# nyhart

# St. Clair County Employees' Retirement System

December 31, 2015 Actuarial Valuation Report

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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, 2015. 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, 2015 for Fiscal Year beginning January 1, 2017;

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

Heath W. Merlak, FSA, EA

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Nick H. Meggos, EA

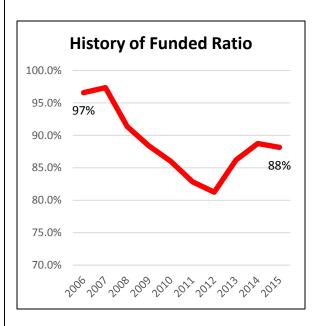
Nick the Meggel

October 13, 2016 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, 2014 January 1, 2016	December 31, 2015 January 1, 2017
Funded Status Measures		
Entry Age Accrued Liability	\$235,705,687	\$247,490,511
Actuarial Value of Assets	209,139,589	218,132,651
Unfunded Accrued Liability	\$26,566,098	\$29,357,860
Funded Percentage (AVA)	88.7%	88.1%
Funded percentage (MVA)	90.2%	85.5%
Cost Measures		
Recommended Contribution	\$5,608,719	\$6,090,683
Recommended Contribution (as a percentage of payroll)	14.4%	16.2%
Asset Performance		
Market Value of Assets (MVA)	\$212,716,972	\$211,588,333
Actuarial Value of Assets (AVA)	\$209,139,589	\$218,132,651
Actuarial Value/Market Value	98.3%	103.1%
Participant Information		
Active Participants	708	696
Terminated Vested Participants	159	163
Retirees, Beneficiaries, and Disabled Participants	683	694
Total	1,550	1,553
Expected Fiscal Year Payroll	\$38,937,952	\$37,714,347





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

The Mental Health group has closed participation as of January 1, 2016. As a result, the actuarial cost method in determining the Recommended Contribution has changed from amortizing the excess of the entry age actuarial accrued liability over the actuarial value of plan assets over a 20 year period for Mental Health as a level percent of payroll to amortizing over 20 years as a level dollar amount as of December 31, 2015, decreasing by one per year until it reaches 15 years. The amortization period upon reaching 15 years will be closed. This change resulted in an increase in the Recommended Contribution.

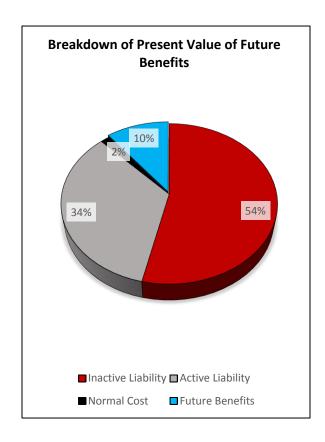
The mortality table has been updated from the RP-2000 Combined Healthy mortality table with generational improvements based on Scale AA to the RP-2014 mortality table with generational improvements from 2006 based on the Social Security mortality improvement assumptions from the 2015 Trustees' Report. This change resulted in an increase 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.

<b>December 31, 2015</b>
\$99,044,132
8,590,867
1,382,466
21,582,802
\$130,600,267
\$129,277,745
10,903,605
814,056
9,880,025
\$150,875,431
\$281,475,698
\$302,293,743

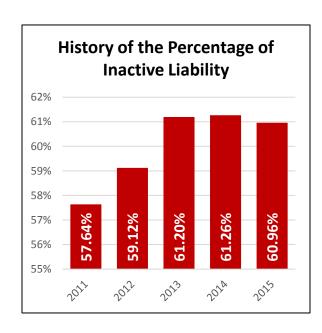




## **Entry Age Accrued Liability**

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

	December 31, 2015
Funding Liabilities	
Active participants	
Retirement	\$79,159,351
Disability	6,066,283
Death	1,043,012
Termination	10,346,434
Total Active	\$96,615,080
nactive participants	
Retired participants	\$129,277,745
Beneficiaries	10,903,605
Disabled participants	814,056
Terminated vested participants	9,880,025
Total Inactive	\$150,875,431
Total	\$247,490,511
Normal Cost	\$4,390,796

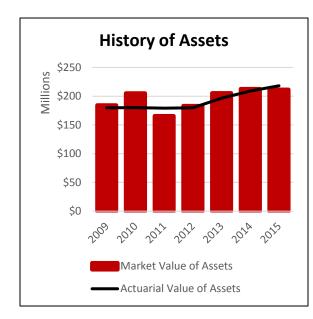




#### **Asset Information**

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.

	<b>December 31, 2015</b>
Market Value Reconciliation	
Market value of assets, beginning of prior year	\$212,716,972
Contributions	
Employer contributions	7,179,980
Member contributions	2,038,958
Total	9,218,938
nvestment income	3,454,816
Benefit payments	13,659,456
Administrative expenses	142,937
Market value of asset, beginning of current year	\$211,588,333
Return on Market Value	1.6%
Market value of assets available for pension benefits	\$211,588,333
Actuarial value of assets	
Value at beginning of current year	\$218,132,651





Asset Information (continued) – 20% Phase in Plan Assets are used to develop funded percentages and contribution requirements.

	December 31, 2015
<ol> <li>Expected actuarial value of assets</li> <li>(a) Actuarial value of assets, beginning of prior year</li> <li>(b) Contributions</li> <li>(c) Benefit payments</li> </ol>	\$209,139,589 9,218,938 (13,659,456)
<ul><li>(d) Expenses</li><li>(e) Expected return</li><li>(f) Expected actuarial value of assets, beginning of current year</li></ul>	(142,937) 15,513,590 \$220,069,724
2. Market value of assets, beginning of current year	\$211,588,333
3. Actual return on market value	\$3,454,816
4. Amount subject to phase in [(3)-(1e)]	\$(12,058,774)
<ul> <li>5. Phase in of asset gain/(loss)</li> <li>(a) Current year</li> <li>(b) First prior year</li> <li>(c) Second prior year</li> <li>(d) Third prior year</li> <li>(e) Fourth prior year</li> <li>(f) Total phase-in</li> </ul>	\$(2,411,755) (625,380) 2,481,486 1,549,652 (2,931,076) \$(1,937,073)
6. Preliminary actuarial value of assets, beginning of current year [(1f)+(5f)]	\$218,132,651
7. 80% Market value of assets	\$169,270,666
8. 120% Market value of assets	\$253,906,000
9. Adjusted actuarial value of assets	\$218,132,651
10. Final actuarial value of assets (9)	\$218,132,651
11. Return on actuarial value of assets	6.6%



Reconciliation of Gain/Loss	
	December 31, 2015
Liability (gain)/loss	
Actuarial liability, beginning of prior year	\$235,705,687
Normal cost	4,389,780
Benefit payments	(13,659,456)
Expected Interest	17,504,191
Change in actuarial assumptions	4,335,813
Expected actuarial liability, beginning of current year	\$248,276,015
Actual actuarial liability	\$247,490,511
Liability (gain)/loss	\$(785,504)
Asset (gain)/loss	
Actuarial value of assets, beginning of prior year	\$209,139,589
Contributions	9,218,938
Benefit payments and expenses	(13,802,393)
Expected investment return	15,513,590
Expected actuarial value of assets, beginning of current year	\$220,069,724
Actual actuarial value of assets, beginning of current year	\$218,132,651
Asset (gain)/loss	\$1,937,073
Total (gain)/loss	\$1,151,569

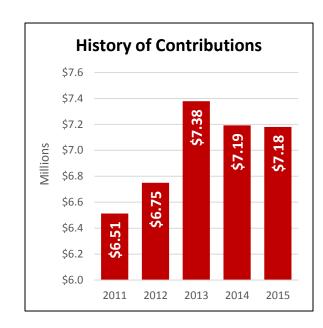


## **Development of Recommended Contribution**

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

December 3	1. 20	15
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	December 31, 2015
Funded Position	
Entry age accrued liability	\$247,490,511
2. Actuarial value of assets	\$218,132,651
Unfunded actuarial accrued liability (UAAL)	\$29,357,860
4. Funded Ratio, (2) / (1)	88.1%
Employer Contributions	
<ul><li>5. Normal Cost</li><li>(a) Total normal cost</li><li>(b) Expected participant contributions</li><li>(c) Net normal cost</li></ul>	\$4,390,796 2,050,841 \$2,339,955
6. Administrative expenses	\$77,577
7. Amortization of UAAL	3,047,004
8. Applicable interest	626,147
9. Total recommended contribution	\$6,090,683
10. Estimated fiscal year payroll	\$37,714,347
11. Recommended contribution as a percentage of estimated payroll	16.2%





## **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 3	31, 201	5
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Participant Counts	
Active Participants	696
Retired Participants	585
Beneficiaries	102
Disabled Participants	7
Terminated Vested Participants	163
Total Participants	1,553
Active Participant Demographics	
Average Age	47.5
Average Service	13.5
Average Compensation	\$53,777
Estimated Fiscal Year Payroll	\$37,714,347



## **Demographic Information (continued)**

	December 31, 2015
Retiree Statistics	
Average Age	69.3
Average Monthly Benefit	\$1,716
Beneficiary Statistics	
Average Age	76.1
Average Monthly Benefit	\$1,069
Disabled Participants Statistics	
Average Age	66.6
Average Monthly Benefit	\$932
Terminated Participants Statistics	
Average Age	49.6
Number with Monthly Benefits	121
Average Monthly Benefit	\$932



# **Participant Reconciliation**

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Totals
Prior Year	708	159	8	569	106	1,550
Active						
To Terminated Vested	(16)	16	0	0	0	0
To Retired	(20)	0	0	20	0	0
To Lump Sum Cash-Out	(5)	0	0	0	0	(5)
Terminated Vested						
To Active	1	(1)	0	0	0	0
To Retired	0	(9)	0	9	0	0
To Lump Sum Cash-Out	0	(2)	0	0	0	(2)
Disabled						
To Death	0	0	(1)	0	0	(1)
Retired						
To Death	0	0	0	(14)	0	(14)
Survivor						
To Death	0	0	0	0	(10)	(10)
Additions	28	0	0	1	6	35
Departures	0	0	0	0	0	0
Current Year	696	163	7	585	102	1,553



## **Active Participant Schedule**

Active participant information grouped based on age and service.

					Years o	f Service					
	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	Total
Under 25	3										3
25 to 29	5	7	2								14
30 to 34	3	16	25	22							66
35 to 39	3	9	21	43	7						83
40 to 44	3	11	20	40	25	7					10
45 to 49	2	9	25	46	29	21	6				13
50 to 54	3	6	11	21	34	13	15	6			10
55 to 59	3	5	14	25	27	12	13	7			10
60 to 64	1	1	9	12	15	7	5	4	1		5
65 to 69	1		1	4	3		1	2			12
70 & up				1	2	1					4
Total	27	64	128	214	142	61	40	19	1		69



## 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:

Years of Service	Annual Multiplier	Annual Application	
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;
- 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.
- 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.

Valuation Date December 31, 2015

Participant and Asset Information Collected as of December 31, 2015

Cost Method (CO) Individual Entry Age Level Percent of Pay Cost Method

**Amortization Method (CO)** 

Mental Health 20 year level dollar amortization of Unfunded Actuarial Accrued Liability

General County 15 year level dollar closed amortization of Unfunded Actuarial Accrued Liability

Road Commission 16 year level dollar 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.

#### **Asset Valuation Method**

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.

Interest Rates (CO) 7.50%

#### **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>	Increase
1	4.5%
2	3.5%
3	3.0%
4	2.5%
5	2.0%
6-19	0.5%
20+	0.0%



## **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%		

<sup>\*</sup>Includes Mental Health Authority
\*\*Sherriff Retirement Rates are only based on age when the participant has less than 25 years of service.



Mortality Rates (FE)

RP-2014 Mortality Table with generational improvements from 2006 based on the Social

Security mortality improvement assumptions from the 2015 Trustees' Report

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%



## Withdrawal Rates (FE)

Percent of Active Members Separating within Next Year

Age	Years of Service	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%

<sup>\*</sup>Includes Mental Health Authority



FE indicates an assumption representing an estimate of future experience

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

CO indicates as 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, 12/31/2014	\$ 139,517,184	\$ 35,260,055	\$ 34,362,350	\$ 209,139,589
Employer Contributions	4,843,347	1,173,921	1,162,712	7,179,980
Employee Contributions	1,154,432	586,967	297,559	2,038,958
Benefit Payments	9,130,631	1,719,803	2,809,022	13,659,456
Expenses	95,353	24,099	23,485	142,937
Investment Income	9,051,307	2,314,861	2,210,349	13,576,517
Actuarial Value of Assets, 12/31/2015	\$ 145,340,286	\$ 37,591,902	\$ 35,200,463	\$ 218,132,651



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.

De	cen	nbe	r 31	20	115
DE	CCII	INC	J	. Zu	, , ,

Funded Position  1. Entry age accrued liability \$162,390,126 2. Actuarial value of assets \$145,340,286 3. Unfunded actuarial accrued liability (UAAL) \$17,049,840 4. Funded Ratio, (2) / (1) 89.5%  Employer Contributions  5. Normal Cost (d) Total normal cost \$2,677,321		
<ol> <li>Actuarial value of assets \$145,340,286</li> <li>Unfunded actuarial accrued liability (UAAL) \$17,049,840</li> <li>Funded Ratio, (2) / (1) 89.5%</li> <li>Normal Cost (d) Total normal cost \$2,677,321</li> </ol>	Funded Position	
<ul> <li>3. Unfunded actuarial accrued liability (UAAL)</li> <li>4. Funded Ratio, (2) / (1)</li> <li>89.5%</li> <li>Employer Contributions</li> <li>5. Normal Cost (d) Total normal cost</li> <li>\$2,677,321</li> </ul>	Entry age accrued liability	\$162,390,126
<ul> <li>4. Funded Ratio, (2) / (1)</li> <li>Employer Contributions</li> <li>5. Normal Cost         (d) Total normal cost</li> <li>\$2,677,321</li> </ul>	2. Actuarial value of assets	\$145,340,286
Employer Contributions  5. Normal Cost (d) Total normal cost \$2,677,321	3. Unfunded actuarial accrued liability (UAAL)	\$17,049,840
5. Normal Cost (d) Total normal cost \$2,677,321	4. Funded Ratio, (2) / (1)	89.5%
(d) Total normal cost \$2,677,321	Employer Contributions	
(e) Expected participant contributions	<ul><li>(d) Total normal cost</li><li>(e) Expected participant contributions</li></ul>	1,150,157
6. Administrative expenses \$46,006	6. Administrative expenses	\$46,006
7. Amortization of UAAL 1,856,718	7. Amortization of UAAL	1,856,718
8. Applicable interest 393,009	8. Applicable interest	393,009
9. Total recommended contribution \$3,822,897	9. Total recommended contribution	\$3,822,897
10. Estimated fiscal year payroll \$22,609,487	10. Estimated fiscal year payroll	\$22,609,487
11. Recommended contribution as a percentage of estimated payroll 16.9%	11. Recommended contribution as a percentage of estimated payroll	16.9%



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, 2015**

	2000
Funded Position	
Entry age accrued liability	\$43,506,640
2. Actuarial value of assets	\$37,591,902
Unfunded actuarial accrued liability (UAAL)	\$5,914,738
4. Funded Ratio, (2) / (1)	86.4%
Employer Contributions	
<ul><li>5. Normal Cost</li><li>(a) Total normal cost</li><li>(b) Expected participant contributions</li><li>(c) Net normal cost</li></ul>	\$1,257,602 603,587 \$654,015
6. Administrative expenses	\$24,143
7. Amortization of UAAL	\$539,711
8. Applicable interest	139,548
9. Total recommended contribution	\$1,357,417
10. Estimated fiscal year payroll	\$11,568,130
11. Recommended contribution as a percentage of estimated payroll	11.7%



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	. 2015
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Funded Position	
Entry age accrued liability	\$41,593,745
2. Actuarial value of assets	\$35,200,463
3. Unfunded actuarial accrued liability (UAAL)	\$6,393,282
4. Funded Ratio, (2) / (1)	84.6%
Employer Contributions	
<ul><li>5. Normal Cost</li><li>(a) Total normal cost</li><li>(b) Expected participant contributions</li><li>(c) Net normal cost</li></ul>	\$455,874 297,097 \$158,777
6. Administrative expenses	\$7,427
7. Amortization of UAAL	\$650,575
Applicable interest	93,590
9. Total recommended contribution	\$910,369
10. Estimated fiscal year payroll	\$3,536,730
11. Recommended contribution as a percentage of estimated payroll	25.7%



## **Amortization Bases**

# **General County (Including Sheriff Division)**

_	Date Established	Years Remaining	Remaining Balance	Annual Payment
	12/31/2014 12/31/2015	14 15	\$14,288,355 2,761,485	\$1,565,703 291,015
	Total		\$17,049,840	\$1,856,718
Mental Hea	lth			
_	Date Established	Years Remaining	Remaining Balance	Annual Payment
	12/31/2015	20	\$5,914,738	\$539,711
Road Comr	nission			
_	Date Established	Years Remaining	Remaining Balance	Annual Payment
	12/31/2015	16	\$6,393,282	\$650,575
Total			\$29,357,860	\$3,047,004



# **Demographic Information by Group**

	General County	Mental Health	Road Commission	Plan Total
Active Participants				
Number accruing benefits	416	216	64	696
Average age	48.0	45.6	50.7	47.5
Average years of employment	14.6	10	18	13.5
Average pay	\$53,700	\$53,233	\$56,110	\$53,777
Terminated Vested				
Number of Terminated Vested	87	59	17	163
Average age	49.4	49.0	52.3	49.6
Number with monthly benefits	73	36	12	121
Total deferred monthly benefits	\$65,176	\$36,348	\$11,256	\$112,780
Average deferred monthly benefit	\$893	\$1,010	\$938	\$932
Participants Receiving Benefits				
Number of Receiving Benefits	455	97	142	694
Average age	69.5	67.8	74.0	70.2
Total monthly benefits	\$753,027	\$139,089	\$227,246	\$1,119,362
Average monthly benefit	\$1,655	\$1,434	\$1,600	\$1,613



## Demographic Information by Group - Total Actives at 12/31/2015

Attained Age as of				Credi	ted Service				
12/31/2015	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +	Total	Average Pay
20 - 24	3							3	\$25,298
25 - 29	12	2						14	\$40,371
30 - 34	19	25	22					66	\$50,931
35 - 39	12	21	43	7				83	\$54,501
40 - 44	14	20	40	25	7			106	\$56,339
45 - 49	11	25	46	29	21	6		138	\$56,777
50 - 54	9	11	21	34	13	15	6	109	\$53,516
55 - 59	8	14	25	27	12	13	7	106	\$52,748
60	1	3	2	5	3	2	1	17	\$57,617
61	1	2	1	3	3	1		11	\$49,790
62		2	7	5	1	1		16	\$43,791
63				1			1	2	\$68,530
64		2	2	1		1	3	9	\$54,865
65 +	1	1	5	5	1	1	2	16	\$50,754
Total	91	128	214	142	61	40	20	696	\$53,777



## **Demographic Information by Group – General County Actives at 12/31/2015**

Attained Age as of				Credit	ed Service				
12/31/2015	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +	Total	Average Pay
20 - 24								0	\$0
25 - 29		1						1	\$46,708
30 - 34	6	16	17					39	\$52,842
35 - 39	3	15	31	6				55	\$56,392
40 - 44	4	13	24	18	3			62	\$58,637
45 - 49	2	12	33	20	12	5		84	\$55,094
50 - 54	2	8	14	19	7	9	4	63	\$50,976
55 - 59	1	8	21	17	7	8	3	65	\$50,643
60		1	2	5	2	1		11	\$59,397
61		2	1	2	2	1		8	\$51,440
62		2	6	5				13	\$45,497
63				1				1	\$31,509
64			1			1	2	4	\$52,279
65 +		1	3	2	1	1	2	10	\$46,666
Total	18	79	153	95	34	26	11	416	\$53,700



## Demographic Information by Group – Mental Health Actives at 12/31/2015

Attained Age as of				Credi	ted Service				
12/31/2015	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +	Total	Average Pay
20 - 24	3							3	\$25,298
25 - 29	12							12	\$38,328
30 - 34	13	9	3					25	\$47,117
35 - 39	9	5	10					24	\$49,838
40 - 44	10	7	12	5	2			36	\$53,755
45 - 49	9	13	10	6	5			43	\$59,914
50 - 54	7	3	3	8	2	3	1	27	\$56,059
55 - 59	7	5	4	6	2	1	4	29	\$51,440
60	1	1			1		1	4	\$54,112
61	1			1				2	\$44,008
62						1		1	\$47,731
63							1	1	\$105,552
64		2	1	1			1	5	\$56,933
65 +	1		2	1				4	\$82,279
Total	73	45	45	28	12	5	8	216	\$53,233



## Demographic Information by Group - Road Commission Actives at 12/31/2015

Attained Age on		Credited Service										
Attained Age as of 12/31/2015			10 - 14	15 - 19	20 - 24	25 - 29	30 +	Total	Average Pay			
20 - 24								0	\$0			
25 - 29		1						1	\$58,546			
30 - 34			2					2	\$61,340			
35 - 39		1	2	1				4	\$56,474			
40 - 44			4	2	2			8	\$50,157			
45 - 49			3	3	4	1		11	\$57,371			
50 - 54			4	7	4	3	1	19	\$58,326			
55 - 59		1		4	3	4		12	\$67,317			
60		1				1		2	\$54,840			
61					1			1	\$48,153			
62			1		1			2	\$30,734			
63								0	\$0			
64								0	\$0			
65 +				2				2	\$8,149			
Total	0	4	16	19	15	9	1	64	\$56,110			



## Demographic Information by Group – Terminated Vested at 12/31/2015

## **Due Only Employee Contributions Refund**

Attained Age as of 12/31/2015		General		Mental Health	ı	Road Commission	Total		
	# Dollars		#	Dollars	#	Dollars	#	Dollars	
20 - 39	8	\$42,506	10	\$64,527	0	\$0	18	\$107,033	
40 - 49	4	25,571	5	30,756	0	-	9	56,327	
50 - 59	2	11,582	7	49,009	4	5,700	13	66,291	
60 +	0	-	1	3,988	1	4,737	2	8,725	
Total	14	\$79,659	23	\$148,280	5	\$10,437	42	\$238,376	

## **Have a Vested Monthly Benefit Payable**

Attained Age as of 12/31/2015		General		Mental Health	Ro	oad Commission	Total		
	# Average Benefit		# Average Benefit		#	Average Benefit	#	Average Benefit	
20 - 39	7	\$848	1	\$809	0	\$0	8	\$843	
40 - 49	19	831	12	1,180	7	971	38	967	
50 - 59	43	951	20	915	2	1,174	65	947	
60 +	4	639	3	1,025	3	704	10	774	
Total	73	\$893	36	\$1,010	12	\$938	121	\$932	



# Demographic Information by Group - Participants Receiving Benefits at 12/31/2015

Attained Age as of 12/31/2015		General		Mental Health		Road Commission	Total		
	#	Average Benefit	#	Average Benefit	#	Average Benefit	#	Average Benefit	
40 - 49	2	583	0	-	0	-	2	583	
50 - 54	13	2,704	3	2,738	0	-	16	2,710	
55 - 59	39	2,560	6	2,254	12	2,196	57	2,451	
60 - 64	84	1,991	22	1,245	17	2,068	123	1,868	
65 - 69	135	1,656	32	1,460	26	2,336	193	1,715	
70 - 74	79	1,440	21	1,420	29	1,874	129	1,534	
75 - 79	42	1,183	8	980	16	1,068	66	1,130	
80 - 84	26	1,247	4	1,270	16	1,096	46	1,197	
85 - 89	22	923	1	481	19	592	42	763	
90 +	13	761	0	-	7	686	20	735	
Total	455	\$1,655	97	\$1,434	142	\$1,600	694	\$1,613	



# 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%	Υ	3	7/1/2011
Communication Officers POAM Original	68	G	Rule of 80, 25 & Out, 60 & 8, 55 & 25	2%	64.00%	Υ	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%	Υ	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



 Mental Health Chapter 10 Modified
 17
 MH
 Rule of 80, 60 & 8, 55 & 25
 Graded
 75.00%
 N
 5
 1/1/2016

 Other Measurements

## **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 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

