appointed Member....James M. Hagerty, appointed by the Dukes County CommissionTerm Expires:December 31, 2023

Board members are required to meet at least once a month. The Board must keep a record of all of its proceedings. The Board must annually submit to the appropriate authority an estimate of the expenses of administration and cost of operation of the System. The Board must annually file a financial statement of condition for the System with the Executive Director of PERAC.

The Advisory Council consists of all the treasurers, elected or appointed, for each town, unit or district within the System. The members of the Advisory Council elect a Chairperson from among its members. The System Advisory Council is required by statute to meet twice per year, typically in the spring and fall. All System Advisory Council meetings are open, public meetings and are subject to the Commonwealth's Open Meeting Law.

The investment of the System's funds is the responsibility of the Board. Disability retirement allowances must be approved by the Retirement Board and are then submitted to the PERAC Actuary for verification prior to payment. Superannuation retirement allowances are not required to obtain PERAC's verification. All expenses incurred by the System must be approved by a majority vote of the Board. Payments shall be made only upon warrants approved by the members of the Board.

System board members and employees are bonded by an authorized agent representing a company licensed to do business in Massachusetts. The System has obtained bonding through the Massachusetts Association of Contributory Retirement Systems program that provides \$10,000,000 of fiduciary protection for Trustees and employees.

NOTE 4 – CASH AND INVESTMENTS

Custodial Credit Risk - Deposits

The System's investment policy allows cash and equivalents to be invested in commercial paper rated Al or P1, re-purchase agreements, U.S. Treasury Bills, money market funds and certificates of deposit. Certificates of deposit should be no more than \$250,000 per bank. At December 31, 2022, the carrying amount of the System's deposits was \$81,062 and the bank balance totaled \$299,871. The bank balance was covered by the Federal Deposit Insurance Corporation (FDIC) and none of the funds were exposed to custodial credit risk.

Interest Rate Risk

Interest rate risk is the risk of changes in market interest rates, which will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the risk of its fair value to change with the market interest rates. The System's investment policy limits investment maturities to less than or equal to 125% of the Bloomberg Barclays Aggregate Bond Index as a means of managing its exposure to fair value losses arising from increasing interest rates.

54% of the Retirement System's investments are in the Pension Reserve Investment Trust (PRIT). This investment pool was established by the Treasurer of the Commonwealth of Massachusetts, who serves as Trustee. PRIT is administered by the Pension Reserves Investment Management Board (PRIM). The fair values of the positions in each investment Pool are the same as the value of each Pool's shares. The System does not have the ability to control any of the investment decisions relative to its funds in PRIT. The effective weighted duration rate for PRIT investments ranged from 1.98 to 14.64 years.

Investments

The System's investments are as follows:

Investment Type	Fair Value		1 - 5 Years	 6 - 10 Years	 More Than 10 Years
Debt Securities					
U.S Government agencies\$	5,760,411	\$	2,037,662	\$ 1,266,727	\$ 2,456,022
Government sponsored enterprises	2,784,055		-	396,329	2,387,726
Corporate bonds	10,108,721		3,698,888	6,409,833	-
Total debt securities	18,653,187	\$	5,736,550	\$ 8,072,889	\$ 4,843,748
Other Investments					
Equities\$	54,680,920				
Money market mutual funds	5,589,248				
Pooled domestic equity funds	18,173,538				
Pension Reserve Investment Trust (PRIT)	113,131,191	_			
Total investments\$	210,228,084	=			

Custodial Credit Risk – Investments

For an investment, this is the risk that, in the event of a failure by the counterparty, the System will not be able to recover the value of its investments or collateral security that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the System and are held by either the depository financial institution or the depository financial institution's trust department or agent but not in the System's name. All of the System's securities are held by the System's custodial bank and are registered in the System's name, except for investments in mutual and commingled funds, real estate properties, and limited partnerships, which by their nature, are not required to be categorized. Investments in the Short-Term Investment Funds (STIF) are held in a SEC-registered pooled fund that is managed by the master custodian bank. The fair value of the position in the pool equals the value of the pool shares.

Year Ended December 31, 2022

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. The System's policy for credit risk requires all debt instruments to carry an investment grade credit rating of "BBB-" or better by two of the three rating agencies (Moody's, S&P and Fitch). The System's investments in money market mutual funds and the PRIT are unrated. The System's corporate bonds are rated as follows:

Quality Rating	Corporate Bonds		
_			
AA\$	403,062		
A+	774,611		
A	1,020,351		
A	2,991,113		
BBB+	2,410,138		
BBB	861,214		
Not Rated	1,648,232		
Total\$	10,108,721		

Concentration of Credit Risk

Equity investments by a manager in any single corporation shall be limited to no more than ten percent (10%) of such manager's total portfolio (based on the fair value of the portfolio at the time of each equity purchase). Fixed income obligations of any single issuer, other than securities subject to guarantee of the United States Government (or any of its agencies), should represent no more than five percent (5%) of the aggregate fair value of a manager's portfolio. No more than 5% of the System's investments are invested in any one issuer.

Fair Value of Investments

The System holds investments that are measured at fair value on a recurring basis. Because investing is not a core part of the System's mission, the System determines that the disclosures related to these investments only need to be disaggregated by major type. The System chooses a tabular format for disclosing the levels within the fair value hierarchy.

The following table presents financial assets at December 31, 2022, for which the System measures fair value on a recurring basis, by level, within the fair value hierarchy:

Investment Type	December 31, 2022		Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)	-	Significant Unobservable Inputs (Level 3)
Investments by fair value level							
Debt Securities:	E 760 411	Φ	E 760 411	Φ		¢	
U.S. Government agencies\$	5,760,411	Ф	5,760,411	Ф	-	\$	-
Government sponsored enterprises Corporate bonds	2,784,055		2,784,055		10 100 721		-
Corporate bonds	10,108,721				10,108,721		
Total debt securities	18,653,187		8,544,466		10,108,721	_	
Other investments:							
Equities	54,680,920		54,680,920		-		-
Money market mutual funds	5,589,248		5,589,248		-		-
Pooled domestic equity funds	18,173,538		18,173,538		-	-	
Total other investments	78,443,706		78,443,706		-	-	
Total investments by fair value level	97,096,893	\$	86,988,172	\$	10,108,721	\$	
Investments measured at net asset value (NAV)							
Pension Reserve Investment Trust (PRIT)	113,131,191	_					
Total investments\$	210,228,084	=					

U.S. Government agencies, government sponsored enterprises, equities, money market mutual funds, and pooled domestic equity funds classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Corporate bonds classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique.

PRIT Investments are valued using the net asset value (NAV) method.

The System's annual money-weighted rate of return on pension plan investments was -14.36%. The money-weighted rate of return expresses investment performance, net of pension plan investment expense, adjusted for the changing amounts actually invested, measured monthly.

NOTE 5 - RECEIVABLES

At December 31, 2022, receivables for the System are as follows:

Receivables:	
Member deductions\$	493,894
Other receivables	2,528
Interest due and accrued	21,815
Total\$	518,237

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NOTE 6 - MEMBERSHIP

At December 31, 2022, pension plan membership consisted of the following:

Retired plan members or beneficiaries currently receiving benefits	419
Inactive plan members entitled to but not yet receiving benefits	316
Active plan members	675
Total	1,410

NOTE 7 – ACTUARIAL VALUATION

The total pension liability was determined by an actuarial valuation as of January 1, 2022, using the following actuarial assumptions, applied to all periods included in the measurement that was updated to December 31, 2022:

Valuation date	January 1, 2022
Actuarial cost method	Individual entry age normal cost method.
Amortization method	UAAL: Increasing dollar amount at 4.0% to reduce the unfunded actuarial accrued liability to zero on or before June 30, 2031. The annual increase in appropriation is limited to 4.51% per year.
	2002 & Increasing dollar amount at 4.5% to reduce the unfunded actuarial accrued liability attributable to the ERI's to zero on or before June 30, 2028.
Remaining amortization period	8 years for the UAL as of December 31, 2022. 5 years for the 2002 and 2003 ERI's as of December 31, 2022.
Asset valuation method	The actuarial value of assets is the fair value of assets as of the valuation date reduced by the sum of:
	a) 80% of gains and losses of the prior year,b) 60% of gains and losses of the second prior year,c) 40% of gains and losses of the third prior year andd) 20% of gains and losses of the fourth prior year.
	Investment gains and losses are determined by the excess or deficiency of the expected return over the actual return on the fair value. The actuarial valuation of assets is further constrained to be not less than 80% or more than 120% of fair value.
Inflation rate	2.4% per year.
Projected salary increases	6% - $4.25%$ for general employees and $7%$ - $4.75%$ for public safety, depending on years of service.

Payroll growth	3.25% per year.
Cost of living allowances	Cost of living adjustments (COLA) are assumed to be 3% of the pension amount, capped at \$420 per year and effective July 1, 2023, capped at 450 per year.
Mortality rates	Mortality rates were based on the RP-2014 Blue Collar Mortality Table with full generational mortality improvements using Scale MP-2020. For disabled members, 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-2020.
Investment rate of return/Discount rate	7.00% per year, net of pension plan investment expense, including inflation.

The components of the net pension liability of the participating member units at December 31, 2022, were as follows:

Total pension liability\$	265,867,549
Plan fiduciary net position	(210,614,627)
Net pension liability\$	55,252,922
Plan fiduciary net position as a percentage of the total pension liability	79.22%

Investment policy

The pension plan's policy in regard to the allocation of invested assets in PRIT is established by PRIM. The policy with regard to the allocation of all other invested assets is established by the Retirement Board. Plan assets are managed on a total return basis with a long-term objective of achieving a fully funded status for the benefits provided through the pension plan.

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, 2022, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic equityInternational equity	30.00% 5.00% 5.00%	4.50% 5.73% 3.10%
PRIT CORE	50.00%	5.10%
Fixed income	10.00%	2.10%
	100.00%	

Discount rate

The discount rate used to measure the total pension liability was 7.00% for the year ended December 31, 2022 and December 31, 2021. The projection of cash flows used to determine the discount rate assumed plan member contributions 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 and at rates equal to the actuarially determined contribution rates. 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.

Sensitivity of the net pension liability to changes in the discount rate

The following table as shown on the next page presents the net pension liability, calculated using the discount rate of 7.00%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

		Current	
	1% Decrease	Discount	1% Increase
	(6.00%)	(7.00%)	(8.00%)
Dukes County Retirement System's net			
pension liability (asset) as of December 31, 2022\$	86,118,430 \$	55,252,922 \$	29,169,433

Contributions

Governmental employers are required to pay an annual appropriation as established by statute and approved by PERAC. The total appropriation includes the amounts to pay the pension portion of each member's retirement allowance, an amount to amortize the actuarially determined unfunded liability to zero in accordance with the System's funding schedule, and additional appropriations in accordance with adopted early retirement incentive programs. The total appropriations are payable on July 1 and January 1. Employers may choose to pay the entire appropriation in July at a discounted rate. Accordingly, actual employer contributions may be less than the "total appropriation." Pension fund appropriations have been allocated among employers using an actuarial based methodology that allocates contributions to member units based on the member units actuarially determined total liability at the beginning of the measurement period.

NOTE 8 – COMMITMENTS AND CONTINGENCIES

Various legal actions and claims are pending against the System. Litigation is subject to many uncertainties, and the outcome of individual litigated matters is not always predictable. Although the amount of liability, if any, at December 31, 2022, cannot be ascertained, management believes any resulting liability should not materially affect the financial position at December 31, 2022.

NOTE 9 - SUBSEQUENT EVENTS

Management has evaluated subsequent events through October 12, 2023, which is the date the financial statements were available to be issued.

NOTE 10 - IMPLEMENTATION OF NEW GASB PRONOUNCEMENTS

There were no GASB pronouncements required to be implemented in 2022 that impacted the System's financial statements.

None of the issued GASB statements that are required to be implemented in future years are anticipated to impact the System's financial statements.

Required Supplementary Information

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS

Total pension liability: Service cost	December 31, 2014 5,025,980 10,735,538	\$ December 31, 2015 5,025,980 11,840,742	\$ 12,602,395	\$	December 31, 2017 5,411,256 13,886,266
Differences between expected and actual experience Changes of assumptions Benefit payments	(6,091,596)	 - - (6,961,135 <u>)</u>	743,316 6,062,453 (7,895,706)	-	- - (8,611,039)
Net change in total pension liability	9,669,922	 9,905,587	16,927,952	-	10,686,483
Total pension liability - beginning	141,568,416	 151,238,338	161,143,925	-	178,071,877
Total pension liability - ending (a)\$	151,238,338	\$ 161,143,925	\$ 178,071,877	\$ _	188,758,360
Plan fiduciary net position:					
Employer pension appropriation\$ Member contributions	5,601,553 3,745,783	\$ 5,777,664 3,545,293	\$ 5,986,402 3,575,601	\$	6,283,276 3,774,675
Net investment income (loss)	8,571,042 (322,018)	4,613,029 (323,866)	8,990,151 (353,615)		22,431,243 (439,389)
Retirement benefits and refunds	(6,091,596)	 (6,961,135)	(7,895,706)	-	(8,611,039)
Net increase (decrease) in fiduciary net position	11,504,764	6,650,985	10,302,833		23,438,766
Fiduciary net position - beginning of year	103,688,761	 115,193,525	121,844,510	-	132,147,343
Fiduciary net position - end of year (b)\$	115,193,525	\$ 121,844,510	\$ 132,147,343	\$ _	155,586,109
Net pension liability - ending (a)-(b)\$	36,044,813	\$ 39,299,415	\$ 45,924,534	\$ _	33,172,251
Plan fiduciary net position as a percentage of the total pension liability	76.17%	75.61%	74.21%		82.43%
Covered payroll\$	34,859,969	\$ 36,254,368	\$ 37,993,450	\$	37,822,874
Net pension liability as a percentage of covered payroll	103.40%	108.40%	120.87%		87.70%

Note: this schedule is intended to present information for 10 years.

Until a 10-year trend is compiled, information is presented for those years for which information is available.

See notes to required supplementary information.

	December 31,		December 31,		December 31,		December 31,		December 31,
_	2018		2019		2020		2021		2022
	_								
\$	5,627,706	\$	6,154,751	\$	6,524,252	\$	6,752,601	\$	7,659,996
	14,689,218		15,380,505		16,172,622		17,528,120		18,013,922
	(458,358)		-		6,537,458		-		(2,544,289)
	5,362,639		-		732,333		11,533,025		-
-	(9,695,545)		(10,730,738)		(11,955,651)		(12,287,718)		(13,887,660)
	15,525,660		10,804,518		18,011,014		23,526,028		9,241,969
-	· · · · ·				· · ·				
_	188,758,360		204,284,020		215,088,538		233,099,552		256,625,580
\$	204 284 020	\$	215 000 530	¢	222 000 552	Ф	256 625 590	\$	265 967 540
Φ -	204,284,020	Φ	215,088,538	\$	233,099,552	\$	256,625,580	Ф	265,867,549
\$	6,597,440	\$	7,012,999	\$	7,433,339	\$	7,895,088	\$	8,376,456
	4,413,695		4,128,998		4,510,757		4,194,858		4,605,500
	(2,223,902)		32,252,097		23,114,489		38,821,715		(35,415,593)
	(352,373)		(437,670)		(433,916)		(440,660)		(467,487)
_	(9,695,545)		(10,730,738)		(11,955,651)		(12,287,718)		(13,887,660)
									(
	(1,260,685)		32,225,686		22,669,018		38,183,283		(36,788,784)
	155,586,109		154,325,424		186,551,110		209,220,128		247,403,411
-									, ,
\$	154,325,424	\$	186,551,110	\$	209,220,128	\$	247,403,411	\$	210,614,627
ď	49,958,596	\$	28,537,428	Œ	23,879,424	æ	9,222,169	ď	55,252,922
\$ <u>-</u>	49,956,596	Φ	20,557,420	\$	23,079,424	\$	9,222,109	\$	55,252,922
	75.54%		86.73%		89.76%		96.41%		79.22%
\$	37,261,230	\$	39,841,053	\$	40,856,737	\$	41,995,989	\$	42,306,728
	134.08%		71.63%		58.45%		21.96%		130.60%

SCHEDULE OF CONTRIBUTIONS

	December 31, 2014	_	December 31, 2015		December 31, 2016	December 31, 2017
Actuarially determined contribution\$	5,601,553	\$	5,777,664	\$	5,986,402	\$ 6,283,276
Contributions in relation to the actuarially determined contribution	(5,601,553)	-	(5,777,664)	-	(5,986,402)	(6,283,276)
Contribution deficiency (excess)\$		\$		\$	-	\$
Covered payroll\$	34,859,969	\$	36,254,368	\$	37,993,450	\$ 37,822,874
Contributions as a percentage of covered payroll	16.07%		15.94%		15.76%	16.61%

Note: this schedule is intended to present information for 10 years.

Until a 10-year trend is compiled, information is presented for those years for which information is available.

See notes to required supplementary information.

-	December 31, 2018	December 31, 2019	•	December 31, 2020	•	December 31, 2021	December 31, 2022
\$	6,597,440	\$ 7,012,999	\$	7,433,339	\$	7,895,088	\$ 8,376,456
-	(6,597,440)	(7,012,999)		(7,433,339)		(7,895,088)	(8,376,456)
\$	-	\$ -	\$	-	\$	-	\$ -
\$	37,261,230	\$ 39,841,053	\$	40,856,737	\$	41,995,989	\$ 42,306,728
	17.71%	17.60%		18.19%		18.80%	19.80%

SCHEDULE OF INVESTMENT RETURNS

Annual money-weighted rate of return,

	rate of return,
Year	net of investment expense
December 31, 2022	-14.36%
December 31, 2021	18.66%
December 31, 2020	12.47%
December 31, 2019	20.99%
December 31, 2018	-1.21%
December 31, 2017	17.29%
December 31, 2016	7.30%
December 31, 2015	4.95%
December 31, 2014	8.13%

Note: this schedule is intended to present information for 10 years. Until a 10-year trend is compiled, information is presented for those years for which information is available.

See notes to required supplementary information.

NOTE A - CHANGES IN THE NET PENSION LIABILITY AND RELATED RATIOS

The Schedule of Changes in the Net Pension Liability and Related Ratios includes the detailed changes in the System's total pension liability, changes in the System's net position, and the ending net pension liability. It also demonstrates the plan's net position as a percentage of the total pension liability and the net pension liability as a percentage of covered payroll.

NOTE B - CONTRIBUTIONS

Governmental employers are required to pay an annual appropriation as established by statute and approved by PERAC. The total appropriation includes the amounts to pay the pension portion of each member's retirement allowance, an amount to amortize the actuarially determined unfunded liability to zero in accordance with the System's funding schedule, and additional appropriations in accordance with adopted early retirement incentive programs. The total appropriations are payable on July 1 and January 1. Employers may choose to pay the entire appropriation in July at a discounted rate. Accordingly, actual employer contributions may be less than the "total appropriation." Pension fund appropriations have been allocated among employers using an actuarial based methodology that allocates contributions to member units based on the member units actuarially determined total liability at the beginning of the measurement period.

NOTE C - MONEY WEIGHTED RATE OF RETURN

The money weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense. A money weighted rate of return expresses investment performance, net of pension plan investment expense, adjusted for the changing amounts actually invested. Inputs to the money weighted rate of return calculation are determined monthly.

NOTE D - CHANGES OF ASSUMPTIONS	
None.	

NOTE E - CHANGES IN PLAN PROVISIONS

None.

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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 Dukes County Retirement Board Dukes County Contributory Retirement System Vineyard Haven, Massachusetts

Report on the Audit of the Schedule of Employer Allocations and Schedule of Pension Amounts by Employer

Opinion

We have audited the accompanying schedule of employer allocations of the Dukes County Contributory Retirement System (System) as of and for the year ended December 31, 2022, and the related notes. 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, total contributions and total pension expense included in the accompanying schedule pension amounts by employer of the System's Pension Plan as of and for the year ended December 31, 2022, and the related notes.

In our opinion, the accompanying schedule of employer allocations and schedule of pension amounts by employer present fairly, in all material respects, the employer allocations and net pension liability, total deferred outflows of resources, total deferred inflows of resources, total contributions and total pension expense for the total of all participating entities for the System as of and for the year ended December 31, 2022, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Schedules section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Schedules

Management is responsible for the preparation and fair presentation of the schedules in accordance with accounting principles generally accepted in the United States of America and for 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 Responsibilities for the Audit of the Schedules

Our objectives are to obtain reasonable assurance about whether the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer as a whole are free from material

misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with general accepted auditing standards, will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgement made by a reasonable user based on the schedules.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgement and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the schedules, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the schedules.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are
 appropriate in the circumstances, but not for the purposes of expressing an opinion on the effectiveness of the
 System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting
 estimates made by management, as well as evaluate the overall presentation of the schedules.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the System as of and for the year ended December 31, 2022, and our report thereon, dated October 12, 2023, expressed an unmodified opinion on those financial statements.

Restriction on Use

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

October 12, 2023

Ponex Alli, LC

SCHEDULE OF EMPLOYER ALLOCATIONS

Employer	Total Pension Liability (*)	Proportionate Share of Total Pension Liability
Up-Island School\$	8,488,205	3.336%
Dukes County	16,170,428	6.356%
Tisbury	47,604,490	18.711%
Edgartown	63,878,060	25.107%
Oak Bluffs	40,754,476	16.018%
West Tisbury	17,822,441	7.005%
Chilmark	14,525,933	5.709%
Aquinnah	5,370,163	2.111%
Gosnold	1,391,928	0.547%
Martha's Vineyard Transit Authority	2,099,951	0.825%
Martha's Vineyard Regional School	19,643,471	7.721%
Martha's Vineyard Landbank	4,285,122	1.684%
Martha's Vineyard Refuse	3,537,132	1.390%
Martha's Vineyard Commission	5,656,201	2.223%
Oak Bluffs Water District	3,197,702	1.257%
Total\$	254,425,703	100.000%

^{*} Total pension liability as of January 1, 2022.

	_	Up-Island School	-	Dukes County	_	Tisbury		Edgartown
Net Pension Liability Beginning net pension liability	\$	314,232	\$	604,984	\$	1,673,788	\$	2,378,169
Ending net pension liability	\$	1,843,360	\$	3,511,687	\$	10,338,135	\$	13,872,221
<u>Deferred Outflows of Resources</u> Differences between expected and actual experience	\$	97,159	\$	185,093	\$	544,898	\$	731,171
Net difference between projected and actual investment earnings on pension plan investments		679,078		1,293,675		3,808,479		5,110,405
Changes of assumptions		272,862		519,814		1,530,293		2,053,423
Changes in proportion and differences between employer contributions and proportionate share of contributions		39,881		159,944		147,749		107,969
Total Deferred Outflows of Resources	_		•		-		_	8,002,968
<u>Deferred Inflows of Resources</u> Differences between expected and actual experience	\$	69,902	\$	133,167	\$	392,033	\$	526,048
Changes in proportion and differences between employer contributions and proportionate share of contributions		50,286		130,579		117,437		372,217
Total Deferred Inflows of Resources	_			263,746	\$	509,470	_	898,265
Pension Expense Proportionate share of plan pension expense	\$	366,780	\$	698,740	\$	2,057,039	\$	2,760,238
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	_	13,586		(21,731)	_	7,303	. <u>-</u>	(76,509)
Total Employer Pension Expense	\$ _	380,366	\$	677,009	\$ _	2,064,342	\$	2,683,729
Contributions Statutory required contribution	\$	262,621	\$	624,927	\$	1,487,586	\$	2,021,256
Contribution in relation to statutory required contribution	_	(262,621)		(624,927)	-	(1,487,586)	-	(2,021,256)
Contribution deficiency/(excess)	\$ _	-	\$		\$	-	\$	
Contributions as a percentage of covered payroll		17.53%		22.17%		20.01%		23.15%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense June 30, 2023. June 30, 2024. June 30, 2025.		119,772 232,880 262,850	\$	207,456 453,080 528,704	\$	644,506 1,321,159 1,517,209	\$	788,894 1,695,482 1,958,560
June 30, 2026 June 30, 2027 Total Deferred Inflows/(Outflows) Recognized in		355,611 (2,321)		707,833 (2,293)	-	2,047,411 (8,336)	-	2,679,013 (17,246)
Future Pension Expense	\$ _	968,792	\$	1,894,780	\$	5,521,949	\$	7,104,703
Discount Rate Sensitivity 1% decrease (6.00%)	\$	2,873,102	\$	5,473,393	\$	16,113,246	\$	21,621,551
Current discount rate (7.00%)	\$	1,843,360	\$	3,511,687	\$	10,338,135	\$	13,872,221
1% increase (8.00%)		973,157	\$	1,853,909	\$	5,457,766	\$	7,323,501
Covered Payroll	\$	1,497,875	\$	2,818,348	\$	7,434,510	\$	8,729,727
See notes to schedule of employer allocations and schedule of pension amounts by employer.								(continued)

	_	Oak Bluffs	-	West Tisbury	Chilmark	-	Aquinnah
Net Pension Liability Beginning net pension liability	\$	1,528,460	\$	645,659	\$ 480,734	\$	202,877
Ending net pension liability	\$	8,850,536	\$	3,870,450	\$ 3,154,556	\$	1,166,223
<u>Deferred Outflows of Resources</u> Differences between expected and actual experience	\$	466,491	\$	204,002	\$ 166,269	\$	61,469
Net difference between projected and actual investment earnings on pension plan investments		3,260,460		1,425,840	1,162,111		429,627
Changes of assumptions		1,310,093		572,920	466,950		172,629
Changes in proportion and differences between employer contributions and proportionate							
share of contributions	_	51,507	-	45,894	253,970	-	82,989
Total Deferred Outflows of Resources	\$ _	5,088,551	\$	2,248,656	\$ 2,049,300	\$	746,714
<u>Deferred Inflows of Resources</u> Differences between expected and actual experience	\$	335,621	\$	146,771	\$ 119,624	\$	44,224
Changes in proportion and differences between employer contributions and proportionate							
share of contributions	_	215,718	-	6,189	19,919	-	18,620
Total Deferred Inflows of Resources	\$ _	551,339	\$	152,960	\$ 139,543	\$	62,844
Pension Expense Proportionate share of plan pension expense	\$	1,761,039	\$	770,125	\$ 627,678	\$	232,049
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions		(68,935)	-	19,843	60,519	_	33,590
Total Employer Pension Expense	\$ _	1,692,104	\$	789,968	\$ 688,197	\$	265,639
Contributions							
Statutory required contribution	\$	1,373,922	\$	593,338	\$ 529,629	\$	213,295
Contribution in relation to statutory required contribution	_	(1,373,922)	-	(593,338)	(529,629)	-	(213,295)
Contribution deficiency/(excess)	\$ _	-	\$		\$ 	\$	
Contributions as a percentage of covered payroll		21.25%		21.27%	17.78%		17.29%
<u>Deferred Inflows/(Outflows) Recognized in</u> <u>Future Pension Expense</u>							
June 30, 2023. June 30, 2024. June 30, 2025. June 30, 2026. June 30, 2027. Total Deferred Inflows/(Outflows) Recognized in	\$ _	489,280 1,074,173 1,258,047 1,725,607 (9,895)	\$	254,821 507,056 571,618 765,550 (3,349)	\$ 258,155 472,173 517,666 661,333 430	\$	98,307 169,320 181,868 235,116 (741)
Future Pension Expense	\$ _	4,537,212	\$	2,095,696	\$ 1,909,757	\$	683,870
Discount Rate Sensitivity 1% decrease (6.00%)	\$	13,794,642	\$	6,032,569	\$ 4,916,762	\$	1,817,702
Current discount rate (7.00%)	\$	8,850,536	\$	3,870,450	\$ 3,154,556	\$	1,166,223
1% increase (8.00%)	\$	4,672,425	\$	2,043,310	\$ 1,665,371	\$	615,679
Covered Payroll	\$	6,464,168	\$	2,789,108	\$ 2,979,534	\$	1,233,373
See notes to schedule of employer allocations and schedule of pension amounts by employer.							(continued)

	-	Gosnold		Martha's Vineyard Transit Authority		Martha's Vineyard Regional School		Martha's Vineyard Landbank
Net Pension Liability	•	44.504	•	77.000	•	745.540	•	444.000
Beginning net pension liability	\$	44,501	\$	77,080	\$	715,548	\$	144,398
Ending net pension liability	\$	302,281	\$	456,041	\$	4,265,918	\$	930,588
<u>Deferred Outflows of Resources</u>								
Differences between expected and actual experience	\$	15,933	\$	24,037	\$	224,846	\$	49,049
Net difference between projected and actual investment earnings on pension plan investments		111,358		168,001		1,571,527		342,820
Changes of assumptions		44,745		67,505		631,459		137,749
Changes in proportion and differences between employer contributions and proportionate share of contributions	_	26,984		6,344		195,075		25,526
Total Deferred Outflows of Resources	\$_	199,020	\$	265,887	\$	2,622,907	\$	555,144
Deferred Inflows of Resources Differences between expected and actual experience	<u>-</u>	11,463	\$	17,294	\$	161,768	\$	35,289
Zinoronoso sottosi, orpostos ana astaal orpononosii	Ψ	,	Ψ	,20.	Ψ	101,700	Ψ	00,200
Changes in proportion and differences between employer contributions and proportionate								
share of contributions	_	-		32,756		48,466		84,703
Total Deferred Inflows of Resources	\$ _	11,463	\$	50,050	\$	210,234	\$	119,992
Pension Expense								
Proportionate share of plan pension expense	\$	60,145	\$	90,743	\$	848,815	\$	185,166
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions		0.033		(2.279)		67,291		(26.005)
contributions and proportionate snare of contributions	-	9,933	•	(2,278)	•	07,291		(26,005)
Total Employer Pension Expense	\$	70,078	\$	88,465	\$	916,106	\$	159,161
Contributions Statutory required contribution	\$	51,110	\$	51,904	\$	732,168	\$	99,776
Contribution in relation to statutory required contribution	-	(51,110)		(51,904)		(732,168)		(99,776)
Contribution deficiency/(excess)	\$		\$		\$	-	\$	
Contributions as a percentage of covered payroll		17.54%		8.69%		15.99%		10.99%
Deferred Inflows/(Outflows) Recognized in								
Future Pension Expense	_							
June 30, 2023		27,249 45,461	\$	23,878	\$	316,252	\$	35,554
June 30, 2025		50,372		49,384 58,751		582,543 653,575		98,726 123,726
June 30, 2026		64,349		84,618		862,651		178,258
June 30, 2027		126		(794)		(2,348)		(1,112)
Total Deferred Inflows/(Outflows) Recognized in	_	407.555	•	045.005		0.440.075	_	405 455
Future Pension Expense	\$ _	187,557	\$	215,837	\$	2,412,673	\$	435,152
Discount Rate Sensitivity								
1% decrease (6.00%)	\$	471,142	\$	710,795	\$	6,648,954	\$	1,450,435
Current discount rate (7.00%)	\$	302,281	\$	456,041	\$	4,265,918	\$	930,588
1% increase (8.00%)	\$	159,582	\$	240,755	\$	2,252,087	\$	491,281
Covered Payroll	\$	291,465	\$	597,036	\$	4,580,156	\$	908,217
See notes to schedule of employer allocations and schedule of pension amounts by employer.								(continued)

	_	Martha's Vineyard Refuse		Martha's Vineyard Commission	•	Oak Bluffs Water District	_	Totals
Net Pension Liability								
Beginning net pension liability	\$	125,486	\$	178,663	\$	107,590	\$	9,222,169
Ending net pension liability	\$	768,149	\$	1,228,341	\$	694,436	\$	55,252,922
<u>Deferred Outflows of Resources</u> Differences between expected and actual experience	\$	40,487	\$	64,743	\$	36,602	\$	2,912,249
Net difference between projected and actual investment earnings on pension plan investments		282,979		452,510		255,824		20,354,694
Changes of assumptions		113,705		181,824		102,793		8,178,764
Changes in proportion and differences between employer contributions and proportionate								
share of contributions	-	14,336		56,476	į.	17,304	-	1,231,948
Total Deferred Outflows of Resources	\$_	451,507	\$	755,553	\$	412,523	\$_	32,677,655
<u>Deferred Inflows of Resources</u> Differences between expected and actual experience	\$	29,129	\$	46,580	\$	26,334	\$	2,095,247
Changes in proportion and differences between employer contributions and proportionate								
share of contributions	_	25,454		69,219	į.	40,385	_	1,231,948
Total Deferred Inflows of Resources	\$_	54,583	\$	115,799	\$	66,719	\$_	3,327,195
Pension Expense Proportionate share of plan pension expense	\$	152,844	\$	244,410	\$	138,179	\$	10,993,990
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions		(1.005)		(6,725)		(8,877)		_
	_			,	•		_	40.000.000
Total Employer Pension Expense	\$ =	151,839	\$	237,685	\$	129,302	\$ =	10,993,990
Contributions Statutory required contribution	\$	103,624	\$	148,771	\$	82,529	\$	8,376,456
Contribution in relation to statutory required contribution	_	(103,624)		(148,771)		(82,529)	_	(8,376,456)
Contribution deficiency/(excess)	\$_		\$		\$		\$_	
Contributions as a percentage of covered payroll		18.67%		16.03%		16.50%		19.80%
Deferred Inflows/(Outflows) Recognized in								
Future Pension Expense June 30, 2023	¢	45,289	\$	68,061	\$	33,932	\$	3,411,406
June 30, 2024		94,236	•	147,342	•	80,529	•	7,023,544
June 30, 2025		108,876		177,971		96,701		8,066,494
June 30, 2026		149,337		246,917		135,302		10,898,906
June 30, 2027 Total Deferred Inflows/(Outflows) Recognized in	-	(814)		(537)		(660)	-	(49,890)
Future Pension Expense	\$ _	396,924	\$	639,754	\$	345,804	\$	29,350,460
Discount Rate Sensitivity								
1% decrease (6.00%)	\$	1,197,254	\$	1,914,520	\$	1,082,363	\$	86,118,430
Current discount rate (7.00%)		768,149	\$	1,228,341	\$	694,436	\$	55,252,922
1% increase (8.00%)	\$	405,526	\$	648,473	\$	366,611	\$	29,169,433
Covered Payroll	\$	555,010	\$	927,879	\$	500,322	\$	42,306,728
See notes to schedule of employer allocations and schedule of pension amounts by employer.								(concluded)

NOTE I - SCHEDULE OF EMPLOYER ALLOCATIONS

Governmental Accounting Standards Board (GASB) Statement #68 requires employers participating in a costsharing 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, and pension expense.

GASB Statement #68 requires the allocation of the collective pension amounts to 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 Dukes County Contributory Retirement System's collective pension amounts.

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 who are employees of any government unit at the close of business on the September 30th immediately preceding the fiscal year unless another methodology is approved by the Board.

Pension fund appropriations have been allocated among employers using an actuarial based methodology that allocates contributions to member units based on the member units actuarially determined Total Pension Liability at the beginning of the measurement period. This is the long-term expected contribution rate that is the basis for preparing the schedule of employer allocations.

The System also uses the actuarially determined Total Pension Liability at the beginning of the measurement period as the method of allocation for roll forward measurements for each employer. Therefore, when the current Total Pension Liability has been rolled forward from the prior year the proportionate share will remain the same. A change in proportionate share by employer will only occur in the first measurement date after a new actuarial valuation. Based on the results of each new valuation, changes in proportion and differences between employer contributions and the proportionate share of contributions will be reported for each employer because the proportionate share is developed from the Total Pension Liability not from actual employer contributions.

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. The accrued liability for the members who accept the ERIP as retirees including the ERIP less the accrued liability for the members as active employees excluding the ERIP represents the increase in accrued liability due to the ERIP. The net increase is amortized for each member unit accepting the ERIP and is separately identified in the System's funding schedule. The remaining 2002 and 2003 ERIP's are being amortized using an increasing dollar amount at 4.5% to reduce the unfunded actuarial accrued liability attributable to the ERIP's to zero on or before June 30, 2028.

NOTE II - 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, pension expense, and contributions for all participating employers including differences between expected and actual economic experience; differences between projected and actual investment earnings, net; changes in proportion; and changes of assumptions.

Under GASB 68, the difference between projected and actual investment earnings gains and losses on investments are deferred and amortized using a 5-year straight-line method. Differences between expected and actual economic experience, changes of assumptions and proportionate share changes use a straight-line amortization method over the average expected remaining service lives of active members compared to all active, inactive, and retired members.

NOTE III - CHANGES IN ASSUMPTIONS AND PLAN PROVISIONS

Actuarial Assumptions	
None.	
Plan Provisions	
None.	

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REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Independent Auditor's Report

To the Honorable Dukes County Retirement Board Dukes County Contributory Retirement System Vineyard Haven, Massachusetts

We have audited, in accordance with auditing standards generally accepted in the United States of America, and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the Dukes County Retirement System (System), as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the System's financial statements, and have issued our report thereon dated October 12, 2023.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting (internal control) as a basis for designing the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that have not been identified.

Report on compliance and Other Matters

As part of obtaining reasonable assurance about whether the System's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no

instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

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The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

October 12, 2023