Macomb County Employees' Retirement System Summary Annual Financial Report Year Ended December 31, 2016

Retirement Board Members:

David Flynn, Chair, Chair of the County Board of Commissioners Gary Cutler, Vice-Chair, Employee Representative Mark Deldin, Deputy County Executive Carol Grant, Employee Representative Robert Hoepfner, Director of the Department of Roads Derek Miller, County Treasurer Matthew Murphy, Employee Representative

Secretary - Stephen Smigiel, County Finance Director

Legal Counsel – John Schapka, County Corporation Counsel Vanoverbeke, Michaud & Timmony, PC, Outside Counsel

Investment Consultant - Graystone Consulting

Auditors - Plante Moran

Actuaries - Conduent

MACOMB COUNTY EMPLOYEES' RETIREMENT SYSTEM Statement of Net Position December 31,

Assets	2015	2016
Cash and pooled investments	\$ 36,050,277	\$ 31,543,531
Receivables		
Accrued interest	456,316	473,649
Other	995,094	619,909
Due from other funds	-	18,039
Other assets	1,945	1,250
Total receivables and other assets	1,453,355	1,112,847
Investments, at fair value		
Corporate bonds	67,745	794,640
Common stock	296,193,037	306,711,318
Preferred Stock	-	3,099,685
Foreign Stock	-	20,040,217
Limited partnership	241,730,630	259,619,925
Fixed income common collective trusts	61,822,500	75,683,812
Equity common collective trusts	255,187,104	235,715,668
Total investments	855,001,016	901,665,265
Total Assets	892,504,648	934,321,643
Liabilities		
Accounts payable	2,275,540	1,105,394
Accrued compensation and benefits	4,776,605	4,416,631
Total Liabilities	7,052,145	5,522,025
Net position	\$ 885,452,503	\$ 928,799,618

MACOMB COUNTY EMPLOYEES' RETIREMENT SYSTEM Statement of Changes In Net Position Years Ended December 31,

ADDITIONS		2015	2016
Employer contributions	\$	21,281,612	\$ 20,909,535
Employee contributions		3,667,705	3,628,768
Interest, dividends and appreciation in value of assets		(10,081,135)	87,838,451
Management and custodial fees		(5,809,052)	(4,908,755)
Other Revenue		13,721	 13,180
		_	
Total additions		9,072,851	 107,481,179
Deductions			
Benefit payments		62,808,671	62,983,475
Refunds of contributions		467,958	380,322
Wages & Fringe Benefits		133	214
Supplies & Services		99,695	86,735
Conferences & Training		13,666	17,368
Repairs & Maintenance		5,500	28,400
Contract Services		90,446	233,858
Internal Services		390,203	403,692
Capital Outlay	_	236	
Total deductions		63,876,508	 64,134,064
Net increase (decrease) in net position		(54,803,657)	43,347,115
Net Position, Beginning of year		940,256,160	885,452,503
Net Position, End of year	\$	885,452,503	\$ 928,799,618

MACOMB COUNTY EMPLOYEES' RETIREMENT SYSTEM Adopted Budget

Year Ending December 31, 2017

ADDITIONS	
Employer contributions	\$ 22,000,000
Employee contributions	3,600,000
Interest, dividends and appreciation in value of assets	67,000,000
Management and custodial fees	(5,955,000)
Other Revenue	12,000
Total additions	86,657,000
Deductions	
Benefit payments	63,000,000
Refunds of contributions	350,000
Wages & Fringe Benefits	215
Supplies & Services	44,300
Conferences & Training	12,000
Repairs & Maintenance	55,000
Contract Services	111,900
Internal Services	392,000
Capital Outlay	
Total deductions	63,965,415
Net increase in net position	\$ 22,691,585

MACOMB COUNTY EMPLOYEES' RETIREMENT SYSTEM Notes to Summary Annual Financial Report December 31, 2016

<u>Plan Description and Provision</u> – The County sponsors and administers the Macomb County Employees' Retirement System (the "System"), a single employer defined benefit plan covering substantially all of the County's employees. The System was established in accordance with state statutes to provide retirement benefits for the employees of the County and its several offices, boards and departments, including the Department of Roads. At December 31, 2016 (date of the most recent actuarial valuation) the System's membership consisted of:

Retirees and beneficiaries receiving benefits	2,926
Terminated employees entitled to benefits but not yet receiving	288
Active members covered by the plan	2,020
Total	5,234

<u>Retirement Benefits-</u> The following is a summary of the benefits provided to the members of the system. All members become vested in the System after 8 or 15 years of service, depending on their date of hire.

General County- Virtually all employees hired on or before December 21, 2001 may retire if their age plus years of service equals or exceeds 70 and they have attained a minimum age of 50. The annual retirement benefit, payable monthly for life, is computed at 2.4% of final average compensation for the first 26 years of service and 1% for every year thereafter, with a maximum employer pension of 65%. Employees hired between January 1, 2002 and December 31, 2011 and certain employees hired before that date not covered by the provisions described above may retire at age 55 with 25 or more years of service or age 60 with 8 years of service. Employees hired between January 1, 2012 and December 31, 2015 may retire at age 55 with 25 or more years of service or age 60 with 15 years of service. The annual retirement benefit, payable monthly for life, for employees in the latter two groups is computed at 2.2% of final average compensation for each year of service, with a maximum employer pension of 66%. The plan is closed to new hires effective January 1, 2016. The employer's normal cost of benefits was 12.83% of payroll and the employer's total contribution was 13.22% of payroll for the year ended December 31, 2016.

<u>Sheriff Department-</u> Employees may retire at any age with 25 or more years of service or age 60 with 8 years of service. The annual retirement benefit for the Sheriff and deputies, payable monthly for life, is computed at 2.64% of final average compensation multiplied by credited years of service with a maximum employer pension of 66%. The factor for the undersheriff, captains, jail administrator, command officers, corrections officers and dispatchers is 2.4% for the first 26 years of service and 1% for every year thereafter, with a maximum employer pension of 66%. The plan is closed to new hires effective January 1, 2016. The employer's normal cost of benefits was 17.49% of payroll and the employer's total contribution was 19.48% of payroll for the year ended December 31, 201

MACOMB COUNTY EMPLOYEES' RETIREMENT SYSTEM Notes to Summary Annual Financial Report (continued) December 31, 2016

Retirement Benefits- (concluded)

<u>Department of Roads-</u> Employees may retire at age 55 with 25 or more years of service, at age 60 with 8 years of service or at age 55 if their age pl4us years of service equals or exceeds 70. The annual retirement benefit, payable monthly for life, is computed at 2.4% of final average compensation for the first 26 years of service and 1% for every year thereafter, with a maximum employer pension of 65%. The plan is closed to new hires effective January 1, 2016. The employer's normal cost of benefits was 16.93% of payroll and the employer's total contribution was 26.76% of payroll for the year ended December 31, 2016.

Martha T. Berry Medical Care Facility- Virtually all employees hired on or before December 21, 2001 may retire if their age plus years of service equals or exceeds 70 and they have attained a minimum age of 50. The annual retirement benefit, payable monthly for life, is computed at 2.4% of final average compensation for the first 26 years of service and 1% for every year thereafter, with a maximum employer pension of 65%. Employees hired between January 1, 2002 and December 31, 2011 and certain employees hired before that date not covered by the provisions described above may retire at age 55 with 25 or more years of service or age 60 with 8 years of service. Employees hired on or after January 1, 2012 may retire at age 55 with 25 or more years of service or age 60 with 15 years of service. The annual retirement benefit, payable monthly for life, for employees in the latter two groups is computed at 2.2% of final average compensation for each year of service, with a maximum employer pension of 66%. The employer's normal cost of benefits was 12.00% of payroll and the employer's total contribution was 7.46% of payroll for the year ended December 31, 2016.

The System also provides death and disability benefits. If an employee leaves covered employment or dies before they are vested, accumulated employee contributions plus interest at the rate of 3.5% per year is refunded to the employee or designated beneficiary.

<u>Funding Policy</u> – Article 9, Section 24 of the State of Michigan constitution requires that financial benefits arising on account of employee service rendered in each year be funded during that year. Accordingly, the Pension Board retains an independent actuary to determine the annual contribution. The actuarially determined rate is the estimated amount necessary 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 by collective bargaining agreement for union members. Contribution rates for nonunion members mirror those of union members with the same benefit levels. The County is required to contribute the difference between the actuarially determined rate and the contribution rate for employees. General County employees contribute 2.5% or 3.5% of their annual salary to the System depending upon classification and date of hire. Department of Roads employees contribute 3.5% of their annual salary. Sheriff employees contribute 4.0% of their annual salary. The County's required contribution for 2016 was \$20,909,535.

MACOMB COUNTY EMPLOYEES' RETIREMENT SYSTEM Notes to Summary Annual Financial Report (continued) December 31, 2016

<u>Annual Pension Cost and Net Pension Obligation –</u> During the year ended December 31, 2016, employer contributions totaled \$20,909,535, as determined by the actuarial valuation of the plan as of December 31, 2014. The normal cost and actuarial accrued liability are determined using an entry age actuarial funding method. Unfunded actuarial accrued liabilities (UAAL) are amortized as a level percent of payroll over a 20-year closed period, with 17 years remaining as of December 31, 2016. The County has historically contributed 100% of the annual required contribution. Ten-year trend information regarding the County's annual pension contribution is presented below.

Schedule of Employer Contributions			
	Actuarially	Actual	
Year Ended	Determined Amoun		
December 31	Contribution	Contributed	
2007	\$ 19,121,330	\$ 19,121,330	
2008	18,658,075	18,658,075	
2009	18,507,521	18,507,521	
2010	15,170,777	15,170,777	
2011	16,050,489	16,050,489	
2012	16,604,841	16,604,841	
2013	19,932,742	19,932,742	
2014	22,152,820	22,152,820	
2015	21,281,602	21,281,602	
2016	20,909,535	20,909,535	

Actuarial Methods and Assumptions – Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions regarding the probability of the occurrence of events in the future. Examples of such assumptions include future employment and retirement patterns, mortality and investment rate returns. These assumptions are subject to continual revision as actual results are measured against past expectations and new estimates are made about the future. The schedule of funding progress presented as required supplemental information following the notes herein, presents multi-year trend information that indicates whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities of the benefits provided. Significant actuarial assumptions used in determining the annual required contribution include (a) a rate of return on the investment of present and future assets of 7.25% per year compounded annually, (b) projected salary increases of 3.0% per year compounded annually, attributable to inflation, (c) additional projected salary increases ranging from 1.0% to 7.0% for various members per year, depending on service, attributable to seniority/merit, and (d) the assumption that benefits will not increase after retirement. The actuarial value of assets was determined using techniques that smooth the effects of short-term volatility in the market value of investments over a five-year period.

MACOMB COUNTY EMPLOYEES' RETIREMENT SYSTEM Notes to Summary Annual Financial Report (continued) December 31, 2016

<u>Funding Status and Progress</u> – As of December 31, 2016, the date of the most recent actuarial valuation, the plan was 92.3% funded. The actuarial accrued liability for benefits was \$1,019,137,859 and the actuarial value of assets in the plan was \$940,494,250, resulting in an unfunded actuarial accrued liability (UAAL) of \$78,643,609. Covered payroll was \$116,574,389 and the ratio of the UAAL to covered payroll was 67.5%. A schedule of funding progress for the previous ten (10) years is presented below and provides information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

SCHEDULE OF FUNDING PROGRESS

Actuarial	Actuarial	Actuarial Accrued	Unfunded			UAAL as a
Valuation	Value of	Liability (AAL)	AAL	Funded	Covered	Percentage of
Date	Assets	Entry Age	(UAAL)	%	Payroll	Covered Payroll
December 31	(a)	(b)	(b-a)	(a/b)	(c)	((b-a)/c)
2007	\$ 847,305,155	\$ 772,649,767	\$ (74,655,388)	109.7	\$ 126,696,252	(58.9)
2008	855,265,571	785,688,661	(69,576,910)	108.9	121,822,674	(57.1)
2009	866,356,598	814,563,728	(51,792,870)	106.4	116,522,938	(44.5)
2010	862,915,501	837,167,835	(25,747,666)	103.1	110,795,240	(23.2)
2011	828,692,442	854,323,946	25,631,504	97.0	108,900,180	23.5
2012	795,605,544	867,218,699	71,613,155	91.7	105,391,874	68.0
2013	837,652,540	884,041,581	46,389,041	94.8	102,252,875	45.4
2014	882,565,132	911,095,833	28,530,701	96.9	110,159,044	25.9
2015	902,930,628	977,566,461	74,635,833	92.4	105,254,524	70.9
2016	940,494,250	1,019,137,859	78,643,609	92.3	116,574,389	67.5

<u>Basis of Accounting</u> – The financial statements of the System are prepared using the accrual basis of accounting. Employee and employer contributions are recognized in the period that the contributions are due. Benefits and refunds are recognized when due and payable according to the terms of the plan.

<u>Benefit Payments</u> - Benefit payments made during the year ended December 31, 2016 totaled \$62,983,475 and the average annual retirement allowance was \$21,367.

<u>Deferred Retirement Option Program (DROP)-</u> The County offers employees the ability to continue employment and be paid a salary after they are fully vested and also receive credits for the retirement benefit payments that would have been paid to them had they left County employment. Employees may receive up to 60 months of DROP credits. The accumulated credits are paid out; including interest at 3.5%, after the employee has fully retired (discontinued providing employee services to the County). The Plan had \$27,977,453 accumulated in DROP accounts at December 31, 2016.

MACOMB COUNTY EMPLOYEES' RETIREMENT SYSTEM Notes to Basic Financial Statements (concluded) December 31, 2016

Investments—The pension plan's policy in regard to the allocation of invested assets is established and may be amended by the Pension Board by a majority vote of its members. It is the policy of the Pension 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, 2016:

	Target
Asset Class	Allocation
Cash and Equivalents	2.0%
Domestic Equity	37.0%
Hedge Funds	5.0%
High Yield Fixed Income	4.0%
Infrastructure	5.0%
International Equity	15.0%
International Fixed Income	4.0%
Investment Grade US Fixe	8.0%
Private Equity	10.0%
Real Estate	10.0%
Total	100.0%

<u>Rate of Return –</u> Investment performance for the trailing 1,3,5,7,10 and 15 years, net of fees, are presented below.

Traling 1 Yr	9.75%
Trailing 3 Yrs	5.10%
Trailing 5 Yrs	9.63%
Trailing 7 Yrs	N/A
Trailing 10 Yrs	4.59%
Trailing 15 Yrs	6.05%