

May 3, 2016

The Retirement Commission
Genesee County Employees Retirement System
Genesee County, Michigan

Dear Commission Members:

The purpose of the annual actuarial valuation of the Genesee County Employees Retirement System as of December 31, 2015 is to:

- Compute the liabilities associated with benefits likely to be paid on behalf of current retired and active members of the Retirement System,
- Compare accrued assets with accrued liabilities to assess the funded condition of the Retirement System, and
- Compute the recommended employer contribution rates for the Fiscal Year beginning January 1, 2017.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. Data concerning active members, retirees, beneficiaries and assets was provided by the County. This data has been reviewed for reasonableness, but no attempt has been made to audit such information. The valuation was based on the provisions of the Retirement System as amended through January 1, 2016. This valuation has been prepared under the supervision of a Member of the American Academy of Actuaries qualified to render the actuarial opinions contained herein.

Respectfully submitted,

A handwritten signature in cursive script, reading "Sandra W. Rodwan".

Sandra W. Rodwan, M.A.A.A.

***Genesee County
Employees Retirement System***

Actuarial Valuation as of December 31, 2015

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Section One:

Valuation Summary



Purpose of Valuation

The purpose of the annual actuarial valuation of the Genesee County Employees Retirement System as of December 31, 2015 is to:

- ❖ Compute the liabilities associated with benefits likely to be paid on behalf of current retired and active members of the Retirement System,
- ❖ Compare accrued assets with accrued liabilities to assess the funded condition of the Retirement System, and
- ❖ Compute the County's recommended contribution rate for the Fiscal Year beginning January 1, 2017.

Liabilities and Funded Condition of Retirement System

Accrued liabilities of the Retirement System as of December 31, 2015 were computed to be \$576,905,433. The funding value of accrued assets was \$428,816,188. The ratio of the funding value of accrued assets to accrued liabilities was 74.3%.

Funding Value of Assets

A smoothed market value of assets was used for the December 31, 2015 valuation. This method, which spreads realized and unrealized capital value changes over four years, is the same as the method used for last year's valuation.

Computed Employer Contribution Rates

The employer normal cost contribution rate was computed to be 6.92% for General & Sheriffs; 3.49% of Water & Waste member payroll; 7.73% of Library member payroll; 6.02% of Mental Health member payroll; 9.02% of Road Commission member payroll and 7.87% of Mt. Morris member payroll.

Actuarial accrued liabilities exceeded the funding value of assets in all groups. The unfunded amount was amortized over 25 years and added to the employer normal cost.

The 25 year amortization period was first used for the December 30, 2010 valuation.

The total employer contribution for General & Sheriffs was computed to be 71.59% which includes an amortization amount of 63.52%. For Water & Waste, the total employer contribution rate was computed to be 15.94% which includes an amortization payment of 11.30%. For the Library, the total employer contribution rate was computed to be 19.53% which includes an amortization payment of 10.65%. The total employer contribution rate for Mental Health was computed to be 29.19% which includes an amortization payment of 22.02%. The total contribution rate for the Road Commission was computed to be 24.34% which includes an amortization payment of 14.17%. The contribution rate for Mt. Morris was computed to be 11.15% which includes an amortization payment of 2.12%. All groups have a 1.15% contribution rate for administrative expenses included.

Retirement System Experience

The overall recognized experience of the Retirement System during the year ended December 31, 2015 was less favorable than expected experience based upon the long-term assumptions. The investment return on the market value of assets was less than assumed. This loss was spread over 4 years for purposes of the funding value of assets. Less than assumed salary increases partially offset the unfavorable experience.

Changes in Methods and Assumptions

There were no method or assumption changes in this valuation.

Benefit Provision Changes

A brief summary of the benefit provision changes that occurred during the year are as follows:

General County Teamsters 214, FOC: Employee contributions increased to 9.0% of pre-tax compensation.

General County Non-Union: Employee contributions increased to 9.0% of pre-tax compensation.

Road Commission: The benefit formula was increased to 2.4% for all years of service from 2.4% for the first 25 years of service and 1.0% for service over 25 years.

Participant Data

	<u>12/31/2015</u>	<u>12/31/2014</u>
Active Members	671	713
Active Member Payroll	\$41,687,051	\$43,723,698
Retirees and Beneficiaries	1,717	1,687
Annual Pensions	\$44,663,724	\$43,151,414
Inactive Vested Members	84	95
Estimated Annual Pensions	\$1,394,909	\$1,629,392

Financial Data

	<u>12/31/2015</u>	<u>12/31/2014</u>
Smoothed Valuation Assets	\$428,816,188	\$426,294,429
Market Value of Assets	423,186,239	444,707,729

Conclusion

The Retirement System is being financed in accordance with a sound funding objective of funding benefits as they accrue.



Section Two:

Actuarial Calculations – Funding



Computed Contribution Rates for The Year Beginning January 1, 2017

The contribution rates shown below are expressed as percents of active member payroll for all groups.

The normal cost can be viewed as the long-term ongoing cost of the Retirement System.

Actuarial accrued liabilities exceeded assets as of December 31, 2015 in all groups. Amortizing unfunded actuarial accrued liabilities over 25 years produces an amortization payment. The amortization payment was computed as a level percent of active member payroll for all divisions except General & Sheriffs and Mental Health. For General & Sheriffs and Mental Health divisions the level dollar amortization was used, as adopted by the Retirement Commission on June 10, 2013.

Contribution Recommendations:

	<u>Percents of Payroll</u>					
	General & Sheriffs	Water & Waste	District Library	Mental Health	Road Commission	Mt. Morris
Normal Cost						
Regular Retirement	10.24%	7.42%	7.20%	7.78%	8.48%	9.25%
Pre-retirement Death	0.45	0.42	0.29	0.31	0.85	0.27
Disability	2.00	0.87	0.82	0.87	2.23	0.66
Withdrawal	<u>2.65</u>	<u>1.78</u>	<u>1.30</u>	<u>2.06</u>	<u>1.14</u>	<u>2.69</u>
Total Normal Cost	15.34	10.49	9.61	11.02	12.70	12.87
Member Portion	8.42	7.00	1.88	5.00	3.68	5.00
Employer Normal Cost	6.92%	3.49%	7.73%	6.02%	9.02%	7.87%
Unfunded Actuarial Accrued Liability	63.52	11.30	10.65	22.02	14.17	2.12
Temporary Funding Credit	0.00	0.00	0.00	0.00	0.00	0.00
Administrative Expense	1.15	1.15	1.15	1.15	1.15	1.15
Net Employer Contribution Rate	71.59%*	15.94%	19.53%	29.19%*	24.34%	11.15%

*The computed dollar contribution for General & Sheriffs is \$9,113,424 and for Mental Health is \$2,996,547.

Employer Contributions – Historical Schedule

	As Percents of Valuation Payroll					
Valuation Date December 31	General & Sheriffs	Water & Waste	District Library	Mental Health	Road Commission	Mt. Morris
1980*	11.34%			4.09%	12.38%	5.30%
1985*	8.01	6.37%	7.91%	7.03	10.24	4.90
1990*	16.21	6.82	4.15	9.12	10.42	1.62
1991*	17.03	6.19	8.27	8.97	15.98	0.58
1992*	21.09	7.98	6.36	9.41	19.89	0.62
1993*	23.34	13.41	4.50	10.67	19.91	0.23
1994*	22.53	14.19	0.69	10.34	20.66	0.23
1995*	18.44	9.99	0.00	7.17	23.34	0.00
1996*	20.19	3.22	0.00	4.69	26.04	3.78
1997*	17.32	10.88	0.00	5.68	19.33	3.76
1998*	11.09	4.14	0.00	1.89	13.78	0.00
1999*	10.29	2.08	0.00	1.20	10.95	0.00
2000*	10.70	3.02	0.00	8.97	12.02	0.00
2001*	10.39	4.71	0.00	8.09	16.93	5.22
2002*	15.52	14.00	0.56	9.44	16.42	11.56
2003*	19.27	15.94	5.40	11.47	18.19	14.96
2004*	22.31	17.11	8.95	13.61	19.57	18.47
2005*	24.28	17.58	12.68	12.80	18.18	18.76
2006*	23.48	15.94	11.20	11.49	16.00	18.21
2007*	25.38	16.49	8.58	11.63	16.60	20.56
2008*	29.33	17.76	11.64	13.96	18.34	20.40
2009	31.74	18.81	12.00	15.16	19.46	21.46
2010*	40.83	18.72	15.13	18.69	22.24	27.08
2011	53.48	20.30	16.87	21.09	25.18	28.43
2012	52.70	20.35	15.93	19.58	25.15	24.34
2013	54.36	18.41	14.34	20.02	23.29	16.45
2014	64.38	16.20	17.65	26.11	23.67	12.52
2015	71.59	15.94	19.53	29.19	24.34	11.15

* After benefit and/or actuarial assumption changes.

Unfunded Actuarial Accrued Liability – by Divisions

	General & Sheriffs	Water & Waste	District Library	Mental Health	Road Commission	Mt. Morris
Actuarial accrued liability and reserves						
Retirees and beneficiaries	\$264,428,361	\$34,370,473	\$10,685,282	\$71,738,578	\$52,223,147	\$4,381,981
Active and inactive members	<u>56,062,607</u>	<u>20,276,285</u>	<u>5,294,028</u>	<u>36,337,819</u>	<u>19,782,272</u>	<u>1,324,600</u>
Total	320,490,968	54,646,758	15,979,310	108,076,397	72,005,419	5,706,581
Assets allocated to funding*						
	230,763,143	41,277,846	12,761,570	82,997,373	55,493,103	5,523,153
Unfunded actuarial accrued liability						
	89,727,825	13,368,912	3,217,740	25,079,024	16,512,316	183,428
Funded Ratio	72.0%	75.5%	79.9%	76.8%	77.1%	96.8%
Funded Ratio - Prior Year	72.9%	75.7%	79.4%	78.1%	75.3%	93.8%

*Allocated based on Reserve Balances reported for each division.

Total Unfunded Actuarial Accrued Liability

	<u>December 31, 2015</u>	<u>December 31, 2014</u>
Actuarial Accrued Liabilities	\$576,905,433	\$569,836,295
Assets Allocated to Funding	<u>428,816,188</u>	<u>426,294,429</u>
Unfunded Actuarial Accrued Liabilities	\$148,089,245	\$143,541,866

Results shown throughout this report, for years prior to 2001, were prepared by the previous actuary.

History of Assets and Accrued Liabilities

Valuation Date 12/31	Valuation Assets	Accrued Actuarial Liabilities	Funded Ratio	Unfunded Accrued Actuarial Liabilities
1980	\$ 48,294	\$ 55,475	87.1 %	\$ 7,181
1985	105,558	91,739	115.1	(13,819)
1990	189,796	172,652	109.9	(17,144)
1991	212,628	200,207	106.2	(12,421)
1992	233,721	239,336	97.7	5,615
1993	251,623	261,782	96.1	10,159
1994	270,364	270,462	100.0	98
1995	299,417	291,703	102.6	(7,714)
1996	317,581	305,706	103.9	(11,875)
1997	331,952	324,882	102.2	(7,714)
1998	380,089	343,752	103.9	(11,875)
1999	418,745	369,606	113.3	(49,139)
2000	432,631	399,583	108.3	(33,048)
2001	425,847	403,159	105.6	(22,688)
2002	414,126	423,009	97.9	8,883
2003	405,218	433,148	93.6	27,930
2004	404,493	458,069	88.3	53,576
2005	412,740	467,582	88.3	54,842
2006	445,962	490,335	91.0	44,373
2007	461,349	514,859	89.6	53,510
2008	439,813	527,640	83.4	87,827
2009	424,483	543,307	78.1	118,824
2010	401,700	564,033	71.2	162,333
2011	365,262	549,929	66.4	184,667
2012	387,979	559,391	69.4	171,412
2013	409,675	548,196	74.7	138,521
2014	426,294	569,836	74.8	143,542
2015	428,816	576,905	74.3	148,089

Aggregate Gain/Loss -- Year Ended December 31, 2015

	General & Sheriffs	Water & Waste	District Library	Mental Health	Road Comm.	Mt. Morris	Totals
(1) UAAL* at start of year	\$85,843,579	\$12,883,813	\$3,352,091	\$22,959,722	\$18,160,478	\$342,183	\$143,541,866
(2) EE and ER Normal Cost From Last Year Val	2,092,850	879,564	239,064	1,269,466	1,111,576	77,028	5,669,548
(3) Actual EE and ER Contribution	10,160,016	2,238,788	400,708	4,541,547	2,194,353	128,019	19,663,431
(4) Interest Accrual	6,544,800	976,336	261,702	1,705,895	1,409,527	25,335	10,923,594
(5) Expected UAAL Bef. Changes	84,321,213	12,500,925	3,452,149	21,393,536	18,487,228	316,527	140,471,577
(6) Changes Due to Amend.					-		-
(7) Changes Due to Assumps.	-	-	-	-	-	-	-
(8) Expected UAAL After Changes	84,321,213	12,500,925	3,452,149	21,393,536	18,487,228	316,527	140,471,577
(9) Actual UAAL at End of Year	89,727,825	13,368,912	3,217,740	25,079,024	16,512,316	183,428	148,089,245
(10) Gain/(Loss)	\$(5,406,612)	\$(867,987)	\$234,409	\$(3,685,488)	\$1,974,912	\$133,099	\$(7,617,668)

* Unfunded Actuarial Accrued Liability.

Actuarial Balance Sheet – December 31, 2015

Actuarial Assets

Accrued Assets		
Assets from system's financial statements (market value)	\$423,186,239	
Funding value adjustment	<u>5,629,949</u>	
Total accrued assets (funding value)		\$428,816,188
Actuarial present value of expected future		
For normal costs	44,483,893	
For unfunded actuarial accrued liabilities	<u>148,089,245</u>	
		<u>192,573,138</u>
Total Actuarial Present Value of Present and Expected Future Resources		<u><u>\$621,389,326</u></u>

Actuarial Present Values (Liability)

To retirees and beneficiaries	\$437,827,822
To vested terminated members	11,597,919
To active members	
Allocated to service rendered prior to valuation date	127,479,692
Allocated to service rendered after valuation date	<u>44,483,893</u>
Total Actuarial Present Value of Expected Future Benefit Payments and Reserves	<u><u>\$621,389,326</u></u>

Comments, Recommendation and Conclusion

Comment 1: The overall recognized experience of the Retirement System during the year ended December 31, 2015 was less favorable than expected experience based upon the long-term assumptions. The rate of investment return based on the funding value of assets was less than the assumed rate. This was offset in part by salary increases which were less than assumed. The slight decrease in the funded ratio reflects this experience.

Recommendation: Section 40(b) of the Retirement Ordinance was amended to provide annual transfers from the Reserve for Employer Contributions (REC) to the Reserve for Retired Benefit Payments (RRBP) based upon the annual actuarial valuation. Transfers from the Reserve for Employee Contributions are made at the time of retirement.

In all divisions except Water & Waste and Mt. Morris, the computed retiree liabilities were greater than the Reserve for Retired Benefit Payments as of December 31, 2015. We recommend that the following transfers be made to the RRBP so that it equals the retired life liabilities as of December 31, 2015.

Division	Reported Reserve for Retired Benefit Payments*	Computed Liabilities	Recommended Transfer from Reserve for Employer Contributions
General	\$250,333,150	\$264,428,361	\$14,095,211
Water & Waste	34,330,931	34,370,473	39,542
District Library	10,153,869	10,685,282	531,413
Mental Health	67,140,821	71,738,578	4,597,757
Road Commission	51,530,215	52,223,147	692,932
Mt. Morris	8,801,354	4,381,981	None

*Including transfers for 2015 retirees made after December 31, 2015.

Conclusion: The Retirement System is being financed in accordance with a sound funding objective of funding benefits as they accrue.

Section Three:

***Retirement System
Benefit Provisions***



General County

Benefits	AFSCME 496-00 8 Yrs on 3/23/2011	AFSCME 496-00 Less Than 8 Yrs on 3/23/2011	AFSCME 496-01 8 Yrs on 2/27/2012	AFSCME 496-01 Less Than 8 Yrs on 2/27/2012	AFSCME 496-03 (Drain) 8 Yrs on 7/12/2011	AFSCME 496-03 (Drain) Less Than 8 Yrs on 7/12/2011	PCOA 8 Yrs on 6/29/2011	PCOA Less Than 8 Yrs on 6/29/2011
Group Number(s)	01	01	02	02	03	03	04	04
Sec. 59 Lump Sum Option?	No	No	No	No	No	No	No	No
FAC Period (Years)	2	2	2	2	2	2	2	2
% of FAC Maximum Benefit	75%	75%	75%	75%	75%	75%	75%	75%
Pop-up – ER Paid	1/1/88	1/1/88	1/1/88	1/1/88	1/1/88	1/1/88	1/1/88	1/1/88
COLA Code	1	1	1	1	1	1	1	1
COLA Payroll Code	1	1	1	1	1	1	1	1
Five-Year COLA Adj. Max. %	3%	3%	3%	3%	3%	3%	3%	3%
Benefit Eligibility Age/Service	00/23; 60/08	00/25; 60/08	00/23; 60/08	00/25; 60/08	00/23; 60/08	00/25; 60/08	00/23; 60/08	00/25; 60/08
Deferred Benefit Service/Years Eligibility	15/23	15/25	15/23	15/25	15/23	15/25	15/23	15/25
Benefit Formula; % to 25 Yrs./After 25 Yrs.	2.4% all	2.4% all	2.4% all	2.4% all	2.4% all	2.4% all	2.4% all	2.4% all
Contribution Rate %	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Other Gov. Service Purchase – DB Only	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Military Service Credit Purchase – DB Only	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years
Prior Refunded Time Buyback – DB Only	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date
Sick Leave/Worker Comp./Layoff Buyback – DB Only	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.
Grace Period for Leaves *	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days
15-Year Gap Rule	No	No	No	No	No	No	No	No
Cash in Time?	No	No	No	No	No	No	No	No

COLA Code:

6. 1.75% compounded min. of 9 years or age 65 (the greater of).

* Disability Leave, Workers' Comp. Personal, Educational, FMLA.

Also AFSCME 496-01 effective 2/27/12.

General County - continued

Benefits	Jud Adm Secretaries 8 Yrs on 9/11/2013	Jud Adm Secretaries Less Than 8 Yrs on 9/11/2013	AFSCME 916 Super 8 Yrs On 3/5/14	AFSCME 916 Super Less Than 8 Yrs On 3/5/14	Teamsters 214 Parks 8Yrs on 8/9/2012	Teamsters 214 Parks Less Than 8 Yrs on 8/9/2012	Teamsters FOC 8 Yrs on 12/7/2011	Teamsters FOC Less Than 8 Yrs on 12/7/2011
Group Number(s)	05	05	06	06	07	07	08	08
Sec. 59 Lump Sum Option?	No	No	No	No	No	No	No	No
FAC Period (Years)	2	2	2	2	2	2	2	2
% of FAC Maximum Benefit	75%	75%	75%	75%	75%	75%	75%	75%
Pop-up – ER Paid	1/1/88	1/1/88	1/1/88	1/1/88	1/1/88	1/1/88	1/1/88	1/1/88
COLA Code	1	1	1	1	1	1	1	1
COLA Payroll Code	1	1	1	1	1	1	1	1
Five-Year COLA Adj. Max. %	3%	3%	3%	3%	3%	3%	3%	3%
Benefit Eligibility Age/Service	00/23; 60/08	00/25; 60/08	00/23; 60/08	00/25; 60/08	00/23; 60/08	00/25; 60/08	00/23; 60/08	00/25; 60/08
Deferred Benefit Service/Years Eligibility	15/23(1)	15/25	15/23(1)	15/25	15/23 (1)	15/25	15/23 (1)	15/25
Benefit Formula; % to 25 Yrs./After 25 Yrs.	2.4% all	2.4% all	2.4% all	2.4% all	2.4% all	2.4% all	2.4% all	2.4% all
Contribution Rate %	9.00%	9.00%	7.00%	7.00%	7.00%	7.00%	9.00%	9.00%
Other Gov. Service Purchase – DB Only	N/A	N/A	N/A	N/A	After 5 years	After 5 years	After 5 years	After 5 years
Military Service Credit Purchase – DB Only	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years
Prior Refunded Time Buyback – DB Only	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date
Sick Leave/Worker Comp./Layoff Buyback – DB Only	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.
Grace Period for Leaves *	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days
15-Year Gap Rule	No	No	No	No	No	No	No	No
Cash in Time?	No	No	No	No	No	No	No	No

COLA CODE:

6. 1.75% compounded min. of 9 years or age 65 (the greater of).

*Disability Leave, Workers' Comp. Personal, Educational, FMLA.

(1)Prior to 1/1/88 defer with 8 years of service.

General County - continued

Benefits	NON-UNION 7/11/15	POAM On or After 1/1/2000 with 15 years of service on 2/26/2013	POAM On or After 1/1/2000 with Less than 15 years of service on 2/26/2013	AFSCME Local 916 5 Sergeants Hired on or after After 1/1/88	AFSCME Local 916 5 Sergeants Hired on Or after After 1/1/99 With 15 yrs service on 5/24/13	AFSCME Local 916 5 Sergeants Hired on Or after After 1/1/99 With less than 15 Yrs Service on 5/24/13	AFSCME Local 916 6 Lieutenants, Captains Hired on or After 1/1/88	AFSCME Local 916 6 Lieutenants, Captains After 1/1/88 with 15 years of service on 5/24/2013	AFSCME Local 916 6 Lieutenants, Captains After 1/1/99 with less than 15 years of service on 5/24/2013
Group Number(s)	09,10	11	11	12	12	12	12	12	12
Sec. 59 Lump Sum Option?	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
FAC Period (Years)	2	2	2	2	2	2	2	2	2
% of FAC Maximum Benefit	75%	75%	75%	75%	75%	75%	75%	75%	75%
Pop-up – ER Paid	1/1/88	1/1/88	1/1/88	1/1/88	1/1/88	1/1/88	1/1/88	1/1/88	1/1/88
COLA Code	1	1	1	1	1	1	1	1	1
COLA Payroll Code	1	6	6	6	6	6	6	6	6
Five-Year COLA Adj. Max. %	3%	9 yr min. 1.75% comp.	9 yr min. 1.75% comp.	9 yr min. 1.75% comp.	9 yr min. 1.75% comp.	9 yr min. 1.75% comp.	9 yr min. 1.75% comp.	9 yr min. 1.75% comp.	9 yr min. 1.75% comp.
Benefit Eligibility Age/Service	00/23; 60/08	00/23; 60/15	00/25; 60/15	00/20; 60/08	00/23; 60/15	00/25; 60/15	00/20; 60/08	00/23; 60/15	00/25; 60/15
Deferred Benefit Service/Years Eligibility	15/23	15/23	15/25	15/20	15/23	15/25	15/20	15/23	15/25
Benefit Formula; % to 25 Yrs./After 25 Yrs.	2.4% all	2.5% all	2.5% all	2.5% all	2.5% all	2.5% all	2.5% all	2.5% all	2.5 all
Contribution Rate %	9.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Other Gov. Service Purchase – DB Only	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years
Military Service Credit Purchase – DB Only	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years	After 5 years
Prior Refunded Time Buyback – DB Only	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date
Sick Leave/Worker Comp./Layoff Buyback – DB Only	Within 1 Yr.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.	Within 1 Yr. of Ret.
Grace Period for Leaves *	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days
15-Year Gap Rule	No	No	No	No	No	No	No	No	No
Cash in Time?	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes

COLA Code:

6. 1.75% compounded min. of 9 years or age 65 (the greater of).

*Disability Leave, Workers' Comp. Personal, Educational, FMLA.

Community Mental Health (Genesee Health System)

Benefits	Non-Union Before 2/9/89	Non-Union After 2/9/89	Program Chiefs	Teamsters Before 2/9/89	Teamsters After 2/9/89	AFSCME
Group Number(s)	30	30	32	33	33	34
Choice of Retirement Plans	DB	DB	DB	DB	DB	DB
Sec. 59 Lump Sum Option?	Yes	Yes	Yes	Yes	Yes	Yes
FAC Period (Years)	3	3	3	3	3	3
% of FAC Maximum Benefit	65%	60%	65%	65%	65%	65%
Pop-up – ER Paid	Effective 2/9/89	Effective 2/9/89	Effective 2/9/89	Effective 2/9/89	Effective 2/9/89	Effective 2/9/89
COLA Code	2	2	2	2	2	2
COLA Payroll Code	2	2	2	2	2	2
Five-year COLA Adj. Max. %	2%*	2%*	2%*	2%*	2%*	2%*
Benefit Eligibility Age/Service	00/23; 60/08	00/23; 60/08	00/23; 60/08	00/23; 60/08	00/23; 60/08	00/23; 60/08
Deferred Benefit Service/Years Eligibility	8/23	15/25	8/25	8/25	15/25	15/25
Benefit Formula; % to 25 Yrs./After 25 Yrs.	2.4/ 1.0	2.4/ 1.0	2.4/ 1.0	2.4/ 1.0	2.4/ 1.0	2.4/ 1.0
Contribution Rate %	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Other Governmental Service Purchase – DB Only	After 8 years	After 8 years	After 8 years	After 8 years	After 8 years	After 8 years
Military Service Credit Purchase – DB Only	After 8 years	After 8 years	After 8 years	After 8 years	After 8 years	After 8 years
Prior Refunded Time Buyback – DB Only	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date
Sick Leave/Workers Comp./Layoff Buyback – DB Only	1 Yr. from Return Date	1 Yr. from Return Date	1 Yr. from Return Date	1 Yr. from Return Date	1 Yr. from Return Date	1 Yr. from Return Date
Grace Period for Leaves	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days
15-year Gap Rule	Eliminated	Eliminated	Eliminated	Eliminated	Eliminated	Eliminated

COLA Code:

2. COLA begins on January 1 following retirement.

* Increases are based on CPI up to stated maximum (Nov. to Nov. 1977 CPIW).

DB Plan Closed to AFSCME Members hired on or after 10/1/2007.
DB Plan Closed to Teamsters members hired on or after 11/20/2007.
DB Plan Closed to Non-Union new hires.

Road Commission

Benefits	Exempt	Supervisors Hired Before 7/9/02	Supervisors Hired After 7/9/02	SEIU 517M Before 7/9/02	SEIU 517M After 7/9/02	AFSCME 496 Hired Before 7/1/04	AFSCME 496 Hired After 7/1/04
Group Number(s)	53	50	50	51	51	52	52
Choice of Retirement Plans	DB	DB	DB	DB	DB	DB	DB
Sec. 59 Lump Sum Option?	No	Yes	Yes	Yes	Yes	Yes	Yes
FAC Period (Years)	3	3	3	3	3	3	3
% of FAC Maximum Benefit	75%	75%	75%	75%	75%	75%	75%
Pop-up – ER Paid	Effective 5/21/91	Effective 5/1/90	Effective 5/1/90	Effective 8/28/90	Effective 8/28/90	Effective 1/1/88	Effective 1/1/88
COLA Code	5	4	4	4	4	N/A	N/A
COLA Payroll Code	1	1	1	1	1	N/A	N/A
Five-year COLA Adj. Max. %	3%	4%	4%	4%	4%	N/A	N/A
Benefit Eligibility Age/Service	00/25; 60/08	00/25; 60/08	00/25; 60/15	00/25; 60/08	00/25; 60/15	00/23; 58/08	00/23; 58/15
Deferred Benefit Service/Years Eligibility	8/25	8/25	15/25 (1)	8/25	15/25 (2)	8/23	15/25
Benefit Formula; % to 25 Yrs./After 25 Yrs.	2.4%/1.0% (3)	2.4% all	2.4% all	2.4% all	2.4% all	2.4% all	2.4% all
Contribution Rate %	6.00%	1.00%	1.00%	4.00%	4.00%	1.50%	1.50%
Other Governmental Service Purchase	After 8 Years	After 5 years	After 5 years	After 8 years	After 8 years	After 8 years	After 8 years
Military Service Credit Purchase	After 8 years	After 5 years	After 5 years	After 8 years	After 8 years	After 8 years	After 8 years
Prior Refunded Time Buyback	1 Year from Hire Date	1 Year from Hire Date	1 Year from Hire Date	1 Year from Hire Date	1 Year from Hire Date	1 Year from Hire Date	1 Year from Hire Date
Sick Leave/Worker's Comp./Layoff Buyback	1 Year from Return Date	1 Year from Return Date	1 Year from Return Date	1 Year from Return Date	1 Year from Return Date	1 Year from Return Date	1 Year from Return Date
Grace Period for Leaves	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days
* Early Elig. – Retire <58 at 6/10 of 1% per month reduction	N/A	N/A	N/A	N/A	N/A	Yes	Yes
* Early Elig. – Retire 55-60 at 6/10 of 1% per month reduction	Yes	N/A	N/A	Yes – 8/55	Yes –15/55	N/A	N/A

- (1) If vested with a minimum of fifteen (15) when separated, then age 60, or twenty-five (25) years of service.
 - (2) If vested with a minimum of fifteen (15) when separated, then age 60, or age 55 with applicable reduction or twenty-five (25) years of service.
 - (3) Pending approval to change to 2.4% all years
- COLA Codes:
4. COLA begins after three full years of retirement.
 5. COLA begins one full year after retirement

Water & Waste

Benefits	Union Hired Prior to 1/1/2006	Union Hired After 1/1/2006	Union After 1/1/2011	Non-Union Hired Prior to 1/1/2006	Non-Union Hired After 1/1/2006 to 12/31/2011	Non-Union After 1/1/2012
Group Number(s)	80	80	80	81	81	81
Choice of Retirement Plans	DB	DB	DB	DB	DB	DB
Sec. 59 Lump Sum Option?	No	No	No	No	No	No
FAC Period (Years)	2	3 out of last 5	3 out of last 5	2	3 out of last 5	3 out of last 5
% of FAC Maximum Benefit	85% of Base Wage Rate	85% of Base Wage Rate	85% of Base Wage Rate	85% of Base Wage Rate	85% of Base Wage Rate	85% of Base Wage Rate
Pop-up – ER Paid	Effective 9/24/90	Effective 9/24/90	Effective 9/24/90	Effective 9/24/90	Effective 9/24/90	Effective 9/24/90
COLA Code	1	1	1	1	1	1
COLA Payroll Code	1	1	1	1	1	1
Five-year COLA Adj. Max. %	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Benefit Eligibility Age/Service	00/23; 60/10 (X)	55/23; 60/10 (X)	55/23; 60/10 (X)	00/23; 60/10 (X)	55/23; 60/10 (X)	55/23; 60/10 (X)
Deferred Benefit Service/Years Eligibility	10 and Age 60	10 and Age 60	10 and Age 60	10 and Age 60	10 and Age 60	10 and Age 60
Benefit Formula; % to 25 Yrs./After 25 Yrs.	2.4 all years	2.4/1.0	2.0/1.0	2.4 all years	2.4 all years	2.0/1.0
Contribution Rate % (Pre Tax Basis)	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Other Governmental Service Purchase (OGS)	After 3 years	After 3 years	After 3 years	After 3 years	After 3 years	After 3 years
Maximum OGS Purchase Limitation	5 years	5 years	5 years	None	None	None
Military Service Credit Purchase	After 3 years	After 3 years	After 3 years	After 3 years	After 3 years	After 3 years
Maximum Military Service Credit Purchases	5 years	5 years	5 years	None	None	None
Prior Refunded Time Buyback	1 Year from Hire Date	1 Year from Hire Date	1 Year from Hire Date	1 Year from Hire Date	1 Year from Hire Date	1 Year from Hire Date
Sick Leave/Worker's Comp./Layoff Buyback	1 Year from Return Date	1 Year from Return Date	1 Year from Return Date	1 Year from Return Date	1 Year from Return Date	1 Year from Return Date
Grace Period for Layoff	30 Days	30 Days	30 Days	30 Days	30 Days	30 Days
Grace Period for Sick Leave & WC Leave	60 Days	60 Days	60 Days	60 Days	60 Days	60 Days

(X) Age and Service Retirement at 55 years of age with a minimum of 10 years of credited service with pension portion of retirement allowance reduced .50% by the number of months the date of retirement precedes the date they would attain age 60.

City of Mt. Morris

Benefits	Non-Union	Local 1918	POLC & POLC Supervisors
Group Number(s)	60	60	61
Choice of Retirement Plans	DB	DB	DB
Sec. 59 Lump Sum Option?	No	No	No
FAC Period (Years)	3	3	3
% of FAC Maximum Benefit	75%	75%	75%
Pop-up – ER Paid	Yes 12/31/02	Yes 12/31/02	Yes 12/31/02
COLA Code	5	No	5
COLA Payroll Code	5	No	5
Five-year COLA Adj. Max. %	3% for 5 years	No	3% for 5 years
Benefit Eligibility Age/Service	00/22; 60/08	00/22; 60/08	00/22; 60/08
Deferred Benefit Service/Years Eligibility	8/22	8/22	8/22
Benefit Formula %	2.5% all	2.5% all	2.5% all
Contribution Rate %	5.0%	5.0%	5.0%
Other Governmental Service	After 8 years	No	After 8 years
Military Service Credit Purchase	After 8 years	After 8 years	After 8 years
Prior Refunded Time Buyback	Within 1 Yr. of Hire	Within 1 Yr. of Hire	Within 1 Yr. of Hire
Sick Leave/Workers Comp./Layoff Buyback	Within 1 Yr. of Return	Within 1 Yr. of Return	Within 1 Yr. of Return
Grace Period for Leaves	Unknown	Unknown	Unknown

COLA Code:

5. Up to 3% CPIW (r decimals) using Nov-Nov 1982-84.

District Library

Benefits	Union & Non-Union Before 7/1/95	Union & Non-Union After 7/1/95	Union & Non-Union After 1/1/98	Non-Union Directors On or After 6/1/04
Group Number(s)	90	90	90	91
Choice of Retirement Plans	DB	DB	DB	DB
Sec. 59 Lump Sum Option?	No	No	No	No
FAC Period (Years)	5/10#	5/10#	5/10#	2/10
% of FAC Maximum Benefit	60%	60%	60%	60%
Pop-up – ER Paid	None	None	None	None
COLA Code	3	3	3	3
COLA Payroll Code	2	2	2	2
Five-year COLA	Yes*	Yes*	Yes*	Yes*
Benefit Eligibility Age/Service	00/25; 60/08	00/25; 60/12	00/25; 60/12	00/25; 60/12
Deferred Benefit Service/Years Eligibility	8/25	8/25**	8/25**	8/25*
Benefit Formula; % to 25 Yrs/After 25 Yrs.	2.3/1.0%	2.3/1.0%	2.3/1.0%	2.3/1.0%
Contribution Rate %	1.50%	1.50%	2.00%	5.00%
Other Governmental Service Purchase	No	No	No	No
Military Service Credit Purchase	No	No	No	No
Prior Refunded Time Buyback	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date	1 Yr. from Hire Date
Sick Leave/Workers Comp./Layoff Buyback	1 Yr. from Return Date	1 Yr. from Return Date	1 Yr. from Return Date	1 Yr. from Return Date
Grace Period for Leaves	(1)	(1)	(1)	(1)

COLA Codes:

2. Nov.-Nov. 1977 CPIW.
3. COLA begins on January 1 after one full year of retirement.

* Increases are based on CPI up to stated maximum.

** If vested with at least 8 when separated; then age 60 with at least 12 years of service; or 25 years of service; whichever comes first.

- (1) Disability, layoff, Worker's Comp., Educational, Personal, FMLA = 30 days grace.
Union Educational Leave = 20 days grace.
Union Business Leave – Repay EE and ER contributions for retirement service credit.

Benefit Provision Summary

Duty Disability Retirement

Eligibility: No age or service requirements. Must be in receipt of worker's compensation.

Groups Covered: All.

Annual Benefit:

Computed as a regular retirement with additional service credit granted from date of retirement to date regular retirement age would have been attained. Prior to age 65 maximum benefit is 90% of FAC (increased by 2.5% for each year of retirement) less worker's compensation payment and/or other remuneration.

Non-Duty Disability Retirement

Eligibility: Generally 10 or more years of credited service. Water and Waste Employees require 15 years of credited service.

Groups Covered: All.

Annual Benefit:

Computed as a regular retirement. Prior to age 65 maximum benefit is 90% of FAC (increased by 2.5% for each year of retirement) less long-term sick benefits and /or other remuneration.

Duty Death Before Retirement

Eligibility: No age or service requirements. Must be in receipt of worker's compensation

Groups Covered: All.

Annual Benefit:

Refund of accumulated contributions. Upon termination of worker's compensation the same amount is paid by the Retirement System to the surviving spouse for life or until remarriage, to unmarried children under 18 and to dependent parents.

Non-Duty Death Before Retirement

Eligibility: 15 or more years of credited service or age 60 with 10 or more years of credited service.

Groups Covered: All.

Annual Benefit:

Computed as a regular retirement but actuarially reduced in accordance with a 100% joint and survivor election.

Section Four:

***Actuarial Assumptions
And Methods***



Actuarial Assumptions

Economic Assumptions

- (i) **Interest Rate** 8% (net of expenses)
- (ii) **Salary Increases**
- | | |
|---------------------|-------------------|
| Across-the-Board | 3.0% |
| Merit and Longevity | Age-related rates |

Sample Annual Rates of Salary Increase

Age	Across-the-Board	Merit and Longevity	Total
20	3.00 %	4.03 %	7.03 %
25	3.00	3.28	6.28
30	3.00	2.81	5.81
35	3.00	2.49	5.49
40	3.00	2.24	5.24
45	3.00	1.76	4.76
50	3.00	1.19	4.19
55	3.00	0.70	3.70
60	3.00	0.17	3.17
65	3.00	0.00	3.00

Demographic Assumptions

(i) Mortality

RP 2000 Combined Healthy
Mortality Table

Sample Ages	Future Life Expectancy (Years)	
	Men	Women
55	26.22	28.95
60	21.78	24.42
65	17.65	20.16
70	13.92	16.27
75	10.61	12.78
80	7.79	9.71

(ii) Disability

Sample Ages	Percent Becoming Disabled Within Next Year	
	Sheriffs & Roads	All Others
20	0.10%	0.07%
25	0.15	0.09
30	0.20	0.10
35	0.25	0.14
40	0.50	0.21
45	0.65	0.32
50	0.80	0.52
55	0.95	0.92

(iii) Termination of Employment

Service related rates for first 5 years of employment. Age related rates for after first 5 years of employment

% of Active Members Separating within Next Year				
Sample Ages	Years of Service	General, Library, Water & Waste, Mental Health & Mt. Morris	Sheriffs	Road Commission
All	0	30.00%	12.00%	20.00%
	1	20.00	9.00	15.00
	2	15.00	7.00	10.00
	3	10.00	5.00	8.00
	4	7.00	4.50	7.00
25	5 & Over	6.00	5.00	3.50
30		5.50	4.50	2.90
35		4.40	3.55	1.50
40		1.85	1.45	0.60
45		1.25	0.75	0.50
50		1.25	0.75	0.50
55		1.25	0.75	0.50
60		1.25	0.75	0.50

(iv) Retirement Rates

**Active Members Retiring within Year
Following Attainment of Indicated Retirement Age**

Percent Retiring – Age Related Rates

Age Retiring	General*	Sheriffs	Road Commission
58			10%
59			10
60	10%	40%	10
61	15	20	15
62	35	15	35
63	20	15	20
64	30	25	30
65	60	100	60
66	35	100	35
67	30	100	30
68	30	100	30
69	45	100	45
70	100	100	100

**Includes Water & Waste, Mental Health, District Library and Mt. Morris.*

**Active Members Retiring within Year
Following Attainment of Indicated Service**

Percent Retiring – Service Related Rates

Years of Service	General*	Sheriffs	Road Commission	Water & Waste
20		40%		
21		40		
22	15%	40		
23	15	40	10%	10%
24	10	40	10	8
25	10	40	10	8
26	10	35	10	8
27	10	20	5	8
28	10	15	5	8
29	10	15	5	8
30	10	15	5	10
31	10	15	5	10
32	10	15	5	10
33	15	15	5	15
34	15	25	5	15
35	15	100	5	15
36	15	100	5	15
37	15	100	10	15
38	100	100	10	100
39	100	100	10	100
40	100	100	100	100

**Includes Mental Health, District Library and Mt. Morris.*

Actuarial Method Used for the Valuation

Normal Cost. Normal cost and the allocation of actuarial present values between service rendered before and after the valuation date were determined using an individual entry-age actuarial cost method having the following characteristics:

- ❖ The annual normal costs for each individual active member, payable from date of hire to date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement;
- ❖ Each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Financing of Unfunded Actuarial Accrued Liability. Unfunded actuarial accrued liability was amortized as a level dollar amount over 25 years for General and Community Mental Health. Unfunded actuarial accrued liability was amortized as a level percent of payroll over 25 years for all other divisions.

Active member payroll was assumed to increase 3.00% a year for the purpose of determining the level percent of payroll amortization payments.

Section Five:

Valuation Data



Asset Summary

As of December 31, 2015 the market value of assets was reported to be \$423,186,239. The funding value of assets (smoothed market value) was computed to be \$428,816,188.

Beginning of Year Values	<u>12/31/14</u>	<u>12/31/15</u>
(1) Cost Value	\$396,377,063	\$405,426,992
(2) Market Value	442,336,101	444,707,729
(3) Funding Value	409,675,263	426,294,429
(4) Net Realized Gains(Losses for Year)	4,252,553	(12,059,607)
(5) Net Addition to Cost Value for Year: (10) - (1)	9,049,929	(18,904,977)
(6) Net Contribution for Year: (5) - (4)	4,797,376	(6,845,370)
(7) Capital Value Change for Year: (11) – (2) – (6)	(2,425,748)	(14,676,120)
(8) Capital Value Changes Recognized: .25 x (7)		
(a) From Current Year	(606,437)	(3,669,030)
(b) From 1 Year Prior	6,490,029	(606,437)
(c) From 2 Years Prior	7,152,567	6,490,029
(d) From 3 Years Prior	(1,214,369)	7,152,567
(e) Total	11,821,790	(5,629,949)
(9) Increase(Decrease) in Funding Value: (6) + (8)	16,619,166	2,521,759
End of Year Values		
(10) Cost Value	405,426,992	386,522,015
(11) Market Value	444,707,729	423,186,239
(12) Funding Value: (3) + (9)	426,294,429	428,816,188
(13) Nominal Rate of Return on Funding Value	10.5%	7.0%

Reported Assets (Book Value) – December 31, 2015

Reserve for Employees' Contributions:

General & Sheriffs	\$ 7,743,830
Water & Waste	4,508,200
District Library	468,239
Mental Health	9,848,573
Road Commission	3,878,452
Mt. Morris	<u>353,880</u>
Totals	\$26,801,174

Reserve for Employer Contributions:

General & Sheriffs	\$(50,109,597)
Water & Waste	(1,646,016)
District Library	876,251
Mental Health	(2,087,464)
Road Commission	(5,405,465)
Mt. Morris	<u>(4,179,915)</u>
Totals	\$(62,552,206)

Reserve for Retired Benefit Payments:

General & Sheriffs	\$250,294,647
Water & Waste	34,330,931
District Library	10,153,869
Mental Health	67,021,031
Road Commission	51,530,215
Mt. Morris	<u>8,801,354</u>
Totals	\$422,132,047

Total Reported Assets (Book Value): **\$386,381,015**

Participant Summary

Retirees and Beneficiaries Included in the Valuation

There were 1,717 retirees and beneficiaries included in the valuation, with annual pensions totaling \$44,663,724.

During 2015, there were 51 new retirees, 9 new beneficiaries and 3 new EDROs added to the pension rolls. There were 34 from General, 14 from Community Mental Health, 2 from Water & Waste, 5 from the Library, 4 from the Road Commission, 1 from Mt. Morris and 0 from Memorial Hospital. In addition, 2 retirees elected a Section 59 transfer to the Defined Contribution Plan, 1 from General and 1 from Community Mental Health.

Pensions Being Paid Historical Schedule

Valuation Date December 31	No.	Annual Pensions	Average Pension	Number of Deaths	Discounted Value of Pensions	
1993	949	\$12,318,751.80	\$12,980	*	*	*
1994	979	13,057,839.60	13,338	*	*	*
1995	1,002	13,911,585.36	13,884	*	*	*
1996	1,051	15,421,755.84	14,673	*	*	*
1997	1,101	17,022,214.44	15,461	*	*	*
1998	1,133	18,033,234.84	15,920	*	*	*
1999	1,168	19,645,572.96	16,820	*	*	*
2000	1,253	22,019,114.64	17,573	*	\$228,887,000	\$180,277
2001	1,268	22,943,508.00	18,094	23	238,254,342	187,898
2002	1,294	24,112,158.00	18,634	34	249,245,058	192,616
2003	1,313	25,133,705.00	19,142	30	251,703,847	191,701
2004	1,343	26,520,677.00	19,747	46	267,193,421	198,953
2005	1,377	28,241,645.00	20,510	41	280,674,919	203,831
2006	1,395	29,492,951.00	21,142	41	298,432,104	213,930
2007	1,413	30,485,990.00	21,575	43	318,316,713	225,277
2008	1,438	31,661,917.00	22,018	39	324,903,521	225,941
2009	1,477	33,588,491.00	22,741	33	344,565,873	233,288
2010	1,551	36,667,863.00	23,641	40	386,466,961	249,173
2011	1,607	39,131,317.00	24,351	50	401,475,821	249,829
2012	1,638	40,600,799.00	24,787	30	411,287,448	251,091
2013	1,657	41,729,183.00	25,184	45	405,517,132	244,730
2014	1,687	43,151,414.00	25,579	28	427,142,549	253,197
2015	1,717	44,663,724.00	26,013	43	437,827,822	261,078

*Amounts not available.

Retirees and Survivors – December 31, 2015**Retirees and Survivors - December 31, 2015**

Attained Age	Age and Service		Casualty		Totals	
	No.	Annual Pensions	No.	Annual Pensions	No.	Annual Pensions
20-24	-	\$-	1	\$3,255	1	\$3,255
25-29	1	18,328	2	6,510	3	24,838
30-34			3	40,779	3	40,779
35-39			1	12,091	1	12,091
40-44	6	180,021	6	134,235	12	314,256
45-49	51	1,768,688	3	47,844	54	1,816,532
50-54	119	3,750,651	9	139,422	128	3,890,073
55-59	214	7,021,715	13	295,771	227	7,317,486
60-64	336	10,040,057	17	324,603	353	10,364,660
65-69	316	8,742,683	24	418,612	340	9,161,295
70-74	201	4,932,358	16	287,939	217	5,220,297
75-79	135	2,915,330	5	60,010	140	2,975,340
80-84	104	1,912,983	8	41,739	112	1,954,722
85-89	72	1,034,342	5	32,873	77	1,067,215
90-94	32	391,115	5	25,429	37	416,544
95-99	10	72,672	1	5,155	11	77,827
Over 100	-	-	1	6,514	1	6,514
Totals	1,597	\$42,780,943	120	\$1,882,781	1,717	\$44,663,724

Average Age at Retirement: 52.1 years.

Average Age Now: 67.1 years.

Retirees and Beneficiaries December 31, 2015**Type of Pensions Being Paid**

Type of Pensions Being Paid	Number	Annual Amounts
Service Pensions		
Straight Life	445	\$13,513,158
100% Joint and Survivor	26	379,627
50% Joint and Survivor	21	388,872
100% Joint and Survivor with Pop- Up	447	14,185,783
50% Joint and Survivor with Pop- Up	123	4,081,975
Years Certain	57	1,765,664
Beneficiaries	85	1,871,610
Social Security Equated at Age 65	49	1,056,642
Total	1,253	\$37,243,331
Age Pensions		
Straight Life	163	2,740,391
100% Joint and Survivor	10	103,085
50% Joint and Survivor	9	117,067
100% Joint and Survivor with Pop-Up	77	1,359,404
50% Joint and Survivor with Pop-Up	34	693,559
Years Certain	9	171,724
Beneficiaries	37	288,356
Social Security Equated at Age 65	5	64,026
Total	344	5,537,612
Total Service Pensions	1,597	\$42,780,943

Retirees and Beneficiaries December 31, 2015**Type of Pensions Being Paid**

(continued)

Type of Pensions Being Paid	Number	Annual Amounts
Duty Disability		
Straight Life	4	\$90,482
100% Joint and Survivor	1	9,719
50% Joint and Survivor	-	-
100% Joint and Survivor with Pop-Up	8	216,540
50% Joint and Survivor with Pop-Up	-	-
Years Certain	1	14,663
Total	14	331,404
Non-Duty Disability		
Straight Life	16	237,405
100% Joint and Survivor	2	19,236
50% Joint and Survivor	1	7,964
100% Joint and Survivor with Pop-Up	24	417,052
50% Joint and Survivor with Pop-Up	3	60,467
Years Certain	1	9,496
Total	47	751,620
Survivors		
Duty Disability	3	23,759
Non-Duty Disability	25	185,138
Duty Death	1	5,389
Non-Duty Death	30	585,471
Total	59	799,757
Total Casualty Pensions	120	1,882,781
Total Pensions	1,717	\$44,663,724

There were also 40 alternate payees, 18 from General, 9 from Waste and Water and 8 from Roads and 4 from Mental Health and 1 from Mt. Morris included in the valuation.

Pensions by Division

	<u>December 31, 2015</u>		<u>December 31, 2014</u>	
	<u>No.</u>	<u>Annual Amount</u>	<u>No.</u>	<u>Annual Amount</u>
General	997	\$26,721,524	979	\$25,757,057
Water & Waste	102	3,487,724	97	3,357,986
District Library	53	1,216,922	49	1,182,230
Mental Health	318	7,253,101	307	6,854,671
Road Commission	215	5,479,318	221	5,518,630
Mt. Morris	17	424,003	17	391,224
Memorial Hospital	<u>15</u>	<u>81,132</u>	<u>17</u>	<u>89,616</u>
Totals	1,717	\$44,663,724	1,687	\$43,151,414

General & Sheriffs Active Members - December 31, 2015
Age and Service Distribution

Attained Age	Service							Total	
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	No.	Payroll
30-34		1	7					8	\$507,980
35-39			16	4				20	1,275,154
40-44		1	17	25	3			46	3,047,241
45-49			13	17	17			47	3,078,796
50-54			6	4	19	1		30	1,955,131
55-59			3	7	12		1	23	1,471,997
						4			
60-64			2	4	11			17	1,343,188
65-69			1					1	50,537
Totals		2	65	61	62	5	1	196	\$12,730,024

Group Averages:

Age: 48.3 years
Service: 17.3 years
Annual Pay: \$64,949

Number Vested - 129, Number Not Vested – 67

Waste & Water Active Members - December 31, 2015
Age and Service Distribution

Attained Age	Service							Total	
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	No.	Payroll
25-29	1							1	\$35,982
30-34	6	4	1	1				12	613,862
35-39	2	4	8	2				16	957,495
40-44	9	4	5	8				26	1,492,367
45-49	1	5	7	9	3	1		26	1,612,826
50-54	3	3	5	8	1	2	1	23	1,624,955
55-59	2	3	5	5	2			17	1,036,625
60-64			4	4	1			9	705,966
Totals	24	23	35	37	7	3	1	130	\$8,080,078

Group Averages:

Age: 46.9 years
Service: 12.3 years
Annual Pay: \$62,154

Number Vested - 52, Number Not Vested – 78

District Library Active Members - December 31, 2015 **Age and Service Distribution**

Attained Age	Service							Total	
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	No.	Payroll
30-34	3		1					4	\$194,860
35-39	1	3	3					7	309,851
40-44	0		3	1				4	191,836
45-49		1	2	3	1			7	371,408
50-54	2		1	2		1		6	296,949
55-59	1	3	2	1				7	333,467
60-64		1					2	3	150,629
65-69		1	1	1			1	4	215,040
Totals	7	9	13	8	1	1	3	42	\$2,064,040

Group Averages:

Age: 49.3 years
Service: 13.1 years
Annual Pay: \$49,144

Number Vested - 33, Number Not Vested – 9

Mental Health Active Members - December 31, 2015
Age and Service Distribution

Attained Age	Service							Total	
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	No.	Payroll
30-34		2						2	\$123,328
35-39		3	7	1				11	729,534
40-44		1	12	5	2			20	1,211,157
45-49		5	7	11	9	3		35	2,253,500
50-54	1	5	9	8	13	2		38	2,329,468
55-59	1	4	6	9	12	2	4	38	2,464,123
60-64				3	9	1		13	1,011,857
65-69		1	1					2	103,127
70-74			1					1	39,518
Totals	2	21	43	37	45	8	4	160	\$10,265,612

Group Averages:

Age: 51.3 years
Service: 17.2 years
Annual Pay: \$64,160

Number Vested - 118, Number Not Vested – 42

Road Commission Active Members - December 31, 2015 **Age and Service Distribution**

Attained Age	Service							Total	
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	No.	Payroll
20-24	3							3	\$126,758
25-29	2							2	103,178
30-34	2	3						5	320,617
35-39	2	2	4	3				11	616,659
40-44	3	3	9	6	2			23	1,386,007
45-49	3	4	5	12	4	1		29	1,685,792
50-54	3	1	9	14	8	1		36	2,144,008
55-59	2	1	3	2	3	1		12	880,641
60-64	1	2	1	3				7	372,256
65-69			2					2	132,771
70-74			1	1				2	188,253
Totals	21	16	34	41	17	3		132	\$7,956,940

Group Averages:

Age: 48.0 years
Service: 13.3 years
Annual Pay: \$60,280

Number Vested - 76 , Number Not Vested – 56

Mt. Morris Active Members - December 31, 2015
Age and Service Distribution

Attained Age	Service					Total	
	0-4	5-9	10-14	15-19	20-24	No.	Payroll
Under 20	1					1	\$22,695
25-29	1					1	61,255
30-34		1				1	66,722
35-39	1	1	1	1		4	218,444
50-54	1				1	2	119,795
55-59			1	1		2	101,446
Totals	4	2	2	2	1	11	\$590,357

Group Averages:

Age: 41.1 years
Service: 8.7 years
Annual Pay: \$53,669

Number Vested - 6, Number Not Vested – 5

Active Members – Three-Year Summary

	2015	2014	2013
Active Members	671	713	793
Valuation Payroll	\$41,687,051	\$43,723,698	\$47,627,546
Average Compensation	\$62,167	\$61,324	\$60,060
Average Age (yrs.)	48.6	48.3	47.6
Average Service (yrs.)	15.1	14.7	14.2

Vested Inactive Members Included in the Valuation

There were 84 inactive vested members included in the valuation consisting of 31 General, 7 Water and Waste, 28 Mental Health, 6 Road Commission, 11 Library members and 1 Mt. Morris.

Inactive Members - December 31, 2015

Attained Age	No.	Estimated Annual Pensions
30-34	3	\$26,138
35-39	4	53,294
40-44	15	280,329
45-49	19	296,385
50-54	21	446,591
55-59	19	272,264
60-64	2	15,943
65-69	1	3,965
Totals	84	\$1,394,909

Average Age at Termination: 56.2 years.

Average Age Now: 49.9 years.