

Fairview Township Postemployment Benefits Plan
Actuarial Valuation
as of January 1, 2014
for Purposes of
Governmental Accounting Standards Board
Statement No. 45 Reporting

Fairview Township Postemployment Benefits Plan
Actuarial Valuation as of January 1, 2014
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Disclosure Statement

Purpose

Actuarial computations under Governmental Accounting Standards Board Statement No. 45 (GASB No. 45) are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been performed in accordance with generally accepted actuarial principles and practices, and on a basis consistent with our understanding of GASB No. 45. In preparing this report, we have relied upon information furnished to us by Fairview Township. This information includes data pertaining to the Plan, as well as a description of the substantive plan. The information has been reviewed and determined to be reasonable and consistent; however, we have not audited the data or reviewed plan provisions for compliance with IRS or DOL regulations.

Determinations for purposes other than meeting the employer financial accounting requirements may be significantly different from the results reported herein. Accordingly, additional determinations are needed for other purposes, such as judging benefit security at termination or adequacy of funding for an ongoing plan. The actuarial calculations contained in this report are not intended or written to be used, and cannot be used, for the purposes of avoiding penalties under the Internal Revenue Code.

This valuation involves estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

Calculations are based on the types of benefits provided under the terms of the substantive plan at the time of the valuation and on the pattern of sharing of costs between the employer and plan members to that point. Calculations reflect a long-term perspective, so methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets.

Benefits Not Included

Defined contribution benefits and insured benefits under GASB No. 45 paragraph 28, pension benefits accounted for under GASB 27, and benefits for compensated absences under GASB 16 are not included in this valuation.

Multiple Year Reporting

Pursuant to GASB No. 45, this valuation can be used for a multiple year period. As such, this valuation provides all of the actuarial figures necessary to comply with GASB No. 45 over the applicable period. Nonetheless, some non-actuarial figures have been determined based on estimated contributions for the period. These figures may need to be adjusted for actual contributions deposited to the trust or claims paid on behalf of plan benefits.

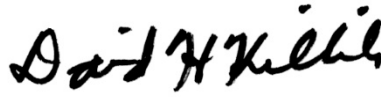
A new valuation should be performed if, since this valuation, material changes have occurred that affect the results of this valuation, including significant changes in benefit provisions, the size or composition of the population covered by the plan, or other changes that impact long-term assumptions.

Valuation For Funded Plans

The interest rate used for this valuation was chosen assuming that the contributions determined will be deposited. If the contributions deposited are less than these amounts, a new valuation that reflects the appropriate interest rate may need to be completed.

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I am a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this valuation.



David H. Killick, F.S.A.
Consulting Actuary

June 4, 2014

Date

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Summary of Plan Provisions

Eligibility for Benefits

Police Officers are eligible for postemployment benefits upon retirement after attainment of age 50 and completion of 25 years of service or due to a service related disability.

Non-Uniformed employees hired prior to August 29, 2011, are eligible for postemployment benefits upon retirement after attainment of age 65 and completion of 12 years of service or after attainment of age 60 and completion of 25 years of service, if earlier. Non-Uniformed employees hired on or after August 29, 2011, are not eligible for postemployment benefits.

The Township Manager is eligible to receive postemployment benefits upon retirement after attainment of age 60 and completion of 12 years of service.

Medical Benefits Payable upon Retirement

Eligible retirees may continue medical, prescription drug, and dental insurance for the retiree and his or her spouse. Coverage continues for a period of years based upon the year of retirement as outlined below:

Before 2009	-	5 years
2009	-	6 years
2010	-	7 years
After 2010	-	8 years

For Police Officers hired in 2012 or later, the member shall be required to contribute 40% of medical insurance premiums. Additionally, all coverage shall cease upon the member's attainment of Medicare age.

For all other eligible members, the member is not required to contribute for coverage. If the member and/or spouse attains Medicare age before the Township paid benefits cease, the member and/or spouse must move to the Senior Plan provided.

For all eligible members, if the Township's subsidized benefits cease before the member attains Medicare age, the member may elect to continue coverage by paying the full premiums until attainment of Medicare age. If the spouse has not attained Medicare age, the spouse may also elect to continue coverage until the earlier of the spouse's attainment of Medicare age or the member's attainment of Medicare age.

Dependents

Only spouses who are legally married to the retiree at the time of retirement are covered.

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Actuarial Assumptions and Methods (1 of 2)

Interest Rate

4.50%

Salary

An assumption for salary increases is used only for spreading contributions over future pay under the entry age normal cost method. For this purpose, annual salary increases are assumed to be 5.0%.

Withdrawal

Table D-1: Rates of withdrawal at selected ages:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
20	5.5000%	35	2.5000%	50	0.0000%
25	5.0000%	40	1.0000%	55	0.0000%
30	4.0000%	45	0.5000%	60	0.0000%

Mortality

RP2000 Table
(This table does not include projected mortality improvements.)

Disability

SOA 1987 Group LTD Table

Retirement

Police Officers are assumed to elect the DROP benefit under the Fairview Township Police Pension Plan for 24 months upon the later of attainment of age 50 and completion of 25 years of service. Non-Uniformed employees are assumed to retire upon the attainment of age 65 or, if earlier, elect the DROP benefit under the Fairview Township Non-Uniformed Employees' Pension Plan for 24 months upon the later of attainment of age 60 and completion of 25 years of service.

Percent of Eligible Retirees Electing Coverage in Plan

80% of employees are assumed to elect coverage. 80% of Vested Former Participants eligible to return to coverage are assumed to elect coverage at age 60.

Percent Married at Retirement

75% of employees are assumed to be married and have a spouse covered by the plan at retirement.

Spouse Age

Wives are assumed to be the same age as their husbands.

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Actuarial Assumptions and Methods (2 of 2)

Per Capita Claims Cost

The per capita claims cost for medical and prescription drug is based on the expected portion of the group's overall cost attributed to individuals in the specified age and gender brackets. Dental costs are assumed to not vary with age or gender. The resulting costs are as follows:

Age	<u>Medical and Prescription Drug Combined</u>				Males	Females
	Males	Females	Age	Males		
< 25	\$2,403	\$5,410	45-49	\$6,220	\$8,983	
25-29	\$2,891	\$7,216	50-54	\$8,237	\$10,152	
30-34	\$3,270	\$7,318	55-59	\$10,033	\$10,623	
35-39	\$3,964	\$7,601	60-64	\$13,092	\$12,203	
40-44	\$4,845	\$8,186	65+	\$3,463	\$3,463	

Dental costs are assumed to be equal to the premium, \$264 for single coverage and \$819 for coverage other than single coverage.

Retiree Contributions

Retiree contributions are assumed to increase at the same rate as the Health Care Cost Trend Rate.

Health Care Cost Trend Rate

6.5% in 2014, decreasing by 0.5% per year to 5.5% in 2016. Rates gradually decrease from 5.3% in 2017 to 4.2% in 2089 and later based on the Society of Actuaries Long-Run Medical Cost Trend Model.

Actuarial Value of Assets

Equal to the Market Value of Assets

Actuarial Cost Method - Entry Age Normal

Under the Entry Age Normal Cost Method, the Normal Cost is the present value of benefits allocated to the year following the valuation date. Benefits are allocated on a level basis over the earnings of an individual between the date of hire and the assumed retirement age. The Accrued Liability as of the valuation date is the excess of the present value of future benefits over the present value of future Normal Cost. The Unfunded Accrued Liability is the excess of the Accrued Liability over the Actuarial Value of Assets. Actuarial gains and losses serve to reduce or increase the Unfunded Accrued Liability.

Participant Data

Based on census information as of January 1, 2014.

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as of January 1, 2014

Section 1

Calculations for GASB No. 45 Reporting

Fairview Township Postemployment Benefits Plan
 Actuarial Valuation as of January 1, 2014
 Summary of Key Results (1 of 2)

Demographic Information	Non-Uniformed Employees	Police	Total
Active Participants	25	12	37
Vested Former Participants	0	1	1
Retired Participants	2	0	2
Total	<u>27</u>	<u>13</u>	<u>40</u>
Annual Payroll of Active Participants	\$1,502,448	\$1,043,932	\$2,546,380
Asset Information			
Market Value of Assets	\$1,128,922	\$826,664	\$1,955,586
Actuarial Value of Assets	\$1,128,922	\$826,664	\$1,955,586
Actuarial Calculations			
Accrued Liability ¹	\$847,688	\$866,325	\$1,714,013
Normal Cost ²	\$50,844	\$60,577	\$111,421
Annual Required Contribution (ARC) ³	\$33,579	\$63,012	\$96,591
ARC as a Percentage of Payroll	2.23%	6.04%	3.79%

¹ **Accrued Liability** is the present value of all benefits attributed to past service of current plan participants as of the valuation date.

² **Normal Cost** is the present value of benefits allocated to the year beginning on the valuation date.

³ **Annual Required Contribution (ARC)** represents the amount needed to fund 1) the cost of benefits attributed to the current year, plus 2) an amortized portion of unfunded liability. It serves as the basis for determining the financial costs.

Fairview Township Postemployment Benefits Plan
Actuarial Valuation as of January 1, 2014
Summary of Key Results (2 of 2)

Financial Statement Calculations	Non-Uniformed Employees	Police	Total
Annual OPEB Cost ^{1,2}			
For Period January 1, 2014 to December 31, 2014	\$47,890	\$70,357	\$118,247
For Period January 1, 2015 to December 31, 2015	\$47,837	\$69,207	\$117,044
For Period January 1, 2016 to December 31, 2016	\$47,781	\$68,082	\$115,863
Estimated Net OPEB Obligation at End of Year ^{3,4}			
As of December 31, 2014	(\$869,829)	(\$377,968)	(\$1,247,797)
As of December 31, 2015	(\$866,430)	(\$309,326)	(\$1,175,756)
As of December 31, 2016	(\$866,025)	(\$256,734)	(\$1,122,759)
Estimated Annual Pay-As-You-Go Cost Including Implicit Rate Subsidy ⁵			
For Period January 1, 2014 to December 31, 2014	\$44,646	\$249	\$44,895
For Period January 1, 2015 to December 31, 2015	\$44,438	\$565	\$45,003
For Period January 1, 2016 to December 31, 2016	\$47,376	\$15,490	\$62,866

¹ **Other Postemployment Benefits (OPEB)** is postemployment benefits other than pension benefits. OPEB includes postemployment healthcare benefits, and all postemployment benefits provided separately from a pension plan, excluding benefits defined as termination offers and benefits.

² **Annual OPEB Cost** is the amount recognized as the expense in the employer's financial statements.

³ **Net OPEB Obligation** is the cumulative difference between the annual OPEB cost and the employer's contributions to the plan. It is the amount that appears as a liability on the employer's financial statements. Please note that if a plan is not funded, the contribution is equal to the amount paid for benefits.

⁴ **Note:** These amounts are estimates only. These amounts may be adjusted for actual contributions deposited or benefit payments made during the fiscal year. In addition, a new valuation should be performed if there have been significant changes in benefit provisions, the size or composition of the population covered by the plan, or other changes that impact long-term assumptions.

⁵ For plans that do not track actual claims and expenses separately for retirees, employers should be aware that the entity's costs for retirees generally exceeds premium amounts to the Trust or Insurance Company. GASB 45 requires the liabilities reflect this "hidden subsidy." Correspondingly, employers should reduce amounts otherwise paid for active employees. For example, if the retirees' Annual Pay-As-You-Go cost is \$1,000,000 but the total premium paid for retirees is \$750,000 for retirees, this means the hidden subsidy valued is \$250,000. As such, the active employees' premium costs should be reduced by \$250,000.

Fairview Township Postemployment Benefits Plan
 Actuarial Valuation as of January 1, 2014
Unfunded Accrued Liability and Amortization of Unfunded Accrued Liability

	Non-Uniformed Employees	Police	Total
Actuarial Present Value of Total Projected Benefits ¹			
Active Participants	\$1,430,865	\$1,583,991	\$3,014,856
Retired Participants	126,254	34,767	161,021
Total Actuarial Present Value of Projected Benefits	<u>\$1,557,119</u>	<u>\$1,618,758</u>	<u>\$3,175,877</u>
Accrued Liability			
Active Participants	\$721,434	\$831,558	\$1,552,992
Retired Participants	126,254	34,767	161,021
Total Accrued Liability	<u>\$847,688</u>	<u>\$866,325</u>	<u>\$1,714,013</u>
Unfunded Accrued Liability			
Accrued Liability	\$847,688	\$866,325	\$1,714,013
Less: Actuarial Value of Assets	(1,128,922)	(826,664)	(1,955,586)
Unfunded Accrued Liability	<u>(\$281,234)</u>	<u>\$39,661</u>	<u>(\$241,573)</u>
Amortization of Unfunded Accrued Liability			
Unfunded Accrued Liability	(\$281,234)	\$39,661	(\$241,573)
Amortization Factor ²	16.2889	16.2889	16.2889
Amortization of Unfunded Accrued Liability	<u>(\$17,265)</u>	<u>\$2,435</u>	<u>(\$14,830)</u>

¹ **Actuarial Present Value of Total Projected Benefits** is the present value of all benefits expected to be earned by current plan participants from their date of employment through their date of retirement.

² Amortization at the end of the year based on level dollar, 30 year open period.

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Annual Required Contribution (ARC)

Annual Required Contribution (ARC)	Non-Uniformed Employees	Police	Total
Normal Cost as of January 1, 2014	\$48,655	\$57,968	\$106,623
Interest	2,189	2,609	4,798
Total Normal Cost	<u>\$50,844</u>	<u>\$60,577</u>	<u>\$111,421</u>
 Total Normal Cost	 \$50,844	 \$60,577	 \$111,421
Amortization of Unfunded Accrued Liability	(17,265)	2,435	(14,830)
Annual Required Contribution (ARC)	<u>\$33,579</u>	<u>\$63,012</u>	<u>\$96,591</u>
 Annual Required Contribution (ARC)	 \$33,579	 \$63,012	 \$96,591
Covered Payroll	1,502,448	1,043,932	2,546,380
ARC as a Percentage of Payroll	<u>2.23%</u>	<u>6.04%</u>	<u>3.79%</u>

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Annual OPEB Cost and Net OPEB Obligation

	Non-Uniformed Employees	Police	Total
<u>For Fiscal Year January 1, 2014 to December 31, 2014</u>			
Annual Required Contribution (ARC)	\$33,579	\$63,012	\$96,591
Interest on Net OPEB Obligation ¹	(39,288)	(20,163)	(59,451)
Adjustment to ARC ²	53,599	27,508	81,107
Annual OPEB Cost	<u>\$47,890</u>	<u>\$70,357</u>	<u>\$118,247</u>
Contributions Made (Estimated)	(44,646)	(249)	(44,895)
Estimated Increase in Net OPEB Obligation	\$3,244	\$70,108	\$73,352
Net OPEB Obligation - Beginning of Year	<u>(\$873,073)</u>	<u>(\$448,076)</u>	<u>(\$1,321,149)</u>
Estimated Net OPEB Obligation - End of Year ³	<u><u>(\$869,829)</u></u>	<u><u>(\$377,968)</u></u>	<u><u>(\$1,247,797)</u></u>
<u>For Fiscal Year January 1, 2015 to December 31, 2015</u>			
Annual Required Contribution (ARC) ⁴	\$33,579	\$63,012	\$96,591
Estimated Interest on Net OPEB Obligation ¹	(39,142)	(17,009)	(56,151)
Estimated Adjustment to ARC ²	53,400	23,204	76,604
Annual OPEB Cost	<u>\$47,837</u>	<u>\$69,207</u>	<u>\$117,044</u>
Contributions Made (Estimated)	(44,438)	(565)	(45,003)
Estimated Increase in Net OPEB Obligation	\$3,399	\$68,642	\$72,041
Estimated Net OPEB Obligation - Beginning of Year	<u>(\$869,829)</u>	<u>(\$377,968)</u>	<u>(\$1,247,797)</u>
Estimated Net OPEB Obligation - End of Year ³	<u><u>(\$866,430)</u></u>	<u><u>(\$309,326)</u></u>	<u><u>(\$1,175,756)</u></u>
<u>For Fiscal Year January 1, 2016 to December 31, 2016</u>			
Annual Required Contribution (ARC) ⁴	\$33,579	\$63,012	\$96,591
Estimated Interest on Net OPEB Obligation ¹	(38,989)	(13,920)	(52,909)
Estimated Adjustment to ARC ²	53,191	18,990	72,181
Annual OPEB Cost	<u>\$47,781</u>	<u>\$68,082</u>	<u>\$115,863</u>
Contributions Made (Estimated)	(47,376)	(15,490)	(62,866)
Estimated Increase in Net OPEB Obligation	\$405	\$52,592	\$52,997
Estimated Net OPEB Obligation - Beginning of Year	<u>(\$866,430)</u>	<u>(\$309,326)</u>	<u>(\$1,175,756)</u>
Estimated Net OPEB Obligation - End of Year ³	<u><u>(\$866,025)</u></u>	<u><u>(\$256,734)</u></u>	<u><u>(\$1,122,759)</u></u>

¹ Interest on Net OPEB Obligation is calculated at the discount rate of 4.50%.

² Net OPEB Obligation - End of prior year divided by the amortization factor of 16.2889.

³ **Note:** These amounts are estimates only. These amounts may be adjusted for actual contributions deposited or benefit payments made during the fiscal year. In addition, a new valuation should be performed if there have been significant changes in benefit provisions, the size or composition of the population covered by the plan, or other changes that impact long-term assumptions.

⁴ Annual Required Contribution (ARC) is assumed to be a level dollar amount.

Fairview Township Postemployment Benefits Plan
 Actuarial Valuation as of January 1, 2014
Required Supplementary Information

Required Supplementary Information¹

	Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
Non-Uniformed Employees	1/1/2014	\$1,128,922	\$847,688	(\$281,234)	133.18%	\$1,502,448	-18.72%
	1/1/2011	\$1,042,695	\$687,700	(\$354,995)	151.62%	\$1,508,445	-23.53%
	1/1/2009	\$0	\$435,236	\$435,236	0.00%	\$1,326,930	32.80%
Police	1/1/2014	\$826,664	\$866,325	\$39,661	95.42%	\$1,043,932	3.80%
	1/1/2011	\$663,916	\$699,001	\$35,085	94.98%	\$1,236,631	2.84%
	1/1/2009	\$0	\$444,415	\$444,415	0.00%	\$1,154,881	38.48%
Total	1/1/2014	\$1,955,586	\$1,714,013	(\$241,573)	114.09%	\$2,546,380	-9.49%
	1/1/2011	\$1,706,611	\$1,386,701	(\$319,910)	123.07%	\$2,745,076	-11.65%
	1/1/2009	\$0	\$879,651	\$879,651	0.00%	\$2,481,811	35.44%

¹ This information is shown for the three most recent valuations, if available.