

nyhart

# ACTUARIAL VALUATION REPORT

December 31, 2016

# St. Clair County Employees' Retirement System

**Nyhart Actuary & Employee Benefits**

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At the request of the plan sponsor, this report summarizes the St. Clair County Employees' Retirement System valuation results as of December 31, 2016. The purpose of this report is to communicate the following results of the valuation:

- Funded Status;
- and Determine the Recommended Contribution as of December 31, 2016 for Fiscal Year beginning January 1, 2018;

This report has been prepared in accordance with the applicable Federal and State laws. Consequently, it may not be appropriate for other purposes. Please contact Nyhart prior to disclosing this report to any other party or relying on its content for any purpose other than that explained above. Failure to do so may result in misrepresentation or misinterpretation of this report.

The results in this report were prepared using information provided to us by other parties. The census information has been provided to us by the employer. Asset information has been provided to us by the County. We have reviewed the provided data for reasonableness when compared to prior information provided, but have not audited the data. Where relevant data may be missing, we have made assumptions we believe to be reasonable. We are not aware of any significant issues with and have relied on the data provided. Any errors in the data provided may result in a different result than those provided in this report. A summary of the data used in the valuation is included in this report.

The actuarial assumptions and methods were chosen by the Board. In our opinion, all actuarial assumptions and methods are individually reasonable and in combination represent our best estimate of anticipated experience of the plan. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- plan experience differing from that anticipated by the economic or demographic assumptions;
- changes in economic or demographic assumptions;
- increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and
- changes in plan provisions or applicable law.

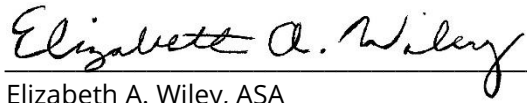
We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement. This report has been prepared in accordance with generally accepted actuarial principles and practice.

Neither Nyhart nor any of its employees have any relationship with the plan or its sponsor which could impair or appear to impair the objectivity of this report. To the extent that this report or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.



The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States and are available for any questions.

Nyhart



Elizabeth A. Wiley, ASA



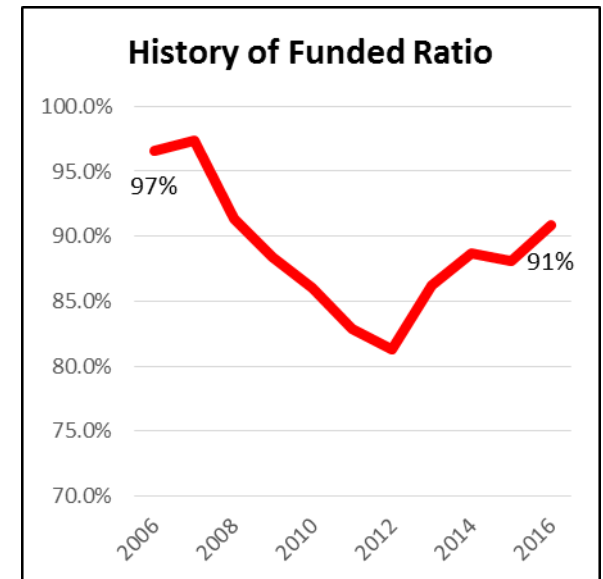
Nick H. Meggos, EA, FCA

\_\_\_\_ September 6, 2017  
Date

## Summary Results

The actuarial valuation's primary purpose is to produce a scorecard measure displaying the funding progress of the plan toward the ultimate goal of paying benefits at retirement. The accrued liability is based on an entry age level percentage of pay.

Valuation Date For Fiscal Year Beginning	December 31, 2015 January 1, 2017	December 31, 2016 January 1, 2018
<b>Funded Status Measures</b>		
Entry Age Accrued Liability	\$247,490,511	\$252,268,270
Actuarial Value of Assets	218,132,651	229,130,114
Unfunded Accrued Liability	\$29,357,860	\$23,138,156
Funded Percentage (AVA)	88.1%	90.8%
Funded percentage (MVA)	85.5%	88.1%
<b>Cost Measures</b>		
Recommended Contribution	\$6,090,683	\$5,396,056
Recommended Contribution (as a percentage of payroll)	16.2%	15.1%
<b>Asset Performance</b>		
Market Value of Assets (MVA)	\$211,588,333	\$222,271,940
Actuarial Value of Assets (AVA)	\$218,132,651	\$229,130,114
Actuarial Value/Market Value	103.1%	103.1%
<b>Participant Information</b>		
Active Participants	696	642
Terminated Vested Participants	163	173
Retirees, Beneficiaries, and Disabled Participants	694	704
Total	1,553	1,519
Expected Fiscal Year Payroll	\$37,714,347	\$35,708,838



### **Changes Since Prior Valuation and Key Notes**

There have been no changes to the plan provisions since the last valuation.

The mortality table has been updated from the RP-2014 mortality table with generational improvements from 2006 based on the Social Security mortality improvement assumptions from the 2015 Trustee's Report to the RP-2014 mortality table with generational improvements from 2006 based on the Social Security mortality improvement assumptions from the 2016 Trustee's Report. This change resulted in a small decrease in the Accrued Liability, Normal Cost, and Recommended Contribution.

## Present Value of Future Benefits

The Present Value of Future Benefits represents the future benefits payable to the existing participants.

December 31, 2016

### Present Value of Future Benefits

#### Active participants

Retirement	\$97,386,422
Disability	8,375,473
Death	1,355,721
Termination	20,824,712
Total active	\$127,942,328

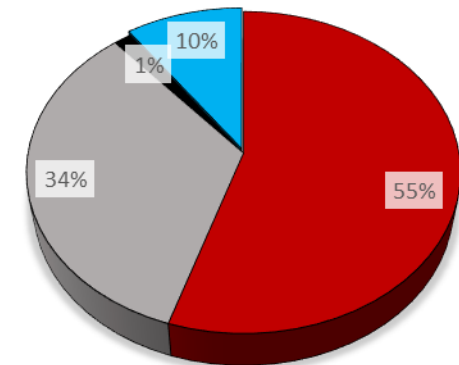
#### Inactive participants

Retired participants	\$135,285,024
Beneficiaries	10,190,959
Disabled participants	973,758
Terminated vested participants	9,937,741
Total inactive	\$156,387,482

Total \$284,329,810

Present value of future payrolls \$283,862,176

Breakdown of Present Value of Future Benefits

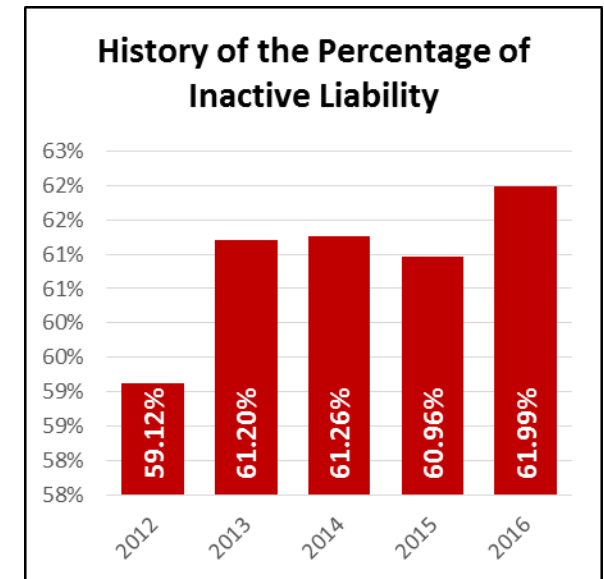


■ Inactive Liability ■ Active Liability  
■ Normal Cost ■ Future Benefits

### Entry Age Accrued Liability

The Funding Liability measures the present value of benefits earned as of the valuation date, using a specified set of actuarial assumptions.

	<b>December 31, 2016</b>
<b>Funding Liabilities</b>	
Active participants	
Retirement	\$78,697,434
Disability	5,914,393
Death	1,034,455
Termination	10,234,506
Total Active	\$95,880,788
Inactive participants	
Retired participants	\$135,285,024
Beneficiaries	10,190,959
Disabled participants	973,758
Terminated vested participants	9,937,741
Total Inactive	\$156,387,482
<b>Total</b>	<b>\$252,268,270</b>
Normal Cost	\$4,196,619





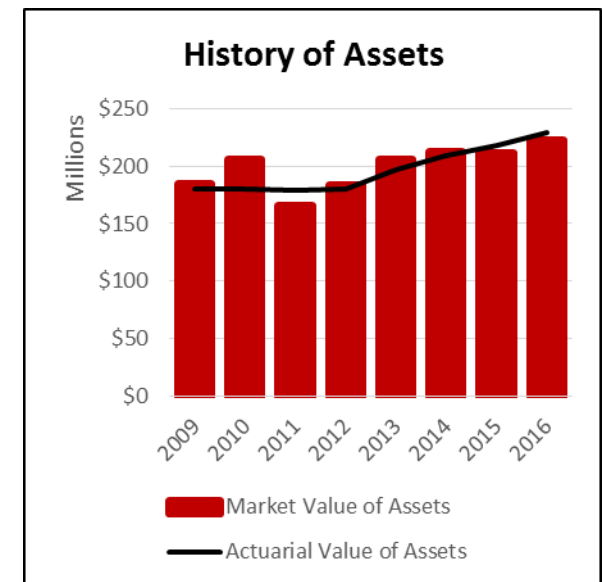
### Asset Information

The amount of assets backing the pension promise is the most significant driver of volatility and future costs within a pension plan. The investment performance of the assets directly offsets the ultimate cost.

**December 31, 2016**

#### Market Value Reconciliation

Market value of assets, beginning of prior year	\$ 211,588,333
Contributions	
Employer contributions	6,264,277
Member contributions	1,989,155
Total	8,253,432
Investment income	16,974,234
Benefit payments	(14,320,304)
Administrative expenses	(223,755)
Market value of asset, beginning of current year	\$ 222,271,940
Return on Market Value	8.1%
Market value of assets available for pension benefits	\$ 222,271,940
<b>Actuarial value of assets</b>	
Value at beginning of current year	\$ 229,130,114



**Asset Information (continued) – 20% Phase in**

Plan Assets are used to develop funded percentages and contribution requirements.

	<b>December 31, 2016</b>
1. Expected actuarial value of assets	
(a) Actuarial value of assets, beginning of prior year	\$ 218,132,651
(b) Contributions	8,253,432
(c) Benefit payments	(14,320,304)
(d) Expenses	(223,755)
(e) Expected return	16,124,050
(f) Expected actuarial value of assets, beginning of current year	\$ 227,966,074
2. Market value of assets, beginning of current year	\$ 222,271,940
3. Actual return on market value	\$ 16,974,234
4. Amount subject to phase in [(3)-(1e)]	\$ 850,184
5. Phase in of asset gain/(loss)	
(a) Current year	\$ 170,037
(b) First prior year	(2,411,755)
(c) Second prior year	(625,380)
(d) Third prior year	2,481,486
(e) Fourth prior year	1,549,652
(f) Total phase-in	\$ 1,164,040
6. Preliminary actuarial value of assets, beginning of current year [(1f)+(5f)]	\$ 229,130,114
7. 80% Market value of assets	\$ 177,817,552
8. 120% Market value of assets	\$ 266,726,328
9. Adjusted actuarial value of assets	\$ 229,130,114
10. Final actuarial value of assets (9)	\$ 229,130,114
11. Return on actuarial value of assets	8.0%

## Reconciliation of Gain/Loss

**December 31, 2016**

### Liability (gain)/loss

Actuarial liability, beginning of prior year	\$247,490,511
Normal cost	4,390,796
Benefit payments	(14,320,304)
Expected Interest	18,363,795
Change in actuarial assumptions	(701,128)
Expected actuarial liability, beginning of current year	\$255,223,670
Actual actuarial liability	\$252,268,270
Liability (gain)/loss	\$(2,955,400)

### Asset (gain)/loss

Actuarial value of assets, beginning of prior year	\$218,132,651
Contributions	8,253,432
Benefit payments and expenses	(14,544,059)
Expected investment return	16,124,050
Expected actuarial value of assets, beginning of current year	\$227,966,074
Actual actuarial value of assets, beginning of current year	\$229,130,114
Asset (gain)/loss	\$(1,164,040)

### Total (gain)/loss

\$(4,119,440)

## Development of Recommended Contribution

The recommended contribution is the annual amount necessary to fund the plan according to funding policies and/or applicable laws.

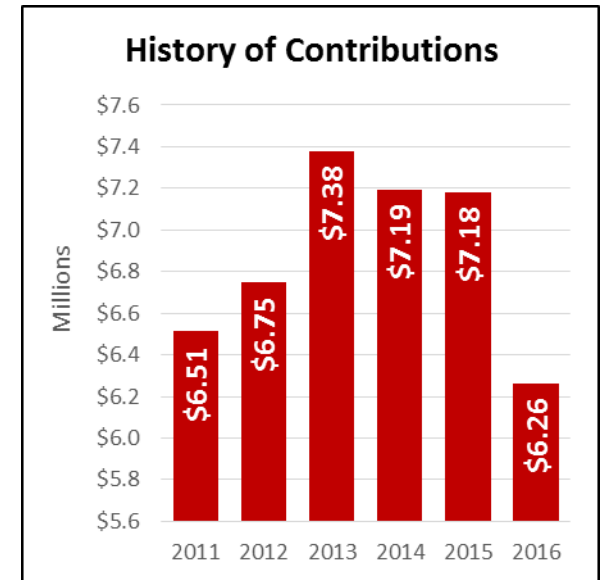
**December 31, 2016**

### **Funded Position**

1.	Entry age accrued liability	\$252,268,270
2.	Actuarial value of assets	\$229,130,114
3.	Unfunded actuarial accrued liability (UAAL)	\$23,138,156
4.	Funded Ratio, (2) / (1)	90.8%

### **Employer Contributions**

5.	Normal Cost	
	(a) Total normal cost	\$4,196,619
	(b) Expected participant contributions	1,952,061
	(c) Net normal cost	\$2,244,558
6.	Administrative expenses	\$73,624
7.	Amortization of UAAL	2,523,137
8.	Applicable interest	554,737
9.	Total recommended contribution	\$5,396,056
10.	Estimated fiscal year payroll	\$35,708,838
11.	Recommended contribution as a percentage of estimated payroll	15.1%



## Demographic Information

The foundation of a reliable actuarial report is the participant information provided by the plan sponsor. Monitoring trends in demographic information is crucial for long-term pension planning.

**December 31, 2016**

### **Participant Counts**

Active Participants	642
Retired Participants	599
Beneficiaries	97
Disabled Participants	8
Terminated Vested Participants	173
<b>Total Participants</b>	<b>1,519</b>

### **Active Participant Demographics**

Average Age	48.0
Average Service	14.2
Average Compensation	\$55,579
Estimated Fiscal Year Payroll	\$35,708,838

Demographic Information (continued)

**December 31, 2016**

**Retiree Statistics**

Average Age	69.2
Average Monthly Benefit	\$1,761

**Beneficiary Statistics**

Average Age	76.2
Average Monthly Benefit	\$1,062

**Disabled Participants Statistics**

Average Age	65.8
Average Monthly Benefit	\$956

**Terminated Participants Statistics**

Average Age	49.3
Number with Monthly Benefits	127
Average Monthly Benefit	\$945

Participant Reconciliation

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Totals
<b>Prior Year</b>	696	163	7	585	102	1,553
<b>Active</b>						
To Terminated Vested	(25)	25	0	0	0	0
To Retired	(27)	0	0	27	0	0
To Lump Sum Cash-Out	(8)	0	0	0	0	(8)
<b>Terminated Vested</b>						
To Disabled	0	(1)	1	0	0	0
To Retired	0	(7)	0	7	0	0
To Lump Sum Cash-Out	0	(6)	0	0	0	(6)
To Death	0	(1)	0	0	0	(1)
<b>Disabled</b>						
To Death	0	0	0	0	0	0
<b>Retired</b>						
To Death	0	0	0	(21)	0	(21)
<b>Survivor</b>						
To Death	0	0	0	0	(11)	(11)
<b>Additions</b>	6	0	0	1	6	13
<b>Departures</b>	0	0	0	0	0	0
<b>Current Year</b>	642	173	8	599	97	1,519

### Active Participant Schedule

Active participant information grouped based on age and service.

	Years of Service										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	
Under 25	3										3
25 to 29	1	9	2								12
30 to 34	1	13	20	16							50
35 to 39	1	8	18	47	7						81
40 to 44		9	15	39	25	4					92
45 to 49		5	22	36	33	26	6				128
50 to 54		8	9	29	27	24	11	8			116
55 to 59		5	9	25	22	10	4	5	2		82
60 to 64		2	6	11	22	9	5	3	1		59
65 to 69		1	3	3	1	1	1	2	1		13
70 & up				1	3	1			1		6
<b>Total</b>	<b>6</b>	<b>60</b>	<b>104</b>	<b>207</b>	<b>140</b>	<b>75</b>	<b>27</b>	<b>18</b>	<b>5</b>	<b>0</b>	<b>642</b>



**Name of plan**

St. Clair County Employees' Retirement System

**Effective date**

The plan was originally effective as of January 1, 1964.

**Participation**

A county policeman, sheriff, or deputy sheriff who agrees to make required participant contributions shall become a participant on his/her date of hire.

Plan is closed to new hires for most of General County employees, Road Commission, and Mental Health.

**Benefits**

**Normal Retirement**

Eligibility

Sheriffs	25 years of service regardless of age.
Others	Age 55 with 25 years of service.
All	Age 60 with 8 years of service. When age plus service equals 80 and service is at least 25 years.

Benefit

The pension payable for modified plan members is determined as the Final Average Compensation (FAC) multiplied by:

<u>Years of Service</u>	<u>Annual Multiplier</u>	<u>Annual Application</u>
1-10	1.75%	Accumulative
11-19	2.00%	Accumulative
20-24	2.00%	Retroactive to 1st Year
25-29	2.40%	Retroactive to 1st Year
(2.50% for Sheriff Department Supervisors)		

The pension payable for original plan members is determined as the FAC multiplied by total service and 2.00%.

### Final Average Compensation (FAC)

Highest 3 years out of last 10 (highest 5 years out of last 10 for Mental Health; Friend of the Court and Road Commission is the highest 3 years out of the last 5). Base pay only for certain General County and Sheriff's Department members.

Please see the appendix for applicable provisions by group

### Non-Duty Disability Retirement

Eligibility	10 or more years of service
Benefit	Computed as a regular retirement, offsets apply.

### Duty Disability Retirement

Eligibility	
Sheriffs	10 years of service
Others	No age or service requirements. Must be in receipt of Worker's Compensation payments.
Benefit	
Sheriffs	50% of compensation at the time of disability and offsets apply.
Others	Computed as a regular retirement. Upon termination of Worker's Compensation payments, additional service credit is granted and benefit is recomputed. Offsets apply.

### Termination Benefit

Participants become vested in their accrued benefit after 8 years of service.

### Supplemental Payments to Retirees Age 65 and Older

If a retiree had less than 20 years of service at retirement, an annual payment of \$14.00 per month will be made for the life of the retiree. For members with 20 or more years of service at retirement, an annual payment of \$16.00 per month.

### **Post-Retirement Life Insurance**

The Retirement System provides \$3,500 of life insurance to retirees.

### **Credited Service**

Service is credited for employees working more than 1,000 hours (nearest 1/12th). Full year of service is granted for more than 1,950 hours and partial credit is provided for hours worked between 1,000 and 1,950.

### **Optional forms of payment**

A participant may choose to receive distributable benefits in an actuarially equivalent alternative form of benefit as follows.

- a monthly benefit payable for the participant's lifetime; or
- a monthly benefit payable for the participant's lifetime with a guarantee that the remainder, if any, of ether 120 monthly payments will be made to the participant's beneficiary following his death; or
- a monthly benefit payable for the participant's lifetime with 50% or 100% of such benefit continued to a surviving contingent annuitant following his death; or
- a monthly benefit payable for the participant's lifetime with a pop-up option with 50% or 100% of such benefit continued to a surviving contingent annuitant following his death

### **Employee Contributions**

As a condition for participation, an employee must agree to contribute 5% of his compensation to the plan (8% for Road Commission).

### **Plan Provisions Not Included**

We are not aware of any plan provisions not included in the valuation

### **Adjustments Made for Subsequent Events**

We are not aware of any event following the measurement date and prior to the date of this report that would materially impact the results of this report.

Except where otherwise indicated, the following assumptions were selected by the plan sponsor with the concurrence of the actuary. Prescribed assumptions are based on the requirements of the relevant law, the Internal Revenue Code, and applicable regulation. The actuary was not able to evaluate the prescribed assumptions for reasonableness for the purpose of the measurement.

<b>Valuation Date</b>	December 31, 2016
<b>Participant and Asset Information Collected as of</b>	December 31, 2016
<b>Cost Method (CO)</b>	Individual Entry Age Level Percent of Pay Cost Method
<b>Amortization Method (CO)</b>	
Mental Health	19 year level dollar amortization of Unfunded Actuarial Accrued Liability
General County	15 year level dollar closed amortization of Unfunded Actuarial Accrued Liability
Road Commission	15 year level dollar closed amortization of Unfunded Actuarial Accrued Liability
	Each subsequent year after an employer who has closed participation reaches a 15 year amortization period of their unfunded accrued liability, a new amortization base for any assumption changes, plan changes, or actuarial gain/loss will be set up which will be fully amortized in 15 years.
<b>Asset Valuation Method</b>	20% Phase-In Method: Expected actuarial value of assets, adjusted by 20% of the asset gain/(loss) from the previous five years. Where the asset gain/(loss) for a particular year is defined as the difference between the actual market value return and the expected actuarial value return. This method was first used for the December 31, 2005 valuation.
<b>Interest Rates (CO)</b>	7.50%
	The interest rate is the expected long term rate of return on assets. This assumption is supported by the investment mix of the plan assets as of 12/31/2016.

**Retirement Rates (FE)**

Age	General*	Road Commission	Sheriff**	Service	Sheriff**
50	15.0%	25.0%		25	25.0%
51	15.0%	25.0%		26	25.0%
52	15.0%	25.0%		27	25.0%
53	15.0%	25.0%		28	25.0%
54	15.0%	25.0%		29	25.0%
55	15.0%	25.0%		30+	100.0%
56	15.0%	25.0%			
57	15.0%	25.0%			
58	15.0%	25.0%			
59	15.0%	25.0%			
60	15.0%	15.0%	15.0%		
61	20.0%	15.0%	15.0%		
62	40.0%	40.0%	40.0%		
63	20.0%	20.0%	20.0%		
64	20.0%	20.0%	20.0%		
65	40.0%	100.0%	100.0%		
66	25.0%	100.0%	100.0%		
67	25.0%	100.0%	100.0%		
68	25.0%	100.0%	100.0%		
69	25.0%	100.0%	100.0%		
70+	100.0%	100.0%	100.0%		

\*Includes Mental Health Authority

\*\*Sherriff Retirement Rates are only based on age when the participant has less than 25 years of service.

Retirement rates are based on professional judgment and expectation for the general population adjusted as necessary for the specific provisions of the plan.

**Annual Pay Increases (FE)**

Pay increase assumption applies to all groups and includes 3.5% inflation. Pay increases compounded with inflation are based on service as follows:

<u>Service</u>	<u>Increase</u>
1	4.5%
2	3.5%
3	3.0%
4	2.5%
5	2.0%
6-19	0.5%
20+	0.0%

The annual pay increase reflects the employer's average target increase for a career employee.

**Mortality Rates (FE)**

RP-2014 Mortality Table with generational improvements from 2006 based on mortality improvement assumptions from the 2016 Social Security Administration Trustee's Report

Mortality assumptions are set to reflect general population trends.

**Marital Status and Ages (FE)**

100% of Participants assumed to be married with female spouse assumed to be 3 years younger

**Expense and/or Contingency Loading (FE)**

0.2% of pay

**Cost of Living Increases (FE)**

None

**Disability Rates (FE)**

Ages	Percent Becoming Disabled within Next Year
20	0.08%
25	0.08%
30	0.08%
35	0.08%
40	0.20%
45	0.26%
50	0.49%
55	0.89%
60	1.41%

Disability rates are determined based on the results of broad population studies.

**Withdrawal Rates** (FE)

Age	Years of Service	Percent of Active Members Separating within Next Year	
		General*	Road Commission/Sheriff
ALL	0	11.0%	4.0%
	1	11.0%	4.0%
	2	11.0%	4.0%
	3	10.0%	4.0%
	4	10.0%	4.0%
	5+	6.0%	4.0%
20		6.0%	4.0%
25		6.0%	4.0%
30		6.0%	4.0%
35		4.0%	4.0%
40		4.0%	4.0%
45		4.0%	4.0%
50		4.0%	4.0%
55		4.0%	4.0%
60		4.0%	4.0%
65		4.0%	4.0%

\*Includes Mental Health Authority

Withdrawal rates are based on professional judgment and expectation for the general population adjusted as necessary for the specific provisions of the plan.

FE indicates an assumption representing an estimate of future experience

MD indicates an assumption representing observations of estimates inherent in market data

CO indicates an assumption representing a combination of an estimate of future experience and observations of market data



The actuarial report also shows the necessary items required for plan reporting and any state requirements.

- ✓ Asset Allocation by Group
- ✓ Development of Recommended Contribution by Group
- ✓ Amortization Bases
- ✓ Demographic Information by Group
- ✓ Plan Provisions by Group

### Asset Allocation by Group

The assets were originally allocated by group for the December 31, 2005 valuation. This asset allocation by group has been maintained for each valuation thereafter taking into account contributions and benefit payments by group. The table below shows how the assets changed by group since the last valuation.

	General	Mental Health	Road Commission	Total
Actuarial Value of Assets, 12/31/2015	\$ 145,340,286	\$ 37,591,902	\$ 35,200,463	\$ 218,132,651
Employer Contributions	4,014,131	1,107,171	1,142,975	6,264,277
Employee Contributions	1,122,458	575,463	291,234	1,989,155
Benefit Payments	(9,550,491)	(2,024,861)	(2,744,952)	(14,320,304)
Expenses	(149,086)	(38,561)	(36,108)	(223,755)
Investment Income	<u>11,503,995</u>	<u>3,007,622</u>	<u>2,776,473</u>	<u>17,288,090</u>
Actuarial Value of Assets, 12/31/2016	\$ 152,281,293	\$ 40,218,736	\$ 36,630,085	\$ 229,130,114

### Development of Recommended Contribution by Group – General County (Including Sheriff Division)

The recommended contribution is the annual amount necessary to fund the plan according to funding policies and/or applicable laws.

**December 31, 2016**

**Funded Position**

1.	Entry age accrued liability	\$166,564,797
2.	Actuarial value of assets	\$152,281,293
3.	Unfunded actuarial accrued liability (UAAL)	\$14,283,504
4.	Funded Ratio, (2) / (1)	91.4%

**Employer Contributions**

5.	Normal Cost	
	(a) normal cost	\$2,566,375
	(b) Expected participant contributions	1,094,769
	(c) Net normal cost	\$1,471,606
6.	Administrative expenses	\$43,791
7.	Amortization of UAAL	1,640,776
8.	Applicable interest	361,646
9.	Total recommended contribution	\$3,517,819
10.	Estimated fiscal year payroll	\$21,511,145
11.	Recommended contribution as a percentage of estimated payroll	16.4%

### Development of Recommended Contribution by Group – Mental Health

The recommended contribution is the annual amount necessary to fund the plan according to funding policies and/or applicable laws.

**December 31, 2016**

**Funded Position**

1. Entry age accrued liability	\$44,457,559
2. Actuarial value of assets	\$40,218,736
3. Unfunded actuarial accrued liability (UAAL)	\$4,238,823
4. Funded Ratio, (2) / (1)	90.5%

**Employer Contributions**

5. Normal Cost	
(a) Total normal cost	\$1,176,261
(b) Expected participant contributions	560,051
(c) Net normal cost	\$616,210
6. Administrative expenses	\$22,402
7. Amortization of UAAL	\$395,929
8. Applicable interest	118,542
9. Total recommended contribution	\$1,153,083
10. Estimated fiscal year payroll	\$10,718,100
11. Recommended contribution as a percentage of estimated payroll	10.8%

### Development of Recommended Contribution by Group – Road Commission

The recommended contribution is the annual amount necessary to fund the plan according to funding policies and/or applicable laws.

**December 31, 2016**

**Funded Position**

1. Entry age accrued liability	\$41,245,914
2. Actuarial value of assets	\$36,630,085
3. Unfunded actuarial accrued liability (UAAL)	\$4,615,829
4. Funded Ratio, (2) / (1)	88.8%

**Employer Contributions**

5. Normal Cost	
(a) Total normal cost	\$453,983
(b) Expected participant contributions	297,241
(c) Net normal cost	\$156,742
6. Administrative expenses	\$7,431
7. Amortization of UAAL	\$486,432
8. Applicable interest	74,549
9. Total recommended contribution	\$725,154
10. Estimated fiscal year payroll	\$3,479,593
11. Recommended contribution as a percentage of estimated payroll	20.8%

## Amortization Bases

### General County (Including Sheriff Division)

<u>Date Established</u>	<u>Years Remaining</u>	<u>Remaining Balance</u>	<u>Annual Payment</u>
12/31/2014	13	\$ 13,676,851	\$ 1,565,703
12/31/2015	14	2,655,756	291,015
12/31/2016	15	(2,049,103)	(215,942)
Total		\$ 14,283,504	\$ 1,640,776

### Mental Health

<u>Date Established</u>	<u>Years Remaining</u>	<u>Remaining Balance</u>	<u>Annual Payment</u>
12/31/2016	19	\$ 4,238,823	\$ 395,929

### Road Commission

<u>Date Established</u>	<u>Years Remaining</u>	<u>Remaining Balance</u>	<u>Annual Payment</u>
12/31/2016	15	\$ 4,615,829	\$ 486,432

**Total** **\$ 23,138,156** **\$ 2,523,137**

### Demographic Information by Group

	General County	Mental Health	Road Commission	Plan Total
<b>Active Participants</b>				
Number accruing benefits	392	188	62	642
Average age	48.2	46.4	51.5	48.0
Average years of employment	15.0	10.8	19.1	14.2
Average pay	\$54,654	\$56,707	\$58,013	\$55,579
<b>Terminated Vested</b>				
Number of Terminated Vested	90	69	14	173
Average age	49.5	48.2	52.9	49.3
Number with monthly benefits	73	44	10	127
Total deferred monthly benefits	\$65,971	\$44,374	\$9,677	\$120,022
Average deferred monthly benefit	\$904	\$1,009	\$968	\$945
<b>Participants Receiving Benefits</b>				
Number of Receiving Benefits	464	105	135	704
Average age	69.8	68.0	73.3	70.2
Total monthly benefits	\$792,132	\$155,545	\$218,720	\$1,166,397
Average monthly benefit	\$1,707	\$1,481	\$1,620	\$1,657

Demographic Information by Group – Total Actives at 12/31/2016

Attained Age as of 12/31/2016	Credited Service							Total	Average Pay
	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +		
<b>20 - 24</b>	3							3	\$17,144
<b>25 - 29</b>	10	2						12	\$48,982
<b>30 - 34</b>	14	20	16					50	\$51,956
<b>35 - 39</b>	9	18	47	7				81	\$56,292
<b>40 - 44</b>	9	15	39	25	4			92	\$57,937
<b>45 - 49</b>	5	22	36	33	26	6		128	\$60,186
<b>50 - 54</b>	8	9	29	27	24	11	8	116	\$55,991
<b>55 - 59</b>	5	9	25	22	10	4	7	82	\$51,473
<b>60</b>	1	2	1	8	4	2		18	\$60,976
<b>61</b>		2	4	5	1	1	3	16	\$57,795
<b>62</b>	1	1	2	1	2	1		8	\$60,504
<b>63</b>		1	4	7	2	1		15	\$45,077
<b>64</b>				1			1	2	\$69,319
<b>65 +</b>	1	3	4	4	2	1	4	19	\$42,861
<b>Total</b>	<b>66</b>	<b>104</b>	<b>207</b>	<b>140</b>	<b>75</b>	<b>27</b>	<b>23</b>	<b>642</b>	<b>\$55,579</b>



Demographic Information by Group – General County Actives at 12/31/2016

Attained Age as of 12/31/2016	Credited Service							Total	Average Pay
	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +		
20 - 24	3							3	\$17,144
25 - 29	1	1						2	\$37,507
30 - 34	3	12	13					28	\$52,513
35 - 39	1	13	36	6				56	\$57,570
40 - 44	2	8	24	18	2			54	\$59,420
45 - 49	2	9	23	24	15	5		78	\$58,805
50 - 54	1	4	24	16	14	9	6	74	\$54,327
55 - 59		3	20	15	5		2	45	\$44,912
60		2	1	4	4	2		13	\$58,634
61			3	5		1	1	10	\$59,768
62		1	2		1	1		5	\$63,192
63		1	4	6	1			12	\$47,110
64				1				1	\$32,135
65 +		1	3	2	1	1	3	11	\$44,852
<b>Total</b>	<b>13</b>	<b>55</b>	<b>153</b>	<b>97</b>	<b>43</b>	<b>19</b>	<b>12</b>	<b>392</b>	<b>\$54,654</b>

Demographic Information by Group – Mental Health Actives at 12/31/2016

Attained Age as of 12/31/2016	Credited Service							Total	Average Pay
	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +		
20 - 24								0	\$0
25 - 29	9							9	\$50,477
30 - 34	11	8	2					21	\$51,559
35 - 39	8	5	8	1				22	\$54,323
40 - 44	7	7	11	4				29	\$55,465
45 - 49	3	13	12	4	7			39	\$62,807
50 - 54	7	5	4	5	4		1	26	\$57,808
55 - 59	5	5	4	5	2	2	3	26	\$55,965
60	1			1				2	\$58,937
61		1	1		1		1	4	\$54,336
62	1			1				2	\$60,017
63						1		1	\$48,635
64							1	1	\$106,503
65 +	1	2	1	1			1	6	\$50,385
<b>Total</b>	<b>53</b>	<b>46</b>	<b>43</b>	<b>22</b>	<b>14</b>	<b>3</b>	<b>7</b>	<b>188</b>	<b>\$56,707</b>

Demographic Information by Group – Road Commission Actives at 12/31/2016

Attained Age as of 12/31/2016	Credited Service							Total	Average Pay
	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +		
20 - 24								0	\$0
25 - 29		1						1	\$58,473
30 - 34			1					1	\$44,664
35 - 39			3					3	\$46,868
40 - 44			4	3	2			9	\$57,008
45 - 49			1	5	4	1		11	\$60,684
50 - 54			1	6	6	2	1	16	\$60,732
55 - 59		1	1	2	3	2	2	11	\$67,696
60				3				3	\$72,482
61		1					1	2	\$54,850
62					1			1	\$48,038
63				1	1			2	\$31,097
64								0	\$0
65 +				1	1			2	\$9,344
<b>Total</b>	<b>0</b>	<b>3</b>	<b>11</b>	<b>21</b>	<b>18</b>	<b>5</b>	<b>4</b>	<b>62</b>	<b>\$58,013</b>

Demographic Information by Group – Terminated Vested at 12/31/2016

Due Only Employee Contributions Refund

Attained Age as of 12/31/2016	General		Mental Health		Road Commission		Total	
	#	Dollars	#	Dollars	#	Dollars	#	Dollars
20 - 39	9	\$62,235	11	\$78,362	0	\$0	20	\$140,597
40 - 49	4	25,571	7	36,743	0	-	11	62,314
50 - 59	4	41,054	6	26,151	3	2,884	13	70,089
60 +	0	-	1	3,988	1	4,737	2	8,725
<b>Total</b>	<b>17</b>	<b>\$128,860</b>	<b>25</b>	<b>\$145,244</b>	<b>4</b>	<b>\$7,621</b>	<b>46</b>	<b>\$281,725</b>

Have a Vested Monthly Benefit Payable

Attained Age as of 12/31/2016	General		Mental Health		Road Commission		Total	
	#	Average Benefit	#	Average Benefit	#	Average Benefit	#	Average Benefit
20 - 39	8	\$821	4	\$930	0	\$0	12	\$857
40 - 49	18	909	15	1,137	6	952	39	1,003
50 - 59	38	935	22	938	2	1,153	62	943
60 +	9	836	3	992	2	829	14	868
<b>Total</b>	<b>73</b>	<b>\$904</b>	<b>44</b>	<b>\$1,009</b>	<b>10</b>	<b>\$968</b>	<b>127</b>	<b>\$945</b>

Demographic Information by Group – Participants Receiving Benefits at 12/31/2016

Attained Age as of 12/31/2016	General		Mental Health		Road Commission		Total	
	#	Average Benefit	#	Average Benefit	#	Average Benefit	#	Average Benefit
<b>40 - 49</b>	1	\$684	0	\$0	0	\$0	1	\$684
<b>50 - 54</b>	10	2,595	4	1,816	2	1,956	16	2,320
<b>55 - 59</b>	41	2,706	8	2,453	8	2,083	57	2,583
<b>60 - 64</b>	80	1,996	19	1,474	20	1,872	119	1,892
<b>65 - 69</b>	135	1,779	37	1,441	27	2,406	199	1,801
<b>70 - 74</b>	89	1,541	20	1,274	30	1,676	139	1,532
<b>75 - 79</b>	49	1,086	11	1,433	13	1,284	73	1,174
<b>80 - 84</b>	24	1,296	5	1,126	12	1,100	41	1,218
<b>85 - 89</b>	21	906	1	481	13	657	35	801
<b>90 +</b>	14	1,017	0	-	10	703	24	886
<b>Total</b>	<b>464</b>	<b>\$1,707</b>	<b>105</b>	<b>\$1,481</b>	<b>135</b>	<b>\$1,620</b>	<b>704</b>	<b>\$1,657</b>

### Plan Provisions by Group

Group	Code	Category	Eligibility	Multiplier	Maximum	Lump Sums in FAC	Years in FAC period	Closed to New Hires
Bailiff and Court Security Officers Assoc. Modified	66	G	Rule of 80, 60 & 8, 55 & 25	Graded	hired prior 1/1/08 75% - hired after 1/1/08 70%	N	3	7/1/2012
Bailiff and Court Security Officers Assoc. Original	67	G	Rule of 80, 60 & 8, 55 & 25	2%	64.00%	N	3	7/1/2012
Board Members Modified	13	G	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	N	3	1/1/2009
Board Members Original	57	G	Rule of 80, 60 & 8, 55 & 25	2%	75.00%	N	3	1/1/2009
CANUE Non-Affiliated Modified	36	G	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	N	3	1/1/2009
CANUE Non-Affiliated Original	37	G	Rule of 80, 60 & 8, 55 & 25	2%	75.00%	N	3	1/1/2009
Circuit Crt/Probate Crt Employees Assoc		G	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	N	3	1/1/2009
Commissioners Modified	14	G	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	N	3	1/1/2009
Communication Officers POAM Modified	69	G	Rule of 80, 25 & Out, 60 & 8, 55 & 25	Graded	75.00%	Y	3	7/1/2011
Communication Officers POAM Original	68	G	Rule of 80, 25 & Out, 60 & 8, 55 & 25	2%	64.00%	Y	3	7/1/2011
Corr. Ofcrs. & Support Staff Modified	24	G	Rule of 80, 25 & out (Corr Off Only), 60 & 8, 55 & 25	Graded	75.00%	Y	3	10/21/2009
Corr. Ofcrs. & Support Staff Original	23	G	Rule of 80, 25 & out (Corr Off Only), 60 & 8, 55 & 25	2%	64.00%	Y	3	10/21/2009
Corrections Officers Supervisors Modified	25	G	Rule of 80, 25 & out (Corr Off Only), 60 & 8, 55 & 25	Graded	75.00%	Y	3	1/1/2009
Corrections Officers Supervisors Original	26	G	Rule of 80, 25 & out (Corr Off Only), 60 & 8, 55 & 25	2%	64.00%	Y	3	1/1/2009
District Court AFSCME Modified	38	G	Rule of 80, 60 & 8, 55 & 25	Graded	hired prior 7/1/06 75% - hired after 7/1/06 70%	N	3	8/19/2009
District Court AFSCME Original	39	G	Rule of 80, 60 & 8, 55 & 25	2%	64.00%	N	3	8/19/2009
Elected Officials Modified	15	G	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	N	3	1/1/2009
Elected Officials Original	16	G	Rule of 80, 60 & 8, 55 & 25	2%	75.00%	N	3	1/1/2009
Friend of Court Supervisors Modified	32	G	Rule of 80, 60 & 8, 55 & 25	Graded	hired prior 1/1/07 75% - hired after 1/1/07 70%	N	3	7/1/2011
Friend of Court Supervisors Original	33	G	Rule of 80, 60 & 8, 55 & 25	2%	64.00%	N	3	7/1/2011
Friend of the Court Modified	30	G	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	N	3	5/11/2011
Friend of the Court Original	31	G	Rule of 80, 60 & 8, 55 & 25	2%	64.00%	N	3	5/11/2011
Human Resources Clerks and Specialists Modified	58	G	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	N	3	1/1/2009
Human Resources Clerks and Specialists Original	59	G	Rule of 80, 60 & 8, 55 & 25	2%	75.00%	N	3	1/1/2009
Judges Modified	35	G	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	N	3	1/1/2009

### Plan Provisions by Group

Group	Code	Category	Eligibility	Multiplier	Maximum	Lump Sums in FAC	Years in FAC period	Closed to New Hires
Mental Health Chapter 10 Modified	17	MH	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	N	5	1/1/2016
Mental Health Chapter 10 Original	18	MH	Rule of 80, 60 & 8, 55 & 25	2%	64.00%	N	5	1/1/2016
Mental Health Chapter 20 Modified	17	MH	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	Y	5	1/1/2016
Mental Health Chapter 20 Original	18	MH	Rule of 80, 60 & 8, 55 & 25	2%	64.00%	Y	5	1/1/2016
Probate Clerical Modified	44	G	Rule of 80, 60 & 8, 55 & 25	Graded	hired prior 7/1/06 75% - hired after 7/1/06 70%	N	3	7/1/2011
Probate Court Juvenile Counselors Modified	46	G	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	N	3	12/16/2009
Probate Court Juvenile Counselors Original	47	G	Rule of 80, 60 & 8, 55 & 25	2%	64.00%	N	3	12/16/2009
Probate Court Supervisors Modified	48	G	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	N	3	1/1/2009
Probate Court Supervisors Original	49	G	Rule of 80, 60 & 8, 55 & 25	2%	64.00%	N	3	1/1/2009
Prosecuting Attorneys Modified	42	G	Rule of 80, 60 & 8, 55 & 25	Graded	69.60%	N	3	1/1/2009
Prosecuting Attorneys Original	43	G	Rule of 80, 60 & 8, 55 & 25	2%	64.00%	N	3	1/1/2009
Public Health Nurse Supervisors Modified	60	G	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	N	3	1/1/2009
Public Health Nurse Supervisors Original	61	G	Rule of 80, 60 & 8, 55 & 25	2%	64.00%	N	3	1/1/2009
Public Health Nurses Modified	52	G	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	N	3	1/1/2009
Public Health Nurses Original	53	G	Rule of 80, 60 & 8, 55 & 25	2%	64.00%	N	3	1/1/2009
Public Service Employees Modified	50	G	Rule of 80, 60 & 8, 55 & 25	Graded	hired prior 7/1/06 75% - hired after 7/1/06 70%	N	3	7/1/2009
Public Service Employees Original	51	G	Rule of 80, 60 & 8, 55 & 25	2%	64.00%	N	3	7/1/2009
Road Commission Modified	20	RC	Rule of 80, 60 & 8, 55 & 25	Graded	75.00%	Y	3	8/23/2011
Road Commission Original	19	RC	Rule of 80, 60 & 8, 55 & 25	2%	75.00%	Y	3	8/23/2011
Sheriff Deputies Modified	22	G	Rule of 80, 25 & out, 60 & 8, 55 & 25	Graded	75.00%	Y	3	No
Sheriff Deputies Original	21	G	Rule of 80, 25 & out, 60 & 8, 55 & 25	2%	64.00%	Y	3	No
Sheriff Deputies Supervisors Modified	27	G	Rule of 80, 25 & out, 60 & 8, 55 & 25	Graded	hired prior 1/1/07 75% - hired after 1/1/07 70%	Y	3	7/1/2011