# Monroe County Employees' Retirement System

**Financial Report**
**with Supplemental Information**
**December 31, 2017**

# Contents

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## Independent Auditor's Report

To the Board of Trustees
Monroe County Employees' Retirement System

### Report on the Financial Statements

We have audited the accompanying basic financial statements of the 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, 2017, and the related notes to the financial statements.

#### *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 financial position of Monroe County Employees' Retirement System as of December 31, 2017 and the changes in fiduciary net position thereof 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

***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

May 11, 2018

## 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:

| | 2017 | 2016 |
|---|---|---|
| Total assets | $ 207,083,235 | $ 199,380,359 |
| Total liabilities | 117,700 | 10,369,427 |
| Net position restricted for pensions | $ 206,965,535 | $ 189,010,932 |
| Net investment income | $ 24,707,505 | $ 12,409,450 |
| Total contributions | 9,351,433 | 8,895,675 |
| Retiree pension and annuity benefits | (15,516,850) | (15,094,283) |
| Refunds of contributions | (438,624) | (472,721) |
| General and administrative expenses | (148,861) | (169,405) |
| Net increase in net position restricted for pensions | $ 17,954,603 | $ 5,568,716 |

## 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, 2017:

| Asset Class | Target Allocation |
|---|---|
| Equities | 65.5 % |
| Fixed income | 17.5 |
| Real estate | 12.0 |
| Alternatives | 5.0 |
| Total | 100.0 % |

## Investment Results

Market returns were positive across major equity and fixed-income indices for calendar year 2017. Broad domestic and international equity markets continued their yearlong trend of strong positive performance. Fixed-income indices also posted positive results, but equities outpaced fixed-income investments for the year, as improving macroeconomic data and robust corporate earnings worldwide fostered investor optimism in the continued global economic recovery. The U.S. stock market represented by the Russell 3000 Index returned 21.1 percent for the calendar year. Domestic equity indices pushed higher as most measures continued to show continued signs of a healthy U.S. economy. Future prospects for lower corporate and individual tax rates following the passage of a Republican Party-led tax code overhaul in December also boosted returns through the period.

International equity market benchmarks posted considerable gains for the year with the MSCI ACWI ex U.S. returning 27.2 percent. Emerging market stocks outpaced both international developed and U.S. equities with the MSCI Emerging Markets Index returning an impressive 37.3 percent for the calendar year. While developed market international index returns were weaker by comparison, they still posted solid gains with the MSCI EAFE Index returning 25.0 percent for the one-year period, outpacing major domestic indices. International equities benefited from continued strength in global fundamental data, a weakening U.S. dollar (USD), and generally accommodative global central bank policies.

During the year, interest rates on the U.S. Treasury yield curve rose for short-term maturities, but fell for long-term maturities, causing further flattening of the yield curve. The jump in interest rates on the short end of the curve was partially due to increasing investor expectations for a U.S. Federal Reserve (Fed) interest rate hike, which materialized in December. Despite the increase in short-term rates, broad fixed-income indices posted modestly positive results, with the bellwether Bloomberg Barclays U.S. Aggregate Index returning 3.5 percent for the year.

The total fund returned a positive 13.27 percent net of fees for the year.

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, Michigan 48161.

# Statement of Fiduciary Net Position

| | December 31, 2017 |
|---|---|
| **Assets** | |
| Cash and short term investments | $ 8,184,238 |
| Investments: | |
| U.S. Treasuries | 11,981,061 |
| Corporate bonds | 15,536,065 |
| Hedge fund | 12,179,477 |
| Mutual fund | 19,485,271 |
| Stocks | 107,998,226 |
| Commingled funds | 12,713,080 |
| Equity real estate | 18,772,402 |
| Receivables: | |
| Contributions receivable | 232,618 |
| Accrued interest and dividend receivable | 797 |
| Total assets | 207,083,235 |
| **Liabilities** - Accounts payable and accrued expenses | 117,700 |
| **Net Position** - Restricted for pensions | **$ 206,965,535** |

See notes to financial statements.

## Monroe County Employees' Retirement System

### Statement of Changes in Fiduciary Net Position

| | Year Ended December 31, 2017 |
|---|---|
| **Additions** | |
| Investment income (loss): | |
| Interest and dividends | $ 2,985,597 |
| Net increase in fair value of investments | 22,438,109 |
| Investment related expenses | (716,201) |
| Total investment income | 24,707,505 |
| Contributions: | |
| Employer contributions | 8,433,096 |
| Employer supplemental pension benefit contributions | 50,000 |
| Member contributions | 868,337 |
| Total contributions | 9,351,433 |
| Total additions | 34,058,938 |
| **Deductions** | |
| Benefit payments | 15,516,850 |
| Refunds of contributions | 438,624 |
| Administrative expenses, not investment related | 148,861 |
| Total deductions | 16,104,335 |
| **Net Increase in Net Position Held in Trust** | 17,954,603 |
| **Net Position Restricted for Pensions** - Beginning of year | 189,010,932 |
| **Net Position Restricted for Pensions** - End of year | **$ 206,965,535** |

See notes to financial statements.

## 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 (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 statement 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 | 752 |
| Inactive plan members entitled to but not yet receiving benefits | 151 |
| Active plan members | 713 |
| Total employees covered by the plan | 1,616 |

## 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, 2017, 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 30.69 percent for the general County, 39.92 percent for Monroe County Agency, 30.29 percent for the sheriff's office, 16.83 percent for Monroe County Library System, 20.13 percent for Monroe County Road Commission, and 26.11 percent for Central Dispatch. The Monroe County Community Mental Health Authority's contributions are expressed in dollars, and the required contribution was $621,412.

### *Net Pension Liability of the County*

The net pension liability of the County has been measured as of December 31, 2017 based on benefits in force as of that date and is composed of the following:

| | |
|---|---|
| Total pension liability | $ 281,370,646 |
| Plan fiduciary net position | 206,965,535 |
| County's net pension liability | $ 74,405,111 |
| Plan fiduciary net position as a percentage of the total pension liability | 73.56 % |

### *Actuarial Assumptions*

The total pension liability was determined by an actuarial valuation as of December 31, 2016, which used updated procedures to roll forward the estimated liability to December 31, 2017. The valuation was determined using an inflation assumption of 3 percent; assumed salary increases of 3.5 to 5.5 percent; an investment rate of return (net of investment expenses) of 7.0 percent; and using 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.

The actuarial assumptions used in the December 31, 2016 actuarial valuation date valuation were based on the results of an actuarial experience study for the period January 1, 2010 to December 31, 2014.

### *Discount Rate*

The discount rate used to measure the total pension liability was 7 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, 2017 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 | 5.47 % |
| Fixed income | 1.98 |
| Real estate | 4.25 |
| Alternatives | 3.53 |

### *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 7.00 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 | $ 108,545,022 | $ 74,405,111 | $ 45,823,974 |

### *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, 2017:

| Asset Class | Target Allocation |
|---|---|
| Equities | 65.50 % |
| Fixed income | 17.50 |
| Real estate | 12.00 |
| Alternatives | 5.00 |

### *Rate of Return*

For the year ended December 31, 2017, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 13.31 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

## 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 that 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 employee who terminates 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 at December 31, 2017 are as follows:

| | |
|---|---|
| Retiree reserve (as of the beginning of the year) | $ 158,543,438 |
| Employee reserve | 8,388,299 |
| Total | $ 166,931,737 |

## 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.

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 |
|---|---|---|---|---|
| U.S. Treasuries | $ 11,981,061 | $ 1,424,943 | $ 3,797,618 | $ 6,758,500 |
| Corporate bonds | 15,536,065 | - | 6,373,095 | 9,162,970 |
| Total | $ 27,517,126 | $ 1,424,943 | $ 10,170,713 | $ 15,921,470 |

## 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 Standard & Poor's (other than the U.S. government) are as follows:

| Investment | AAA | A | BBB | Not Rated |
|---|---|---|---|---|
| Corporate bonds | $ 140,200 | $ 2,417,050 | $ 12,172,506 | $ 806,309 |

### *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, 2017, 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 the 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.

## Note 3 - Deposits and Investments (Continued)

The System has the following recurring fair value measurements as of December 31, 2017:

| | 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, 2017 |
|---|---|---|---|---|
| Debt securities: | | | | |
| U.S. Treasury securities | $ - | $ 11,981,061 | $ - | $ 11,981,061 |
| Corporate bonds | - | 15,536,065 | - | 15,536,065 |
| Total debt securities | - | 27,517,126 | - | 27,517,126 |
| Equity securities - Stocks | 107,998,226 | - | - | 107,998,226 |
| Mutual funds | 19,485,271 | - | - | 19,485,271 |
| Total | $ 127,483,497 | $ 27,517,126 | $ - | 155,000,623 |
| Investments measured at NAV: | | | | |
| Commingled funds | | | | 12,713,080 |
| Hedge fund | | | | 12,179,477 |
| Equity real estate | | | | 18,772,402 |
| Total investments measured at NAV | | | | 43,664,959 |
| Total investments measured at fair value | | | | $ 198,665,582 |

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, 2017 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 the 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.

## Note 3 - Deposits and Investments (Continued)

At the year ended December 31, 2017, 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 | $ 12,713,080 | $ - | Immediate | N/A |
| Hedge fund | 12,179,477 | - | Quarterly | Up to 90 days |
| Equity real estate | 18,772,402 | - | Quarterly | Up to 90 days |
| Total investments measured at NAV | $ 43,664,959 | $ - | | |

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 the 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 the 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 the net asset value per share of the investments.

# Required Supplemental Information

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

**Last Four Fiscal Years**

| | 2017 | 2016 | 2015 | 2014 |
|---|---|---|---|---|
| **Total Pension Liability** | | | | |
| Service cost | $ 3,852,383 | $ 4,007,459 | $ 3,901,674 | $ 4,475,473 |
| Interest | 19,352,896 | 18,590,127 | 18,114,296 | 17,360,575 |
| Differences between expected and actual experience | (6,474,450) | 4,215,420 | (1,665,060) | - |
| Changes in assumptions | - | - | 4,100,832 | - |
| Benefit payments, including refunds | (15,955,473) | (15,567,005) | (15,081,332) | (14,348,289) |
| **Net Change in Total Pension Liability** | 775,356 | 11,246,001 | 9,370,410 | 7,487,759 |
| **Total Pension Liability** - Beginning of year | 280,595,290 | 269,349,289 | 259,978,879 | 252,491,120 |
| **Total Pension Liability** - End of year | **$ 281,370,646** | **$ 280,595,290** | **$ 269,349,289** | **$ 259,978,879** |
| **Plan Fiduciary Net Position** | | | | |
| Contributions - Employer | $ 8,483,096 | $ 8,044,525 | $ 7,938,586 | $ 7,275,798 |
| Contributions - Member | 868,337 | 851,150 | 897,929 | 773,806 |
| Net investment income (loss) | 24,707,505 | 12,409,450 | (1,133,015) | 7,866,098 |
| Administrative expenses | (148,861) | (169,405) | (233,746) | (154,756) |
| Benefit payments, including refunds | (15,955,474) | (15,567,004) | (15,081,332) | (14,348,289) |
| **Net Change in Plan Fiduciary Net Position** | 17,954,603 | 5,568,716 | (7,611,578) | 1,412,657 |
| **Plan Fiduciary Net Position** - Beginning of year | 189,010,932 | 183,442,216 | 191,053,794 | 189,641,137 |
| **Plan Fiduciary Net Position** - End of year | **$ 206,965,535** | **$ 189,010,932** | **$ 183,442,216** | **$ 191,053,794** |
| **County's Net Pension Liability** - End of year | **$ 74,405,111** | **$ 91,584,358** | **$ 85,907,073** | **$ 68,925,085** |
| **Plan Fiduciary Net Position as a Percentage of Total Pension Liability** | 73.56 % | 67.36 % | 68.11 % | 73.49 % |
| **Covered Employee Payroll** | $ 35,047,000 | $ 34,786,368 | $ 34,514,128 | $ 33,045,751 |
| **County's Net Pension Liability as a Percentage of Covered Employee Payroll** | 212.30 % | 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.

# Required Supplemental Information
# Schedule of County Contributions

**Last Ten Fiscal Years**

**Year Ended December 31**

| | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| Actuarially determined contribution | $ 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 | $ 5,938,425 |
| Contributions in relation to the actuarially determined contribution (includes supplemental pension benefit funding) | 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 | 5,938,425 |
| Contribution excess | **$ 36,633** | **$ -** | **$ -** | **$ -** | **$ -** | **$ -** | **$ -** | **$ -** | **$ -** | **$ -** |
| Covered employee payroll | $ 34,322,000 | $ 34,786,368 | $ 34,514,128 | $ 33,045,751 | $ 37,587,747 | $ 38,891,988 | $ 42,893,135 | $ 43,961,798 | $ 43,152,156 | $ 41,821,305 |
| Contributions as a percentage of covered employee payroll | 24.7 % | 23.1 % | 23.0 % | 22.0 % | 19.1 % | 18.3 % | 14.0 % | 13.5 % | 12.9 % | 14.2 % |

**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 2017 were determined based on the actuarial valuation as of December 31, 2015. The most recent actuarial valuation for funding purposes was as of December 31, 2016. |

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) |
| Retirement age | Experience-based table of rates specific to the type of eligibility condition |
| Mortality | The Fully Generational RP-2014 Blue Collar Mortality Table for males and females, using Projection Scale MP-2014 |

## Required Supplemental Information
## Schedule of Investment Returns

**Last Four Fiscal Years**

| | 2017 | 2016 | 2015 | 2014 |
|---|---|---|---|---|
| Annual money-weighted rate of return, net of investment expense | 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.