
Monroe County Employees' Retirement System

**Financial Report
with Supplemental Information
December 31, 2018**

Monroe County Employees' Retirement System

Contents

Independent Auditor's Report	1-2
Management's Discussion and Analysis	3-4
Basic Financial Statements	
Statement of Fiduciary Net Position	5
Statement of Changes in Fiduciary Net Position	6
Notes to Financial Statements	7-14
Required Supplemental Information	15
Schedule of Changes in the County Net Pension Liability and Related Ratios	16
Schedule of County Contributions	17
Schedule of Investment Returns	18
Note to Required Supplemental Information	19

Independent Auditor's Report

To the Board of Trustees
Monroe County Employees' Retirement System

Report on the Financial Statements

We have audited the accompanying financial statements of Monroe County Employees' Retirement System (the "System"), a pension trust fund of the County of Monroe, Michigan, as of and for the year ended December 31, 2018 and the related notes to the financial statements, which collectively comprise the Monroe County Employees' Retirement System's basic financial statements, as listed in the table of contents.

Management's Responsibility 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; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

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

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

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

Opinion

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

To the Board of Trustees
Monroe County Employees' Retirement System

Other Matter

Required Supplemental Information

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

Plante & Moran, PLLC

June 3, 2019

Monroe County Employees' Retirement System

Management's Discussion and Analysis

Using this Annual Report

This annual report consists of three parts: (1) management's discussion and analysis (this section), (2) the basic financial statements, and (3) required supplemental information. The financial statements also include notes that explain some of the information in the financial statements and provide more detailed data. The financial statements are followed by a section of required supplemental information that further explains and supports the information in the financial statements.

Condensed Financial Information

The table below compares key financial information in a condensed format between the current year and the prior year:

	<u>2018</u>	<u>2017</u>
Total assets	\$ 189,264,515	\$ 207,083,235
Total liabilities	<u>1,020,302</u>	<u>117,700</u>
Net position restricted for pensions	<u>\$ 188,244,213</u>	<u>\$ 206,965,535</u>
Net investment (loss) income	\$ (11,080,239)	\$ 24,707,505
Total contributions	9,303,571	9,351,433
Retiree pension and annuity benefits	(16,179,759)	(15,516,850)
Refunds of contributions	(554,538)	(438,624)
General and administrative expenses	<u>(210,357)</u>	<u>(148,861)</u>
Net (decrease) increase in net position restricted for pensions	<u>\$ (18,721,322)</u>	<u>\$ 17,954,603</u>

Overall Fund Structure and Objectives

Monroe County Employees' Retirement System (the "System") exists to pay benefits to its members and retirees. Active members earn service credit that entitles them to receive benefits in the future. Benefits currently being paid are significantly greater than contributions currently being received. The excess of benefits over contributions must be funded through investment income. The public capital markets represent the primary source of investments.

Asset Allocation

The System has established asset allocation policies that are expected to deliver sufficient investment income over a very long period of time to satisfy the obligations to pay the benefits promised to the members of the System. The following is a summary of the System's adopted asset allocation as of December 31, 2018:

<u>Asset Class</u>	<u>Target Allocation</u>
Equities	63.0 %
Fixed income	14.0
Real estate	12.0
Alternatives	10.0
Cash	<u>1.0</u>
Total	<u>100.0 %</u>

Monroe County Employees' Retirement System

Management's Discussion and Analysis (Continued)

Investment Results

Market returns were negative across major equity and fixed-income indices for calendar year 2018. Broad domestic and international equity markets were positive through the end of the third quarter, but fourth quarter losses turned results negative for the calendar year for all parts of the U.S. and international equity markets. The U.S. stock market represented by the Russell 3000 Index returned (5.25) percent for the calendar year. Concerns over continued interest rate increases and a decidedly unfriendly global trade environment threatened to halt one of the longest-running bull markets in history. International equity markets fared worse than U.S. markets, with the MSCI EAFE falling 13.8 percent and MSCI Emerging Markets falling 15.00 percent. During the year, interest rates on the U.S. Treasury yield curve rose across the board. Broad high-quality U.S. fixed-income (Bloomberg Barclays Aggregate Bond Index) returned 0.0 percent for the year. The Federal Reserve increased interest rates four times during the year.

The total fund returned (6.23) percent net of fees for the year (time-weighted rate of return).

The System's total return must always be considered in a longer-term context. The fund's investment horizon is long term, corresponding to the long-term nature of the System's liabilities. Therefore, the board of trustees establishes an asset allocation policy to control risks and generate expected returns that will enable the System to pay the benefits promised to members and retirees. Accordingly, the board of trustees must make investment decisions that it believes will be the most beneficial to the System over many years, not just one or two years.

Contacting the System's Management

This financial report is intended to provide a general overview of the System's finances and investment results in relation to actuarial projections. It shows the System's accountability for the money it receives from employer and employee contributions. If you have questions about this report or need additional information, we welcome you to contact the System's office at 840 South Roessler Street, Monroe, MI 48161.

Monroe County Employees' Retirement System

Statement of Fiduciary Net Position

December 31, 2018

Assets

Cash and short term investments	\$ 6,507,022
Investments:	
U.S. Treasuries	7,872,078
Corporate bonds	14,494,721
Hedge fund	12,350,648
Mutual fund	3,770,712
Equities	87,699,364
Commingled funds	26,168,062
Real estate funds	29,739,685
Receivables:	
Due from brokers for securities sold	54,689
Contributions receivable	338,294
Accrued interest and dividend receivable	269,240
Total assets	<u>189,264,515</u>

Liabilities

Accounts payable and accrued expenses	110,839
Due to brokers for securities purchased	<u>909,463</u>
Total liabilities	<u>1,020,302</u>

Net Position - Restricted for pensions

\$ 188,244,213

Monroe County Employees' Retirement System

Statement of Changes in Fiduciary Net Position

Year Ended December 31, 2018

Additions

Investment income (loss):	
Interest and dividends	\$ 4,080,113
Net decrease in fair value of investments	(14,126,323)
Investment related expenses	<u>(1,034,029)</u>
Net investment loss	(11,080,239)
Contributions:	
Employer contributions	8,259,272
Member contributions	944,299
Employer supplemental pension benefit contributions	<u>100,000</u>
Total contributions	<u>9,303,571</u>
Total additions	(1,776,668)

Deductions

Benefit payments	16,179,759
Refunds of contributions	554,538
Administrative expenses - Not investment related	<u>210,357</u>
Total deductions	<u>16,944,654</u>

Net Decrease in Net Position Held in Trust	(18,721,322)
Net Position Restricted for Pensions - Beginning of year	<u>206,965,535</u>
Net Position Restricted for Pensions - End of year	<u><u>\$ 188,244,213</u></u>

December 31, 2018

Note 1 - Significant Accounting Policies

Accounting and Reporting Principles

The System follows accounting principles generally accepted in the United States of America (GAAP), as applicable to governmental units. Accounting and financial reporting pronouncements are promulgated by the Governmental Accounting Standards Board. The following is a summary of the significant accounting policies used by the System:

Reporting Entity

Monroe County Employees' Retirement System (the "System") is a single-employer defined benefit contributory pension plan administered by the Monroe County Employees' Retirement System Board of Trustees (the "Board"). The System primarily provides pension, disability, and death benefits, covering substantially all full-time employees of Monroe County and its component units, including the following:

Monroe County Library System
Monroe County Road Commission
Monroe County Agency
Monroe County Community Mental Health Authority

The System was adopted by Monroe County, Michigan (the "County") pursuant to Michigan Compiled Laws, Section 46.12a. Benefit provisions are established and may be amended by the Board, as permitted by county ordinances. The financial statements of the System are also included in the combined financial statements of the County as a pension trust fund. The assets of the pension trust fund include no securities of or loans to the County or any other related party.

Basis of Accounting

The System uses the economic resources measurement focus and the full-accrual basis of accounting. Revenue is recorded when earned, and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. System member contributions are recognized in the period in which the contributions are due. Employer contributions to the plan are recognized when due pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

Specific Balances and Transactions

Cash and Short-term Investments

Cash and cash equivalents include cash on hand, demand deposits, and short-term investments with a maturity of three months or less when acquired. Short-term investments are reported at cost, which approximates fair value.

Investments

Investments are reported at fair value or estimated fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Investments that do not have an established market value are reported at estimated fair value as determined by the System's management.

Note 1 - Significant Accounting Policies (Continued)

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Note 2 - Pension Plan

Plan Description

The Monroe County Employees' Retirement System Pension Plan is a single-employer defined benefit pension plan that provides pensions for substantially all permanent full-time general employees of the County. Benefit terms have been established by contractual agreements between the County and the various employee union representations; amendments are subject to the same process.

Management of the System is vested in the retirement board, which consists of nine members: the Monroe County Board of Commissioners' (the "County Commission") chair or vice-chair, at the discretion of the chair; a county commissioner selected by the County Commission; a citizen who is an elector of the County, selected by the County Commission; three members of the System, elected by the members of the System; one member of the System appointed by the Monroe County Library Board; one member elected from the Monroe County Road Commission; and one member who is a retiree and beneficiary of the System, elected by the Association of County Retired Employees, Inc.

Benefits Provided

The System provides retirement, disability, and death benefits. For the County and Monroe County Agency employees, benefit terms are established by negotiations between the County Commission and the employees through collective bargaining agreements and may be amended by the County Commission.

For Monroe County Library System employees, the terms are established by the library administration and library board of trustees. For Monroe County Road Commission employees, the terms are established by the road commission board of trustees through collective bargaining. For Monroe County Community Mental Health Authority employees, the terms are established by the mental health board of trustees through collective bargaining.

Plan Membership

The following members were covered by the benefit terms:

Inactive plan members or beneficiaries currently receiving benefits	768
Inactive plan members entitled to but not yet receiving benefits	144
Active plan members	724
	<hr/>
Total employees covered by the plan	1,636
	<hr/> <hr/>

Note 2 - Pension Plan (Continued)

Contributions

State law requires public employers to make pension contributions in accordance with an actuarial valuation. The System hires an independent actuary for this purpose and annually contributes the amount determined to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability. Contribution requirements of plan members are established and may be amended by the board of trustees in accordance with the union contracts and plan provisions. For the year ended December 31, 2018, the active member contribution rate ranged from 0.0 percent to 5.0 percent of annual pay, and the contribution as a percentage of payroll for the various departments was 31.31 percent for the general County, 37.14 percent for Monroe County Agency, 31.08 percent for the sheriff's office, 16.63 percent for Monroe County Library System, 18.87 percent for Monroe County Road Commission, and 24.25 percent for Central Dispatch. The Monroe County Community Mental Health Authority's contributions are expressed in dollars, and the required contribution was \$578,042.

Net Pension Liability of the County

The net pension liability of the County has been measured as of December 31, 2018 based on benefits in force as of that date and is composed of the following:

Total pension liability	\$ 290,296,974
Plan fiduciary net position	<u>188,244,213</u>
County's net pension liability	<u>\$ 102,052,761</u>

Plan fiduciary net position as a percentage of the total pension liability	64.85 %
--	---------

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of December 31, 2017, which used update procedures to roll forward the estimated liability to December 31, 2018. The valuation was determined using an inflation assumption of 3 percent; assumed salary increases of 3.5 to 5.5 percent (including inflation); an investment rate of return (net of investment expenses) of 7.0 percent; and the Fully Generational RP-2014 Blue Collar mortality tables for male and females, using projection scale MP-2014. These assumptions were applied to all periods included in the measurement and are based on an experience study performed for the five-year period ended December 31, 2014.

Discount Rate

The discount rate used to measure the total pension liability was 7.0 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that system contributions will be made at rates equal to the difference between actuarially determined contribution rates and the employee rate.

Based on those assumptions, the System's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. 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.

Note 2 - Pension Plan (Continued)

Investment Rate of Return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return as of the December 31, 2018 measurement date for each major asset class included in the pension plan's target asset allocation are summarized in the following table:

Asset Class	Long-term Expected Real Rate of Return
Equities	5.24 %
Fixed income	1.98
Real estate	4.18
Hedge funds	3.71

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

The following presents the net pension liability of the County, calculated using the discount rate of 7.0 percent, as well as what the County's 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:

	1 Percent Decrease (6.00%)	Current Discount Rate (7.00%)	1 Percent Increase (8.00%)
Net pension liability of the County	\$ 136,811,830	\$ 102,052,761	\$ 72,879,475

Investment Policy

The System's policy in regard to the allocation of invested assets is established and may be amended by the Board by a majority vote of its members. It is the policy of the Board to pursue an investment strategy that manages risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The pension plan's investment policy discourages the use of cash equivalents, except for liquidity purposes, and aims to refrain from dramatically shifting asset class allocations over short time spans. The following was the Board's adopted asset allocation policy as of December 31, 2018:

Asset Class	Target Allocation
Equities	63.00 %
Fixed income	14.00
Real estate	12.00
Alternatives	10.00
Cash	1.00

Rate of Return

For the year ended December 31, 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was (5.66) percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Monroe County Employees' Retirement System

Notes to Financial Statements

December 31, 2018

Note 2 - Pension Plan (Continued)

Pension Plan Reserves

In accordance with state law, the following reserves are required to be set aside within the pension plan:

The retiree reserve is to be computed annually by the actuary as the present value of estimated benefit payments for all current retirees. The amounts reserved may be used solely to pay monthly retiree benefit payments.

The employee reserve is credited as employee contributions are received throughout the year; the System maintains a record of the amount contributed by each employee, and crediting of interest shall be the rate of interest per annum, compounded annually, as reflected in the 10-year U.S. Treasury rate for the prior calendar year ending on December 31. For any employees who terminate before vesting in the pension plan, their balance is returned to them; for those who stay until retirement, the balance is transferred into the retiree reserve.

The balances of the reserve accounts are as follows:

Retiree reserve (as of the beginning of the year)	\$ 166,188,110
Employee reserve at December 31, 2018	<u>8,882,121</u>
Total	<u>\$ 175,070,231</u>

Note 3 - Deposits and Investments

The System is authorized by Michigan Public Act 314 of 1965, as amended, to invest in certain reverse repurchase agreements, stocks, diversified investment companies, annuity investment contracts, real estate leased to public entities, mortgages, real estate (if the trust fund's assets exceed \$250 million), debt or equity of certain small businesses, certain state and local government obligations, and certain other specified investment vehicles.

The investment policy adopted by the Board in accordance with Public Act 196 of 1997 has authorized investments according to Michigan Public Act 314 of 1965, as amended. The System's deposits and investment policies are in accordance with statutory authority.

There are no limitations or restrictions on withdrawals for the investments that are recorded at amortized cost.

The System's cash and investments are subject to several types of risk, which are examined in more detail below.

Interest Rate Risk

Interest rate risk is the risk that the value of investments will decrease as a result of a rise in interest rates. The System's investment policy does not restrict investment maturities.

At year end, the System had the following investments and maturities:

Investment	Fair Value	Less than 1 Year	1-5 Years	6-10 Years	More than 10 Years
U.S. Treasuries	\$ 7,872,078	\$ 2,280,090	\$ -	\$ 5,591,988	\$ -
Corporate bonds	<u>14,494,721</u>	<u>1,024,042</u>	<u>7,637,543</u>	<u>5,566,136</u>	<u>267,000</u>
Total	<u>\$ 22,366,799</u>	<u>\$ 3,304,132</u>	<u>\$ 7,637,543</u>	<u>\$ 11,158,124</u>	<u>\$ 267,000</u>

December 31, 2018

Note 3 - Deposits and Investments (Continued)

Credit Risk

State law limits investments in commercial paper to the top two ratings issued by nationally recognized statistical rating organizations. The System's investment policy emphasizes appropriate risk/return parameters and compliance with Public Act 314 of 1965, as amended, and gives discretionary authority to its investment managers, as opposed to establishing specific credit rating benchmarks. As of year end, the credit quality ratings of debt securities per Moody's (other than the U.S. government) are as follows:

Investment	Aaa	Aa1	A2	A3	Baa1 and Below	Not Rated
Corporate bonds	\$ 430,660	\$ 471,685	\$ 545,209	\$ 1,175,024	\$ 10,265,733	\$ 1,606,410

Concentration of Credit Risk

The System's investment policy requires that no manager will hold more than 5 percent of its portion of the total fund in any single company, and no more than 5 percent may be held in any single common stock. At December 31, 2018, the System's investment portfolio was not concentrated.

Fair Value Measurements

The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. Investments that are measured at fair value using net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy below.

In instances whereby inputs used to measure fair value fall into different levels in the above fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The System's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset.

December 31, 2018

Note 3 - Deposits and Investments (Continued)

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

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Balance at December 31, 2018
Debt securities:				
U.S. Treasury securities	\$ -	\$ 7,872,078	\$ -	\$ 7,872,078
Corporate bonds	-	14,494,721	-	14,494,721
Total debt securities	-	22,366,799	-	22,366,799
Equity securities - Stocks	87,699,364	-	-	87,699,364
Mutual funds	3,770,712	-	-	3,770,712
Total	<u>\$ 91,470,076</u>	<u>\$ 22,366,799</u>	<u>\$ -</u>	113,836,875
Investments measured at NAV:				
Commingled funds				26,168,062
Hedge fund				12,350,648
Real estate funds				<u>29,739,685</u>
Total investments measured at NAV				<u>68,258,395</u>
Total investments measured at fair value				<u>\$ 182,095,270</u>

Mutual funds and equity securities classified in Level 1 are valued using prices quoted in active markets for those securities.

The fair value of debt securities at December 31, 2018 was determined primarily based on Level 2 inputs. The System estimates the fair value of these investments based on prices that have been evaluated by independent pricing services. Such evaluated prices may be determined by using inputs, such as interest rates and yield curves, that are observable at commonly quoted intervals, maturities, call features, and ratings among other factors.

The valuation method for investments measured at net asset value (NAV) per share (or its equivalent) is presented on the table below.

Investments in Entities that Calculate Net Asset Value per Share

The System holds shares or interests in investment companies whereby the fair value of the investments is measured on a recurring basis using net asset value per share (or its equivalent) of the investment companies as a practical expedient.

December 31, 2018

Note 3 - Deposits and Investments (Continued)

At December 31, 2018, the fair value, unfunded commitments, and redemption rules of those investments are as follows:

	Fair Value	Unfunded Commitments	Redemption Frequency, if Eligible	Redemption Notice Period
Commingled funds	\$ 11,487,048	\$ -	Immediate	N/A
Hedge fund	27,031,662	-	Quarterly	Up to 90 days
Equity real estate	29,739,685	1,250,000	Quarterly	Up to 90 days
Total investments measured at NAV	<u>\$ 68,258,395</u>	<u>\$ 1,250,000</u>		

The commingled fund class includes investments in funds that invest predominantly in fixed-income instruments in U.S., developed, and emerging market countries. The funds invest across a diverse group of security types, including government, corporate, and mortgage-backed debt and across the credit quality spectrum of investment grade and high yield. The fair values of the investments in this class have been estimated using net asset value per share of the investments.

The equity real estate class includes investments in funds whose objective is to acquire, develop, own, and operate a diversified portfolio of real estate investments in commercial property. The fair values of the investments in this class have been estimated using net asset value per share of the investments.

The hedge fund class includes investment in funds whose objective is to achieve substantial capital appreciation with limited volatility. The strategy is designed to achieve modest correlation to global equity and fixed-income returns. The funds pursue a multistrategy, multimanager approach to hedge fund investing and invest in four broad strategies: long/short equity, relative value, event driven/distressed, and global macro. The fair values of the investments in this class have been estimated using net asset value per share of the investments.

Required Supplemental Information

Monroe County Employees' Retirement System

Required Supplemental Information Schedule of Changes in the County Net Pension Liability and Related Ratios

Last Five Fiscal Years

	2018	2017	2016	2015	2014
Total Pension Liability					
Service cost	\$ 4,101,406	\$ 3,852,383	\$ 4,007,459	\$ 3,901,674	\$ 4,475,473
Interest	19,397,343	19,352,896	18,590,127	18,114,296	17,360,575
Differences between expected and actual experience	2,161,876	(6,474,450)	4,215,420	(1,665,060)	-
Changes in assumptions	-	-	-	4,100,832	-
Benefit payments, including refunds	(16,734,297)	(15,955,473)	(15,567,005)	(15,081,332)	(14,348,289)
Net Change in Total Pension Liability	8,926,328	775,356	11,246,001	9,370,410	7,487,759
Total Pension Liability - Beginning of year	281,370,646	280,595,290	269,349,289	259,978,879	252,491,120
Total Pension Liability - End of year	\$ 290,296,974	\$ 281,370,646	\$ 280,595,290	\$ 269,349,289	\$ 259,978,879
Plan Fiduciary Net Position					
Contributions - Employer	\$ 8,359,272	\$ 8,483,096	\$ 8,044,525	\$ 7,938,586	\$ 7,275,798
Contributions - Member	944,299	868,337	851,150	897,929	773,806
Net investment (loss) income	(11,080,239)	24,707,505	12,409,450	(1,133,015)	7,866,098
Administrative expenses	(210,357)	(148,861)	(169,405)	(233,746)	(154,756)
Benefit payments, including refunds	(16,734,297)	(15,955,474)	(15,567,004)	(15,081,332)	(14,348,289)
Net Change in Plan Fiduciary Net Position	(18,721,322)	17,954,603	5,568,716	(7,611,578)	1,412,657
Plan Fiduciary Net Position - Beginning of year	206,965,535	189,010,932	183,442,216	191,053,794	189,641,137
Plan Fiduciary Net Position - End of year	\$ 188,244,213	\$ 206,965,535	\$ 189,010,932	\$ 183,442,216	\$ 191,053,794
County's Net Pension Liability - End of year	\$ 102,052,761	\$ 74,405,111	\$ 91,584,358	\$ 85,907,073	\$ 68,925,085
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	64.85 %	73.56 %	67.36 %	68.11 %	73.49 %
Covered Payroll	\$ 35,798,576	\$ 35,292,710	\$ 34,786,368	\$ 34,514,128	\$ 33,045,751
County's Net Pension Liability as a Percentage of Covered Payroll	285.07 %	212.82 %	263.28 %	248.90 %	208.57 %

This schedule is intended to show information for 10 years. GASB 67 was implemented in 2014, and additional years will be added as they become available.

Monroe County Employees' Retirement System

Required Supplemental Information Schedule of County Contributions

**Last Ten Fiscal Years
Years Ended December 31**

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Actuarially determined contribution	\$ 8,395,905	\$ 8,446,463	\$ 8,044,525	\$ 7,938,586	\$ 7,275,798	\$ 7,169,324	\$ 7,114,103	\$ 5,994,825	\$ 5,938,425	\$ 5,547,369
Contributions in relation to the actuarially determined contribution (includes supplemental pension benefit funding)	8,359,272	8,483,096	8,044,525	7,938,586	7,275,798	7,169,324	7,114,103	5,994,825	5,938,425	5,547,369
Contribution (deficiency) excess	<u>\$ (36,633)</u>	<u>\$ 36,633</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 35,798,576	\$ 35,292,710	\$ 34,786,368	\$ 34,514,128	\$ 33,045,751	\$ 37,587,747	\$ 38,891,988	\$ 42,893,135	\$ 43,961,798	\$ 43,152,156
Contributions as a percentage of covered payroll	23.4 %	24.0 %	23.1 %	23.0 %	22.0 %	19.1 %	18.3 %	14.0 %	13.5 %	12.9 %

Notes to Schedule of Contributions

Actuarial valuation information relative to the determination of contributions:

Valuation date Actuarially determined contribution rates are calculated as of December 31, two years prior to the end of the fiscal year in which the contributions are reported. Contributions for FY 2018 were determined based on the actuarial valuation as of December 31, 2016. The most recent actuarial valuation for funding purposes was as of December 31, 2017.

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age
Amortization method	Liabilities were amortized using a 25-year level percent of payroll with the exception of Monroe County Community Mental Health Authority liabilities that were amortized using a level-dollar method for the valuation as of December 31, 2012.
Remaining amortization period	25 years - At the September 21, 2015 board meeting, the Board adopted a 25-year layered amortization with 2 percent annual payment increases. Future unanticipated unfunded actuarial accrued liability will be amortized over a 25-year period from the point incurred, resulting in a schedule of UAAL payments.
Inflation	3.0 percent
Salary increase	3.5-5.5 percent, vary by employee group
Investment rate of return	7.0 percent (net of investment expenses)
Mortality	The Fully Generational RP-2014 Blue Collar Mortality Table for males and females, using Projection Scale MP-2014

Monroe County Employees' Retirement System

Required Supplemental Information Schedule of Investment Returns

	Last Five Fiscal Years				
	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money-weighted rate of return - Net of investment expense	(5.7)%	13.3 %	6.6 %	(0.2)%	5.7 %

This schedule is intended to show information for 10 years. GASB 67 was implemented in 2014, and additional years will be added as they become available.

Monroe County Employees' Retirement System

Note to Required Supplemental Information

December 31, 2018

Changes in Assumptions

In 2015, amounts reported as changes of assumptions resulted from adjustment of the discount rate from 6.95 percent to 7 percent and updating the mortality tables from RP-2000 Mortality Table to RP-2014 Blue Collar Annuitant Table.