

BLOOMFIELD TOWNSHIP OTHER POST-EMPLOYMENT BENEFITS PROGRAM

July 1, 2016 Actuarial Valuation

Prepared by Milliman, Inc.

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Certification

We have performed an actuarial valuation of the Bloomfield Township Other Post-Employment Benefits Program as of July 1, 2016. The results of this valuation, along with supporting data, are set forth in the following report.

Milliman has prepared this report in compliance with Government Accounting Standard No. 45. No attempt is being made to offer any accounting opinion or advice. The calculations reported herein have been made on a basis consistent with our understanding of the plan provisions. Additional determinations may be needed for purposes other than meeting accounting requirements.

In preparing this report, we relied on employee census data, asset information, claims and premium information as of the valuation date, furnished by the Bloomfield Township. We performed a limited review of the information used directly in our analysis for reasonableness and consistency and have found them to be reasonably consistent and comparable with data used for other purposes. If the information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete and our calculations may need to be revised. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge, this report is complete and accurate, all costs and liabilities were determined in conformance with generally accepted actuarial principles and practices, and the methods and assumptions produced results which are reasonable. 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 or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

The actuarial method and assumptions used in this valuation are discussed on pages 19-22 of this report. A summary of the plan provisions starts on page 23 of this report.

Milliman's work is prepared solely for the internal business use of Bloomfield Township. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exception(s):

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Certification

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

November 9, 2016

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Discussion of Experience

This valuation reflects a number of changes relative to the July 1, 2015 valuation:

Demographic Changes from 2015 to 2016

From July 1, 2015 to July 1, 2016, the overall membership decreased from 571 to 570. The total number of active members decreased from 216 to 206 and the total number of retirees, deferred members and spouses of retirees increased from 355 to 364.

The average age of active members increased from 45.4 to 46.0 and the average age of retired members increased slightly from 68.8 to 69.1.

Assumption Changes

Medical Claims Costs: We updated the expected claims costs based on our analysis of the claims experience and premium information that was provided to us for this valuation.

Other Changes

Presentation of results: This report breaks out liabilities and costs for Cable Studio and Building Inspection Fund members. Previously the figures for these groups were included with those for Town members.

Overview of GASB 43 and GASB 45

GASB 43 requires OPEB plans to disclose information about asset and liability levels and show historical contribution information. GASB 43 only applies in situations where a separate trust is established to prefund these benefits. GASB 45 requires employers to perform periodic actuarial valuations to determine annual accounting costs, and to keep a running tally of the extent to which these amounts are over or under funded. GASB 43 was effective starting in FY 2006-07 for a Phase I government, FY 2007-08 for a Phase II government, and FY 2008-09 for a Phase III government. GASB 45 was effective for the fiscal year following implementation of GASB 43.

GASB 43 and 45 apply to just about any benefit that is provided after retirement except for pension benefits: medical insurance, dental, vision, and hearing benefits plus life insurance and long term care insurance. The benefits provided by the Township to retirees include medical and dental insurance plus life insurance. The philosophy driving the accounting standard is that these post-employment benefits are part of the compensation that is paid to employees in return for their services, and the cost of these benefits should be recognized while the employees are providing those services, rather than after they have retired. This philosophy has already been applied for years to defined benefit pensions; GASB 43 and 45 extend the same thinking to all other post-employment benefits.

The Valuation Process

The process of determining the liability for OPEB benefits is based on many assumptions about future events. The key actuarial assumptions are:

Turnover and retirement rates: How likely is it that an employee will qualify for post-employment benefits and when will they start?

Medical inflation and claims costs assumptions: When an employee starts receiving post-employment benefits many years from now, how much will be paid each year for the benefits and how rapidly will the costs grow?

Mortality assumption: How long is a retiree likely to receive the benefits?

Discount rate assumption: What is the present value of those future benefit payments in terms of today's dollars?

Since the liability is being recognized over the employee's whole career with the Township, the present value is divided into three pieces: the part that is attributed to past years (the "Accrued Liability" or "Past Service Liability"), the part that is being earned this year (the "Normal Cost"), and the part that will be earned in future years (the "Future Service Liability").

Once the Accrued Liability and the Normal Cost have been calculated, the next step is to determine an annual contribution. This consists of two pieces:

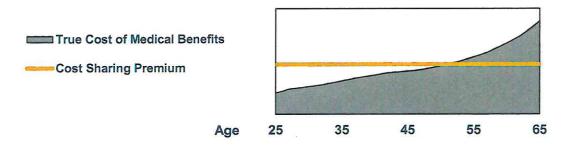
- Normal Cost because the benefits earned each year should be paid for each year
- Past Service Cost a catch-up payment to fund the Accrued Liability over time.

The final step is to keep track going forward of how much of the contribution is actually paid. There is no requirement to actually fund these benefits, but the cumulative deficiency must be disclosed on the Township's financial statements. In addition, the Discount Rate used to calculate the liabilities must reflect the expected investment income of whatever funds are set aside to prefund the benefits; if there is no prefunding then the Discount Rate will be much lower and the liabilities significantly higher than if the benefits are prefunded.

Implicit Rate Subsidies

As part of the Other Post-Employment Benefits Program, there are situations where the cost is borne partly or entirely by retirees. In most cases, the premium that is used to split the cost is lower than the true cost of providing the medical benefits, for two reasons:

The cost sharing premium is usually a fixed amount such as a COBRA premium that does not take into account the age of the retiree and his/her dependents. Since medical costs generally increase with age, the cost sharing premium is often lower than the true cost of the medical benefits:



The cost sharing premium is usually a blended rate that takes into account the cost of medical benefits for active employees as well as retirees. Medical costs are generally higher for retirees than for active employees of the same age. This means that, again, the cost sharing premium is often lower than the true cost of the medical benefits.

Because of these two factors, a retiree who is paying 100% of the cost sharing premium is most likely not paying 100% of the true cost of the medical benefits. This situation is known as an "implicit rate subsidy". GASB 43 and 45 require the plan sponsor to measure the liability for this subsidy; that is, the difference between the true cost of the medical benefits and the cost sharing premiums paid by the retiree. To do this, our valuation consists of several steps:

First, we calculate the liability for the true cost of medical benefits expected to be received by retirees and their dependents. This liability is based on factors developed by Milliman's health actuaries that reflect how the cost of medical benefits varies by age and gender, as well as the other assumptions discussed on the prior page. We term this amount the "gross liability".

Next, we calculate the liability for the future premiums expected to be paid by the retiree for their own and their dependents' coverage. This liability is based on the current premium rates without adjustment for age or gender. It also is based on the terms of the retiree medical program – different retirees pay different percentages based on their union, date of retirement, age at retirement, and other factors. We term this amount the "offset liability".

Finally, the net liability for the Township is calculated as the difference between the gross liability and the offset liability.

Summary of Assets

This valuation reflects assets that are managed through irrevocable OPEB trusts. While other assets may be used to meet future OPEB liabilities, only those funds that are contributed to an appropriate trust may be reflected in the determination of the Annual Required Contribution.

		Water and	
	Town	Sewer	Total
Market Value of Assets as of July 1, 2015	\$2,674,671	\$2,762,352	\$5,437,023
Market Value of Assets as of July 1, 2016	3,263,286	3,075,911	6,339,197

Assets in the Town OPEB Trust are allocated to the Fire, Police, and Town groups based on their respective Accrued Liability (see following pages).

As of July 1, 2016, there are no irrevocable OPEB trust assets for the Library, Cable Studio, or Building Inspection Fund groups.

The funding policies for the Town OPEB Trust and the Water and Sewer OPEB Trust are not identical. It is our understanding that the Water and Sewer OPEB Trust is intended to be an enterprise fund which will receive additional contributions annually. The Town OPEB Trust, conversely, may not receive additional funds annually. We have accordingly assumed a 4.50% discount rate for the Water and Sewer group and a 4.00% discount rate for all other groups to reflect this funding strategy.

Summary of Liabilities

several pieces: benefits that are expected to be paid prior to age 65 (i.e. prior to Medicare) and after age 65 (i.e. after Medicare) to current active We have calculated the Accrued Liability separately for seven groups of Township employees. We have broken the accrued liability for each group into members and their covered dependents after retirement, and the same figures for members who have already retired and are currently receiving benefits. In all cases, the Accrued Liability only reflects benefits that are paid for by the Township, taking into account any implicit rate subsidies.

					Water and	Cable	Inspection	
	Fire	Police	Library	Town	Sewer	Studio	Fund	Total
Current active members								
Employees under age 65	\$3,876,130	\$5,734,803	\$596,925	\$3,641,371	\$622,913	\$156,875	\$235,808	\$14,864,825
Employees over age 65	5,232,033	6,360,006	1,848,195	6,858,470	805,082	322,423	530,365	21,956,574
Dependents under age 65	5,740,039	7,387,682	155,780	3,182,264	617,664	200,178	188,841	17,472,448
Dependents over age 65	5,781,547	6,508,066	691,964	4,343,725	594,811	236,991	346,384	18,503,488
Total	20,629,749	25,990,557	3,292,864	18,025,830	2,640,470	916,467	1,301,398	72,797,335
Current retired members								
Employees under age 65	2,556,424	2,290,375	122,458	2,088,474	588,596	178,348	0	7,824,675
Employees over age 65	10,639,739	11,198,923	1,438,121	11,111,982	2,596,574	367,000	582,681	37,935,020
Dependents under age 65	4,036,258	2,660,800	134,671	2,182,377	902,922	173,711	68,111	10,158,850
Dependents over age 65	13,541,403	11,391,320	656,196	7,896,593	2,835,244	47,830	353,313	36,721,899
Total	30,773,824	27,541,418	2,351,446	23,279,426	6,923,336	766,889	1,004,105	92,640,444
Total Accrued Liability	51,403,573	53,531,975	5,644,310	41,305,256	9,563,806	1,683,356	2,305,503	165,437,779

July 1, 2016 Actuarial Valuation Bloomfield Township Other Post-Employment Benefits Program

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Annual Required Contribution

The Annual Required Contribution (ARC) for the OPEB program consists of two pieces: a Normal Cost (the cost of benefits earned each year should be accrued in that year) plus a Past Service Cost (a catch-up accrual to amortize the Unfunded Accrued Liability). The amortization period is 25 years starting for FYE 2009. The amortization method produces annual payments that will increase by 4.00% annually. The ARC is assumed to be paid at the beginning of the Fiscal Year. On this basis, the ARC is determined as follows:

	Fire	Police	Library	Town	Water and Sewer	Cable Studio	Building Inspection Fund	Total
Accrued Liability Assets	\$51,403,573 1,147,043	\$53,531,975 1,194,538	\$5,644,310 0	\$5,644,310 \$41,305,256 0 921.705	\$9,563,806	\$1,683,356 0	\$2,305,503 0	\$165,437,779
Unfunded Accrued Liability	50,256,530	52,337,437	5,644,310	40,383,551	6,487,895	1,683,356	2,305,503	159,098,582
Amortization Period Amortization Growth Rate	4.00%	4.00%	4.00%	16 4.00%	16 4.00%	16 4.00%	16 4.00%	4.00%
Past Service Cost	3,141,033	3,271,090	352,769	2,523,972	420,242	105,210	144,094	9,958,410
Total Normal Cost	1,176,657	1,557,173	207,464	1,041,702	191,177	48,182	83,160	4,305,515
Expenses Net Normal Cost	1,176,657	1,557,173	0 207,464	1,041,702	191,177	48,182	83,160	0 4,305,515
Interest	129,531	144,848	16,807	106,970	20,635	4,602	6,818	430,211
ARC for FY 2018	4,447,221	4,973,111	577,040	3,672,644	632,054	157,994	234,072	14,694,136
Expected Benefit Payouts	1,675,395	1,321,773	166,632	1,322,448	419,059	11,052	72,874	4,989,233
Net Budget Impact	2,771,826	3,651,338	410,408	2,350,196	212,995	146,942	161,198	9,704,903

July 1, 2016 Actuarial Valuation Bloomfield Township Other Post-Employment Benefits Program

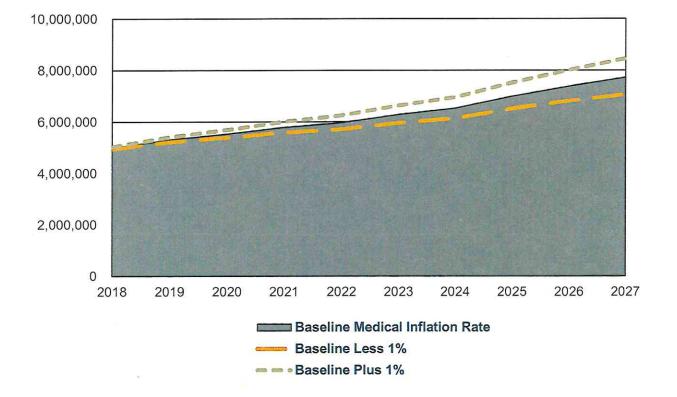
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Projected Payouts

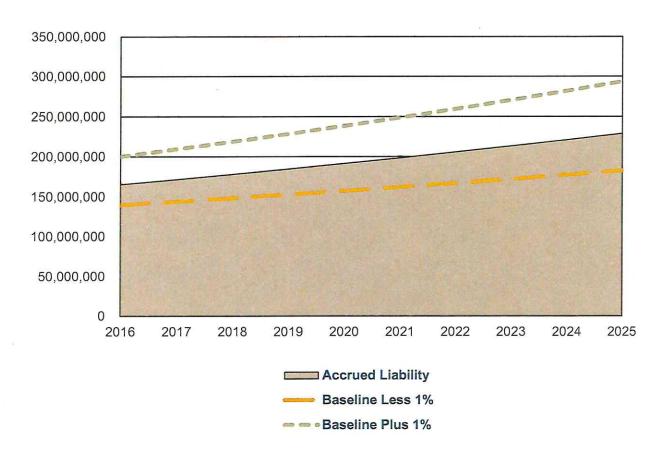
The table and graph below show the expected annual payments for OPEB benefits for the next 10 years.

		Baseline Medical	
	Baseline	Inflation	Baseline
Fiscal Year	Less 1%	Rate	Plus 1%
2018	\$4,944,406	\$4,989,233	\$5,034,060
2019	5,217,530	5,312,405	5,408,173
2020	5,390,100	5,537,989	5,688,686
2021	5,586,052	5,791,306	6,002,444
2022	5,708,989	5,971,930	6,244,981
2023	5,953,922	6,284,347	6,630,739
2024	6,135,325	6,533,991	6,955,899
2025	6,514,486	7,000,475	7,519,687
2026	6,814,457	7,388,933	8,008,522
2027	7,064,805	7,729,520	8,453,256



Projected Liabilities

The graph below shows how the Township's accrued liability for OPEB benefits is expected to grow over the next 10 years.



GASB 45 Schedule of Funding Progress

The following information is required to be disclosed in the Township's financial statement.

(\$ 000s)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Accrued Liability (b)	Unfunded Accrued Liability (UAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAL as a Percentage of Covered Payroll ((b - a) / c)
7/1/2013	1,609	150,097	148,488	1.07%	15,953	930.8%
7/1/2015	5,437	157,391	151,954	3.45%	15,279	994.5%
7/1/2016	6,339	165,438	159,099	3.83%	14,879	1,069.3%

GASB 45 Schedule of Employer Contributions

The following information is required to be disclosed in the Township's financial statement.

Year Ended March 31	Annual Required Contribution
2015	\$12,779,644
2016	13,283,303
2017	13,769,228
2018	14,694,136

Summary of Census Data

The following were included in our analysis based on information provided as of July 1, 2016 by the Township.

Building

	Fire	Police	Library	Town	Water and Sewer	Cable	Inspection Fund	Total
Number of members								
Active	47	56	18	65	1	က	9	206
Retired members	53	54	13	53	16	~	4	194
Spouses of retirees	22	45	7	36	16	0	2	163
Deferred members	2	2	0	2	0	~	0	7
Total	159	157	38	156	43	5	12	220
Average age								
Active	44.5	42.3	52.4	48.9	39.0	51.7	53.0	46.0
Retired members	0.79	67.4	75.3	6.69	71.3	71.0	79.0	69.1
Deferred members	45.5	45.5	N/A	41.0	A/N	34.0	A/N	45.6
Average retirement age								
Active	56.2	53.5	61.5	59.0	56.0	9.09	62.7	57.1
Retired members	55.6	53.2	60.5	56.9	55.8	54.0	62.8	55.8
Expected lifetime								
Active [to retirement]	11.7	11.3	9.1	10.2	17.0	0.6	9.7	11.1
Retired [lifetime]	19.6	19.1	15.3	18.4	16.7	17.8	11.5	18.4

Where complete census data was not available, we have made assumptions which we believe to be reasonable.

July 1, 2016 Actuarial Valuation Bloomfield Township Other Post-Employment Benefits Program This work product was prepared solely for the Township for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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Current Premiums

We received the following information from the Township regarding the current premiums for health benefits provided to retirees:

2016 - 2017 Monthly Premiums		Employee	Spouse
PPO with Vision	Pre 65	\$1,164.27	\$2,478.47
	Post 65	733.62	807.85
PPO without Vision	Pre 65	1,159.77	2,468.38
	Post 65	729.53	798.69
HRA with Vision	Pre 65	471.80	964.52
	Post 65	388.76	782.97
HRA without Vision	Pre 65	464.09	952.28
	Post 65	381.05	770.73
Dental		35.69	59.30

Expected Healthcare Costs

Milliman's Health Cost Guidelines were used to develop the expected true cost of health care benefits by age. Representative health care costs (per person per month) are shown below.

	Library H	RA Plan	All Others	HRA Plan
Age	Employee	Spouse	Employee	Spouse*
40	\$579	\$533	\$579	\$777
45	637	599	637	844
50	714	701	714	946
55	845	824	845	1,069
60	1,048	986	1,048	1,231
65	297	298	297	298
70	342	342	342	342
75	386	384	386	384
80	419	416	419	416
		_,		
	PPO	Plan		

PPO Plan		
Employee	Spouse*	
\$878	\$970	
977	1,070	
1,107	1,221	
1,327	1,401	
1,663	1,641	
596	599	
688	688	
777	771	
845	834	
	\$878 977 1,107 1,327 1,663 596 688 777	

It is assumed that there is no implicit rate subsidy associated with dental benefits. Unadjusted age premium rates were used to value these benefits.

^{*} Child dependent claim costs are included with pre-65 spouse claim costs.

Glossary

The following is an explanation of many of the terms referenced by the Statement of the Governmental Accounting Standards Board, "Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions".

Actuarial Cost Method - This is a procedure for determining the Actuarial Present Value of Benefits and allocating it to time periods to produce the Actuarial Accrued Liability and the Normal Cost. The Statement assumes a closed group of employees and other participants unless otherwise stated; that is, no new entrants are assumed. Six methods are permitted – Unit Credit, Entry Age Normal, Attained Age, Aggregate, Frozen Entry Age, and Frozen Attained Age.

Accrued Liability - This is the portion of the Actuarial Present Value of Benefits attributable to periods prior to the valuation date by the Actuarial Cost Method (i.e., that portion not provided by future Normal Costs).

Actuarial Assumptions - With any valuation of future benefits, assumptions of anticipated future events are required. If actual events differ from the assumptions made, the actual cost of the plan will vary as well. Some examples of key assumptions include the discount rate, medical cost inflation, and rates of mortality, turnover and retirement.

Actuarial Present Value of Benefits - This is the value, as of the applicable date, of future payments for benefits and expenses under the Plan, where each payment is: a) Multiplied by the probability of the event occurring on which the payment is conditioned, such as the probability of survival, death, disability, termination of employment, etc.; and b) Discounted at the assumed discount rate.

Actuarial Value of Assets - This is the value of cash, investments and other property belonging to the Plan, as used by the actuary for the purpose of an Actuarial Valuation.

Amortization Payment - This is the amount of the contribution required to pay interest on and to amortize over a given period the Unfunded Actuarial Accrued Liability or the Unfunded Frozen Actuarial Accrued Liability. A closed amortization period is a specific number of years counted from one date and reducing to zero with the passage of time; an open amortization period is one that begins again or is recalculated at each actuarial valuation date.

Annual Required Contribution ("ARC") - This is the employer's periodic required contribution to a defined benefit OPEB plan, calculated in accordance with the set of requirements for calculating actuarially determined OPEB information included in financial reports.

Attribution Period - The period of an employee's service to which the expected postretirement benefit obligation for that employee is assigned. The beginning of the attribution period is the employee's date of hire and costs are spread across all employment.

Benefit Payments - The monetary or in-kind benefits or benefit coverage to which participants may be entitled under a post employment benefit plan, including health care benefits and life insurance not provided through a pension plan.

Glossary

Discount Rate - GASB 45 requires that the interest rate used to discount future benefit payments back to the present day be based on the expected rate of return on any investments set aside to pay for these benefits. If no funds are set aside for this purpose, the discount rate would be based on the expected return of the employer's general funds.

Funding Excess - This is the excess of the Actuarial Value of Assets over the Actuarial Accrued Liability.

Health Cost Trend - This is the rate at which health costs are assumed to increase over time.

Implicit Rate Subsidy - This is the excess of the expected health care cost per retired member over the gross premium charged for that coverage. In most cases, the gross premium charged to a retiree is less than the expected health care cost, since the premium is a blended average rate that does not fully reflect the above-average, increasing costs by age that apply during retirement.

Normal Cost - This is the portion of the Actuarial Present Value of Benefits allocated to a valuation year by the Actuarial Cost Method.

Net OPEB Obligation - This is the cumulative difference since the effective date of this statement between the annual OPEB cost and the employer's contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

Other Post-employment Benefits ("OPEB") - This refers to post-employment benefits other than pension benefits, including healthcare benefits regardless of the type of plan that provides them, and all other post-employment benefits provided separately from a pension plan, excluding benefits defined as termination benefits or offers.

Past Service Cost - This is a catch-up payment to fund the Unfunded Actuarial Accrued Liability over time (generally 10 to 30 years). Also known as the **Amortization Payment**.

Return on Plan Assets - This is the actual investment return on plan assets during the fiscal year.

Substantive Plan - The terms of the postretirement benefit plan as understood by an employer that provides postretirement benefits and the employees who render services in exchange for those benefits. The substantive plan is the basis for the accounting for the plan.

Unfunded Actuarial Accrued Liability - This is the excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

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Actuarial Method

The actuarial funding method used is the **Projected Unit Credit Cost Method**. Recommended annual contributions consist of two pieces: Normal Cost plus a payment towards the Unfunded Accrued Liability.

The **Accrued Liability** is determined directly as the present value of benefits accrued to date, where the accrued benefit for each Member is the pro-rata portion (based on service to date) of the **projected** benefit payable at death, disability, retirement or termination.

The **Normal Cost** is similarly determined as the present value of the portion of the **projected** benefit attributable to the current year.

The **Unfunded Accrued Liability** is the Accrued Liability less the value of any plan assets.

Actuarial Assumptions

Each of the assumptions used in this valuation was set based on industry standard published tables and data, the particular characteristics of the plan, relevant information from the plan sponsor or other sources about future expectations, and our professional judgement regarding future plan experience. We believe the assumptions are reasonable for the contingencies they are measuring, and are not anticipated to produce significant cumulative actuarial gains or losses over the measurement period.

Discount Rate Water and Sewer: 4.50%

All Others: 4.00%

Inflation Rate 2.70%

Medical Inflation Rate 7.10% - 4.60% over 68 years

Dental Inflation Rate 3.00%

Amortization Growth Rate 4.00%

Mortality RP-2000 Mortality Table with generational projection per Scale BB. This

assumption includes a margin for mortality improvement beyond the valuation

date.

Turnover 50% of Prudential Scale ½ A

Age	Male	Female
20	2.500%	3.750%
25	2.500%	3.750%
30	1.875%	2.500%
35	1.250%	1.875%
40	0.750%	1.250%
45	0.375%	0.625%
50 & Over	0.000%	0.000%

Disability Table C-4 of TSA Volume XXXIX, 100% of the 6-month rates:

Age	Male	Female
20	0.080%	0.100%
30	0.099%	0.140%
40	0.176%	0.276%
50	0.540%	0.622%
60	1.477%	1.179%

All disabilities are assumed to be Service-Connected.

The turnover and disability assumptions are based on the January 1, 2015 Actuarial Valuation Report of the Township of Bloomfield Retirement Income Plan.

July 1, 2016 Actuarial Valuation
Bloomfield Township Other Post-Employment Benefits Program

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Actuarial Assumptions

Retirement

Fire:

For members hired after March 31, 1999 who retire with less than 25 Years of Service:

Age	Rate
52-64	5%
65	100%

Otherwise:

Age	Rate
52	20%
53-54	10%
55-56	30%
57-64	50%
65	100%

Police:

For members hired after March 31, 1999 who retire with less than 25 Years of Service:

Age	Rate
50-62	5%
63	100%

Otherwise:

Age	Rate
50-51	35%
52-54	10%
55-56	30%
57-62	50%
63	100%

Library: 25% at age 55 with 25 years of service; at all other ages (with at least 15 years of service):

Age	Rate
55-59	15%
60-61	25%
62	30%
63-64	15%
65-69	50%
70	100%

Actuarial Assumptions

Retirement

Others: 25% at the earlier of age 52 with 25 years of service or 30 years of service; at all other ages (with at least 15 years of service):

Age	Rate
< 53	5%
54	7%
55	10%
56-59	15%
60-61	25%
62	30%
63-64	15%
65-69	50%
70	100%

Future Retiree Coverage All active and former vested members are assumed to elect coverage at retirement.

Future Dependent Coverage

Current active members are assumed to elect dependent coverage at retirement as follows. All female spouses are assumed to be 3 years younger than males.

	Male	Female
Fire	95%	95%
Police	90%	90%
Town	80%	50%

Future Post-65 Coverage All current actives and pre-65 retirees are assumed to continue coverage at age

Valuation of Dental Benefits

It is assumed that there is no implicit rate subsidy associated with these benefits.

Valuation of Benefits for Children

Benefits attributed to children have been excluded from this valuation for Library, as they were determined to be de minimis.

This summary is intended only to describe our understanding of the essential features of the benefits that will be provided to future retirees based on copies of bargaining agreements, applicable personnel rules and the benefits being currently provided to retired members. All eligibility requirements and benefit amounts shall be determined in strict accordance with the relevant plan documents. To the extent that this summary does not accurately reflect the plan provisions, then the results of this valuation may not be accurate.

Eligibility

Fire

Members who retire from active service at age 52 or older, can elect to continue medical and dental coverage for self and spouse.

Members who terminate before age 52 with 15 or more years of service are eligible for post-retirement medical and dental benefits upon the attainment of age 52.

Normal Retirement for pension purposes is age 52 with 8 years of service.

Effective with hire date after May 1, 2011, employees shall have their retiree healthcare provided through a Retirement Health Savings Plan.

Police / Police Command

Hire date prior to April 1, 1999:

Members who retire from active service on or after Normal Retirement, can elect to continue medical and dental coverage for self and spouse.

Members who terminate before Normal Retirement with 25 or more years of service are eligible for post-retirement medical and dental benefits upon the attainment of Normal Retirement Date (age 50).

Members who terminate before Normal Retirement with between 15 and 25 years of service are eligible for post-retirement medical and dental benefits upon the attainment of age 52.

Effective for retirement from active service on or after June 7, 2006, eligibility for retiree health insurance is the earlier of age 50 with 25 years of service, or age 52 with 10 years of service, as long as the member has satisfied the minimum requirements to retire as defined in the Township defined benefit pension plan.

Eligibility

Police / Police Command

Hire date after March 31, 1999:

Members who retire from active service at age 50 or older and with 25 or more years of service, can elect to continue medical and dental coverage for self and spouse.

Members who terminate before age 50, but who have 25 years of service, are eligible for post-retirement medical and dental benefits upon the attainment of age 50.

Members who terminate with between 15 and 25 years of service are eligible for post-retirement medical and dental benefits upon the attainment of age 52.

Effective with hire date after May 1, 2011, employees shall have their retiree healthcare provided through a Retirement Health Savings Plan.

Town

Hire date prior to April 1, 1999:

Members who retire from active service at age 55 or older, can elect to continue medical and dental coverage for self and spouse, as long as the member has satisfied the minimum requirements to retire as defined in the Township defined benefit pension plan.

Members who retire from active service at age 52 with 15 years of service, or 30 years of service regardless of age, can elect to continue medical and dental coverage for self and spouse.

Members who terminate before normal retirement with 15 or more years of service, are eligible for post-retirement medical and dental benefits upon the attainment of normal retirement date.

Normal Retirement for Library is age 55 with 8 years of service.

Normal Retirement for Town Others is the earlier of age 52 with 8 years of service, or completion of 30 years of service regardless of age.

Eligibility

Town

Hire date after March 31, 1999:

Members who retire on or after normal retirement with 15 or more years of service, can elect to continue medical and dental coverage for self and spouse.

Members who terminate before normal retirement with 15 or more years of service are eligible for post-retirement medical and dental benefits upon the attainment of normal retirement date.

Effective with hire date after May 1, 2011, employees shall have their retiree healthcare provided through a Retirement Health Savings Plan.

Cost Sharing

Fire

Hire date prior to April 1, 1999:

An employee who retires from active service at age 52 or older who has satisfied the minimum requirements to retire as defined in the Township pension plan qualifies for post-retirement health insurance at no cost.

An employee who terminates prior to Normal Retirement Date with 25 years of service qualifies for post-retirement health insurance at Normal Retirement at no cost.

An employee who terminates prior to Normal Retirement Date and has between 15 and 25 years of service qualifies for post-retirement health insurance at Normal Retirement. Retiree's contributions are based on the following schedule:

	Retiree's %
Years of Service	of Premium
Less than 15	No Coverage
15	40%
16	36%
17	32%
18	28%
19	24%
20	20%
21	16%
22	12%
23	8%
24	4%
25	0%

Cost Sharing

Fire

Hire date after March 31, 1999:

An employee who retires on or after Normal Retirement with 25 years of service qualifies for post-retirement health insurance at no cost.

An employee who terminates prior to Normal Retirement with 25 years of Service qualifies for post-retirement health insurance at Normal Retirement at no cost.

An employee who retires on or after Normal Retirement or terminates prior to Normal Retirement and has between 15 and 25 Years of Service qualifies for post-retirement health insurance at Normal Retirement. Retiree's contributions are based on the following schedule:

Retiree's %
of Premium
No Coverage
40%
36%
32%
28%
24%
20%
16%
12%
8%
4%
0%

Cost Sharing

Police / Police Command

Hire date prior to April 1, 1999:

An employee who retires from active service on or after Normal Retirement and who has satisfied the minimum requirements to retire as defined in the Township pension plan qualifies for post-retirement health insurance at no cost.

An employee who terminates prior to Normal Retirement Date with 25 years of service qualifies for post-retirement health insurance at Normal Retirement (age 50) at no cost.

An employee who terminates prior to Normal Retirement Date and has between 15 and 25 years of service qualifies for post-retirement health insurance at age 52. Retiree's contributions are based on the following schedule:

	Retiree's %
Years of Service	of Premium
Less than 15	No Coverage
15	40%
16	36%
17	32%
18	28%
19	24%
20	20%
21	16%
22	12%
23	8%
24	4%
25	0%

Retiree's contributions for employees who retire on or after July 1, 2009 are the greater of:

- \$100 per year for single (\$200 per year for family), or
- The above schedule

Cost Sharing

Police / Police Command

Hire date after March 31, 1999:

An employee who retires directly from the Township at age 50 or older with 25 years of service qualifies for post-retirement health insurance at no cost.

An employee who terminates prior to age 50 with 25 years of service qualifies for post-retirement health insurance at age 50 at no cost.

An employee who retires at age 52 or terminates prior to age 52, and who has between 15 and 25 years of service, qualifies for post-retirement health insurance at age 52. Retiree's contributions are based on the following schedule:

	Retiree's %
Years of Service	of Premium
Less than 15	No Coverage
15	40%
16	36%
17	32%
18	28%
19	24%
20	20%
21	16%
22	12%
23	8%
24	4%
25	0%

Retiree's contributions for employees who retire on or after July 1, 2009 are the greater of:

- \$100 per year for single (\$200 per year for family), or
- The above schedule

Cost Sharing

Town

Hire date prior to April 1, 1999:

An employee who retires from active service at the earlier of age 55 or 30 years of service regardless of age, and who has satisfied the minimum requirements to retire as defined in the Township pension plan, qualifies for post-retirement health insurance at no cost.

An employee who retires from active service between age 52 and 55 with 25 years of service qualifies for post-retirement health insurance at no cost.

An employee who retires between age 52 and 55 and has between 15 and 25 years of service qualifies for post-retirement health insurance. Retiree's contributions are based on the following schedule (contribution will stop when retiree reaches age 55):

	Retiree's %
Years of Service	of Premium
Less than 15	No Coverage
15	40%
16	36%
17	32%
18	28%
19	24%
20	20%
21	16%
22	12%
23	8%
24	4%
25	0%

Cost Sharing

Town

Hire date prior to April 1, 1999:

An employee who terminates prior to Normal Retirement Date with 25 years of service qualifies for post-retirement health insurance at Normal Retirement at no cost.

An employee who terminates prior to Normal Retirement Date and has between 15 and 25 years of service qualifies for post-retirement health insurance at Normal Retirement. Retiree's contributions are based on the following schedule:

	Retiree's %
Years of Service	of Premium
Less than 15	No Coverage
15	40%
16	36%
17	32%
18	28%
19	24%
20	20%
21	16%
22	12%
23	8%
24	4%
25	0%

Cost Sharing

Town

Hire date after March 31, 1999:

An employee who retires from active service on or after Normal Retirement with 25 years of service qualifies for post-retirement health insurance at no cost.

An employee who terminates prior to Normal Retirement with 25 years of service qualifies for post-retirement health insurance at Normal Retirement at no cost.

An employee who retires on or after Normal Retirement, or terminates prior to Normal Retirement, and has between 15 and 25 years of service qualifies for post-retirement health insurance at Normal Retirement. Retiree's contributions are based on the following schedule:

	Retiree's %
Years of Service	of Premium
Less than 15	No Coverage
15	40%
16	36%
17	32%
18	28%
19	24%
20	20%
21	16%
22	12%
23	8%
24	4%
25	0%

Disability

Fire

An employee who is eligible for early retirement and suffers a service-connected disability shall receive the same post-retirement health and dental insurance benefits that are available to an employee who retires on or after their Normal Retirement Date. An employee who is not eligible for early retirement and suffers a service-connected disability shall receive post-retirement health and dental insurance benefits for 54 months only.

Police / Police Command

An employee who suffers a service-connected disability shall receive post-retirement health benefits for 54 months only. An employee who suffers a non service-connected disability shall receive post-retirement health benefits for 30 months only.

Life Insurance

Fire / Police: \$6,000

Police Command: \$8,000

Town: \$8,000