

Saratoga County

Other Post-Employment Benefits

GASB Statement No. 75 Annual Report

as of January 1, 2018

For reporting date:

December 31, 2018

Prepared by:



Ph: 315-752-0060
Fax: 315-752-0057
120 Walton Street, Suite 601
Syracuse, NY 13202



November 8, 2018

Mr. Brian D. O'Connor
Finance Director
Saratoga County
40 McMaster Street – Building 1
Ballston Spa, New York 12020

Re: Retiree Medical Expense and Liability Calculations under GASB No. 75

Dear Mr. O'Connor:

Presented in this report is information to assist the employer in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 75. The information presented is for the period ending December 31, 2018.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. The actuaries involved in this engagement are members of the Society of Actuaries and other professional actuarial organizations and meet the “Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States” to render the actuarial opinion outlined herein.

The results of our calculations were based upon the plan data and the actuarial valuation as of January 1, 2017 and financial data and actuarial roll forward techniques to calculate the results as of January 1, 2018 (The Measurement Date). We will need to perform a new valuation as of January 1, 2019 to determine the Net OPEB Liability and related Disclosures for the Fiscal Years ending December 31, 2019 and December 31, 2020.

We relied upon underlying records and/or summaries prepared by the responsible officer or employees of the organization and have reviewed this information for reasonableness, but have not audited it. The accuracy of the results is dependent upon the accuracy and completeness of the underlying information which is the responsibility of those who supply the data.

The calculations reported herein have been made on a basis consistent with our understanding of GASB Statement No 75), **Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions**. Determinations for purposes other than meeting the employer’s financial accounting requirements may be significantly different from the results reported.

Ph: 315-752-0060
Fax: 315-752-0057

120 Walton Street, Suite 601
Syracuse, NY 13202

Please keep in mind that future actuarial valuation results 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, and changes in plan provisions or applicable law.

I, the undersigned, am a Consulting Actuary for Armory Associates, LLC, am a member of the American Academy of Actuaries and meet the Qualification Standards of the Academy to render the actuarial opinion contained herein. To the best of my knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principals which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

Respectfully submitted,



Damon R. Hacker, ASA, MAAA
Executive Vice President
Armory Associates, LLC



Michael A. Stark, ASA, MAAA
Actuary
Member of the American Academy of Actuaries

TABLE OF CONTENTS

	<u>PAGE</u>
SECTION 1: SUMMARY OF PRINCIPAL RESULTS	1
SECTION 2: INTRODUCTION	2
SECTION 3: NET OPEB LIABILITY	4
SECTION 4: CALCULATION OF OPEB EXPENSE	6
SECTION 5: DEFERRED OUTFLOWS/INFLOWS	9
ADDENDUM A: ACTUARIAL ASSUMPTIONS AND METHODS.....	10
ADDENDUM B: PLAN PROVISIONS.....	19
ADDENDUM C: REQUIRED SUPPLEMENTARY INFORMATION.....	25
ADDENDUM D: DEFERRED INFLOWS & OUTFLOWS OF RESOURCES.....	26
ADDENDUM E: GASB 75 RESULTS BY FUND	27
ADDENDUM F: GASB 75 TERMINOLOGY	28

SECTION 1: SUMMARY OF PRINCIPAL RESULTS

Saratoga County provides medical and prescription drug benefits for retirees, spouses, and their covered dependents while contributing a portion of the expenses. Such postemployment benefits are an included value in the exchange of salaries and benefits for employee services rendered. An employee's total compensation package includes not only the salaries and benefits received during active service, but all compensation and benefits received for their services during postemployment. Nevertheless, both types of benefits constitute compensation for employee services.

Saratoga County
GASB Statement No. 75 Required Information
For Reporting Date December 31, 2018

Summary of Principal Results

Valuation Date:	January 1, 2017
Measurement Date:	January 1, 2018
Reporting Date:	December 31, 2018
Membership Data:	
Retirees and Survivors	738
Terminated Vested Employees	0
Actives	<u>1008</u>
Total	1746
Municipal Bond Index Rate:	3.44%
Present Value of Total Future Liability	\$366,914,672
Net OPEB Liability:	
Total OPEB Liability (TOL)	\$250,265,675
Fiduciary Net Position (FNP)	<u>\$0</u>
Net OPEB Liability (NOL=TOL-FNP)	\$250,265,675
FNP as a percentage of TOL	0%
OPEB Expense:	\$18,197,883
Deferred Outflows of Resources:	\$18,581,286
Deferred Inflows of Resources:	\$0

SECTION 2: INTRODUCTION

Armory Associates, LLC is very pleased to be working with Saratoga County. Saratoga County contracted with Armory Associates, LLC to assist in the determination of the present liability for postemployment medical insurance costs for the entire medical plan membership of Saratoga County. This analysis has been completed in accordance with GASB Statement No. 75; Accounting and Financial Reporting for Postemployment Benefits other than Pensions.

This report, prepared as of January 1, 2018 (the Measurement Date), presents information to assist Saratoga County in meeting the requirements of GASB 75 for the fiscal year ending December 31, 2018 (Reporting Date). Most of the material provided, except as indicated later in this report, is based on the data, assumptions, and results of the actuarial valuation as of January 1, 2017. The sections that follow provide the results of all the necessary calculations, as well as additional disclosure items needed as Required Supplementary Information (RSI) or for required financial statement footnotes.

The new GASB 75 requirements represent a significant departure from the requirements of the prior statement GASB 45. Four major changes with GASB 75 are:

1. The employer must now recognize the entire Unfunded Actuarial Accrued Liability (Net OPEB Liability) on its balance sheet. No more amortization of the liability over a 30 year period.
2. The discount rate is now an input tied to a 20-year tax-exempt general obligation municipal bond rated AA/Aa (or equivalent) or higher as of the Measurement Date. The discount rate and the corresponding liability must be updated annually even if in an Interim Year.
3. Only one Actuarial Cost Method is allowed; Entry Age Normal (EAN) as a level percentage of payroll.
4. Most changes in the total OPEB liability will be recognized immediately for the current reporting period as OPEB Expense.

OPEB Expense includes amounts for service cost (the Normal Cost under EAN for the year), interest on the Total OPEB Liability, changes in benefit plan provisions, amortization of increases/decreases in liability due to actuarial experience and actuarial assumption changes. The actuarial experience and assumption change impacts are amortized over the average expected remaining service life of the Saratoga County membership as of the Measurement Date. The development of the collective OPEB Expense is shown in Section 4.

The unamortized portions of each year's experience and assumption changes are used to develop deferred inflows and outflows, which also must be included on the employer's financial statement. The development of the collective deferrals is shown in Section 5.

The philosophy behind the accounting standard is that these post-employment benefits are part of the compensation earned by employees in return for their services, and the cost of these benefits should be recognized while employees are providing those services, rather than after they have retired. This philosophy has already been applied for years to defined benefit pensions; Statement 75 extends this practice to all other post-employment benefits.

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 will an employee be eligible for post-employment benefits and when will the post-employment benefits start?
- Health care cost inflation and claim cost assumptions: When an employee begins receiving post-employment benefits, how much will be paid each year and how quickly will the costs grow?
- Mortality assumptions: How long is a retiree likely to receive benefits?
- Discount rate assumption: What is the present value of those future benefit payments in terms of today's dollar?

Since the liability is being recognized over the employee's entire career with Saratoga County, the present value is divided into three pieces: the part that is attributed to past years (the Total OPEB Liability), the part that is being earned this year (the Service Cost), and the part that will be earned in future years (the Future Service Liability).

One of the most important foundational concepts to keep in mind throughout this analysis is that postemployment liabilities are being impacted by the fact that people are retiring earlier in life and living longer lives. With the retirement age as early as fifty-five (55) years old in the public sector and with people routinely living into their nineties (90's), employers are having to utilize a greater portion of their operating budget each year to account for the extending periods of time in which benefit expenses are incurred.

The motives behind such identification and funding of this liability is threefold:

- It is prudent that your business' annual budget recognizes the future financial obligations and/or liabilities associated with all benefits promised to both employees and retirees;
- Awareness of the expected liabilities prevents future budgets from being overburdened with the financial obligations associated with the cost of retiree benefits; and
- A sufficient system for funding postemployment benefits safeguards retirees in the unlikely event that the employer becomes no longer a viable entity.

Without the proper legislation in NYS to establish an OPEB Trust Fund, the goal of this process is not necessarily to fund the liability today, but rather to accurately identify the liability and establish a plan to effectively and efficiently manage the liability over time. This process will prepare Saratoga County for the financial impact associated with the pressures of providing sufficient postemployment benefits to the employees and retirees.

Should you have any additional questions regarding the information contained herein, please feel free to contact us at our offices by phone at (315) 752-0060. We would like to thank Saratoga County for this opportunity to serve as your consultant and we look forward to continuing a mutually beneficial relationship for many years to come.

SECTION 3: NET OPEB LIABILITY

The Net OPEB Liability is equal to the Total OPEB Liability minus the Fiduciary Net Position. Since Saratoga County operates the OPEB Plan on a pay-as-you-go basis the Fiduciary Net Position is \$0.

	January 1, 2018
Total OPEB Liability	\$250,265,675
Fiduciary Net Position	0
Net OPEB Liability	<u>\$250,265,675</u>
Ratio of Fiduciary Net Position to Total OPEB Liability	0%
Covered Payroll over Measurement Period	\$58,384,878
Net OPEB Liability as a percentage of covered employee payroll	429%

The following table details the changes in the Net OPEB Liability from the beginning to the end of the measurement year.

Changes in the Net OPEB Liability

	Total OPEB Liability
Balance at 01/01/2017	<u>\$231,390,213</u>
Changes for the year:	
Service Cost	7,586,537
Interest Cost	8,864,916
Changes in benefit terms	0
Differences between expected and actual experience	0
Changes in assumptions and other inputs	11,334,333
Benefit Payments (including implicit subsidy)	<u>(8,910,324)</u>
Net Changes	<u>18,875,462</u>
Balance at 01/01/2018	\$250,265,675

Changes of assumptions and other inputs reflects a change in the discount rate from 3.78% on January 1, 2017 to 3.44% on January 1, 2018.

In addition to the results in the above table, the sensitivity of the Net OPEB Liability to changes in the discount rate and healthcare trend rate must be disclosed.

Sensitivity of the total OPEB liability to changes in the discount rate: The following presents the Total OPEB Liability of the County, as well as what the County’s Total OPEB Liability would be if it were calculated using a discount rate that is 1-percentage point lower (2.44%) or 1-percentage point higher (4.44%) than the current discount rate:

	1% Decrease 2.44%	Current 3.44%	1% Increase 4.44%
Total OPEB Liability	\$288,726,472	\$250,265,675	\$219,054,335

Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates: The following presents the total OPEB liability of the County, as well as what the County’s total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage point lower or 1-percentage point higher than the current healthcare cost trend rates:

	1% Decrease	Current Trend Rates	1% Increase
Total OPEB Liability	\$212,518,845	\$250,265,675	\$298,442,977

SECTION 4: CALCULATION OF OPEB EXPENSE

As previously noted, the OPEB Expense consists of a number of different items. GASB 75 refers to the first as Service Cost which is the Normal Cost using the Entry Age Normal actuarial funding method. The second item is interest on the beginning of year Total OPEB Liability at the 3.78% discount rate as of the previous Measurement Date.

The next three items refer to any change that occurred in the Total OPEB Liability due to benefit changes, actual experience differences, and assumptions. Benefit changes, which are reflected immediately in the OPEB Expense can be positive, if there is a benefit improvement for existing members, or negative if there is a benefit reduction. Differences in experience and changes in assumptions are spread over the remaining service life of the entire membership. The following changes have been made since the previous Measurement Date:

Changes to Benefit Terms

- No changes have been made to the benefit terms.

Changes in Experience

- No changes in the experience were recognized for this Measurement Period. Since Saratoga County has chosen to do biennial valuations update procedures were used to roll forward the total OPEB liability to the measurement date without using updated census and claims data.

Changes to Assumptions and Other Inputs

- Changed the discount rate from 3.78% to 3.44%. The discount rates are inputs taken from the rate for a 20-year high-quality tax-exempt municipal bond index as of each measurement date.

Changes in Net OPEB Liability since Prior Measurement Date

Expected January 1, 2018 Net OPEB Liability	
January 1, 2017 Net OPEB Liability	231,390,213
Service Cost	7,586,537
2017 Expected Employer Contributions (including implicit subsidy)	(8,910,324)
Interest Cost (3.78%)	8,864,916
Expected January 1, 2018 Net OPEB Liability	\$238,931,342
Actual January 1, 2018 Net OPEB Liability	
	\$250,265,675
(Gains)/Losses Recognized Immediately	
Changes to Benefit Terms	0
(Gains)/Losses w/ Recognition over Average Remaining Service Lives (6.49 years)	
Differences between Expected and Actual Experience	0
Changes to Assumptions and Other Inputs	11,334,333
Total Actuarial (Gains)/Losses	\$11,334,333

The current year portions of previously determined experience and assumptions are recognized as deferred outflows and inflows (see Section 5) are included next. The calculation of the OPEB Expense for the measurement period ending January 1, 2018 is shown in the following table.

OPEB Expense

Service Cost	\$7,586,537
Interest on the total OPEB Liability	8,864,916
Current-period benefit changes	0
Expensed portion of current-period difference between expected and actual experience in the total OPEB Liability	0
Expensed portion of current-period changes of assumptions	1,746,430
Recognition of beginning deferred outflows of resources as OPEB expense	0
Recognition of beginning deferred inflows of resources as OPEB expense	0
OPEB Expense:	\$18,197,883

SECTION 5: DEFERRED OUTFLOWS/INFLOWS

Since certain expense items are amortized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts serve to reduce the OPEB expense they are labeled deferred inflows, and if they will increase the OPEB expense they are labeled deferred outflows. As noted in the previous section, the amortization of these amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions, if any, are amortized over the average remaining service life of the active and inactive members at the beginning of the measurement period.

Also tracked as deferred outflow of resources are employer contributions made to the OPEB plan as the benefits come due, made subsequent to the measurement date and before the end of the reporting period. These contributions will be recognized in the net OPEB liability calculation in the next measurement period.

The table below provides a summary of the deferred outflows and inflows as of January 1, 2018 (Measurement Date).

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$0	\$0
Changes of assumptions or other inputs	9,587,903	0
Employer contributions subsequent to the measurement date (Expected employer contribution including implicit subsidy)	8,993,383	0
Total	<u>\$18,581,286</u>	<u>\$0</u>

The amortization period for the beginning of the measurement period is 6.49 years for the average expected remaining service life of members. Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as detailed in Addendum D.

Year Ended December 31,	
2019	\$ 1,746,430
2020	1,746,430
2021	1,746,430
2022	1,746,430
2023 and Thereafter	2,602,183

ADDENDUM A: ACTUARIAL ASSUMPTIONS AND METHODS

The actuarial assumptions utilized in developing the Total OPEB Liability are outlined in this section. The Total OPEB Liability was determined by an actuarial valuation as of January 1, 2017 with update procedures used to roll forward the total OPEB liability to the measurement date.

Valuation Date	January 1, 2017
Measurement Date	January 1, 2018
Reporting Date	December 31, 2018
Actuarial Cost Method	Entry Age Normal – Level Percent of Pay
Plan Type	Single Employer Defined Benefit Plan
Discount Rate	3.44%, as of the measurement date. Source: Bond Buyer Weekly 20-Bond GO Index
Salary Scale	3.5%
Rate of Inflation	2.2%
Mortality - Actives	The RPH-2014 Mortality Table for employees, sex distinct, with generational mortality adjusted to 2006 using scale MP-2014, and projected forward with scale MP-2017.
Mortality – Retirees	The RPH-2014 Mortality Table for Healthy Annuitants, sex distinct, with generational mortality adjusted to 2006 using scale MP-2014, and projected forward with scale MP-2017.
Turnover	Rates of decrement due to turnover based on the experience under the New York State & Local Retirement System as prepared by the Department of Civil Service’s actuarial consultant in the report titled, <u>Development of Recommended Actuarial Assumptions for New York State/SUNY GASB 45 Valuation (September 2016)</u> . Please refer to Exhibits 6-1 and 6-2 for the complete turnover tables.

Retirement Incidence

Rates of decrement due to retirement based on the experience under the New York State & Local Retirement System as prepared by the Department of Civil Service’s actuarial consultant in the report titled, Development of Recommended Actuarial Assumptions for New York State/SUNY GASB 45 Valuation (September 2016). Please refer to Exhibits 6-3 through 6-6 for the complete retirement incidence tables.

Medical Trend

To Fiscal Year Ending	Pre-65	Post-65
2019	6.50%	7.50%
2020	6.00%	7.00%
2021	5.50%	6.75%
2022	5.45%	6.49%
2027	5.19%	5.19%
2032	5.19%	5.19%
2037	5.19%	5.19%
2047	4.92%	4.92%
2057	4.68%	4.68%
2067	4.40%	4.40%
2077	3.84%	3.84%
2087	3.84%	3.84%

The above trend rates were developed using the baseline projection of the SOA Long-Run Medical Cost Trend Model (v2018_c). The short term (first 4 years) trend rates were based on the recent premium rate history for Saratoga County. The long-term (after 4 years) trend rates were based on the following assumptions:

- Rate of Inflation: 2.2%
- Rate of Growth in Real Income / GDP per capita: 1.6%
- Extra Trend due to Technology and other factors: 1.3%
- Health Share of GDP Resistance Point: 25%

The SOA Long-Run Medical Cost Trend Model and its baseline projection are based on an econometric analysis of historical US medical expenditures and the judgments of experts in the field. The long-run baseline projection and input variables have been developed under the guidance of an SOA Project Oversight Group. The above schedule represents a reasonable medical trend projection for the current plan provisions and demographics of the Retiree Healthcare Plan, and no changes to these baseline assumptions are necessary.

Excise Tax

Under the Patient Protection and Affordable Care Act (“PPACA”), an excise tax will be imposed for tax years beginning after December 31, 2021 for high cost employer sponsored health coverage. The law specifies a 40% excise tax, to be paid by the provider, of the excess value beyond a basic dollar amount plus an additional amount for qualified retirees of those engaged in a high risk profession. The applicable thresholds for the Excise tax — set by the ACA at \$10,200 for individual coverage and \$27,500 for family coverage in 2018 — should continue to index during the delay but will index according to the Chained Consumer Price Index for all Urban Consumers (C-CPI-U), as provided under the new tax law. For pre-65 retirees, additional amounts of \$1,650 for single coverage and \$3,450 for family coverage are included, but actual threshold amounts have not yet been released.

For purposes of this valuation we have assumed that the County would stay under the threshold amount and will therefore have no excise tax. As more regulatory guidance becomes available, the calculation of the excise tax liability will evolve.

Election Percentage

Upon retirement it is assumed that eligible employees will elect to participate in the County’s OPEB plan at the following rates:

Participant Group	% Electing Coverage
Retiree	100%
Retiree's Spouse	85%
Surviving Spouse	10%

Marriage Rate

It is assumed that 70% of retirees will be married at the time of their retirement, with the male spouse assumed to be approximately 3 years older than the female.

Health Plan Election

It has been assumed for this valuation that future CSEA & PBA retirees will be enrolled in one of the County's two plans for pre-65 retirees at the following rates:

Plan	Participation
POS \$25	35%
PPO \$15	65%

It has also been assumed for this valuation that all current and future retirees with covered spouses will select the two-person coverage tier of the medical plan he/she enrolls in.

Morbidity

To reflect the differences in covered health care expenses due to aging, the premiums are adjusted by age and gender using the following age-sex factors:

Age	Male	Female
40-44	0.805	1.229
45-49	1.016	1.349
50-54	1.339	1.587
55-59	1.740	1.835
60-64	2.233	2.184
65-69	0.933	0.886
70-74	1.025	0.973
75-79	1.089	1.040
80-84	1.111	1.071
85-89	1.073	1.044
90-94	1.004	0.958
95+	0.931	0.827

The aforementioned age related factors are based on results from Table 5 of "Health Care Costs – From Birth to Death," by Dale Yamamoto, part of the Health Care Cost Institute's Independent Report Series, June 2013.

Per Capita Costs

The Retiree Health Care Plan is a self-insured plan that is available to all pre-65 actives and retirees. The following table presents the age-adjusted premiums of the plan, including administrative fees, which were used to calculate the actuarial accrued liability:

Age	PPO \$15	POS \$25	POS \$20
40-45	\$8,027	\$7,392	\$7,742
45-49	\$9,311	\$8,574	\$8,981
50-54	\$11,487	\$10,578	\$11,080
55-59	\$13,999	\$12,892	\$13,503
60-64	\$17,265	\$15,899	\$16,653

Post-65 medical coverage is provided through an MVP USA Care PPO \$10 plan. The following table shows the age-adjusted premiums of this plan:

Age	MVP Post-65
65-69	\$3,146
70-74	\$3,456
75-79	\$3,683
80-84	\$3,776
85-89	\$3,664
90-94	\$3,394
95+	\$3,036

The County’s demographic population is considered large enough to be fully credible for the purposes of developing age-adjusted premiums. Premium equivalent rates from the County’s health plans were age-adjusted using the morbidity factors disclosed on page 13 to produce the age-adjusted premiums.

Exhibit 6-1: NYSERS Turnover Table

Age	Years of Service					
	<2	2-2.99	3-3.99	4-4.99	5-9.99	>=10
15	18.375%	10.298%	6.792%	5.938%	4.333%	2.727%
16	18.375%	10.298%	6.792%	5.938%	4.333%	2.727%
17	18.375%	10.298%	6.792%	5.938%	4.333%	2.727%
18	18.375%	10.298%	6.792%	5.938%	4.333%	2.727%
19	18.375%	10.298%	6.792%	5.938%	4.333%	2.727%
20	18.259%	10.298%	6.792%	5.938%	4.333%	2.727%
21	18.011%	10.298%	6.792%	5.938%	4.333%	2.727%
22	17.680%	10.298%	6.792%	5.938%	4.333%	2.727%
23	17.286%	10.853%	8.065%	6.339%	4.505%	2.727%
24	16.840%	11.240%	8.865%	6.671%	4.628%	2.727%
25	16.362%	11.473%	9.293%	6.919%	4.701%	2.727%
26	15.892%	11.592%	9.493%	7.107%	4.727%	2.727%
27	15.479%	11.621%	9.587%	7.282%	4.719%	2.727%
28	15.157%	11.569%	9.645%	7.485%	4.690%	2.688%
29	14.917%	11.436%	9.683%	7.721%	4.655%	2.643%
30	14.716%	11.226%	9.682%	7.945%	4.620%	2.588%
31	14.502%	10.953%	9.602%	8.084%	4.589%	2.522%
32	14.240%	10.645%	9.411%	8.065%	4.563%	2.447%
33	13.929%	10.326%	9.100%	7.855%	4.539%	2.369%
34	13.592%	10.015%	8.695%	7.483%	4.510%	2.290%
35	13.264%	9.712%	8.247%	7.028%	4.472%	2.215%
36	12.972%	9.407%	7.814%	6.587%	4.418%	2.140%
37	12.731%	9.086%	7.440%	6.238%	4.345%	2.063%
38	12.538%	8.747%	7.146%	6.016%	4.254%	1.982%
39	12.387%	8.405%	6.926%	5.903%	4.146%	1.904%
40	12.262%	8.081%	6.755%	5.845%	4.033%	1.830%
41	12.148%	7.793%	6.610%	5.783%	3.919%	1.768%
42	12.033%	7.553%	6.473%	5.676%	3.812%	1.719%
43	11.910%	7.360%	6.336%	5.512%	3.716%	1.683%
44	11.782%	7.208%	6.202%	5.306%	3.629%	1.653%
45	11.659%	7.089%	6.079%	5.094%	3.550%	1.620%
46	11.560%	6.995%	5.968%	4.906%	3.472%	1.572%
47	11.499%	6.926%	5.870%	4.766%	3.389%	1.504%
48	11.485%	6.880%	5.777%	4.680%	3.301%	1.419%
49	11.516%	6.856%	5.688%	4.639%	3.210%	1.329%
50	11.577%	6.849%	5.608%	4.625%	3.122%	1.250%
51	11.642%	6.854%	5.549%	4.620%	3.048%	1.189%
52	11.688%	6.865%	5.524%	4.608%	2.990%	1.148%
53	11.697%	6.877%	5.547%	4.583%	2.951%	1.125%
54	11.670%	6.891%	5.620%	4.546%	2.926%	1.112%
55	11.623%	6.914%	5.736%	4.508%	2.912%	1.105%
56	11.594%	6.955%	5.875%	4.484%	2.906%	1.103%
57	11.633%	7.031%	6.023%	4.493%	2.908%	1.105%
58	11.790%	7.155%	6.170%	4.547%	2.916%	1.110%
59	12.106%	7.338%	6.311%	4.653%	2.927%	1.116%
60	12.585%	7.589%	6.453%	4.808%	2.940%	1.124%
61	13.185%	7.894%	6.594%	5.001%	2.954%	1.132%
62	13.796%	8.223%	6.726%	5.212%	2.966%	1.138%
63	13.796%	8.223%	6.726%	5.212%	2.966%	1.138%
64	13.796%	8.223%	6.726%	5.212%	2.966%	1.138%
65	13.796%	8.223%	6.726%	5.212%	2.966%	1.138%
66	13.796%	8.223%	6.726%	5.212%	2.966%	1.138%
67	13.796%	8.223%	6.726%	5.212%	2.966%	1.138%
68	13.796%	8.223%	6.726%	5.212%	2.966%	1.138%
69	13.796%	8.223%	6.726%	5.212%	2.966%	1.138%
70	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%

Exhibit 6-2: PFRS Turnover Table

Years of Service	Turnover Rates
0	7.427%
1	4.223%
2	2.325%
3	1.510%
4	1.277%
5	1.211%
6	1.105%
7	0.958%
8	0.806%
9	0.662%
10	0.546%
11	0.447%
12	0.392%
13	0.395%
14	0.417%
15	0.427%
16	0.405%
17	0.337%
18	0.264%
19	0.215%
20	0.215%
21	0.260%
22	0.344%
23	0.344%
24	0.344%
25	0.344%
26	0.344%
27	0.344%
28	0.344%
29	0.344%
30	0.344%
31	0.344%
32	0.344%
33	0.344%
34	0.344%
35	0.344%
36	0.344%
37	0.344%
38	0.344%
39	0.344%

Exhibit 6-3: NYSERS & NH Retirement Incidence Table

Age	Years of Service		
	< 20	20-29.99	>= 30
55	15.655%	29.771%	55.855%
56	8.874%	13.022%	23.639%
57	7.267%	10.981%	20.885%
58	8.663%	12.168%	19.484%
59	9.860%	14.358%	19.139%
60	9.824%	16.002%	19.303%
61	12.896%	19.192%	21.575%
62	17.478%	29.445%	30.069%
63	14.088%	22.236%	20.647%
64	15.868%	25.367%	20.720%
65	20.503%	25.527%	23.208%
66	21.347%	27.429%	23.237%
67	18.053%	24.840%	20.013%
68	14.699%	26.911%	18.633%
69	17.778%	23.200%	17.022%
70	100.000%	100.000%	100.000%

Exhibit 6-4: NYSERS Tiers 2,3,4 Retirement Incidence Table

Age	Years of Service		
	< 20	20-29.99	>= 30
55	5.923%	8.206%	41.847%
56	3.858%	4.789%	19.822%
57	3.839%	4.887%	18.561%
58	3.993%	5.426%	18.220%
59	4.336%	6.459%	18.802%
60	4.888%	7.811%	19.944%
61	8.169%	16.183%	24.296%
62	14.912%	32.164%	35.967%
63	10.952%	21.710%	24.163%
64	12.035%	21.020%	23.513%
65	15.763%	25.788%	27.753%
66	15.360%	25.820%	28.852%
67	12.425%	20.575%	22.782%
68	12.378%	19.431%	24.346%
69	13.189%	20.578%	23.787%
70	100.000%	100.000%	100.000%

Exhibit 6-5: NYSERS Tiers 5, 6 Retirement Incidence Table

Age	Years of Service		
	< 20	20-29.99	>= 30
55	4.767%	6.619%	41.847%
56	3.098%	3.849%	19.822%
57	3.083%	3.928%	18.561%
58	3.207%	4.364%	18.220%
59	3.484%	5.201%	18.802%
60	3.929%	6.298%	19.944%
61	6.589%	13.160%	24.296%
62	30.590%	38.923%	76.487%
63	10.952%	21.710%	24.163%
64	12.035%	21.020%	23.513%
65	15.763%	25.788%	27.753%
66	15.360%	25.820%	28.852%
67	12.425%	20.575%	22.782%
68	12.378%	19.431%	24.346%
69	13.189%	20.578%	23.787%
70	100.000%	100.000%	100.000%

Exhibit 6-6: NYS Correctional Officers Retirement Incidence Table

Years of Service	Retirement Rates
25	26.648%
26	14.923%
27	15.678%
28	17.105%
29	18.182%
30	18.182%
31	18.182%
32	18.311%
33	20.188%
34	22.684%
35	26.046%

ADDENDUM B: PLAN PROVISIONS

Health Plans: For all members except Corrections, Saratoga County provides two self-insured medical plan options to eligible pre-65 retirees and dependents: the PPO \$15 Plan and the POS \$25 Master Health Plan. For Corrections, the County provides a self-insured POS \$20 Master Health Plan. Upon retirement, employees maintain enrollment in the same plan he/she was enrolled in during active employment but may switch plans if he/she relocates out of the service area of the plan he/she is enrolled in. A summary of the pre-65 health plans are as follows:

Saratoga County Pre-65 Medical Plan Summaries						
	PPO \$15		POS \$25		POS \$20	
	In-Network	Out-of-Network	In-Network	Out-of-Network	In-Network	Out-of-Network
Deductible	None	\$500/\$1000	None	\$500/\$1000	None	\$500/\$1000
Coinsurance	None	20%	None	30%	None	30%
Inpatient Hospitalization	\$200 per Admission \$400 Aggregate per year		100% coverage	Deductible & Coinsurance	100% coverage	Deductible & Coinsurance
Outpatient Services	\$15 Co-pay	Deductible & Coinsurance	100% coverage	Deductible & Coinsurance	100% coverage	Deductible & Coinsurance
Office Visits	\$15 Co-pay	Deductible & Coinsurance	\$25 Co-pay	Deductible & Coinsurance	\$20 Co-pay	Deductible & Coinsurance
Emergency Room	\$150 Co-pay		\$25 Co-pay		\$20 Co-pay	
Out-of-Pocket Max	\$5080/\$12700	\$2000/\$4000	\$5080/\$12700	\$2500/\$5000	\$5080/\$12700	\$2500/\$5000
Prescription Drugs:						
30 & 90 Day Supply (eff. 1/1/16)	\$5/\$25/\$50	Not Covered	\$5/\$25/\$50	Not Covered	\$5/\$20/\$40	Not Covered

For post-65 members, the County provides a MVP USA Care PPO \$10 Medicare Advantage plan. Key components of the plans are as follows:

- \$10 copay for primary care and specialist.
- Prescription drug copays: \$5/\$20/\$40.
- Emergency room admission is now capped at the CMS limit of \$65 per admission for Plan 1 members, which is waived if admitted to a hospital.
- Inpatient hospitalization: \$200.
- Out-of-pocket maximum: \$400 (excludes Part D costs).

Premium Rates: The following monthly premium rates are effective January 1st of their respective plan years:

2017 Monthly Medical Premium Rates			
Pre-65	PPO \$15	POS \$25	POS \$20
Individual	\$873.29	\$833.76	\$842.35
Two-Person	\$1,780.74	\$1,700.11	\$1,717.64
Family	\$2,357.11	\$2,250.39	\$2,273.59
Post-65 Medical Plans			
MVP USA Care PPO \$10			\$284.40
MVP USA Care PPO \$25			\$272.00

2018 Monthly Medical Premium Rates			
Pre-65	PPO \$15	POS \$25	POS \$20
Individual	\$916.95	\$875.45	\$884.47
Two-Person	\$1,869.78	\$1,785.12	\$1,803.52
Family	\$2,474.97	\$2,362.91	\$2,387.27
Post-65 Medical Plans			
MVP USA Care PPO \$10			\$305.40

Retiree Eligibility & Contribution Requirements

Eligibility and contribution requirements for all current and future retirees are as follows:

CSEA/Management

Total Active Members: 781

Medical Plan: Members hired prior to January 1, 2014 enroll in either PPO \$15 & POS \$25. All members hired on/after January 1, 2014 must enroll in PPO \$15.

Eligibility: All members must belong to the New York State Employees Retirement System (ERS) and attain a minimum of 55 years of age. Members hired prior to January 1, 2014 must provide a minimum of 10 years of service to the County. Members hired on/after January 1, 2014 must provide a minimum of 20 years of service to the County.

Contributions: Contributions are dependent on the member's date of hire and date of retirement as follows:

- Hired prior to January 1, 2001: Members who retire prior to January 1, 2019 receive 100% paid coverage from the County. Members who retire on/after January 1, 2019 will contribute 5% of the applicable premium for the first year of retirement. Afterwards, the cash amount of the retiree's contribution in the first year of retirement is increased annually by 3%.
- Hired between January 1, 2001 & December 31, 2010: Member contributes 15% for individual, two-person, or family coverage.
- Hired on/after January 1, 2011: Member contributes 20% of the premium for individual, two-person, or family coverage.

Surviving spouses can continue coverage by paying 100% of the individual premium.

Medicare Part B: Saratoga County provides reimbursement for Medicare Part B premiums to retirees and spouses. Reimbursement is not given to surviving spouses.

Length of Coverage: Lifetime.

Police/Road Patrol**Total Active Members:** 114**Medical Plan:** Members hired prior to January 1, 2015 enroll in either PPO \$15 & POS \$25. All members hired on/after January 1, 2015 must enroll in PPO \$15.**Eligibility:** Members hired prior to October 7, 2014 must provide a minimum of 10 years of service to the County. Members hired on/after October 7, 2014 must provide a minimum of 20 years of service to the County. All members must also be eligible to retire under New York State Retirement System guidelines. It has been assumed for this valuation that all members will provide a minimum of 25 years of service to the County prior to retirement. There is no minimum age requirement to fulfill.**Contributions:** Contributions are dependent on the member's date of hire and date of retirement as follows:

- Hired prior to July 1, 1998: Members who retire prior to January 1, 2019 receive 100% paid coverage from the County. Members who retire on/after January 1, 2019 will contribute 5% for individual, two-person, or family coverage.
- Hired between July 1, 1998 & October 6, 2014: Member contributes 15% for individual, two-person, or family coverage.
- Hired on/after October 7, 2014: Member contributes 20% of the premium for individual, two-person, or family coverage.

Surviving spouses can continue coverage by paying 100% of the individual premium.

Medicare Part B: Saratoga County provides reimbursement for Medicare Part B premiums to retirees and spouses. Reimbursement is not given to surviving spouses.**Length of Coverage:** Lifetime.

Correctional

Total Active Members: 113

Medical Plan: All members enroll in the POS \$20 plan.

Eligibility: All members hired prior to June 1, 2013 must supply 10 years of continuous service to Saratoga County. All members hired on/after June 1, 2013 must supply 20 years of continuous full-time service to Saratoga County.

All members must also be eligible to retire under New York State Retirement System guidelines. It has been assumed for this valuation that all members will provide a minimum of 25 years of service to the County prior to retirement. There is no minimum age requirement to fulfill.

Contributions: Contributions are dependent on the member's date of hire as follows:

- Hired prior to January 1, 1998: Member contributes 5% for individual, two-person, or family coverage.
- Hired between January 1, 1998 & May 31, 2013: Member contributes 15% for individual, two-person, or family coverage.
- Hired on/after June 1, 2013: Member contributes 20% of the premium for individual, two-person, or family coverage.

Retirees are permitted to apply a portion of the cash value of unused sick days to assist in meeting their contribution requirements. Retirees must have a minimum of 25 unused sick days and can apply 30% of the cash value for each day over 25, 40% of the value for each day above 50, and 50% of the value for each day over 75, up to a maximum of 185 days.

Surviving spouses can continue coverage by paying 100% of the individual premium.

Medicare Part B: Saratoga County provides reimbursement for Medicare Part B premiums to retirees and spouses. Reimbursement is not given to surviving spouses.

Length of Coverage: Lifetime.

Current Retirees

Total Retired Members: 738

Contributions: Most members currently in this group do not make any contributions towards their coverage. 62 retirees make contributions towards medical coverage. Surviving spouses can continue coverage by paying 100% of the individual premium.

Medicare Part B: Saratoga County provides reimbursement for Medicare Part B premiums to retirees and spouses. Reimbursement is not given to surviving spouses.

Length of Coverage: Lifetime.

Medicare Part B Reimbursement

Saratoga County provides reimbursement for Medicare Part B coverage to all current and future retirees & their spouses, but not for surviving spouses. The County reimburses a flat amount of \$96.40 monthly and is not adjusted for changes in the Medicare Part B premium or for members who contribute a larger premium due to income limits.

ADDENDUM C: REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in the Employer's Total OPEB Liability and Related Ratios

Last 10 Fiscal Years

Total OPEB Liability	FY 2018	FY 2017	FY 2016	FY 2015	FY 2014	FY 2013	FY 2012	FY 2011	FY 2010	FY 2009
Service Cost	\$ 7,586,537									
Interest	8,864,916									
Changes of Benefit Terms	0									
Differences between expected and actual experience	0									
Changes of Assumptions or other inputs	11,334,333									
Benefit Payments	(8,910,324)									
Net Change in Total OPEB Liability	18,875,462									
Total OPEB Liability - Beginning of year	\$ 231,390,213									
Total OPEB Liability - End of year	\$250,265,675									
Covered Payroll over Measurement Period	58,384,878	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total OPEB Liability as a Percentage of Covered Payroll	429%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Notes to Schedule:										
Changes of Assumptions. Changes of assumptions and other inputs reflect the effects of changes in the discount rate each period. The discount rate in effect at the current measurement date is 3.44%.										

ADDENDUM D: DEFERRED INFLOWS & OUTFLOWS OF RESOURCES

Year Established	Outstanding Balance at January 1, 2018	Amount Recognized During Year	Outstanding Balance at December 31, 2018	Deferred Outflows/Inflows Recognized in Future Years				
				Year Ended December 31,				
				2019	2020	2021	2022	2023 and Thereafter
Plan Year Outflows 2018 Assumptions Loss	\$11,334,333	\$1,746,430	\$9,587,903	\$1,746,430	\$1,746,430	\$1,746,430	\$1,746,430	\$2,602,183
Total Outflows	\$11,334,333	\$1,746,430	\$9,587,903	\$1,746,430	\$1,746,430	\$1,746,430	\$1,746,430	\$ 2,602,183
Plan Year Inflows								
Total Inflows	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$11,334,333	\$1,746,430	\$9,587,903	\$1,746,430	\$1,746,430	\$1,746,430	\$1,746,430	\$ 2,602,183

ADDENDUM E: GASB 75 RESULTS BY FUND

Saratoga County
GASB Statement No. 75 Required Information
For Reporting Date December 31, 2018

Summary of Principal Results

	Fund 1	Fund 2	Fund 3	Fund 7	Fund 8	Total
Net OPEB Liability:						
Retirees & Dependents	\$103,160,414	\$13,907,728	\$229,124	\$6,202,291	\$250,152	\$123,749,709
Actives	98,246,626	9,859,256	11,571,852	6,838,232	0	126,515,966
Deferred Vesteds	0	0	0	0	0	0
Total OPEB Liability (TOL)	<u>\$201,407,040</u>	<u>\$23,766,984</u>	<u>\$11,800,976</u>	<u>\$13,040,523</u>	<u>\$250,152</u>	<u>\$250,265,675</u>
Fiduciary Net Position (FNP)	0	0	0	0	0	\$0
Net OPEB Liability (NOL=TOL-FNP)	<u>\$201,407,040</u>	<u>\$23,766,984</u>	<u>\$11,800,976</u>	<u>\$13,040,523</u>	<u>\$250,152</u>	<u>\$250,265,675</u>
FNP as a percentage of TOL	0%	0%	0%	0%	0%	0%
Present Value of Total Future Liability	\$301,496,730	\$30,305,635	\$16,895,286	\$17,966,869	\$250,152	\$366,914,672
OPEB Expense:	\$14,905,291	\$1,483,646	\$880,489	\$917,826	\$10,631	\$18,197,883
Deferred Outflows of Resources:						
Employer Contributions Subsequent to Measurement Date	\$7,325,592	\$1,104,013	\$55,544	\$499,273	\$8,961	\$8,993,383
Differences between expected and actual experience	0	0	0	0	0	0
<u>Changes of assumptions or other inputs</u>	<u>7,716,085</u>	<u>910,535</u>	<u>452,106</u>	<u>499,594</u>	<u>9,583</u>	<u>9,587,903</u>
Total Deferred Outflows	<u>\$15,041,677</u>	<u>\$2,014,548</u>	<u>\$507,650</u>	<u>\$998,867</u>	<u>\$18,544</u>	<u>\$18,581,286</u>
Deferred Inflows of Resources:						
Differences between expected and actual experience	\$0	\$0	\$0	\$0	\$0	\$0
<u>Changes of assumptions or other inputs</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Deferred Inflows	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

ADDENDUM F: GASB 75 Terminology

Actuarial Present Value of Total Projected Benefits: Total projected benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Expressed another way, it is the amount that would have to be invested on the valuation date so that the amount invested in addition to investment earnings will provide sufficient assets to pay total projected benefits when due.

Actuarial Valuation: The determination, as of a point in time (the actuarial valuation date), of the service cost, total OPEB liability, and related actuarial present value of projected benefit payments for OPEB performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.

Deferred Inflows/Outflows of Resources: Amounts arising from gains and losses that have not been recognized into the OPEB Expense, but will be recognized in the future.

Discount Rate: The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments. With a pay-as-you-go funded plan the discount rate is calculated using a yield or index rate for 20-year, tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale).

Net OPEB Liability (NOL): The Total OPEB Liability minus the Fiduciary Net Position.

OPEB: Other Post-Employment Benefits

Pay-as-you-go funding: Paying benefits (such as pensions or OPEB) on a cash basis, with no money set aside for future liabilities which are already incurred.

Service Cost (Formerly Normal Cost): The portions of the actuarial present value of projected benefit payments that are attributed to the measurement period.

Total OPEB Liability: The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of this Statement.