



Other Post-Employment Benefits

Actuarial Valuation Information for Financial Reporting under Governmental Accounting Standards Board Statements 74 and 75

as of December 31, 2019 (Fiscal Year 2019)

May, 2020

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Executive Summary

The purpose of this report is to provide the information needed for financial reporting and accounting for the Retiree Healthcare Plan (the Plan) of York County, PA (the County), in accordance with Governmental Accounting Standards Board (GASB) Statements 74 and 75.

The funding report for this plan is sent under separate cover, and serve a separate purpose. All the figures presented in this report are to be used for accounting purposes only.

The County implemented GASB Statement 74 in fiscal year 2017. Statement 75 was implemented as of 12/31/2018.

This report is prepared in accordance with generally accepted actuarial principles and practices. In the opinion of the Employer and its actuaries, the actuarial assumptions used are reasonable related to Plan experience and expectations.

The Net OPEB Liability as of December 31, 2019 is \$52,28,459 (page 5). The ratio of the Plan's Fiduciary Net Position to the Total OPEB Liability is 37.5%, a 19.1% increase since the prior year.

The County's OPEB expense for fiscal year 2019 is \$7,145,669 (page 12), and the net amount of deferred (inflows)/outflows of resources is (\$1,069,973) (pages 14-15).

All figures for years prior to 2019, as well as plan provisions shown in this report, are from the prior actuary's reports and should be verified by the County.

The undersigned are members of the American Academy of Actuaries, and are qualified to render the actuarial opinions presented in this report.

Respectfully Submitted,

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GASB 74: Plan Reporting

The measurement date for GASB 74 is the County's year end, December 31, 2019. Plan assets (Fiduciary Net Position) are measured as of this date. The Total OPEB Liability (TOL) as of this date is based on an actuarial valuation as of January 1, 2019, adjusted one-year forward.

Under GASB 74, the Net OPEB Liability (NOL) is established as the difference between the Total OPEB Liability and the Plan Fiduciary Net Position. The NOL is very much like the unfunded actuarial accrued liability that is developed for the funding valuation, with adjustments for timing as needed.

Relevant Dates

Valuation Date:	January 1, 2019 ¹
Measurement Date:	December 31, 2019
Reporting Date:	December 31, 2019

¹ Valuation completed by prior actuary. Results were verified, and then used to determine liability as of the measurement date.

Net OPEB Liability

The components of the net OPEB liability are as follows:

	12/31/2019	12/31/2018
Total OPEB Liability	\$ 83,672,817	\$83,072,791
Plan Fiduciary Net Position	31,384,358	15,300,635
Net OPEB Liability	\$ 52,288,459	\$67,772,156
Plan Fiduciary Net Position as a percentage of Total OPEB Liability	37.5%	18.4%

Sensitivity of the net OPEB liability to changes in the discount rate

The following presents the net OPEB liability of the plans, calculated using the discount rate of 7.00%, as well as what each plan's net OPEB liability would be if it were calculated using a discount rate that is 1.00% lower or 1.00% higher than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
Discount Rate	<u>6.00%</u>	<u>7.00%</u>	<u>8.00%</u>
Total OPEB Liability	\$91,700,760	\$83,672,817	\$76,697,848
<u>Plan Net Position</u>	<u>\$31,384,358</u>	<u>\$31,384,358</u>	<u>\$31,384,358</u>
Net OPEB Liability	\$60,316,402	\$52,288,459	\$45,313,490
Ratio of Plan Net Position to Total OPEB Liability	34.2%	37.5%	40.9%

Sensitivity of the net OPEB liability to changes in the trend rate

The following presents the net OPEB liability of the plans, calculated using the healthcare trend rate of from 5.65% to an ultimate rate of 3.90%, as well as what each plan's net OPEB liability would be if it were calculated using rates that are 1.00% lower or 1.00% higher than the current rates:

	1% Decrease	Current Ultimate Trend Rate	1% Increase
Ultimate Trend Rate	<u>2.90%</u>	<u>3.90%</u>	<u>4.90%</u>
Total OPEB Liability	\$75,210,491	\$83,672,817	\$93,566,786
<u>Plan Net Position</u>	<u>\$31,384,358</u>	<u>\$31,384,358</u>	<u>\$31,384,358</u>
Net OPEB Liability	\$43,826,133	\$52,288,459	\$62,182,428
Ratio of Plan Net Position to Total OPEB Liability	41.7%	37.5%	33.5%

Changes in Net OPEB Liability

<u>Total OPEB Liability</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
Service Cost	\$386,710	\$370,057	\$380,344
Interest	5,556,679	5,700,115	5,794,991
Changes in benefit terms	0	0	0
Difference between expected and actual experience	2,953,698	0	0
Changes in assumptions	0	0	0
<u>Benefit payments, including implicit subsidies</u>	<u>(8,297,061)</u>	<u>(8,115,084)</u>	<u>(6,925,740)</u>
Net Change in Total OPEB Liability	\$600,026	(\$2,044,912)	(\$750,405)
Total OPEB Liability - Beginning of Year	\$83,072,791	\$85,117,703	\$85,868,108
Total OPEB Liability - End of Year	\$83,672,817	\$83,072,791	85,117,703
<u>Plan Fiduciary Net Position</u>			
Contributions – employer	\$20,509,775	\$18,800,542	\$9,844,495
Contributions – member	0	0	0
Net investment income	3,871,009	(574,738)	271,134
Benefit payments, including implicit subsidies	(8,297,061)	(8,115,084)	(6,925,740)
Admin. Expenses	0	0	0
<u>Other</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net Change in Plan Fiduciary Net Position	\$16,083,723	\$10,110,720	\$3,189,889
Plan Fiduciary Net Position - Beginning of Year	\$15,300,635	\$5,189,915	\$2,000,026
Plan Fiduciary Net Position - End of Year	\$31,384,358	\$15,300,635	5,189,915
Net OPEB Liability - Beginning of Year	\$67,772,156	\$79,927,788	\$83,868,082
Net OPEB Liability - End of Year	\$52,288,459	\$67,772,156	79,927,788
Net Position as a percentage of Total OPEB Liability	37.5%	18.4%	6.1%
Covered Employee Payroll	\$2,156,285	\$2,529,747	\$3,535,492
Net OPEB Liability as a percentage of Covered Payroll	2424.9%	2679.0%	2260.7%

For the year ended December 31, 2019, the annual money-weighted rate of return on OPEB plan investments, net of pension plan investment expense, was 17.6%. The money weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Employer Contributions

Fiscal Year Ending	Actuarially Determined Employer Contribution	Actual Employer Contribution	Contribution Deficiency/(Excess)	Covered Employee Payroll	Contribution as a Percent of Payroll
12/31/2015	\$9,009,635	\$0	(\$9,009,635)		
12/31/2016	9,009,635	2,000,000	(7,009,635)		
12/31/2017	8,323,521	9,844,495	(1,520,974)	3,535,492	278%
12/31/2018	8,323,521	18,800,542	(10,477,021)	2,529,747	743%
12/31/2019	7,004,918	20,509,775	(13,504,857)	2,156,285	951%

Actuarial Information

Actuarial assumptions

The total OPEB liability was determined by an actuarial valuation as of January 1, 2019, using the following actuarial assumptions, applied to all periods included in the measurement:

Investment Return: 7.00%, net of investment expense and including inflation
Healthcare Trend: 5.90% initially, grading down to 3.90% ultimate

Mortality rates were RP2000 for Males and Females, projected to 2015 with scale BB. A more detailed description of assumptions can be found in the 1/1/2019 OPEB valuation report.

Changes in Actuarial assumptions.

There were no changes in assumptions during 2019.

Actuarial Methods for Determining Employer Contributions

The same economic and demographic assumptions are used for both funding and financial reporting purposes under GASB 74/75.

The Entry Age method is used for accounting/GASB purposes, therefore all of the actuarial figures within this Report are based on it.

The unfunded actuarial liability, as determined each actuarial valuation, is amortized over 20-year layers, beginning in 2017.

Assumed Rate of Return

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimates of expected future real rates of return (expected returns, net of pension plan investment expense and including inflation) are developed for each asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. This is then modified through a Monte-Carlo simulation process, by which a (downward) risk adjustment is applied to the baseline expected return.

Best estimates of real rates of return for each major asset class included in the OPEB plan’s target asset allocation as of December 31, 2019, and the final investment return assumption, are summarized in the following table:

Asset Class	Long-Term Expected Real Return - Portfolio	Weight
Domestic Equity	5.80%	45.00%
International Equity	6.50%	24.00%
Fixed Income	1.65%	23.00%
Real Estate	4.80%	6.00%
Cash, short term funds	0.40%	2.00%
Total Weighted Average Real Return	4.85%	100.0%
Plus Inflation	2.50%	
Total Return w/o Adjustment	7.35%	
Risk Adjustment	-0.35%	
Total Expected Return	7.00%	

Discount Rate

The discount rate used to measure the total OPEB liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that County contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate.

Based on those assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rates of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

GASB 75: Employer Reporting

The Net OPEB Liability as of December 31, 2017 was established under GASB 74. The purpose of GASB 75 is to outline the changes in the NOL over time, via the OPEB Expense.

The OPEB Expense under GASB 75 includes the cost of benefits accrued, interest cost for elapsed time, administrative expenses, decreases for benefits paid and for employee contributions, differences between actual and assumed experience, and other adjustments resulting from changes in assumptions or plan provisions.

GASB 75 was implemented as of December 31, 2018, and includes information on the OPEB Expense, Deferred Inflows and Outflows of Resources, and recognition schedules for such.

Investment gains and losses for each year as relevant, beginning with FY2018, will be recognized over five years. Demographic gains and losses as well as assumption changes will be recognized over the average remaining working lifetimes of all plan participants, which could vary from year to year. In general, any plan changes will be recognized immediately.

OPEB Expense

County's OPEB Expense

Item	Fiscal Year 2019	Fiscal Year 2018
Service Cost	\$386,710	\$370,057
Interest on Total OPEB Liability	5,556,679	5,700,115
Difference between expected and actual experience*	2,953,698	0
Changes in actuarial assumptions*	0	0
Changes in benefit terms	0	0
Employee contributions	0	0
Projected Earnings on Plan investments	(1,549,527)	(737,285)
Difference between projected and actual earnings*	(201,891)	262,405
Administrative expense	0	0
Other changes in Fiduciary Net Position	0	0
Total OPEB Expense	\$7,145,669	\$5,595,292

* Portions recognized for expense

Development of Experience Gain/Loss

Total OPEB Liability (TOL) - Prior	\$ 83,072,791
Service Cost	386,710
Benefit Payments	(8,297,061)
<u>Interest</u>	<u>5,556,679</u>
Expected TOL	\$ 80,719,119
Actual TOL, before Assumption Change	83,672,817
Experience (Gain)/Loss	2,953,698
Assumption Changes	-
Total OPEB Liability	\$ 83,672,817

Net Position, Prior	\$ 15,300,635
Contributions	20,509,775
Benefit Payments + Expenses	(8,297,061)
<u>Expected Earnings</u>	<u>1,549,527</u>
Expected Net Position	\$ 29,062,876
Actual Net Position	31,384,358
(Gain)/Loss	\$ (2,321,482)

Deferred Inflow/Outflow Summary

As of December 31, 2019, the County reported deferred outflows of resources and deferred inflows of resources related to OPEBs from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Net difference between projected and actual earnings on plan investments	\$787,213	(\$1,857,186)
Differences between expected and actual experience	0	0
Changes in actuarial assumptions	0	0
Total	\$787,213	(\$1,857,186)
Net Amount of (Inflow)/Outflow	(\$1,069,973)	

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEBs will be recognized in OPEB expense as follows:

Year ended December 31	Net Amount of Outflow/(Inflow)
2020	(\$201,891)
2021	(201,891)
2022	(201,893)
2023	(464,298)
After 2023	0
Total Amount to be Recognized	(\$1,069,973)

Full schedules are shown on the next page.

Deferred Inflows and Outflows by Source

# Years	Fiscal Year	Investment (Gain)/Loss	2019 Recognized	2019 Remaining	2020 Recognized	2020 Remaining	2021 Recognized	2021 Remaining	2022 Recognized	2022 Remaining	2023 Recognized	2023 Remaining
5	2018	1,312,023	262,405	787,213	262,405	524,808	262,405	262,403	262,403	-		
5	2019	(2,321,482)	(464,296)	(1,857,186)	(464,296)	(1,392,889)	(464,296)	(928,593)	(464,296)	(464,296)	(464,296)	-
		Net Total	(201,891)	(1,069,973)	(201,891)	(868,081)	(201,891)	(666,190)	(201,893)	(464,296)	(464,296)	-

Note: There are no deferred inflows or outflows associated with experience gains/losses or from assumption changes. The impact of those changes is to be recognized over the average expected working lifetime of all plan participants. Because the plan has been closed for a number of years and is over 90% inactive, this average is less than one. Therefore the impact of each gain or loss from experience or changes in assumptions will be recognized immediately in the OPEB Expense.

Plan Membership

The following is a summary of plan membership as of January 1, 2019.

	Number of Participants
Active Employees	39
Inactive/Deferred	23
Retirees and Beneficiaries	579
Total Participants	641

Plan Description

Plan Membership

An employee hired on a full-time basis prior to January 1, 1989 enters the plan on the day he becomes a full-time County employee. Employees hired prior to January 1, 1989 who terminate employment and do not vest their pension benefit and are subsequently rehired on or after January 1, 1989 are not eligible for plan benefits.

Benefit Eligibility

An eligible County employee who retires on or after January 1, 1983 after completion of 8 or more years of service and is both receiving a pension from the York County Employees' Retirement System and currently enrolled in the County's health benefits plan is eligible for paid health and life insurance benefits for the remainder of his lifetime.

Spousal coverage will be provided for retiring members if the spouse was covered under the County health benefits plan at the time of retirement.

Normal Retirement

If a member terminates after age 55 and completion of 20 years of service, or age 60, he will be eligible for normal retirement pension under the York County Employees' Retirement System.

Early Retirement

If a member retires after voluntary termination after completion of 20 years of service, or after involuntary termination (as defined in Act 96 of 1971, the *County Pension Law*) after 8 years of service, he will be eligible for an early retirement pension under the York County Employees' Retirement System.

Termination of Employment

A county employee who terminates employment after 8 or more years of service will be eligible for benefits at retirement.

Death Benefit

If an employee dies prior to retirement, no benefits will be payable under the plan unless the employee has elected the Option 2(d) death benefit under the Retirement System.

If an eligible retired member dies and is receiving a pension benefit that includes lifetime benefits for a surviving spouse, then the spouse will continue to receive coverage under the plan after the death of the eligible retired member.

Healthcare Benefits

Upon meeting the eligibility requirements, the plan will pay the medical costs for benefits covered to the retired County employees. Currently, this coverage is provided under the County's self-funded insurance plan for active employees until Medicare eligibility and under an insured Medi-care Supplement policy thereafter. County Employees who retired prior to April 1, 2010 will continue to receive the plan medical benefits that were in place at the time of their retirement.

The medical benefits provided at retirement include coverages:

- Coverage for hospitalization and doctor's care through the Indemnity or Preferred Provider Organization plan under which the member was covered as an active member.
- Prescription Drug expense reimbursement, which changes to an insured prescription drug product for members over age 65.
- Reimbursement of Medical Expenses, which is provided for a small group of grandfathered retired members.
- Dental Coverage
- Vision Coverage

The medical coverage has varying deductibles, copayments and other provisions based upon the date of retirement, union contract provisions and participant elections.

Life Insurance Benefits

The designated beneficiaries of eligible members will, upon the death of the member, receive a benefit of 100% of the member's pay at retirement, up to a maximum of \$50,000. For deaths after age 70, the amount will be reduced by 50%.

Contributions

Retired members do not contribute towards their medical benefits, except for members of certain employee groups who will be required to make the following contributions towards their medical costs after retirement:

- For medical coverage (i.e., PPO or Indemnity coverage), the contributions by retired members will be determined based upon the monthly dollar amount being paid by active employees at their retirement. These amounts will not increase after retirement.
- For dental coverage, the participant will be required to pay the excess of the COBRA rate for the option and tier coverage chosen over the COBRA rate low-option single person coverage. These amounts will not increase after retirement.

Changes in Plan Provisions

There have been no changes in eligibility or cost-sharing provisions since the prior valuation.

Glossary of Terms

Actuarial Accrued Liability (AAL)*:	The portion of benefits deemed to be accrued by participants based on past service. The AAL serves as the asset funding target, when annual contributions are determined.
Actuarial Value of Assets (AVA)*:	The smoothed value of assets, used to compute the Unfunded AAL. The purpose of the AVA is to control volatility in annual cash contributions .
Amortization of Unfunded Liability*:	The portion of the annual cash contribution that represents a portion of the Unfunded AAL. The amortization can be positive or negative.
Actuarially Determined Employer Contribution (ADEC):	The contribution determined by the actuary for funding purposes .
Employer's Contributions:	Contributions made in relation to the ADEC. An employer has made a contribution in relation to the ARC if the employer has (a) made payments of benefits directly to or on behalf of a retiree or beneficiary, (b) made premium payments to an insurer, or (c) irrevocably transferred assets to a trust, or an equivalent arrangement, in which plan assets are dedicated to providing benefits to retirees and their beneficiaries in accordance with the terms of the plan and are legally protected from creditors of the employers(s) or plan administrator.
Deferred Inflow of Resources:	An acquisition of net assets by the government that is applicable to a future reporting period.
Deferred Outflow of Resources:	A consumption of net assets by the government that is applicable to a future reporting period.
Discount Rate:	The rate used to adjust future benefit payments or a stream of payments, to reflect the time value of money. This rate may be different for accounting purposes versus plan funding.
Market Value of Assets (MVA):	The total value of Plan assets available to pay benefits.
Net OPEB Liability:	The difference between the Total OPEB Liability and the Plan Fiduciary Net Position. Can be positive or negative.
OPEB Expense:	The change in Net OPEB Liability during the fiscal year, with partial recognition of deferred inflows/outflows.
Plan Fiduciary Net Position:	The fair market value of assets on the measurement date, for accounting purposes. It is often equal to the MVA.
Service Cost:	That portion of the annual contribution that represents one year's accrual of benefits. In funding calculations, this is known as the Normal Cost.
Total OPEB Liability:	The present value of past service benefits for all plan members, as determined for accounting purposes.
Unfunded Actuarial Accrued Liability*:	The difference between the Actuarial Value of Assets and the Actuarial Accrued Liability, used for funding purposes .

* actuarial **funding** terminology