



# **COUNTY OF DUKES COUNTY**

Participant in the Dukes County Pooled OPEB Trust

**OTHER POSTEMPLOYMENT BENEFITS PROGRAM**

**FINANCIAL REPORTING AND DISCLOSURES**  
**Governmental Accounting Standards Board**  
**Statements 74 and 75**

**Disclosures as of**  
**June 30, 2018**

KMS Actuarial, LLC  
814 Elm Street, Suite 204  
Manchester, NH 03101

November, 2018



November 20, 2018

Ms. Ann Metcalf  
Treasurer  
County of Dukes County  
9 Airport Road, Suite 2  
Vineyard Haven, MA 02568

Dear Ann:

We are pleased to present the enclosed report of the July 1, 2016 actuarial valuation of the retiree health care benefits for the County of Dukes County, a Participant in the Dukes County Pooled OPEB Trust. The valuation was prepared in accordance with, and for the purpose of financial reporting and disclosures as of June 30, 2018, under the following Government Accounting Standards Board (GASB) Statements:

- ◆ GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (GASB 74)
- ◆ GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (GASB 75)

The Principal Valuation Results, including assets, liabilities and the development of future contributions, are provided in Section 1. The Notes to the Financial Statements and the Required Supplementary Information are provided in Sections 2 and 3, respectively. Employer Reporting Amounts under GASB 75 are provided in Section 4. The Summary of Plan Provisions and Actuarial Assumptions and Methods are shown in Sections 5 and 6, respectively. Section 7 summarizes the demographic profile of active members and retired members, covered spouses and survivors. Finally, a Glossary of Terms is provided in Section 8.

Our calculations are based on member census data and other information provided by the County of Dukes County as well as health plan rates provided by the Trustees of the Dukes County Pooled OPEB Trust as of July 1, 2017. Although we did not audit the data used in the valuation and disclosure calculations, we believe that the information is complete and reliable.

Liabilities presented in this report are based on a discount rate of 5.16%, a long-term investment return rate of 7.5% and a municipal bond rate of 3.87%. The long-term investment return rate is based on expected long-term investment return rates provided by the Trust's investment consultant, Rockland Trust.

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K M S A C T U A R I E S

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This report was completed in accordance with generally accepted actuarial standards and procedures, and conforms to the Code of Professional Conduct of the American Academy of Actuaries. The actuarial assumptions other than those explicitly applicable to the postemployment benefit plans are consistent with those used by the Dukes County Retirement System's actuaries for the Retirement System pension valuations.

Future actuarial valuation results may differ significantly from the current results presented in this report. Examples of potential sources of volatility include plan experience differing from that anticipated by the economic or demographic assumptions, the effect of new entrants, changes in economic or demographic assumptions, the effect of law changes and the delayed effect of smoothing techniques.

Our valuation follows generally accepted actuarial methods and we perform such tests as we consider necessary to assure the accuracy of the results. The amounts presented in this report have been appropriately determined according to the actuarial assumptions and methods stated herein.

This report is intended for the sole use of the County of Dukes County and is intended to provide information to comply with the stated purpose of the report. It may not be appropriate for other purposes.

The expected claims, cost trend rates, and analysis of regulatory changes have been developed based on the expertise of the undersigned health and welfare actuary, Christopher E. Bean, ASA, MAAA. The undersigned credentialed actuaries are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinion contained herein. They are available to answer any questions with regard to this report.

Respectfully submitted,



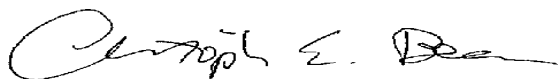
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K M S A C T U A R I E S

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## EXECUTIVE SUMMARY

This report presents the results of the actuarial valuation of the County of Dukes County's retiree health care benefits as of July 1, 2016. The valuation was prepared in accordance with, and for the purpose of financial reporting and disclosures as of June 30, 2018, under the following Government Accounting Standards Board (GASB) Statements:

- ◆ GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans (GASB 74)
- ◆ GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (GASB 75)

The results as of the measurement date are based on a roll forward of the liabilities developed in the most recent actuarial valuation.

### **New Accounting Standards**

In June 2015, the GASB approved two related Statements that significantly changed the way other postemployment benefits (OPEB) plans and governments account and report OPEB liabilities. Effective for plans with fiscal years beginning after June 15, 2016, GASB Statement No. 74 (GASB 74), *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, replaced the requirements of Statement No. 43 and effective for employers with fiscal years beginning after June 15, 2017, GASB Statement No. 75 (GASB 75), *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, replaced the requirements of Statement No. 45.

GASB 74 requires OPEB plans to present a statement of fiduciary net position (OPEB plan assets) and a statement of changes in fiduciary net position. Further, the statement requires that notes to financial statements include descriptive information such as the types of benefits provided, the classes of plan members covered and the authority under which benefit terms are established or may be amended. Finally, GASB 74 requires OPEB plans to present in required supplementary information the sources of the changes in the net OPEB liability and information about the actuarially determined contributions compared with the actual contributions made to the plan and related ratios.

GASB 74 and GASB 75 require projected benefit payments be discounted to their actuarial present value using the single rate that reflects:

- (1) a long-term expected rate of return on OPEB plan investments *to the extent that the OPEB plan's assets are sufficient to pay benefits and OPEB plan assets are expected to be invested using a strategy to achieve that return and*
- (2) a tax-exempt, high-quality municipal bond rate *to the extent that the conditions for use of the long-term expected rate of return are not met.*

GASB 75 establishes standards for measuring and recognizing liabilities, deferred outflows of resources, deferred inflows of resources and OPEB expense by state and local governments.

## EXECUTIVE SUMMARY

### County of Dukes County Other Postemployment Benefits Program

The effective date for GASB 74 is for plan years beginning after June 15, 2016, which is the fiscal year ending June 30, 2017 for the County of Dukes County. The effective date for GASB 75 is for fiscal years beginning after June 15, 2017, which is the fiscal year ending June 30, 2018 for the County of Dukes County.

### Summary of Results

A summary of principal results from the current and prior measurement dates follows:

Measurement Date	<u>June 30, 2018</u>	<u>June 30, 2017</u>	<u>Increase/ (Decrease)</u>
<b>Valuation Date</b>	July 1, 2016	July 1, 2016	
<b>Membership Data</b>			
Active Plan Members	34	38	(10.5%)
Inactive Plan Members	22	22	0.0%
Total Plan Members	56	60	(6.7%)
 Covered Payroll	 2,395,994	 2,162,273	 10.8%
<b>Valuation Results (GASB 74)</b>			
Discount rate	5.16%	5.38%	
Total OPEB Liability	\$6,200,615	\$5,658,934	9.6%
Fiduciary Net Position	\$814,895	\$661,238	23.2%
Net OPEB Liability	\$5,385,720	\$4,997,696	7.8%
Funded Ratio	13.1%	11.7%	12.0%
<b>Valuation Results (GASB 75)</b>			
OPEB Expense	\$585,348	N/A	
Deferred Outflows	\$177,840	N/A	
Deferred Inflows	\$0	N/A	
<b>Valuation Results (GASB 45)</b>			
Actuarial Accrued Liability	N/A	4,064,845	
Market Value of Assets	N/A	661,238	
Unfunded Actuarial Accrued Liability	N/A	3,403,607	
Funded Ratio	N/A	16.3%	
 Annual Required Contribution	 N/A	 \$379,403	
Net OPEB Obligation	N/A	\$2,051,622	

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## EXECUTIVE SUMMARY

### Experience Gain and Loss

In developing the Total OPEB Liability, various assumptions are made regarding future premium rates, mortality, retirement, disability and turnover rates. A comparison of the results of the current and prior measurements is made to determine how closely actual experience relates to expected. For the current measurement period, there is no experience gain or loss as the Total OPEB liability was developed from a roll forward of results of the most recent valuation.

### Changes of Assumptions

The discount rate changed from 5.38% as of June 30, 2017 to 5.16% as of June 30, 2018. The Actuarial Assumptions and Methods used in the valuation are summarized in Section 6.

### Changes of Benefit Terms

The Patient Protection and Affordable Care Act (PPACA) applies a 40% excise tax, commonly referred to as the "Cadillac Tax", to the cost of plan benefits in excess of statutory thresholds beginning in 2022. Previously, the tax was effective beginning in 2020. All other benefit terms are the same as those used in the prior valuation. A Summary of the Principal Plan Provisions is provided in Section 5.

### Total OPEB Liability

The Total OPEB Liability as of the current measurement date, June 30, 2018, is \$6,200,615. The Total OPEB Liability as of the prior measurement date, June 30, 2017, was \$5,658,934. The development of the Total OPEB Liability for the current measurement date is shown in Section 1, Exhibit 1.2.

### Fiduciary Net Position

The Fiduciary Net Position is equal to the market value of assets and as of the current measurement date, June 30, 2018, is \$814,895. The Fiduciary Net Position as of the prior measurement date, June 30, 2017, was \$661,238. The Fiduciary Net Position is shown in Section 1, Exhibit 1.1.

### Employer Future Period Contributions

The County annually contributes \$150,000 to the OPEB trust toward its share of the liability.

### Discount Rate

As of the June 30, 2018 measurement date, the OPEB plan's fiduciary net position was projected to be insufficient to make all projected benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to the first 30 periods of projected future benefit payments and, the 3.87% municipal bond rate was applied to all periods thereafter to determine the total OPEB liability.

### OPEB Expense

The OPEB Expense as of the current measurement date, June 30, 2018, is \$585,348. The development of the OPEB expense for the current measurement date is shown in Section 4, Exhibit 4.2.

## SECTION 1 - PRINCIPAL VALUATION RESULTS

### Exhibit 1.1 - OPEB Trust Assets

The Dukes County Pooled OPEB Trust has established an irrevocable trust pursuant to Chapter 149 of the Acts of 2010 for the purpose of accumulating assets to prefund the OPEB liabilities. Plan assets segregated and restricted in an OPEB trust must be dedicated to providing plan benefits to retirees and beneficiaries in accordance with the terms of the plan and must be legally protected from creditors of the employer. Further, employer contributions to the trust must be irrevocable. Asset information for the current and prior fiscal years was provided by the Trustees and is presented below:

Fiscal Year Ended June 30	2018	2017
<b>Trust Fund Composition at Fiscal Year-End</b>		
Equities	\$448,192	\$357,068
US Governments & Agencies	171,128	151,424
Fixed Income	187,426	140,182
Cash & Equivalents	8,149	12,564
Total Market Value of Assets	\$814,895	\$661,238
<b>Asset Activity</b>		
Market value, beginning of year	\$661,238	\$485,456
Employer Premiums	255,164	236,184
OPEB Trust Contributions	120,000	150,000
Benefit Payments	(255,164)	(236,184)
Administrative Expenses	-	-
Investment Return	33,657	25,782
Market value, end of year	\$814,895	\$661,238
<b>Money-Weighted Rate of Return</b>	4.42%	4.14%
<b>(Gain) / Loss on OPEB Plan Investments</b>		
Projected earnings	\$54,093	\$42,034
Actual earnings	33,657	25,782
(Gain) / Loss on OPEB plan investments	\$20,436	\$16,252

## SECTION 1 - PRINCIPAL VALUATION RESULTS

### Exhibit 1.2 - Total OPEB Liability

The Total OPEB Liability, developed using the Entry Age Normal funding method, is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service. The total OPEB liability as of the June 30, 2018 measurement date was developed from an actuarial valuation as of July 1, 2016 and rolled forward to the OPEB plan's fiscal year-end.

The Service Cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year. Only active employees who have not reached the age at which the probability of retirement is 100% incur a service cost.

Actuarial gains and losses arise from the difference between estimates and actual experience, excluding amounts related to benefit changes and changes in assumptions or other inputs.

The development of the Total OPEB Liability from the beginning of the measurement period, June 30, 2017 to the end of the measurement period, June 30, 2018 is shown below:

<u>Measurement Date</u>	<u>June 30, 2018</u>
1. Total OPEB Liability, beginning of year:	
a. Actives	\$2,554,222
b. Retirees, Covered Spouses and Survivors	3,104,712
c. Total OPEB Liability at 5.38% (a. + b.)	\$5,658,934
2. Service Cost	\$301,243
3. Expected Benefit Payments	
a. Current retirees	(\$224,539)
b. Future retirees	(30,625)
c. Total (a. + b.)	(\$255,164)
4. Interest [5.38% x (1.c. + 2. + .5 x 3.c)]	\$313,794
5. Changes of benefit terms	(\$8,833)
6. Differences between expected and actual experience	\$0
7. Changes of assumptions or other inputs	\$190,641
8. Total OPEB Liability, end of year (1.c. + 2. + 3.c. + 4. + 5. + 6. + 7.)	
a. Actives	\$3,088,072
b. Retirees, Covered Spouses and Survivors	3,112,543
c. Total OPEB Liability at 5.16% (a. + b.)	\$6,200,615

## SECTION 1 - PRINCIPAL VALUATION RESULTS

### Exhibit 1.3 - Development of Actuarially Determined Employer Contributions

The County annually contributes \$150,000 to the OPEB trust toward its share of the liability.

The Actuarially Determined Employer Contribution (ADEC) equals the Normal Cost plus a provision for amortizing the Unfunded Actuarial Accrued Liability. We have assumed increasing dollar amortization over an amortization period of 30 years.

<b>Fiscal Year Ending</b>	<b>June 30, 2018</b>
<b>Discount Rate</b>	<b>5.38%</b>
1. Normal Cost	\$301,243
2. Unfunded Actuarial Accrued Liability	
a. Actuarial Accrued Liability	\$5,658,934
b. Actuarial Value of Plan Assets	\$661,238
c. Unfunded Actuarial Accrued Liability	\$4,997,696
3. Amortization of Unfunded Actuarial Accrued Liability	
a. Unfunded Actuarial Accrued Liability	\$4,997,696
b. Amortization Period in years	30
c. Payroll Growth Rate	4.0%
d. Amortization Factor	24.94
e. Amortization Amount (3.a. / 3.d.)	\$200,389
4. Interest on 1. and 3.e.	\$26,988
5. Actuarially Determined Employer Contribution (1. + 3.e. + 4.)	\$528,620
6. Actual Employer Contribution to OPEB Trust	\$120,000
7. Expected Benefit Payments	\$255,164
8. Total Contribution (6. + 7.)	\$375,164

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## SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

### Exhibit 2.1 - Plan Description

*Plan administration:*

The County of Dukes County administers the retiree health care benefits program - a single-employer defined benefit plan that is used to provide postemployment benefits other than pensions (OPEB) for all permanent full-time employees.

*Plan membership:*

At June 30, 2018, OPEB plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefit payments <sup>1</sup>	22
Inactive plan members entitled to but not yet receiving benefit payments	0
Active plan members	34
	<hr/>
	56
	<hr/>

<sup>1</sup>Per paragraph 34a of GASB 74 and further clarified by Question 4.67 of the 2017-2 GASB 74 Implementation Guide, the total shown for inactive plan members or beneficiaries currently receiving benefit payments does not include covered spouses or other dependents.

*Benefits provided:*

The County provides health care benefits for retirees and their dependents. Benefits are provided through the Cape Cod Municipal Health Group, and the full cost of benefits is shared between the County and retirees.

*Contributions:*

The County annually contributes \$150,000 to the OPEB trust toward its share of the liability.

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## SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

### Exhibit 2.2 - Net OPEB Liability

The components of the net OPEB liability at June 30, 2018, were as follows:

Total OPEB liability	\$ 6,200,615
Fiduciary net position	(814,895)
Net OPEB liability	<u>\$ 5,385,720</u>

Fiduciary net position as a percentage of the total OPEB liability 13.14%

#### *Actuarial assumptions:*

The total OPEB liability was determined by an actuarial valuation as of July 1, 2016, rolled forward to the measurement date and using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.0 percent
Discount rate	5.16%, net of investment expenses, including inflation
Healthcare cost trend rate	8 percent for 2016, decreasing 1 percent per year to an ultimate rate of 5 percent.
Pre-Retirement Mortality - General and Public Safety employees:	RP-2000 Employees Mortality Table, base year 2009, projected with generational mortality improvement using scale BB.
Post-Retirement Mortality - General and Public Safety employees:	RP-2000 Healthy Annuitant Mortality Table, base year 2009, projected with generational mortality improvement using scale BB.

## SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

### Exhibit 2.2 - Net OPEB Liability

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major 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. Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of June 30, 2018 are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation<sup>1</sup></u>	<u>Long-Term Expected Real Rates of Return<sup>1</sup></u>
Equities	54%	9.00%
US Governments & Agencies	20%	1.03%
Fixed Income	25%	3.61%
Cash & Equivalents	1%	0.00%
Total	100%	

<sup>1</sup> provided by the Trust's investment consultant, Rockland Trust.

#### *Discount rate:*

The discount rate used to measure the total OPEB liability was 5.16%. The projection of cash flows used to determine the discount rate assumed that contributions from the County will be made in accordance with the plan's funding policy. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be insufficient to make all projected benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to the first 30 periods of projected future benefit payments and, the 3.87% municipal bond rate was applied to all periods thereafter to determine the total OPEB liability.

## SECTION 2 - NOTES TO THE FINANCIAL STATEMENTS

### Exhibit 2.2 - Net OPEB Liability

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

The following presents the net OPEB liability calculated using the current discount rate of 5.16 percent, as well as what the net OPEB liability would be if it were calculated using a discount rate 1-percentage point lower (4.16 percent) or 1-percentage point higher (6.16 percent) than the current rate:

	<b>1% Decrease (4.16%)</b>	<b>Discount Rate (5.16%)</b>	<b>1% Increase (6.16%)</b>
Net OPEB Liability	\$ 6,382,688	\$ 5,385,720	\$ 4,588,348

*Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates:*

The following presents the net OPEB liability calculated using the current healthcare cost trend rates as well as what the net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage point lower (7% year 1 decreasing to 4%) or 1-percentage point higher (9% year 1 decreasing to 6%) than the current healthcare cost trend rates:

	<b>1% Decrease 7% Year 1 Decreasing to 4%</b>	<b>Healthcare Cost Trend Rates 8% Year 1 Decreasing to 5%</b>	<b>1% Increase 9% Year 1 Decreasing to 6%</b>
Net OPEB Liability	\$ 4,365,049	\$ 5,385,720	\$ 6,794,654

## SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

### Exhibit 3.1 - Changes in Net OPEB Liability and Related Ratios

Fiscal Year Ended June 30	2018	2017
<b>Total OPEB Liability</b>		
Service cost	\$ 301,243	\$ 342,568
Interest	313,794	285,191
Changes of benefit terms	(8,833)	-
Differences between expected and actual experience	-	-
Changes of assumptions	190,641	(576,049)
Benefit payments	(255,164)	(236,184)
<b>Net change in total OPEB liability</b>	<b>\$ 541,681</b>	<b>\$ (184,474)</b>
<b>Total OPEB liability—beginning</b>	<b>\$ 5,658,934</b>	<b>\$ 5,843,408</b>
<b>Total OPEB liability—ending (a)</b>	<b>\$ 6,200,615</b>	<b>\$ 5,658,934</b>
<b>Plan fiduciary net position</b>		
Contributions—employer	\$ 375,164	\$ 386,184
Net investment income	33,657	25,782
Benefit payments	(255,164)	(236,184)
Administrative expenses	-	-
Other	-	-
<b>Net change in plan fiduciary net position</b>	<b>\$ 153,657</b>	<b>\$ 175,782</b>
<b>Plan fiduciary net position—beginning</b>	<b>\$ 661,238</b>	<b>\$ 485,456</b>
<b>Plan fiduciary net position—ending (b)</b>	<b>\$ 814,895</b>	<b>\$ 661,238</b>
<b>Net OPEB liability—ending (a) – (b)</b>	<b>\$ 5,385,720</b>	<b>\$ 4,997,696</b>
Plan fiduciary net position as a percentage of the total OPEB liability	13.14%	11.68%
Covered payroll	\$ 2,395,994	\$ 2,162,273
Net OPEB liability as a percentage of covered payroll	224.78%	231.13%

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## SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

### Exhibit 3.2 - Investment Returns

Fiscal Year Ended June 30	<u>2018</u>	<u>2017</u>
Annual money-weighted rate of return, net of investment expenses	4.42%	4.14%

The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amount of OPEB plan investments by the proportion of time they are available to earn a return during that period. The rate of return is then calculated by solving, through an iterative process, for the rate that equates the sum of the weighted external cash flows into and out of the OPEB plan investments to the ending fair value of OPEB plan investments.

## SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

### Exhibit 3.2 - Investment Returns

#### Calculation of Money-Weighted Rate of Return

	Plan Investments/ Net External Cash Flows (a)	Periods Invested (b)	Period Weight (c)=(b)÷12	(d)=(a) x (1+r <sub>mw</sub> ) <sup>(c)</sup>
Beginning value - July 1, 2017	\$ 661,238	12	1.00	\$ 690,487
Monthly net external cash flows:				
July	-	11	0.92	-
August	120,000	10	0.83	124,407
September	-	9	0.75	-
October	-	8	0.67	-
November	-	7	0.58	-
December	-	6	0.50	-
January	-	5	0.42	-
February	-	4	0.33	-
March	-	3	0.25	-
April	-	2	0.17	-
May	-	1	0.08	-
June	-	0	0.00	-
Ending value - June 30, 2018				\$ 814,895
			Money-weighted rate of return:	4.42%

## SECTION 3 - REQUIRED SUPPLEMENTARY INFORMATION

### Exhibit 3.3 - Schedule of Employer Contributions

Fiscal Year Ended June 30	<u>2018</u>	<u>2017</u>
Actuarially determined contribution	\$ 528,620	\$ 379,403
Contributions in relation to the actuarially determined contribution	<u>375,164</u>	<u>386,184</u>
Contribution deficiency (excess)	<u>\$ 153,456</u>	<u>\$ (6,781)</u>
Covered payroll	\$ 2,395,994	\$ 2,162,273
Contributions as a percentage of covered payroll	15.66%	17.86%
Discount rate	5.38%	7.50%

#### Notes to Schedule

*Valuation date:*

Actuarially determined contributions are determined as of July 1, one year prior to the end of the fiscal year in which contributions are reported.

*Methods and assumptions used in calculations of actuarially determined contributions:*

Actuarial cost method	Entry Age Normal
Amortization method	Increasing at 4% over 30 years on an open amortization period
Amortization period	30 years
Asset valuation method	Market value
Inflation	3 percent
Healthcare cost trend rates	8 percent for 2016, decreasing 1 percent per year to an ultimate rate of 5 percent.

## SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 75

### Exhibit 4.1 - Deferred Outflows and Deferred Inflows of Resources

Deferred Outflows of Resources and Deferred Inflows of Resources arising from differences between expected and actual experience are recognized in OPEB Expense over the average expected remaining service life of all active and inactive participants.

Year	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in OPEB Expense through June 30, 2018 (c)	Balances at June 30, 2018	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2018	\$ -	\$ -	\$ -	\$ -	\$ -
Total				<u>\$ -</u>	<u>\$ -</u>

Deferred Outflows of Resources and Deferred Inflows of Resources arising from changes of assumptions are recognized in OPEB Expense over the average expected remaining service life of all active and inactive participants.

Year	Increases in the Total OPEB Liability (a)	Decreases in the Total OPEB Liability (b)	Amounts Recognized in OPEB Expense through June 30, 2018 (c)	Balances at June 30, 2018	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2018	\$ 190,641	\$ -	\$ 29,150	\$ 161,491	\$ -
Total				<u>\$ 161,491</u>	<u>\$ -</u>

## SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 75

### Exhibit 4.1 - Deferred Outflows and Deferred Inflows of Resources

Deferred Outflows of Resources and Deferred Inflows of Resources arising from differences between projected and actual earnings on OPEB Plan investments are recognized in OPEB Expense over five years.

Year	Investment Earnings Less Than Projected	Investment Earnings Greater Than Projected	Amounts Recognized in OPEB Expense through June 30, 2018	Balances at June 30, 2018	
	(a)	(b)	(c)	Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2018	\$ 20,436	\$ -	\$ 4,087	\$ 16,349	\$ -
Total				\$ 16,349	\$ -
Net				\$ 16,349	\$ -

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources will be recognized in OPEB expense as follows:

Year ended June 30		
2019	\$	33,237
2020	\$	33,237
2021	\$	33,237
2022	\$	33,238
2023	\$	29,150
Thereafter		15,741

## SECTION 4 - EMPLOYER REPORTING AMOUNTS UNDER GASB 75

### Exhibit 4.2 - OPEB Expense

The OPEB Expense and deferred outflows and inflows of resources primarily result from changes in the components of the net OPEB liability (NOL). Most changes in the NOL are included in the OPEB Expense in the period of the change, including service cost, interest on total OPEB liability, changes in benefit terms and projected earnings on the OPEB plan's investments. Other changes in the net OPEB liability are included in OPEB Expense over the current and future periods. These include the effects on the total OPEB liability of changes of economic and demographic assumptions and differences between expected and actual experience. In addition, the effect on the net OPEB liability of differences between the projected earnings on OPEB plan investments and actual experience with regard to those earnings are included in OPEB expense over the current and future periods. The OPEB Expense for the reporting period ending June 30, 2018 is presented below:

Fiscal Year Ended June 30	<u>2018</u>
Measurement date	<u>6/30/2018</u>
1. Service cost	\$ 301,243
2. Interest on the total OPEB liability	
a. Total OPEB liability, beginning of year	5,658,934
b. Service cost, beginning of year	301,243
c. Benefit payments	<u>(255,164)</u>
d. Interest on total OPEB liability = 5.38% times (a. + b. + .5 times c.)	313,794
3. Differences between expected and actual experience	-
4. Changes of benefit terms	(8,833)
5. Changes of assumptions	29,150
6. Projected earnings on OPEB plan investments	
a. Plan fiduciary net position, beginning of year	661,238
b. Contributions - Employer	375,164
c. Benefit payments	(255,164)
d. Administrative expenses and other	-
e. Total projected earnings = 7.5% times (a. + .5 times (b. + c. + d.))	(54,093)
7. Differences between projected and actual earnings on OPEB plan investments	<u>4,087</u>
8. OPEB plan administrative expenses	-
9. Other changes in fiduciary net position	-
<b>10. Total OPEB Expense</b>	<b><u>\$ 585,348</u></b>

County of Duques County Postemployment Benefits Other Than Pensions  
Financial Reporting and Disclosures Under GASB 74 and GASB 75 as of June 30, 2018

## SECTION 5 - SUMMARY OF PLAN PROVISIONS

**Eligibility for Postemployment Benefits:** Employees of the County and their dependents are eligible for postemployment medical and life insurance based on the eligibility requirements under the Dukes County Retirement System.

**Retirement Eligibility:** General employees hired before April 2, 2012: retire after attaining age 55 with 10 or more years of service or any age with 20 or more years of service

General employees hired after April 1, 2012: retire after attaining age 60 with 10 or more years of service

Public Safety employees hired before April 2, 2012: retire after attaining age 55 or any age with 20 or more years of service

Public Safety employees hired after April 1, 2012: retire after attaining age 55

**Ordinary Disability Eligibility:** Any member who is unable to perform his or her duties due to a non-occupational disability and has ten or more years of creditable service.

**Accidental Disability Eligibility:** Any member who is unable to perform his or her duties due to a job-related disability.

**Medical Premiums:** The total monthly premiums by plan are shown below:

<u>Non-Medicare Plans - July 1, 2017</u>	<u>Individual</u>	<u>Family</u>
Master Health Plus	\$1,547.00	\$3,867.00
BCBS Blue Care Elect	\$1,058.00	\$2,649.00
Network Blue	\$809.00	\$2,173.00
Harvard Pilgrim EPO	\$804.00	\$2,150.00
Harvard Pilgrim PPO	\$882.00	\$2,334.00
<u>Medicare Plans - January 1, 2017</u>		
Medex III Enhanced	\$356.00	
Harvard Pilgrim Medicare Enhance	\$320.00	

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## SECTION 5 - SUMMARY OF PLAN PROVISIONS

<b>Participant Contributions:</b>	Retired employees contribute 10% of the total medical premium.
<b>Continuation of Coverage to Spouse After Death of Retiree:</b>	Surviving spouse may continue coverage for lifetime by paying the required medical premium.
<b>Medicare Penalty Reimbursement:</b>	The County reimburses the Medicare late-enrollment penalty, if applicable, based on information provided in the retiree data.
<b>Dental Coverage:</b>	Dental coverage is not offered to retirees.
<b>Life Insurance Coverage:</b>	Retirees are eligible for a \$5,000 life insurance benefit. The total monthly cost is \$5.50. Retirees contribute \$1.00 towards the monthly premiums.
<b>PPACA Excise Tax:</b>	The Patient Protection and Affordable Care Act (PPACA) applies a 40% excise tax, commonly referred to as the "Cadillac Tax", to the cost of plan benefits in excess of statutory thresholds beginning in 2022. The 2018 thresholds are assumed to be \$10,200 for individual and \$27,500 for family coverage, increasing by chained CPI plus one percentage point in 2019 and by chained CPI thereafter. The annual limits are increased by \$1,650 for individual and \$3,450 for family coverage for retirees not eligible for Medicare benefits.

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## SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

<b>Valuation Date:</b>	July 1, 2016
<b>Disclosure Date:</b>	June 30, 2018
<b>GASB 75 Reporting Date:</b>	June 30, 2018
<b>Long-Term Expected Rate of Return:</b>	7.5%, compounded annually, net of fees.  A long-term assumption based on capital market expectations by asset class, historical returns and professional judgment. A building block approach was used that considered the target asset allocation, expected returns by asset class and risk analysis to determine a long-term expected average annual rate of return.
<b>Municipal Bond Rate:</b>	3.87%, based on the Bond Buyer 20-Bond GO Index published on June 28, 2018.
<b>Discount Rate (GASB):</b>	5.16%, compounded annually, for the measurement as of June 30, 2018. 5.38%, compounded annually, for the measurement as of June 30, 2017.  The single rate that reflects the long-term expected rate of return on OPEB plan investments to the extent that the OPEB plan's assets, which are expected to be invested using a strategy to achieve that return, are sufficient to pay benefits, and a tax-exempt, high-quality municipal bond rate to the extent that the conditions for use of the long-term expected rate of return are not met.
<b>Discount Rate (ADEC):</b>	5.38%, compounded annually, for development of the Actuarially Determined Contribution (ADEC) as of June 30, 2018.
<b>Amortization Method:</b>	Increasing at 4% over 30 years on an open amortization period for partial pre-funding.

## SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

**Medical Trend Rates:**

Year	Trend
1	8.00%
2	7.00%
3	6.00%
4	5.00%
5	5.00%
Ultimate	5.00%

Health care trend assumptions begin at current levels and grade down over a period of years to a lower level equal to some real rate plus inflation. The principal components of health trend are medical inflation, deductible erosion, cost shifting, utilization, technology and catastrophic claims. The overall effect of these components are expected to decline year by year.

**Dental Trend Rates:** Not applicable (no dental coverage).

**Inflation:** 3% per year.

**Payroll Growth:** 4% per year.

**Participation Rates:** Medical - 85% of eligible retired employees will elect to participate.  
 Dental - Not offered to retired employees.  
 Life - 70% of eligible retirees will elect to participate.  
 Medicare - all retired employees are assumed to enroll in Medicare at age 65.

**Dependent Status:** Male spouses are assumed to be three years older and female spouses are assumed to be three years younger than the retired employee.

60% of employees are assumed to retire with a covered spouse.

For current retirees, the actual census information is used.

## SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

**Medical Per Capita Costs:** The following annual per capita costs are for the fiscal year beginning July 1, 2016 and are applicable to retirees, survivors and spouses. Annual costs for current and future retirees are based on the blended curve shown below, developed using the plan coverages elected by current retirees and survivors and premium rates currently in effect. Future years' costs are based on the first year cost adjusted with trend.

<u>Age</u>	<u>Male</u>	<u>Female</u>
Under 20	\$4,337	\$5,092
20-24	3,418	5,421
25-29	3,556	7,998
30-34	4,467	10,105
35-39	5,604	10,409
40-44	6,983	10,661
45-49	8,813	11,701
50-54	11,615	13,766
55-59	15,093	15,917
60-64	19,369	18,944
65-69	3,568	3,475
70-74	4,276	4,099
75-79	5,049	4,756
80-84	5,804	5,454
85-89	6,465	6,097
90-94	7,038	6,507
95+	7,481	6,293

**Retiree Contributions:** Annual per capita participant contributions for the fiscal year beginning July 1, 2016 are as follows:

<u>Plan</u>	<u>Contribution</u>
Non-Medicare	\$ 1,326
Medicare	409

**PPACA Excise Tax:** For purposes of estimating the Patient Protection and Affordable Care Act (PPACA) excise tax, per capita plan costs are developed for individual and family coverage for both Medicare and non-Medicare members. These plan costs are compared to the thresholds stipulated in the PPACA. Beginning in 2022, a 40% excise tax is applied on the excess of the plan costs over the thresholds. The thresholds increase annually by chained CPI.

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## SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

**Actuarial Cost Method:** Entry Age Normal. The costs of each employee's postemployment benefits are allocated as a level basis over the earnings of the employee between the employee's date of hire and the assumed exit ages.

**Employee Data:** Employee and retiree data were submitted by the County. We made reasonable adjustments for missing or invalid data.

## SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

**Post-Retirement Mortality:** Post-retirement mortality rates for General and Public Safety employees are based on the RP-2000 Healthy Annuitant Mortality Table, base year 2009, projected with generational mortality improvement using scale BB.

**Pre-Retirement Mortality:** Pre-retirement mortality rates for General and Public Safety employees are based on the RP-2000 Employees Mortality Table, base year 2009, projected with generational mortality improvement using scale BB.

**Turnover Rates:** Turnover rates for General and Public Safety employees are as follows:

General Employees		Public Safety	
Service	Rate	Service	Rate
0	15.00%	0	1.50%
1	12.00%	1	1.50%
2	10.00%	2	1.50%
3	9.00%	3	1.50%
4	8.00%	4	1.50%
5	7.60%	5	1.50%
10	5.40%	10	1.50%
15	3.30%	15	0.00%
20	2.00%	20	0.00%
25	1.00%	25	0.00%
30	0.00%	30	0.00%

**Disability Rates:** Disability rates for General and Public Safety employees are as follows:

General Employees		Public Safety	
Age	Rate	Age	Rate
25	0.02%	25	0.20%
30	0.03%	30	0.30%
35	0.06%	35	0.30%
40	0.10%	40	0.30%
45	0.15%	45	1.00%
50	0.19%	50	1.25%
55	0.24%	55	1.20%
60	0.28%	60	0.85%

55% of the General employee disabilities are job-related.

90% of the Public Safety employee disabilities are job-related.

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## SECTION 6 - ACTUARIAL ASSUMPTIONS AND METHODS

### Retirement Rates:

Retirement rates for General and Public Safety employees are as follows:

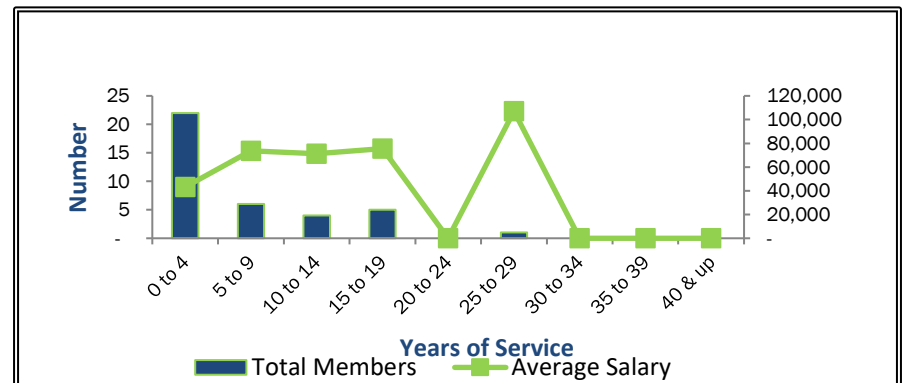
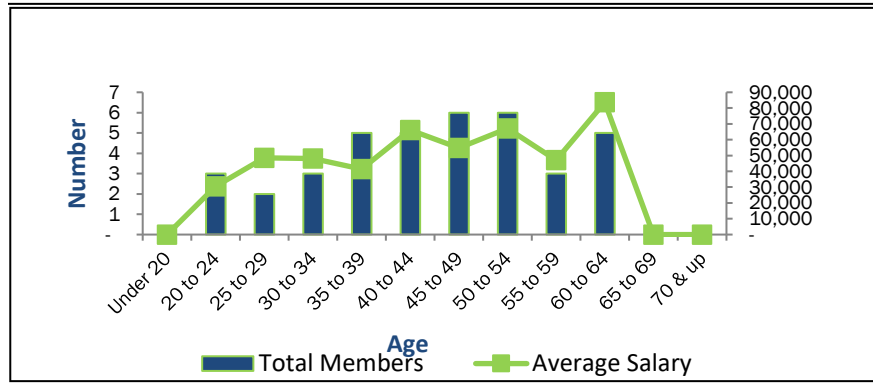
<u>Age</u>	<u>General Employees</u>		<u>Public Safety</u>
	Male	Female	All
45	0.00%	0.00%	1.00%
50	1.00%	1.50%	2.00%
55	2.00%	5.50%	15.00%
60	12.00%	5.00%	20.00%
62	30.00%	15.00%	25.00%
65	40.00%	15.00%	100.00%
69	30.00%	20.00%	
70	100.00%	100.00%	

## SECTION 7 - PLAN MEMBER INFORMATION

**TABLE 7.1 - ACTIVE MEMBERS BY AGE and YEARS OF SERVICE AS OF JULY 1, 2016**

Age	Years of Service									Total	Total Salary	Average Salary
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up			
Under 20	-	-	-	-	-	-	-	-	-	-	-	-
20 to 24	3	-	-	-	-	-	-	-	-	3	91,525	30,508
25 to 29	2	-	-	-	-	-	-	-	-	2	96,859	48,430
30 to 34	2	-	1	-	-	-	-	-	-	3	144,380	48,127
35 to 39	4	1	-	-	-	-	-	-	-	5	207,220	41,444
40 to 44	3	1	1	-	-	-	-	-	-	5	330,911	66,182
45 to 49	2	2	1	1	-	-	-	-	-	6	328,559	54,760
50 to 54	4	1	-	1	-	-	-	-	-	6	402,977	67,163
55 to 59	1	1	-	1	-	-	-	-	-	3	141,550	47,183
60 to 64	1	-	1	2	-	1	-	-	-	5	418,292	83,658
65 to 69	-	-	-	-	-	-	-	-	-	-	-	-
70 & up	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>22</b>	<b>6</b>	<b>4</b>	<b>5</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>38</b>	<b>2,162,273</b>	<b>56,902</b>
<b>Total Salary</b>	<b>949,181</b>	<b>442,801</b>	<b>284,834</b>	<b>378,390</b>	<b>-</b>	<b>107,067</b>	<b>-</b>	<b>-</b>	<b>-</b>			
<b>Average Salary</b>	<b>43,145</b>	<b>73,800</b>	<b>71,209</b>	<b>75,678</b>	<b>-</b>	<b>107,067</b>	<b>-</b>	<b>-</b>	<b>-</b>			

Average Age: 44.5      Average Service: 6.1



## SECTION 7 - PLAN MEMBER INFORMATION

**TABLE 7.2 - RETIRED MEMBERS, COVERED SPOUSES and SURVIVORS AS OF JULY 1, 2016**

Age	Non-Medicare Plans					Medicare Plans		Total
	Master Health Plus	BCBS Blue Care Elect	Network Blue	Harvard Pilgrim EPO	Harvard Pilgrim PPO	Medex III Enhanced	Harvard Pilgrim Medicare Enhance	
Under 40	0	0	0	0	0	0	0	0
40 to 44	0	0	0	0	0	0	0	0
45 to 49	0	0	0	0	0	0	0	0
50 to 54	0	0	0	0	0	0	0	0
55 to 59	0	1	0	0	0	0	0	1
60 to 64	0	5	0	0	0	1	0	6
65 to 69	0	0	0	0	0	6	1	7
70 to 74	0	0	0	0	0	4	0	4
75 to 79	0	0	0	0	0	1	0	1
80 to 84	0	1	0	0	0	0	0	1
85 to 89	0	0	0	0	0	1	0	1
90+	0	0	0	0	0	1	0	1
<b>Total</b>	0	7	0	0	0	14	1	22
<b>Covered Spouses</b>	0	2	0	0	0	6	1	9
Average Age: 70.1								

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## SECTION 8 - GLOSSARY OF TERMS

**Actuarial Assumptions** – Assumptions as to the occurrence of future events affecting OPEB costs, such as mortality, withdrawal, disability and retirement; changes in compensation and OPEB benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.

**Actuarial Cost Method (or Funding Method)** – A procedure for allocating the Actuarial Present Value of projected benefit payments to the current year (Service Cost) and the past (Total OPEB Liability).

**Actuarial Gain or Loss (or Experience Gain or Loss)** – A measure of the difference between actual experience and that expected based upon the set of Actuarial Assumptions during the period between the valuation date and the most recent immediately preceding valuation date.

**Actuarial Present Value of Projected Benefit Payments** – The dollar value on the valuation date of all benefits expected to be paid to current members based upon the Actuarial Assumptions and the terms of the Plan.

**Actuarially Determined Contribution** – A target or recommended contribution to a defined benefit OPEB plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

**Actuarial Valuation Date** – The date as of which an actuarial valuation is performed. This date may be up to 24 months prior to the measurement date and up to 30 months prior to the employer's reporting date.

**Deferred Inflow of Resources** – Acquisition of resources by a governmental entity that is applicable to future reporting periods. Under GASB 75, deferred inflows of resources are made up of experience gains, assumption changes reducing the Total OPEB Liability and investment gains that are recognized in future reporting periods.

**Deferred Outflow of Resources** – Consumption of resources by a governmental entity that is applicable to future reporting periods. Under GASB 75, deferred outflows of resources are made up of experience losses, assumption changes increasing the Total OPEB Liability and investment losses that are recognized in future reporting periods.

**Entry Age Normal Actuarial Cost Method** – A method under which the actuarial present value of the projected benefits of each individual in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age.

**Explicit Subsidy** – The difference between (a) the blended rates based on combined active and retired member experience and (b) actual cash contributions made by the employer.

**Fiduciary Net Position** – The fair market value of assets as of the measurement date.

**Funded Ratio** – The Actuarial Value of Assets expressed as a percentage of the Actuarial Accrued Liability.

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## SECTION 8 - GLOSSARY OF TERMS

**GASB** – Governmental Accounting Standards Board.

**Health Cost Trend Rate** – The rate of change in per capita health claims cost over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

**Implicit Subsidy** – In an experience-rated healthcare plan that includes both active employees and retirees with blended premium rates for all plan members, the difference between (a) the age-adjusted premiums approximating claim costs for retirees in the group and (b) the blended rates based on combined active and retired member experience.

**Measurement Date** – The date as of which the Total OPEB Liability and Fiduciary Net Position are measured.

**Net OPEB Liability** – The liability of the employer for benefits provided through an OPEB plan. It is calculated as the Total OPEB Liability less the Fiduciary Net Position.

**OPEB** – Other Postemployment Benefits including medical, dental, vision, hearing and life insurance benefits.

**Pay-As-You-Go** – A method of financing an OPEB plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

**Present Value of Future Benefits** – The actuarial present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value of money and the probabilities of payment.

**Reporting Date** – The last day of the Plan or employer's fiscal year.

**Service Cost** – The portion of the actuarial present value of projected benefit amounts that is attributed to a valuation year.

**Substantive Plan** – The terms of an OPEB plan as understood by the employer and plan members.

**Total OPEB Liability** – The portion of the actuarial present value of projected benefit amounts that is attributed to past periods of employee service.

**Unfunded Actuarial Accrued Liability** – The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

## SECTION 9 - BREAKOUT OF RESULTS BY DEPARTMENT

Department	County of Duke's County	Martha's Vineyard Airport	Senior Services	Dukes County Contributory Ret. System	Vineyard Health Care Access Program	Total
<b>Summary of Member Data Used in Valuation</b>						
Active Members	11	20	2	2	3	38
Average Age	49.7	41.2	55.8	42.4	42.0	44.5
Average Service	8.3	5.3	1.0	7.0	6.1	6.1
Retired Members and Survivors	11	9	0	2	0	22
Average Age	72.4	67.0	0.0	72.2	0.0	70.1
Covered Spouses	3	5	0	1	0	9
Expected Benefit Payments	84,432	139,616	89	28,332	2,696	255,164
OPEB Trust contributions	112,116	0	924	0	6,960	120,000
Total Employer Contributions	196,548	139,616	1,013	28,332	9,656	375,164
<b>Beginning Net OPEB Liability - June 30, 2017</b>						
Total OPEB Liability	1,826,164	3,283,491	32,115	383,581	133,583	5,658,934
Fiduciary Net Position	617,794	0	5,092	0	38,352	661,238
Net OPEB Liability	1,208,370	3,283,491	27,023	383,581	95,231	4,997,696
<b>Ending Net OPEB Liability - June 30, 2018</b>						
Total OPEB Liability	1,953,907	3,642,350	51,240	395,036	158,082	6,200,615
Fiduciary Net Position	761,356	0	6,275	0	47,264	814,895
Net OPEB Liability	1,192,551	3,642,350	44,965	395,036	110,818	5,385,720
<b>Total Deferred Outflows of Resources</b>						
Differences between Expected and Actual Experience	0	0	0	0	0	0
Changes in Assumptions	52,114	93,702	916	10,946	3,812	161,491
Differences between Expected and Actual Earnings on OPEB Plan Investments	15,275	0	126	0	948	16,349
<b>Total Deferred Outflows of Resources</b>	67,389	93,702	1,042	10,946	4,760	177,840
<b>Total Deferred Inflows of Resources</b>						
Differences between Expected and Actual Experience	0	0	0	0	0	0
Changes in Assumptions	0	0	0	0	0	0
Differences between Expected and Actual Earnings on OPEB Plan Investments	0	0	0	0	0	0
<b>Total Deferred Inflows of Resources</b>	0	0	0	0	0	0
<b>Total OPEB Expense</b>	<b>113,341</b>	<b>404,773</b>	<b>17,913</b>	<b>28,840</b>	<b>20,482</b>	<b>585,348</b>

County of Dukes County Postemployment Benefits Other Than Pensions  
Financial Reporting and Disclosures Under GASB 74 and GASB 75 as of June 30, 2018

## SECTION 9 - BREAKOUT OF RESULTS BY DEPARTMENT

Department	County of Duke's County	Martha's Vineyard Airport	Senior Services	Dukes County Contributory Ret. System	Vineyard Health Care Access Program	Total
<b>Sensitivity of the Net OPEB Liability to Changes in the Discount Rate</b>						
Current Discount Rate: 5.16%	1,192,551	3,642,350	44,965	395,036	110,818	5,385,720
1% Decrease in the Discount Rate: 4.16%	1,413,308	4,316,597	53,289	468,162	131,332	6,382,688
1% Increase in the Discount Rate: 6.16%	1,015,990	3,103,089	38,308	336,550	94,411	4,588,348
<b>Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates</b>						
Current Trend Rates	1,192,551	3,642,350	44,965	395,036	110,818	5,385,720
1% Decrease in Trend Rates	966,546	2,952,073	36,443	320,171	89,816	4,365,049
1% Increase in Trend Rates	1,504,529	4,595,209	56,728	498,380	139,809	6,794,654
<b>Deferred Outflows of Resources and Deferred Inflows of Resources recognized in OPEB Expense</b>						
2018	12,594	17,512	195	2,046	890	33,237
2019	12,594	17,512	195	2,046	890	33,237
2020	12,594	17,512	195	2,046	890	33,237
2021	12,595	17,512	195	2,046	890	33,238
2022	11,046	15,359	171	1,794	780	29,150
Thereafter	5,965	8,294	92	969	421	15,741

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## APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

Under GASB 74, a series of projections and calculations are used to determine the discount rate for the purpose of the measurement of the Total OPEB Liability. The discount rate is the single rate that reflects (1) the long-term expected rate of return on OPEB plan investments that are expected to be used to finance the payment of benefits, to the extent that the OPEB plan's fiduciary net position is projected to be sufficient to make projected benefit payments and OPEB plan assets are expected to be invested using a strategy to achieve that return, and (2) a yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher, to the extent that the conditions for use of the long-term expected rate of return are not met.

Projected cash flows into and out of the OPEB plan are assumed to be contributions to the OPEB plan, benefit payments, OPEB plan administrative expenses and OPEB plan investment earnings. These projected cash flows are used to project the OPEB plan's fiduciary net position at the beginning of each period. The OPEB plan's projected fiduciary net position at the beginning of each period is compared to the amount of benefit payments projected to occur in that period.

It is assumed that the OPEB plan's fiduciary net position is expected to always be invested using a strategy to achieve the long-term expected rate of return on OPEB plan investments.

The benefit payments that are projected to occur in a period are discounted using the long-term expected rate of return on OPEB plan investments if the amount of the OPEB plan's beginning fiduciary net position is projected to be sufficient to make the benefit payments in that period. In periods in which benefit payments are projected to be greater than the amount of the OPEB plan's fiduciary net position, they are discounted using a municipal bond rate as required by GASB 74.

For purposes of this valuation, the long-term expected rate of return on OPEB plan investments is 7.5%; the municipal bond rate is 3.87%, based on the Bond Buyer 20-Bond GO Index published on June 28, 2018. The OPEB plan's fiduciary net position was projected to be insufficient to make all projected benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to the first 30 periods of projected future benefit payments and, the 3.87% municipal bond rate was applied to all periods thereafter to determine the total OPEB liability.

## APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

**Table 1: Projection of Contributions**

Year	Projected Payroll			Projected Contributions			
	Payroll for Current Plan Members (a)	Payroll for Future Plan Members (b)	Total Payroll (c) = (a) + (b)	Employer Contributions (Benefit Payments) (d)	Employer Contributions (OPEB Trust) (e)	Employer Contributions Related to Payroll of Future Employees (f) = (b) * 7.74%	Portion of Employer Contributions for Current Plan Members (g) = (d) + (e) - (f)
2018	2,395,994	-	2,395,994	255,164	120,000	-	375,164
2019	2,272,610	219,224	2,491,834	272,794	120,000	16,969	375,825
2020	2,165,406	426,101	2,591,507	235,267	120,000	32,982	322,285
2021	2,049,768	645,399	2,695,167	262,363	120,000	49,957	332,406
2022	1,951,844	851,130	2,802,974	272,235	120,000	65,882	326,353
2023	1,814,509	1,100,584	2,915,093	272,626	120,000	85,191	307,435
2024	1,752,685	1,279,012	3,031,697	283,323	120,000	99,002	304,321
2025	1,680,503	1,472,462	3,152,965	301,145	120,000	113,976	307,169
2026	1,597,565	1,681,519	3,279,084	340,476	120,000	130,158	330,318
2027	1,494,862	1,915,385	3,410,247	388,118	120,000	148,260	359,858
2028	1,379,891	2,166,766	3,546,657	435,291	120,000	167,719	387,572
2029	1,300,704	2,387,819	3,688,523	455,985	120,000	184,829	391,156
2030	1,224,439	2,611,625	3,836,064	484,457	120,000	202,153	402,304
2031	1,148,075	2,841,432	3,989,507	478,455	120,000	219,941	378,514
2032	1,082,434	3,066,653	4,149,087	521,713	120,000	237,374	404,339
2033	1,010,976	3,304,074	4,315,050	551,813	120,000	255,752	416,061
2034	959,581	3,528,071	4,487,652	552,659	120,000	273,090	399,569
2035	879,769	3,787,389	4,667,158	571,845	120,000	293,163	398,682
2036	838,164	4,015,680	4,853,844	602,154	120,000	310,834	411,320
2037	794,197	4,253,801	5,047,998	557,562	120,000	329,266	348,296
2038	742,178	4,507,740	5,249,918	575,757	120,000	348,922	346,835
2039	701,041	4,758,874	5,459,915	617,062	120,000	368,361	368,701
2040	644,483	5,033,829	5,678,312	560,772	120,000	389,644	291,128
2041	603,036	5,302,408	5,905,444	574,304	120,000	410,433	283,871
2042	575,854	5,565,808	6,141,662	616,928	120,000	430,822	306,106
2043	544,557	5,842,771	6,387,328	620,078	120,000	452,260	287,818
2044	514,183	6,128,638	6,642,821	648,538	120,000	474,387	294,151
2045	472,732	6,435,802	6,908,534	696,950	120,000	498,163	318,787
2046	418,814	6,766,061	7,184,875	740,684	120,000	523,727	336,957
2047	354,006	7,118,264	7,472,270	708,446	120,000	550,989	277,457
2048	314,063	7,457,098	7,771,161	671,307	120,000	577,217	214,090
2049	266,814	7,815,193	8,082,007	681,416	120,000	604,935	196,481
2050	249,079	8,156,208	8,405,287	646,684	120,000	631,332	135,352
2051	238,374	8,503,124	8,741,498	642,313	120,000	658,185	104,128

County of Dukes County Postemployment Benefits Other Than Pensions  
 Financial Reporting and Disclosures Under GASB 74 and GASB 75 as of June 30, 2018

## APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

**Table 1: Projection of Contributions**

Year	Projected Payroll			Projected Contributions			
	Payroll for Current Plan Members (a)	Payroll for Future Plan Members (b)	Total Payroll (c) = (a) + (b)	Employer Contributions (Benefit Payments) (d)	Employer Contributions (OPEB Trust) (e)	Employer Contributions Related to Payroll of Future Employees (f) = (b) * 7.74%	Portion of Employer Contributions for Current Plan Members (g) = (d) + (e) - (f)
2052	206,391	8,884,767	9,091,158	663,236	120,000	687,726	95,510
2053	179,258	9,275,546	9,454,804	695,108	120,000	717,974	97,134
2054	149,983	9,683,013	9,832,996	726,077	120,000	749,514	96,563
2055	128,859	10,097,457	10,226,316	772,736	120,000	781,594	111,142
2056	106,793	10,528,576	10,635,369	720,391	120,000	814,965	25,426
2057	77,917	10,982,867	11,060,784	750,068	120,000	850,129	19,939
2058	63,325	11,439,890	11,503,215	771,636	120,000	885,505	6,131
2059	51,323	11,912,021	11,963,344	730,480	120,000	922,050	-
2060	41,774	12,400,104	12,441,878	667,238	120,000	959,830	-
2061	18,619	12,920,934	12,939,553	661,283	120,000	1,000,145	-
2062	9,158	13,447,977	13,457,135	666,237	120,000	1,040,941	-
2063	7,636	13,987,784	13,995,420	603,586	120,000	1,082,725	-
2064	1,940	14,553,297	14,555,237	595,578	120,000	1,126,498	-
2065	1,685	15,135,761	15,137,446	598,745	120,000	1,171,584	-
2066	1,382	15,741,562	15,742,944	598,824	120,000	1,218,476	-
2067	-	16,372,662	16,372,662	591,093	120,000	1,267,326	-
2068	-	17,027,568	17,027,568	587,909	120,000	1,318,020	-
2069	-	17,708,671	17,708,671	575,331	120,000	1,370,740	-
2070	-	18,417,018	18,417,018	568,978	120,000	1,425,570	-
2071	-	19,153,699	19,153,699	563,336	120,000	1,482,593	-
2072	-	19,919,847	19,919,847	550,001	120,000	1,541,896	-
2073	-	20,716,641	20,716,641	541,602	120,000	1,603,572	-
2074	-	21,545,307	21,545,307	526,991	120,000	1,667,715	-
2075	-	22,407,119	22,407,119	518,548	120,000	1,734,424	-
2076	-	23,303,404	23,303,404	509,787	120,000	1,803,801	-
2077	-	24,235,540	24,235,540	492,488	120,000	1,875,953	-
2078	-	25,204,962	25,204,962	481,196	120,000	1,950,991	-
2079	-	26,213,160	26,213,160	463,981	120,000	2,029,031	-
2080	-	27,261,686	27,261,686	448,241	120,000	2,110,192	-
2081	-	28,352,153	28,352,153	432,746	120,000	2,194,599	-
2082	-	29,486,239	29,486,239	409,988	120,000	2,282,383	-
2083	-	30,665,689	30,665,689	394,587	120,000	2,373,679	-
2084	-	31,892,317	31,892,317	374,429	120,000	2,468,626	-
2085	-	33,168,010	33,168,010	357,385	120,000	2,567,371	-

County of Duques County Postemployment Benefits Other Than Pensions  
 Financial Reporting and Disclosures Under GASB 74 and GASB 75 as of June 30, 2018

## APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

**Table 2: Projection of the OPEB Plan's Fiduciary Net Position**

Year	Projected Beginning Fiduciary Net Position (a)	Employer Contributions for Current Plan Members (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) +(e)
2018	661,238	375,164	255,164	-	33,657	814,895
2019	814,895	375,825	272,794	-	64,981	982,907
2020	982,907	322,285	235,267	-	76,981	1,146,906
2021	1,146,906	332,406	262,363	-	88,645	1,305,594
2022	1,305,594	326,353	272,235	-	99,949	1,459,661
2023	1,459,661	307,435	272,626	-	110,780	1,605,250
2024	1,605,250	304,321	283,323	-	121,181	1,747,429
2025	1,747,429	307,169	301,145	-	131,283	1,884,736
2026	1,884,736	330,318	340,476	-	140,974	2,015,552
2027	2,015,552	359,858	388,118	-	150,107	2,137,399
2028	2,137,399	387,572	435,291	-	158,515	2,248,195
2029	2,248,195	391,156	455,985	-	166,184	2,349,550
2030	2,349,550	402,304	484,457	-	173,136	2,440,533
2031	2,440,533	378,514	478,455	-	179,292	2,519,884
2032	2,519,884	404,339	521,713	-	184,590	2,587,100
2033	2,587,100	416,061	551,813	-	188,942	2,640,290
2034	2,640,290	399,569	552,659	-	192,281	2,679,481
2035	2,679,481	398,682	571,845	-	194,467	2,700,785
2036	2,700,785	411,320	602,154	-	195,403	2,705,354
2037	2,705,354	348,296	557,562	-	195,054	2,691,142
2038	2,691,142	346,835	575,757	-	193,251	2,655,471
2039	2,655,471	368,701	617,062	-	189,847	2,596,957
2040	2,596,957	291,128	560,772	-	184,660	2,511,973
2041	2,511,973	283,871	574,304	-	177,507	2,399,047
2042	2,399,047	306,106	616,928	-	168,273	2,256,498
2043	2,256,498	287,818	620,078	-	156,778	2,081,016
2044	2,081,016	294,151	648,538	-	142,787	1,869,416
2045	1,869,416	318,787	696,950	-	126,025	1,617,278
2046	1,617,278	336,957	740,684	-	106,156	1,319,707
2047	1,319,707	277,457	708,446	-	82,816	971,534
2048	971,534	214,090	671,307	-	55,719	570,036
2049	570,036	196,481	681,416	-	24,568	109,669
2050	109,669	135,352	646,684	-	-	-
2051	-	104,128	642,313	-	-	-

## APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

**Table 2: Projection of the OPEB Plan's Fiduciary Net Position**

Year	Projected Beginning Fiduciary Net Position (a)	Employer Contributions for Current Plan Members (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) +(e)
2052	-	95,510	663,236	-	-	-
2053	-	97,134	695,108	-	-	-
2054	-	96,563	726,077	-	-	-
2055	-	111,142	772,736	-	-	-
2056	-	25,426	720,391	-	-	-
2057	-	19,939	750,068	-	-	-
2058	-	6,131	771,636	-	-	-
2059	-	-	730,480	-	-	-
2060	-	-	667,238	-	-	-
2061	-	-	661,283	-	-	-
2062	-	-	666,237	-	-	-
2063	-	-	603,586	-	-	-
2064	-	-	595,578	-	-	-
2065	-	-	598,745	-	-	-
2066	-	-	598,824	-	-	-
2067	-	-	591,093	-	-	-
2068	-	-	587,909	-	-	-
2069	-	-	575,331	-	-	-
2070	-	-	568,978	-	-	-
2071	-	-	563,336	-	-	-
2072	-	-	550,001	-	-	-
2073	-	-	541,602	-	-	-
2074	-	-	526,991	-	-	-
2075	-	-	518,548	-	-	-
2076	-	-	509,787	-	-	-
2077	-	-	492,488	-	-	-
2078	-	-	481,196	-	-	-
2079	-	-	463,981	-	-	-
2080	-	-	448,241	-	-	-
2081	-	-	432,746	-	-	-
2082	-	-	409,988	-	-	-
2083	-	-	394,587	-	-	-
2084	-	-	374,429	-	-	-
2085	-	-	357,385	-	-	-

## APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

**Table 2: Projection of the OPEB Plan's Fiduciary Net Position**

Year	Projected Beginning Fiduciary Net Position (a)	Employer Contributions for Current Plan Members (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (f) = (a) + (b) - (c) - (d) +(e)
2086	-	-	336,741	-	-	-
2087	-	-	311,610	-	-	-
2088	-	-	289,150	-	-	-
2089	-	-	261,271	-	-	-
2090	-	-	238,037	-	-	-
2091	-	-	210,158	-	-	-
2092	-	-	183,689	-	-	-
2093	-	-	156,597	-	-	-
2094	-	-	133,375	-	-	-
2095	-	-	111,769	-	-	-
2096	-	-	92,488	-	-	-
2097	-	-	75,563	-	-	-
2098	-	-	60,782	-	-	-
2099	-	-	48,381	-	-	-
2100	-	-	37,696	-	-	-
2101	-	-	29,066	-	-	-
2102	-	-	21,842	-	-	-
2103	-	-	16,248	-	-	-
2104	-	-	11,667	-	-	-
2105	-	-	8,240	-	-	-
2106	-	-	5,709	-	-	-
2107	-	-	3,884	-	-	-
2108	-	-	2,600	-	-	-
2109	-	-	1,713	-	-	-
2110	-	-	1,113	-	-	-
2111	-	-	714	-	-	-
2112	-	-	448	-	-	-
2113	-	-	283	-	-	-
2114	-	-	174	-	-	-
2115	-	-	100	-	-	-
2116	-	-	60	-	-	-
2117	-	-	33	-	-	-
2118	-	-	21	-	-	-
2119	-	-	-	-	-	-
2120	-	-	-	-	-	-

## APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

**Table 3: Actuarial Present Value of Projected Benefit Payments - End of Measurement Period**

Year	Projected Beginning Fiduciary Net Position (a)	Projected Benefit Payments (b)	Projected Benefit Payments		Actuarial Present Value of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments (c)	"Unfunded" Portion of Benefit Payments (d)	Present Value of "Funded" Benefit Payments (e)	Present Value of "Unfunded" Benefit Payments (f)	Present Value of Benefit Payments Using the Single Discount Rate (g)
2019	814,895	272,794	272,794	-	263,106	-	266,018
2020	982,907	235,267	235,267	-	211,081	-	218,168
2021	1,146,906	262,363	262,363	-	218,968	-	231,359
2022	1,305,594	272,235	272,235	-	211,356	-	228,287
2023	1,459,661	272,626	272,626	-	196,893	-	217,400
2024	1,605,250	283,323	283,323	-	190,342	-	214,846
2025	1,747,429	301,145	301,145	-	188,200	-	217,157
2026	1,884,736	340,476	340,476	-	197,935	-	233,474
2027	2,015,552	388,118	388,118	-	209,890	-	253,087
2028	2,137,399	435,291	435,291	-	218,977	-	269,923
2029	2,248,195	455,985	455,985	-	213,384	-	268,884
2030	2,349,550	484,457	484,457	-	210,891	-	271,658
2031	2,440,533	478,455	478,455	-	193,747	-	255,131
2032	2,519,884	521,713	521,713	-	196,525	-	264,549
2033	2,587,100	551,813	551,813	-	193,361	-	266,085
2034	2,640,290	552,659	552,659	-	180,147	-	253,419
2035	2,679,481	571,845	571,845	-	173,396	-	249,353
2036	2,700,785	602,154	602,154	-	169,848	-	249,688
2037	2,705,354	557,562	557,562	-	146,297	-	219,855
2038	2,691,142	575,757	575,757	-	140,532	-	215,892
2039	2,655,471	617,062	617,062	-	140,106	-	220,029
2040	2,596,957	560,772	560,772	-	118,442	-	190,148
2041	2,511,973	574,304	574,304	-	112,837	-	185,183
2042	2,399,047	616,928	616,928	-	112,755	-	189,168
2043	2,256,498	620,078	620,078	-	105,424	-	180,806
2044	2,081,016	648,538	648,538	-	102,570	-	179,827
2045	1,869,416	696,950	696,950	-	102,536	-	183,770
2046	1,617,278	740,684	740,684	-	101,368	-	185,720
2047	1,319,707	708,446	708,446	-	90,191	-	168,922
2048	971,534	671,307	671,307	-	79,501	-	152,214
2049	570,036	681,416	-	681,416	-	214,024	146,927
2050	109,669	646,684	-	646,684	-	195,548	132,597
2051	-	642,313	-	642,313	-	186,990	125,240
2052	-	663,236	-	663,236	-	185,887	122,975

County of Duquesne County Postemployment Benefits Other Than Pensions  
 Financial Reporting and Disclosures Under GASB 74 and GASB 75 as of June 30, 2018

## APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

**Table 3: Actuarial Present Value of Projected Benefit Payments - End of Measurement Period**

Year	Projected Beginning Fiduciary Net Position (a)	Projected Benefit Payments		Actuarial Present Value of Projected Benefit Payments			
		Projected Benefit Payments (b)	"Funded" Portion of Benefit Payments (c)	"Unfunded" Portion of Benefit Payments (d)	Present Value of "Funded" Benefit Payments (e)	Present Value of "Unfunded" Benefit Payments (f)	Present Value of Benefit Payments Using the Single Discount Rate (g)
2053	-	695,108	-	695,108	-	187,561	122,562
2054	-	726,077	-	726,077	-	188,618	121,742
2055	-	772,736	-	772,736	-	193,260	123,209
2056	-	720,391	-	720,391	-	173,456	109,228
2057	-	750,068	-	750,068	-	173,872	108,148
2058	-	771,636	-	771,636	-	172,208	105,800
2059	-	730,480	-	730,480	-	156,949	95,243
2060	-	667,238	-	667,238	-	138,019	82,729
2061	-	661,283	-	661,283	-	131,691	77,969
2062	-	666,237	-	666,237	-	127,734	74,699
2063	-	603,586	-	603,586	-	111,411	64,355
2064	-	595,578	-	595,578	-	105,837	60,385
2065	-	598,745	-	598,745	-	102,436	57,728
2066	-	598,824	-	598,824	-	98,632	54,904
2067	-	591,093	-	591,093	-	93,731	51,536
2068	-	587,909	-	587,909	-	89,753	48,744
2069	-	575,331	-	575,331	-	84,560	45,361
2070	-	568,978	-	568,978	-	80,511	42,659
2071	-	563,336	-	563,336	-	76,742	40,164
2072	-	550,001	-	550,001	-	72,134	37,290
2073	-	541,602	-	541,602	-	68,386	34,919
2074	-	526,991	-	526,991	-	64,062	32,310
2075	-	518,548	-	518,548	-	60,687	30,232
2076	-	509,787	-	509,787	-	57,439	28,264
2077	-	492,488	-	492,488	-	53,422	25,965
2078	-	481,196	-	481,196	-	50,253	24,125
2079	-	463,981	-	463,981	-	46,650	22,121
2080	-	448,241	-	448,241	-	43,388	20,322
2081	-	432,746	-	432,746	-	40,327	18,657
2082	-	409,988	-	409,988	-	36,783	16,809
2083	-	394,587	-	394,587	-	34,082	15,384
2084	-	374,429	-	374,429	-	31,136	13,882
2085	-	357,385	-	357,385	-	28,612	12,600
2086	-	336,741	-	336,741	-	25,954	11,289

County of Duquesne County Postemployment Benefits Other Than Pensions  
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## APPENDIX A - CALCULATION OF SINGLE DISCOUNT RATE

**Table 3: Actuarial Present Value of Projected Benefit Payments - End of Measurement Period**

Year	Projected Beginning Fiduciary Net Position (a)	Projected Benefit Payments		Actuarial Present Value of Projected Benefit Payments			
		Projected Benefit Payments (b)	"Funded" Portion of Benefit Payments (c)	"Unfunded" Portion of Benefit Payments (d)	Present Value of "Funded" Benefit Payments (e)	Present Value of "Unfunded" Benefit Payments (f)	Present Value of Benefit Payments Using the Single Discount Rate (g)
2087	-	311,610	-	311,610	-	23,123	9,934
2088	-	289,150	-	289,150	-	20,657	8,766
2089	-	261,271	-	261,271	-	17,970	7,532
2090	-	238,037	-	238,037	-	15,762	6,526
2091	-	210,158	-	210,158	-	13,397	5,479
2092	-	183,689	-	183,689	-	11,273	4,554
2093	-	156,597	-	156,597	-	9,253	3,692
2094	-	133,375	-	133,375	-	7,587	2,990
2095	-	111,769	-	111,769	-	6,121	2,383
2096	-	92,488	-	92,488	-	4,876	1,875
2097	-	75,563	-	75,563	-	3,836	1,457
2098	-	60,782	-	60,782	-	2,970	1,114
2099	-	48,381	-	48,381	-	2,276	843
2100	-	37,696	-	37,696	-	1,707	625
2101	-	29,066	-	29,066	-	1,268	458
2102	-	21,842	-	21,842	-	917	327
2103	-	16,248	-	16,248	-	657	232
2104	-	11,667	-	11,667	-	454	158
2105	-	8,240	-	8,240	-	309	106
2106	-	5,709	-	5,709	-	206	70
2107	-	3,884	-	3,884	-	135	45
2108	-	2,600	-	2,600	-	87	29
2109	-	1,713	-	1,713	-	55	18
2110	-	1,113	-	1,113	-	34	11
2111	-	714	-	714	-	21	7
2112	-	448	-	448	-	13	4
2113	-	283	-	283	-	8	2
2114	-	174	-	174	-	5	1
2115	-	100	-	100	-	3	1
2116	-	60	-	60	-	1	-
2117	-	33	-	33	-	1	-
2118	-	21	-	21	-	-	-
2119	-	-	-	-	-	-	-
2120	-	-	-	-	-	-	-

County of Duques County Postemployment Benefits Other Than Pensions  
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**APPENDIX B - SCHEDULE OF DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES**

Year	Differences between Expected and Actual Experience	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2018	\$ -		-	-	-	-	-	-	-	-	-	-
Net Increase (Decrease) in OPEB Expense			-	-	-	-	-	-	-	-	-	-

Year	Changes of Assumptions	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2018	\$ 190,641	6.54	29,150	29,150	29,150	29,150	29,150	29,150	15,741	-	-	-
Net Increase (Decrease) in OPEB Expense			29,150	29,150	29,150	29,150	29,150	29,150	15,741	-	-	-

Year	Differences between Projected and Actual Earnings on OPEB Plan Investments	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2018	\$ 20,436	5	4,087	4,087	4,087	4,087	4,088	-	-	-	-	-
Net Increase (Decrease) in OPEB Expense			4,087	4,087	4,087	4,087	4,088	-	-	-	-	-

County of Dukes County Postemployment Benefits Other Than Pensions  
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