

# Ross Township Police Pension Plan

## Actuarial Report: January 1, 2019

### SUMMARY OF ACTUARIAL VALUATION RESULTS

Valuation Date:	1/1/2017		1/1/2019		
Mortality assumption:	RP2014 bc	RP14 bc s/f2+MP18	RP14 bc s/f2+MP18	RP14 bc s/f2+MP18	RP2014 bc
Actuarial value of assets:	Gen.Rule	Gen.Rule	Gen.Rule	Gen.Rule	Gen.Rule
Valuation Rate of Interest:	7.125%	7.000%	8.000%	6.000%	7.125%
			<i>+1% PER GASB 68</i>	<i>-1% PER GASB 68</i>	<i>Prior Assumptions</i>
<b>A. Actuarial Accrued Liability:</b>					
1. Actuarial Accrued Liability	\$ 29,362,640	\$ 32,643,684	\$ 29,379,693	\$ 36,546,039	\$ 31,780,866
2. Actuarial Value of Assets	26,419,994	28,199,525	28,199,525	28,199,525	28,199,525
3. Unfunded Actuarial Liability = (1) - (2)	\$ 2,942,646	\$ 4,444,159	\$ 1,180,168	\$ 8,346,514	\$ 3,581,341
4. Funded Percentage = (2)/(1)	89.98%	86.39%	95.98%	77.16%	88.73%
<b>Distress Level (based on distress score)</b>					
5. Amortization Contribution (Advanced Funding Credit)	\$ 339,239	\$ 551,769	\$ 173,193	\$ 968,643	\$ 452,480
<b>B. Components of Normal Cost:</b>					
1. Entry Age Normal Cost %	16.608%	16.770%	13.234%	21.395%	15.949%
2. Administrative expense percentage	0.677%	0.684%	0.684%	0.684%	0.684%
3. Employee Contribution percentage	5.000%	5.000%	5.000%	5.000%	5.000%
<b>C. Minimum Obligation of Municipality:</b>					
1. Estimated Minimum Municipal Obligation (2020)					
a. Estimated payroll [see c/]		\$ 4,604,238	\$ 4,604,238	\$ 4,604,238	\$ 4,604,238
b. Normal Cost (entry age)		772,131	609,325	985,077	734,330
c. Expenses [see c/]		23,300	23,300	23,300	23,300
d. Employee contributions		(230,212)	(230,212)	(230,212)	(230,212)
e. Past Service Amortization (Advance Funding Credit)	<b>2019 MMO</b>	551,769	173,193	968,643	452,480
f. Total	\$ 857,762	\$ 1,116,988	\$ 575,606	\$ 1,746,808	\$ 979,898
2. Estimated Minimum Municipal Obligation (2021)					
a. Estimated payroll = C(1a) x 1.0450		\$ 4,811,429	\$ 4,811,429	\$ 4,811,429	\$ 4,811,429
b. Normal Cost (entry age)		806,877	636,745	1,029,405	767,375
c. Expenses		32,910	32,910	32,910	32,910
d. Employee contributions		(240,571)	(240,571)	(240,571)	(240,571)
e. Past Service Amortization (Advance Funding Credit)		551,769	173,193	968,643	452,480
f. Total		\$ 1,150,985	\$ 602,277	\$ 1,790,387	\$ 1,012,194
<b>D. Actuarial Accrued Liability:</b>					
1. Actuarial Accrued Liability	\$ 29,362,640	\$ 32,643,684	\$ 29,379,693	\$ 36,546,039	\$ 31,780,866
2. Market Value of Assets	26,086,754	27,375,895	27,375,895	27,375,895	27,375,895
3. Unfunded Actuarial Liability = (1) - (2)	\$ 3,275,886	\$ 5,267,789	\$ 2,003,798	\$ 9,170,144	\$ 4,404,971
4. Funded Percentage = (2)/(1)	88.84%	83.86%	93.18%	74.91%	86.14%

**2020 MMO  
w/ 2017 AVR**

\$ 4,604,238  
764,672  
23,300  
(230,212)  
339,239  
**\$ 896,999**

**NOTES:**

b/ "Units" = 2 for each active uniformed participant, 1 for each non-uniformed active participant.

c/ Payroll based on current + 1 year's salary increase.

# units at 1/1/2019: 78

**2020 MMO w/ 2017 AVR: \$896,999**

Act 44 of 2009 distress score table:			Amortization contribution reduction
Ratio	Score	Distress level	The election of this relief measure initiates the fixed period of relief.
90% or more	0	Not distressed	Fixed period of relief
70 - 89%	1	Minimal distress	→ 2 years
50 - 69%	2	Moderate distress	→ 4 years
<50%	3	Severe distress	→ 6 years

# Ross Township General Employees' Pension Plan

## Actuarial Report: January 1, 2019

### SUMMARY OF ACTUARIAL VALUATION RESULTS

	1/1/2017	1/1/2019			
		RP14 bc/f2+MP18 Gen.Rule 7.00%	RP14 bc/f2+MP18 Gen.Rule 8.00% <i>+1% PER GASB 68</i>	RP14 bc/f2+MP18 Gen.Rule 6.00% <i>-1% PER GASB 68</i>	RP2014 bc Gen.Rule 7.125% <i>Prior Assumptions</i>
Valuation Date:	1/1/2017				
Mortality assumption:	RP2014 bc				
Actuarial value of assets:	Gen.Rule				
Valuation Rate of Interest:	7.125%				
<b>A. Actuarial Accrued Liability:</b>					
1. Actuarial Accrued Liability	\$ 12,000,698	\$ 12,660,949	\$ 11,611,002	\$ 13,877,859	\$ 12,343,795
2. Actuarial Value of Assets	12,778,293	13,160,450	13,160,450	13,160,450	13,160,450
3. Unfunded Actuarial Liability = (1) - (2)	\$ (777,595)	\$ (499,501)	\$ (1,549,448)	\$ 717,409	\$ (816,655)
4. Funded Percentage = (2)/(1)	106.48%	103.95%	113.34%	94.83%	106.62%
<b>Distress level (based on distress score)</b>					
5. Amortization Contribution (Advanced Funding Credit)	\$ (77,760)	\$ (49,950)	\$ (154,945)	\$ 76,452	\$ (81,666)
<b>B. Components of Normal Cost:</b>					
1. Entry Age Normal Cost %	11.909%	12.528%	10.001%	15.738%	11.674%
2. Administrative expense percentage	0.665%	0.639%	0.639%	0.639%	0.639%
3. Employee Contribution percentage	3.000%	3.000%	3.000%	3.000%	3.000%
<b>C. Minimum Obligation of Municipality:</b>					
1. Estimated Minimum Municipal Obligation (2020)					
a. Estimated payroll [see c/]		\$ 2,414,233	\$ 2,414,233	\$ 2,414,233	\$ 2,414,233
b. Normal Cost (entry age)		302,455	241,447	379,952	281,838
c. Expenses [see c/]		14,100	14,100	14,100	14,100
d. Employee contributions		(72,427)	(72,427)	(72,427)	(72,427)
e. Past Service Amortization (Advance Funding Credit)	<u>2019 MMO</u>	(49,950)	(154,945)	76,452	(81,666)
f. Total	\$ 158,915	\$ 194,178	\$ 28,175	\$ 398,077	\$ 141,845
2. Estimated Minimum Municipal Obligation (2021)					
a. Estimated payroll = C(1a) x 1.0450		\$ 2,522,873	\$ 2,522,873	\$ 2,522,873	\$ 2,522,873
b. Normal Cost (entry age)		316,066	252,313	397,050	294,520
c. Expenses		16,121	16,121	16,121	16,121
d. Employee contributions		(75,686)	(75,686)	(75,686)	(75,686)
e. Past Service Amortization (Advance Funding Credit)		(49,950)	(154,945)	76,452	(81,666)
f. Total		\$ 206,551	\$ 37,803	\$ 413,937	\$ 153,289
<b>D. Actuarial Accrued Liability:</b>					
1. Actuarial Accrued Liability	\$ 12,000,698	\$ 12,660,949	\$ 11,611,002	\$ 13,877,859	\$ 12,343,795
2. Market Value of Assets	12,609,756	12,790,865	12,790,865	12,790,865	12,790,865
3. Unfunded Actuarial Liability = (1) - (2)	\$ (609,058)	\$ (129,916)	\$ (1,179,863)	\$ 1,086,994	\$ (447,070)
4. Funded Percentage = (2)/(1)	105.08%	101.03%	110.16%	92.17%	103.62%

2020 MMO w/ 2017 AVR
\$ 2,414,233
287,511
14,100
(72,427)
(77,760)
\$ 151,424

**NOTES:**

b/ "Units" = 2 for each active uniformed participant, 1 for each non-uniformed active participant.

c/ Payroll based on current + 1 year's salary increase.

# units at 1/1/2019: 37

2020 MMO w/ 2017 AVR: \$151,424

Act 44 of 2009 distress score table:			Amortization contribution reduction	
Ratio	Score	Distress level	The election of this relief measure initiates the fixed period of relief.	
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