



GASB 74/75 ACTUARIAL VALUATION

Fiscal Year Ending June 30, 2019

KENT COUNTY LEVY COURT

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November 19, 2019

**Allan Kujala
Kent County Levy Court
555 Bay Road
Dover, DE 19901**

This report summarizes the GASB actuarial valuation for the Kent County Levy Court 2018/19 fiscal year. To the best of our knowledge, the report presents a fair position of the funded status of the plan in accordance with GASB Statement No. 74 (Financial Reporting for Post-Employment Benefit Plans Other Than Pension Plans) and GASB Statement No. 75 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions).

The information presented herein is based on the actuarial assumptions and substantive plan provisions summarized in this report and participant information furnished to us by the Plan Sponsor. We have reviewed the employee census provided by the Plan Sponsor for reasonableness when compared to the prior information provided but have not audited the information at the source, and therefore do not accept responsibility for the accuracy or the completeness of the data on which the information is based. When relevant data may be missing, we may have made assumptions we feel are neutral or conservative to the purpose of the measurement. We are not aware of any significant issues with and have relied on the data provided.

The discount rate, other economic assumptions, and demographic assumptions have been selected by the Plan Sponsor with the concurrence of Nyhart. In our opinion, the actuarial assumptions are individually reasonable and in combination represent our estimate of anticipated experience of the Plan. All calculations have been made in accordance with generally accepted actuarial principles and practice.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- plan experience differing from that anticipated by the economic or demographic assumptions;
- changes in economic or demographic assumptions;
- increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and
- changes in plan provisions or applicable law.

We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement.

To our knowledge, there have been no significant events prior to the current year's measurement date or as of the date of this report that could materially affect the results contained herein.



Neither Nyhart nor any of its employees has any relationship with the plan or its sponsor that could impair or appear to impair the objectivity of this report. Our professional work is in full compliance with the American Academy of Actuaries "Code of Professional Conduct" Precept 7 regarding conflict of interest. The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Should you have any questions please do not hesitate to contact us.

A handwritten signature in black ink that reads "Randy Gomez".

Randy Gomez, FSA, MAAA
Consulting Actuary

A handwritten signature in black ink that reads "Suraj M. Datta".

Suraj M. Datta, ASA, MAAA
Valuation Actuary

Executive Summary

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Summary of Results

Presented below is the summary of GASB 75 results for the fiscal year ending June 30, 2019 compared to the prior fiscal year as shown in the County's Notes to Financial Statement.

	As of June 30, 2018	As of June 30, 2019
Total OPEB Liability	\$ 30,356,932	\$ 36,524,151
Actuarial Value of Assets	\$ (17,335,606)	\$ (18,344,869)
Net OPEB Liability	\$ 13,021,326	\$ 18,179,282
Funded Ratio	57.1%	50.2%

	FY 2017/18	FY 2018/19
OPEB Expense	\$ 2,511,769	\$ 4,333,134
Annual Employer Contributions	\$ 1,366,633	\$ 1,366,633
Actuarially Determined Contribution	\$ 1,318,229	\$ 1,318,229

	As of June 30, 2018	As of June 30, 2019
Discount Rate	7.50%	7.50%
Expected Return on Assets	7.50%	7.50%

	As of June 30, 2019
Total Active Participants	292
Total Retiree Participants	132

The active participants' number above may include active employees who currently have no health care coverage. Refer to Summary of Participants section for an accurate breakdown of active employees with and without coverage.

Executive Summary

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Summary of Results

Below is a breakdown of total GASB 75 liabilities allocated to past and current service compared to the prior year. The table below also provides a breakdown of the Total OPEB Liability allocated to pre- and post- Medicare eligibility. The liability shown below includes explicit (if any) and implicit subsidies. Refer to the Substantive Plan Provisions section for complete information on the Plan Sponsor's GASB subsidies.

Present Value of Future Benefits	As of June 30, 2018	As of June 30, 2019
Active Employees	\$ 27,678,179	\$ 27,453,391
Retired Employees	10,188,816	16,358,293
Total Present Value of Future Benefits	\$ 37,866,995	\$ 43,811,684

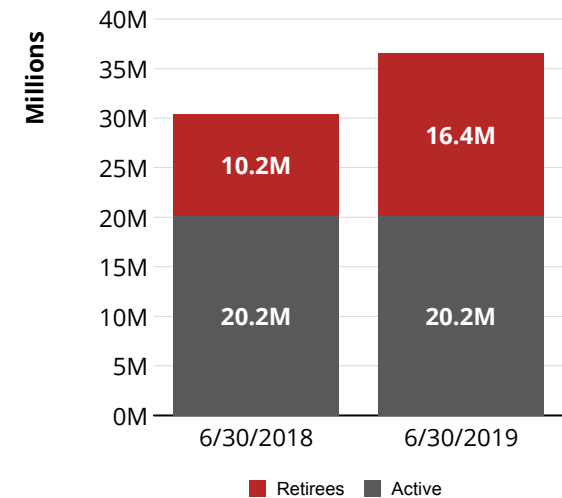
Total OPEB Liability	As of June 30, 2018	As of June 30, 2019
Active Pre-Medicare	\$ 3,580,734	\$ 3,945,001
Active Post-Medicare	16,587,382	16,220,857
Active Liability	\$ 20,168,116	\$ 20,165,858

Retiree Pre-Medicare	\$ 515,570	\$ 1,295,931
Retiree Post-Medicare	9,673,246	15,062,362
Retiree Liability	\$ 10,188,816	\$ 16,358,293

Total OPEB Liability	\$ 30,356,932	\$ 36,524,151
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	As of June 30, 2018	As of June 30, 2019
Discount Rate	7.50%	7.50%

Changes In Total OPEB Liability



Present Value of Future Benefits (PVFB) is the amount needed as of June 30, 2019 and June 30, 2018, to fully fund the County's retiree health care subsidies for existing and future retirees and their dependents assuming all actuarial assumptions are met.

Total OPEB Liability is the portion of PVFB considered to be accrued or earned as of June 30, 2019 and June 30, 2018. This amount is a required disclosure in the Required Supplementary Information section.

GASB Disclosures

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Schedule of Changes in Net OPEB Liability and Related Ratios

OPEB Liability	FY 2018/19	FY 2017/18	FY 2016/17
Total OPEB Liability			
Total OPEB Liability - beginning of year	\$ 30,356,932	\$ 22,343,038	\$ 18,186,728
Service cost	978,528	692,587	677,093
Interest	2,306,663	1,752,033	1,425,396
Change of benefit terms	474,250	0	168,506
Changes in assumptions	2,952,416	877,054	2,579,359
Differences between expected and actual experience	636,633	5,566,019	58,998
Benefit payments	(1,181,271)	(873,799)	(753,042)
Net change in total OPEB liability	\$ 6,167,219	\$ 8,013,894	\$ 4,156,310
Total OPEB Liability - end of year	\$ 36,524,151	\$ 30,356,932	\$ 22,343,038
Plan Fiduciary Net Position			
Plan fiduciary net position - beginning of year	\$ 17,335,606	\$ 15,749,065	\$ 14,221,832
Contributions - employer	1,366,633	1,366,633	785,111
Contributions - active employees	0	0	0
Net investment income	836,738	1,099,278	1,500,706
Benefit payments	(1,181,271)	(873,799)	(753,042)
Trust administrative expenses	(12,837)	(5,571)	(5,542)
Net change in plan fiduciary net position	\$ 1,009,263	\$ 1,586,541	\$ 1,527,233
Plan fiduciary net position - end of year	\$ 18,344,869	\$ 17,335,606	\$ 15,749,065
Net OPEB Liability - end of year	\$ 18,179,282	\$ 13,021,326	\$ 6,593,973
Plan fiduciary net position as % of total OPEB liability	50.2%	57.1%	70.5%
Covered employee payroll	\$ 15,374,840	\$ 15,106,839	\$ 14,595,980
Net OPEB liability as % of covered payroll	118.2%	86.2%	45.2%

GASB Disclosures

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Schedule of Employer Contributions

The Actuarially Determined Contributions (ADC) shown below are based on the Annual Required Contribution (ARC) calculated in prior GASB 45 actuarial valuations as shown in the County's financial statements.

	FY 2018/19	FY 2017/18	FY 2016/17	FY 2015/16	FY 2014/15
Actuarially Determined Contribution (ADC)	\$ 1,318,229	\$ 1,318,229	\$ 785,111	\$ 785,111	\$ 616,016
Contributions in relation to the ADC	1,366,633	1,366,633	785,111	785,111	616,016
Contribution deficiency/(excess)	\$ (48,404)	\$ (48,404)	\$ 0	\$ 0	\$ 0
Covered employee payroll	\$ 15,374,840	\$ 15,106,839	\$ 14,595,980	\$ 13,470,257	\$ 13,470,257
Contribution as a % of covered payroll	8.9%	9.0%	5.4%	5.8%	4.6%
	FY 2013/14	FY 2012/13	FY 2011/12	FY 2010/11	FY 2009/10
Actuarially Determined Contribution (ADC)	\$ 616,016	\$ 661,025	\$ 661,025	\$ 630,976	\$ 630,976
Contributions in relation to the ADC	616,016	661,025	661,025	630,976	630,976
Contribution deficiency/(excess)	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Covered employee payroll	\$ 13,186,023	\$ 13,186,023	\$ 12,081,049	\$ 12,081,049	N/A
Contribution as a % of covered payroll	4.7%	5.0%	5.5%	5.2%	N/A

*Due to the timing of the County's budgeting and reporting process, the Actuarially Determined Contribution amount for FY 2018/19 has been set equal to the contribution amount from FY 2017/18.

GASB Disclosures

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

OPEB Expense

OPEB Expense	FY 2018/19	FY 2017/18
Discount Rate		
Beginning of year	7.50%	7.75%
End of year	7.50%	7.50%
Service cost	\$ 978,528	\$ 692,587
Interest	2,306,663	1,752,033
Change of benefit terms	474,250	0
Projected earnings on OPEB plan investments	(1,306,523)	(1,199,122)
Reduction for contributions from active employees	0	0
OPEB plan administrative expenses	12,837	5,571
Current period recognition of deferred outflows / (inflows) of resources		
Differences between expected and actual experience	\$ 895,033	\$ 804,085
Changes in assumptions	937,879	516,105
Net difference between projected and actual earnings on OPEB plan investments	34,467	(59,490)
Total current period recognition	\$ 1,867,379	\$ 1,260,700
Total OPEB expense	\$ 4,333,134	\$ 2,511,769

GASB Disclosures

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Deferred Outflows / (Inflows) of Resources

Deferred Outflows / (Inflows) of Resources represents the following items that have not been recognized in the OPEB Expense:

1. Differences between expected and actual experience of the OPEB plan
2. Changes of assumptions
3. Differences between projected and actual earnings in OPEB plan investments (for funded plans only)

The initial amortization period for the first two items noted above is based on expected future service lives while the difference between the projected and actual earnings in OPEB plan investment is amortized over five years. All balances are amortized linearly on a principal only basis and new bases will be created annually for each of the items above.

Differences between expected and actual experience for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2019
June 30, 2017	\$ 58,998	7	\$ 8,939	\$ 35,757
June 30, 2018	\$ 5,566,019	7	\$ 795,146	\$ 3,975,727
June 30, 2019	\$ 636,633	7	\$ 90,948	\$ 545,685

Changes in assumptions for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2019
June 30, 2017	\$ 2,579,359	7	\$ 390,812	\$ 1,563,248
June 30, 2018	\$ 877,054	7	\$ 125,293	\$ 626,468
June 30, 2019	\$ 2,952,416	7	\$ 421,774	\$ 2,530,642

Net Difference between projected and actual earnings in OPEB plan investments for FYE	Initial Balance	Initial Amortization Period	Annual Recognition	Unamortized Balance as of June 30, 2019
June 30, 2017	\$ (397,295)	5	\$ (79,459)	\$ (158,918)
June 30, 2018	\$ 99,844	5	\$ 19,969	\$ 59,906
June 30, 2019	\$ 469,785	5	\$ 93,957	\$ 375,828

GASB Disclosures

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Deferred Outflows / (Inflows) of Resources (Continued)

As of fiscal year ending June 30, 2019	Deferred Outflows	Deferred Inflows
Differences between expected and actual experience	\$ 4,557,169	\$ 0
Changes in assumptions	4,720,358	0
Net difference between projected and actual earnings in OPEB plan investments	435,734	(158,918)
Total	\$ 9,713,261	\$ (158,918)

Annual Amortization of Deferred Outflows / (Inflows)

The balances as of June 30, 2019 of the deferred outflows / (inflows) of resources will be recognized in OPEB expense in the future fiscal years as noted below.

FYE	Balance
2020	\$ 1,867,379
2021	\$ 1,867,379
2022	\$ 1,946,837
2023	\$ 1,926,870
2024	\$ 1,433,161
Thereafter	\$ 512,717

GASB Disclosures

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Sensitivity Results

The following presents the Net OPEB Liability as of June 30, 2019, calculated using the discount rate assumed and what it would be using a 1% higher and 1% lower discount rate.

- The current discount rate is 7.50%.
- The 1% decrease in discount rate would be 6.50%.
- The 1% increase in discount rate would be 8.50%.

As of June 30, 2019	Net OPEB Liability
1% Decrease	\$ 22,856,685
Current Discount Rate	\$ 18,179,282
1% Increase	\$ 14,276,127

The following presents the Net OPEB Liability as of June 30, 2019, using the health care trend rates assumed and what it would be using 1% higher and 1% lower health care trend rates.

- The current health care trend rate starts at an initial rate of 8.00%, decreasing to an ultimate rate of 4.50%.
- The 1% decrease in health care trend rates would assume an initial rate of 7.00%, decreasing to an ultimate rate of 3.50%.
- The 1% increase in health care trend rates would assume an initial rate of 9.00%, decreasing to an ultimate rate of 5.50%.

As of June 30, 2019	Net OPEB Liability
1% Decrease	\$ 14,039,313
Current Trend Rates	\$ 18,179,282
1% Increase	\$ 23,187,942

Asset Information

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Reconciliation of Assets

	FY 2017/18	FY 2018/19
Additions		
Contributions received		
Employer	\$ 1,366,633	\$ 1,366,633
Employee	0	0
Total contributions	\$ 1,366,633	\$ 1,366,633
Investment income		
Net increase in fair value of investments	\$ 713,325	\$ 541,638
Interests and dividends	385,953	294,149
Investment expense, other than from securities lending	0	0
Securities lending income	0	1,119
Securities lending expense	0	(168)
Net investment income	\$ 1,099,278	\$ 836,738
Total additions	\$ 2,465,911	\$ 2,203,371
Deductions		
Benefit payments	\$ (873,799)	\$ (1,181,271)
Administrative expenses	(5,571)	(12,837)
Other	0	0
Total deductions	\$ (879,370)	\$ (1,194,108)
Net increase in net position	\$ 1,586,541	\$ 1,009,263
Net position restricted to OPEB		
Beginning of year	\$ 15,749,065	\$ 17,335,606
End of year	\$ 17,335,606	\$ 18,344,869

Asset Information

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Due to the timing of the County's budgeting and reporting process, the Actuarially Determined Contribution for each year is calculated with a one-year lag.

	FY 2018/19	FY 2019/20	FY 2020/21
Discount rate	7.75%	7.50%	7.50%
Payroll growth factor used for amortization	N/A	N/A	N/A
Actuarial cost method	Entry Age Normal Level % of Salary	Entry Age Normal Level % of Salary	Entry Age Normal Level % of Salary
Amortization type	Level % of Salary	Level % of Salary	Level % of Salary
Amortization period	30 years	30 years	29 years
Actuarial accrued liability (AAL) ¹	\$ 22,343,038	\$ 30,356,932	\$ 36,524,151
Actuarial value of assets ¹	(15,749,065)	(17,335,606)	(18,344,869)
Unfunded AAL – beginning of year	\$ 6,593,973	\$ 13,021,326	\$ 18,179,282
Normal Cost	\$ 692,587	\$ 978,528	\$ 1,099,110
Amortization of UAAL	530,827	1,025,611	1,445,855
Total normal cost plus amortization	\$ 1,223,414	\$ 2,004,139	\$ 2,544,965
Interest to the end of year	94,815	150,310	190,872
Actuarially Determined Contribution – Preliminary	\$ 1,318,229	\$ 2,154,449	\$ 2,735,837
Expected benefit payments	873,799	1,181,271	1,664,978
Actuarially Determined Contribution – Final²	\$ 1,318,229	\$ 2,154,449	\$ 2,735,837

Actuarially Determined Contribution (ADC) is the target or recommended contribution to a defined benefit OPEB plan, which if paid on an ongoing basis, will provide sufficient resources to fund future costs for services to be earned and liabilities attributed to past services. This is typically higher than the pay-as-you-go cost because it includes recognition of employer costs expected to be paid in future accounting periods.

¹ As of July 1, 2017, 2018, and 2019 for fiscal years 2018/19, 2019/20, and 2020/21, respectively.

² Set to be the greater of the preliminary ADC and expected benefit payments.

Projection of GASB Disclosures

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

The Total OPEB Liability (TOL) is expected to change on an annual basis as a result of expected and unexpected events. Under normal circumstances, it is generally expected to have a net increase each year. Below is a list of the most common events affecting the total OPEB liability and whether they increase or decrease the liability.

Expected Events

- Increases in TOL due to additional benefit accruals as employees continue to earn service each year
- Increases in TOL due to interest as the employees and retirees age
- Decreases in TOL due to benefit payments

Unexpected Events

- Increases in TOL when actual premium rates increase more than expected. A liability decrease occurs when the reverse happens.
- Increases in TOL when more new retirements occur than expected or fewer terminations occur than anticipated. Liability decreases occur when the opposite outcomes happen.
- Increases or decreases in TOL depending on whether benefits are improved or reduced.

Projection of Total OPEB Liability (TOL)	FY 2018/19	FY 2019/20
TOL as of beginning of year	\$ 30,356,932	\$ 36,524,151
Normal cost as of beginning of year	978,528	1,099,110
Exp. benefit payments during the year	(1,181,271)	(1,664,978)
Interest adjustment to end of year	2,306,663	2,760,437
Exp. TOL as of end of year	\$ 32,460,852	\$ 38,718,720
Actuarial Loss / (Gain)	4,063,299	TBD
Actual TOL as of end of year	\$ 36,524,151	\$ TBD

Discount rate as of beginning of year	7.50%	7.50%
Discount rate as of end of year	7.50%	TBD

Projection of Actuarial Value of Assets (AVA)	FY 2018/19	FY 2019/20
AVA as of beginning of year	\$ 17,335,606	\$ 18,344,869
Exp. employer contributions during the year	1,366,633	2,154,449
Exp. benefit payments during the year	(1,181,271)	(1,664,978)
Expected investment income	1,306,523	1,393,547
Exp. Trust administrative expenses	(12,837)	(9,288)
Exp. AVA as of end of year	\$ 18,814,654	\$ 20,218,599
Differences between expected and actual experience	(469,785)	TBD
AVA as of end of year	\$ 18,344,869	\$ TBD

Expected asset return as of beginning of year	7.50%	7.50%
Expected asset return as of end of year	7.50%	TBD

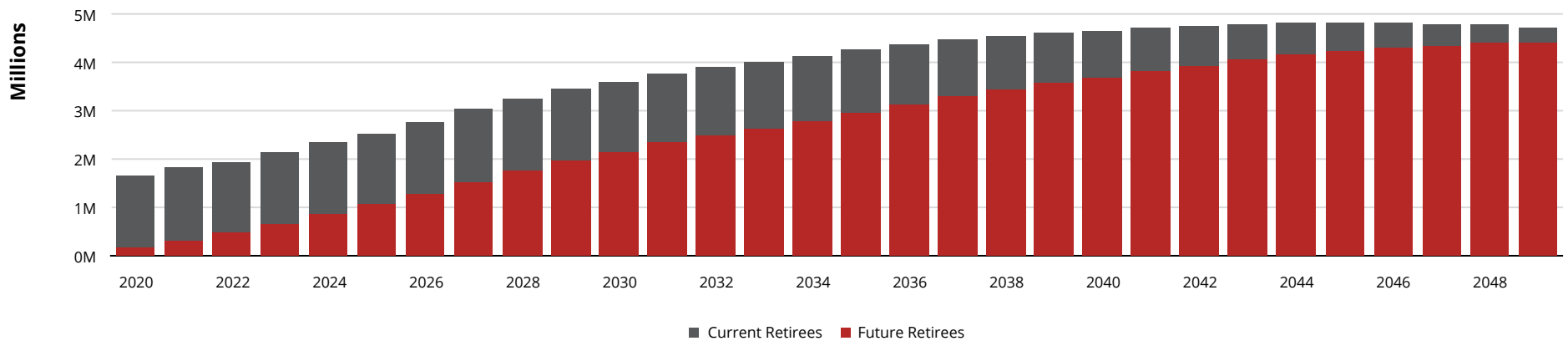
Cash Flow Projections

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next thirty years. Results are shown separately for a closed group of current/future retirees. These projections include explicit and implicit subsidies.

FYE	Current Retirees	Future Retirees*	Total	FYE	Current Retirees	Future Retirees*	Total	FYE	Current Retirees	Future Retirees*	Total
2020	\$ 1,500,780	\$ 164,198	\$ 1,664,978	2030	\$ 1,447,409	\$ 2,153,986	\$ 3,601,395	2040	\$ 979,664	\$ 3,678,809	\$ 4,658,473
2021	\$ 1,503,049	\$ 321,370	\$ 1,824,419	2031	\$ 1,427,684	\$ 2,332,306	\$ 3,759,990	2041	\$ 904,297	\$ 3,816,669	\$ 4,720,966
2022	\$ 1,463,384	\$ 480,655	\$ 1,944,039	2032	\$ 1,402,199	\$ 2,482,349	\$ 3,884,548	2042	\$ 826,431	\$ 3,929,070	\$ 4,755,501
2023	\$ 1,465,459	\$ 669,239	\$ 2,134,698	2033	\$ 1,370,755	\$ 2,634,828	\$ 4,005,583	2043	\$ 747,777	\$ 4,057,966	\$ 4,805,743
2024	\$ 1,474,229	\$ 864,057	\$ 2,338,286	2034	\$ 1,332,929	\$ 2,797,441	\$ 4,130,370	2044	\$ 669,496	\$ 4,166,953	\$ 4,836,449
2025	\$ 1,476,377	\$ 1,054,052	\$ 2,530,429	2035	\$ 1,288,738	\$ 2,971,915	\$ 4,260,653	2045	\$ 592,736	\$ 4,251,820	\$ 4,844,556
2026	\$ 1,501,154	\$ 1,267,743	\$ 2,768,897	2036	\$ 1,238,213	\$ 3,152,324	\$ 4,390,537	2046	\$ 518,606	\$ 4,325,127	\$ 4,843,733
2027	\$ 1,512,345	\$ 1,532,121	\$ 3,044,466	2037	\$ 1,181,674	\$ 3,311,865	\$ 4,493,539	2047	\$ 448,558	\$ 4,352,195	\$ 4,800,753
2028	\$ 1,488,598	\$ 1,755,045	\$ 3,243,643	2038	\$ 1,119,168	\$ 3,440,886	\$ 4,560,054	2048	\$ 383,261	\$ 4,410,618	\$ 4,793,879
2029	\$ 1,461,517	\$ 1,970,181	\$ 3,431,698	2039	\$ 1,051,595	\$ 3,583,603	\$ 4,635,198	2049	\$ 323,478	\$ 4,397,928	\$ 4,721,406

Projected Employer Pay-go Cost



* Projections for future retirees do not take into account future new hires.

Discussion of Discount Rates

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Under GASB 74, the discount rate used in valuing OPEB liabilities for funded plans as of the Measurement Date must be based on the long-term expected rate of return on OPEB plan investments that are expected to be used to finance future benefit payments to the extent that (a) they are sufficient to pay for the projected benefit payments and (b) the OPEB plan assets are invested using a strategy that will achieve that return. When the OPEB plan investments are insufficient to cover future benefit payments, a yield 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) must be used.

For the current valuation:

1. The long-term expected rate of return on OPEB plan investment is 7.00%, which is based on an asset allocation of 58% in equity and 42% in fixed income.
2. The discount rate used when the OPEB plan investments are insufficient to pay for future benefit payments are selected from the range of indices as shown in the table below, where the range is given as the spread between the lowest and highest rate shown.
3. The final equivalent single discount rate used in this year's valuation is 7.50%, which is based on the expectation that the County will continue to fully fund the Actuarially Determined Contribution (ADC). The discount rate will be decreased to 7.25% for the FYE 2020 and 2021 valuations, and will be reduced to 7.00% for FYE 2022 and all subsequent valuations.

	Bond Buyer Go 20- Bond Municipal Bond Index	S&P Municipal Bond 20-Year High Grade Rate Index	Fidelity 20-Year Go Municipal Bond Index	Bond Index Range
Yield as of June 30, 2018	3.87%	2.98%	3.62%	2.98% - 3.87%
Yield as of June 30, 2019	3.51%	2.79%	3.13%	2.79% - 3.51%

Summary of Plan Participants

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Active Employees

Actives with coverage	Single ¹	Non-Single	Total	Avg. Age	Avg. Svc	Salary
PPO High Plan	191	63	254	48.7	12.8	\$ 13,758,724
Total actives with coverage	191	63	254	48.7	12.8	\$ 13,758,724

Actives without coverage	Total	Avg. Age	Avg. Svc	Salary
Total actives without coverage	38	52.8	5.1	\$ 1,616,166

Active employees who currently have no coverage are assumed elect subsidized life insurance at retirement. They have been included in this GASB valuation.

Active Age-Service Distribution

Age	Years of Service										Total
	< 1	1 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 25	4	4									8
25 to 29	1	8	4								13
30 to 34	5	9	7	5							26
35 to 39	1	10	3	10	4						28
40 to 44	2	10	3	4	7	3					29
45 to 49	2	5	3	6	6	4	2				28
50 to 54	2	5	5	9	3	11	7	4			46
55 to 59	5	14	7	12	9	7	6	1	1		62
60 to 64	1	3	7	9	11	5	3	1	1		41
65 to 69		1	1	2		1		1			6
70 & up		1	2		1	1					5
Total	23	70	42	57	41	32	18	7	2	0	292

¹ Includes participants electing Employee + Child(ren) coverage

Summary of Plan Participants

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Retirees

Retirees with healthcare coverage	Single	Non-Single	Total	Avg. Age
PPO High Plan (pre-65)	15	4	19	63.0
Medicare Supplement Plan (post-65)	74	22	96	73.8
Total retirees with healthcare coverage	89	26	115	72.0

Retirees with dental and life insurance only	Total	Avg. Age
Total retirees with dental and life insurance only	16	75.0

Retirees with life insurance only	Total	Avg. Age
Total retirees with life insurance only	1	67.4

Retiree Age Distribution

Age	Retirees
< 45	
45 to 49	
50 to 54	
55 to 59	1
60 to 64	18
65 to 69	39
70 to 74	31
75 to 79	20
80 to 84	15
85 to 89	6
90 & up	2
Total	132

Substantive Plan Provisions

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Eligibility

All employees meeting pension eligibility requirements below are eligible for retiree health benefits.

Eligibility for those hired on/before June 29, 2010 is the earlier of:

1. Age 62 with 5 years of service
2. 30 years of service (Early Retirement)
3. Age 55 with 20 years of service (Early Retirement)
4. Age 60 with 15 years of service (Early Retirement)

Eligibility for those hired after June 29, 2010 is the earlier of:

1. Age 62 with 8 years of service
2. 30 years of service (Early Retirement)
3. Age 55 with 20 years of service (Early Retirement)
4. Age 60 with 15 years of service (Early Retirement)

Spouse Benefit

Surviving spouses are eligible for COBRA coverage.

Medical Benefits

Same benefits are available to retirees as active employees. The PPO plans are self-insured through the Delaware Valley Health Trust with a self-insured Health Reimbursement Account (HRA). The Medicare Supplement plan is fully-insured. The monthly funding rates and Delaware Valley Health Trust premium equivalent rates by plan effective on July 1, 2019 are as shown below.

Funding Rates

Plans	EE	EE + Sp
PPO High Plan	\$ 1,142.55	\$ 2,627.85
PPO Low Plan	\$ 1,101.04	\$ 2,532.36
Medicare Supplement Plan	\$ 725.24	\$ 1,454.39

Delaware Valley Health Trust Premium Equivalent Rates²

Plans	EE	EE + Sp
PPO High Plan	\$ 1,008.25	\$ 2,318.96
PPO Low Plan	\$ 966.73	\$ 2,223.48

² Highmark premium equivalent rates do not include HRA expenses.

Substantive Plan Provisions

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Dental Benefit

Monthly dental premiums effective on July 1, 2019 are as shown below.

	EE	EE + Sp
Dental	\$ 34.20	\$ 69.20

Life Insurance

Group life insurance is provided at a rate of \$0.92 monthly. This is subsidized for the retiree only.

Retiree Cost Sharing

Retirees contribute 7% of the funding rates for pre-65 PPO plans. These amounts are \$79.98 monthly for the EPO High Plan or \$77.08 monthly for the EPO low plan.

Retirees contribute \$3.10 monthly for dental coverage for single coverage and \$45.10 for EE+Sp coverage.

The County pays for the full cost of retiree life insurance and post-65 Medicare Supplement coverage for the eligible retiree.

Retirees contribute 20% of the monthly medical premium for dependent medical coverage. Spousal dental and life insurance coverage was excluded from this valuation as spouses pay the full cost of coverage.

Explicit Subsidy

Retirees are responsible for the portion of premium rates not covered by the County.

Excise Tax

Effective on January 1, 2022, the County is liable for 40% of the difference between the plan costs and the cost threshold, when the plan costs are greater than the cost threshold. The 2022 annual cost thresholds for the excise tax are estimated to be the following:

- Pre-Medicare: \$12,850 for single and \$33,500 for family
- Medicare: \$11,050 for single and \$29,750 for family

The above thresholds are based on the 2018 amounts increased by 2% annually from 2018 to 2022. The excise tax thresholds are assumed to increase by 3.5% in 2022 and 2.5% for all years after 2022.

The plan costs used in the excise tax liability valuation are equal to the County's funding rates.

Actuarial Methods and Assumptions

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

The actuarial assumptions used in this report represent a reasonable long-term expectation of future OPEB outcomes. As national economic and County experience change over time, the assumptions will be tested for ongoing reasonableness and, if necessary, updated.

There are changes to the actuarial methods and assumptions since the last GASB valuation, which was for the fiscal year ending June 30, 2017. Refer to Actuary's Notes section for complete information on these changes. For the current year GASB valuation, we have also updated the per capita costs. We expect to update discount rate, health care trend rates, and per capita costs again in the next full GASB valuation, which will be for the fiscal year ending June 30, 2021.

Measurement Date	For fiscal year ending June 30, 2019, a June 30, 2019 measurement date was used.
Actuarial Valuation Date	June 30, 2019 with no adjustments to get to the June 30, 2019 measurement date. Liabilities as of July 1, 2018 are based on an actuarial valuation date of June 30, 2016 projected to July 1, 2018 on a "no loss / no gain" basis.
Discount Rate	7.50% as of July 1, 2018 and June 30, 2019 The discount rate will be decreased to 7.25% for the FYE 2020 and 2021 valuations, and will be reduced to 7.00% for all FYE 2022 and all subsequent valuations. Refer to the Discussion of Discount Rates section for more information on selection of the discount rate.
Payroll Growth	3.5% per year
Inflation Rate	3.0% per year
Employer Funding Policy	The County fully funds the Actuarially Determined Contribution (ADC). The annual ADC is determined based on the annual normal cost and amortization of the Net OPEB Liability. This amortization amount is calculated using the Level Dollar amortization method, the discount rate for each year, and a decreasing amortization period that begins at 30 years for FYE 2019 [REQUIRES confirmation from the County].
Cost Method	Allocation of Actuarial Present Value of Future Benefits for services prior and after the Measurement Date was determined using Entry Age Normal Level % of Salary method where: <ul style="list-style-type: none">• Service Cost for each individual participant, payable from date of employment to date of retirement, is sufficient to pay for the participant's benefit at retirement; and• Annual Service Cost is a constant percentage of the participant's salary that is assumed to increase according to the Payroll Growth.

Actuarial Methods and Assumptions

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Census Data

Census information was provided by the County in August 2019. We have reviewed it for reasonableness and no material modifications were made to the census data.

Experience Study

Best actuarial practices call for a periodic assumption review and Nyhart recommends the County to complete an actuarial assumption review (also referred to as an experience study). The County has recently had an experience study conducted for their pension plan and Nyhart recommends that the assumptions from that experience study be adopted for the GASB 74/75 valuation.

Health Care Coverage Election Rate

Active employees with current coverage: 100%
Active employees with no coverage³: 0%

Inactive employees with current coverage: 100%
Inactive employees with no coverage: 0%

Spousal Coverage

Spousal coverage for current retirees is based on actual data.

20% of employees are assumed to be married at retirement. Husbands are assumed to be the same age as wives.

Mortality

RP-2000 Combined Mortality Table with mortality improvement projected to 2016 using Scale AA

Disability

Sample disability rates are as shown below.

<u>Age</u>	<u>Rates</u>
25	0.07%
30	0.09%
35	0.12%
40	0.20%
45	0.36%
50	0.62%
55	1.08%
60	1.40%

³ All are assumed to elect dental and life insurance coverage.

Actuarial Methods and Assumptions

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Turnover Rate

Assumption used to project terminations (voluntary and involuntary) prior to meeting minimum retirement eligibility for retiree health coverage. The rates represent the probability of termination in the next 12 months. The termination rates are a multiple of Table T-5. Sample annual turnover rates are shown below:

Age	Years of Service					
	0	1	2	3	4	5+
25	7.7%	15.4%	13.5%	11.6%	9.7%	7.7%
30	7.2%	14.4%	12.6%	10.8%	9.0%	7.2%
35	6.3%	12.6%	11.0%	9.4%	7.8%	6.3%
40	5.2%	10.3%	9.0%	7.7%	6.4%	5.2%
45	4.0%	8.0%	7.0%	6.0%	5.0%	4.0%
50	2.6%	5.1%	4.5%	3.8%	3.2%	2.6%
55	9.4%	1.9%	1.6%	1.4%	1.2%	0.9%
60	0.9%	0.2%	0.2%	0.1%	0.1%	0.1%
65+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Retirement Rate

Annual rates of retirement are as shown below.

Age	Male	Female
55	10%	10%
56 - 59	0%	0%
60 - 61	10%	10%
62	20%	20%
63 - 64	10%	10%
65	100%	100%

Actuarial Methods and Assumptions

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Health Care Trend Rates

FYE	Medical/Rx	Dental
2020	8.00%	4.50%
2021	7.50%	4.25%
2022	7.00%	4.00%
2023	6.50%	3.75%
2024	6.00%	3.50%
2025	5.50%	3.50%
2026	5.00%	3.50%
2027+	4.50%	3.50%

The per capita costs represent the cost of coverage for a retiree-only population.

Actuarial standards require the recognition of higher inherent costs for a retired population versus an active population.

The ultimate trend rate was selected based on historical medical CPI information.

The HRA benefit is assumed to increase at 2% annually. Life insurance premium is assumed not to increase in the future.

Retiree Contributions

Retiree contributions are assumed to increase according to health care trend rates.

Per Capita Costs

Annual per capita costs were calculated based on the Delaware Valley Health Trust premium equivalent rates effective July 1, 2019, actuarially increased using health index factors and current enrollment. All employees are assumed to elect the PPO High Plan at retirement. The costs are assumed to increase with health care trend rates. Annual per capita costs are as shown below:

Age	PPO Plan
<55	\$ 12,100
55 – 59	\$ 15,100
60 – 64	\$ 19,500

The per capita costs represent the cost of coverage for a retiree-only population.

Actuarial standards require the recognition of higher inherent costs for a retired population versus an active population.

Annual per capita costs for post-65 retirees equal the Medicare Supplement premium rate of \$8,703 per person. There is no post-65 implicit subsidy.

The annual cost for the HRA benefit is assumed to be \$3,100.

Annual dental and life insurance per capita costs for retirees are equal to the premium rate (\$410.40 and \$11.04 respectively). There is no implicit subsidy for these benefits.

Actuarial Methods and Assumptions

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Explicit Subsidy

The difference between (a) the premium rate and (b) the retiree contribution. Below is an example of the monthly explicit subsidies for a future retiree who is enrolled in the PPO High Plan.

	Funding Rate	Retiree Contribution	Explicit Subsidy
	A	B	C = A - B
Retiree	\$ 1,142.55	\$ 79.98	\$ 1,062.57
Spouse	\$ 1,485.30	\$ 297.06	\$ 1,188.24

Implicit Subsidy

The difference between (a) the per capita cost and (b) the premium rate. Below is an example of the monthly implicit subsidies for a male retiree age 64 with spouse of the same age enrolled in the PPO High Plan.

	Per Capita Cost	Funding Rate	Implicit Subsidy
	A	B	C = A - B
Retiree	\$ 1,625.00	\$ 1,142.55	\$ 482.45
Spouse	\$ 1,625.00	\$ 1,485.30	\$ 139.70

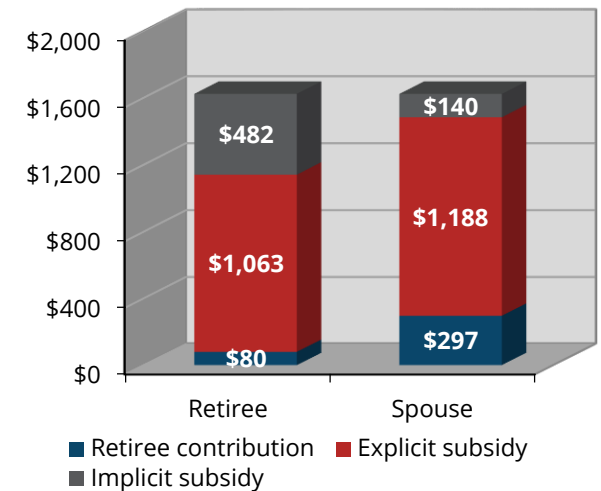
All employers that utilize premium rates based on blended active/retiree claims experience will have an implicit subsidy. There is an exception for Medicare plans using a true community-rated premium rate.

GASB Subsidy Breakdown

Below is a breakdown of the GASB 75 monthly total cost for a male retiree age 64 with spouse of the same age enrolled in the PPO High Plan.

	Retiree	Spouse
Retiree contribution	\$ 79.98	\$ 297.06
Explicit subsidy	\$ 1,062.57	\$ 1,188.24
Implicit subsidy	\$ 482.45	\$ 139.70
Total monthly cost	\$ 1,625.00	\$ 1,625.00

GASB Subsidy Breakdown



APPENDIX

The background features a complex geometric design. The top half is a solid dark gray. Below this, there are several overlapping, semi-transparent shapes. On the left, there are white and light gray shapes. On the right, there are large, vibrant red shapes that overlap with the lighter tones. The overall effect is a modern, minimalist aesthetic.

Appendix

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Comparison of Participant Demographic Information

The active participants' number below may include active employees who currently have no health care coverage. Refer to Summary of Participants section for an accurate breakdown of active employees with and without coverage.

	As of June 30, 2016	As of June 30, 2019
Active Participants	294	292
Retired Participants	114	132
Averages for Active		
Age	48.9	49.2
Service	11.7	11.8
Averages for Inactive		
Age	72.2	72.3

Appendix

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

Detailed Actuary's Notes

There has been one substantive plan provision change since the last full valuation, which was for the fiscal year ending June 30, 2017. Effective July 1, 2018, the dependent cost share for medical coverage was reduced from 30% to 20%. This change has resulted in an increase in liabilities.

The following assumptions have been updated:

1. Health care trend rates have been reset to an initial rate of 8.0% decreasing by 0.5% per year to an ultimate rate of 4.5% and dental trend rates have been reset to an initial rate of 4.00% decreasing by 0.25% per year to an ultimate rate of 3.50%. This change has caused an increase in liabilities.

GLOSSARY

The background features a series of overlapping, semi-transparent geometric shapes. A large, solid red triangle is positioned in the bottom right corner. To its left, there are several overlapping triangles in various shades of gray and white, creating a layered, architectural effect. The top half of the page is a solid, medium-gray color.

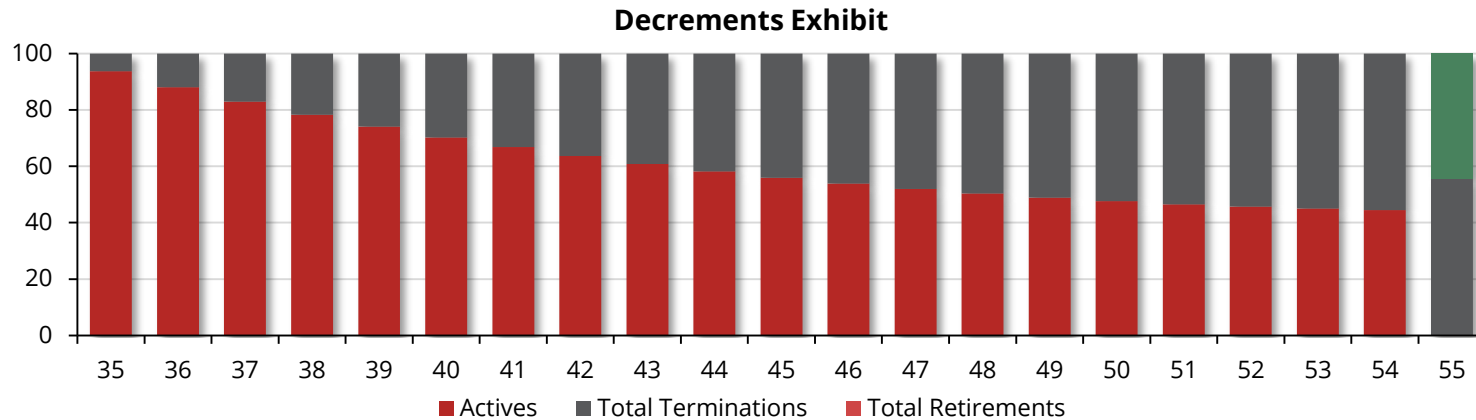
Glossary – Decrements Exhibit

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. Starting with 100 employees at age 35, the illustrated actuarial assumptions show that 44.43 employees out of the original 100 are expected to retire and could elect retiree health benefits at age 55.

Age	# Remaining Employees	# of Terminations per Year ⁴	# of Retirements per Year	Total Decrements
35	100.000	6.276	0.000	6.276
36	93.724	5.677	0.000	5.677
37	88.047	5.136	0.000	5.136
38	82.911	4.648	0.000	4.648
39	78.262	4.209	0.000	4.209
40	74.053	3.814	0.000	3.814
41	70.239	3.456	0.000	3.456
42	66.783	3.131	0.000	3.131
43	63.652	2.835	0.000	2.835
44	60.817	2.564	0.000	2.564
45	58.253	2.316	0.000	2.316

Age	# Remaining Employees	# of Terminations per Year	# of Retirements per Year	Total Decrements
46	55.938	2.085	0.000	2.085
47	53.853	1.866	0.000	1.866
48	51.987	1.656	0.000	1.656
49	50.331	1.452	0.000	1.452
50	48.880	1.253	0.000	1.253
51	47.627	1.060	0.000	1.060
52	46.567	0.877	0.000	0.877
53	45.690	0.707	0.000	0.707
54	44.983	0.553	0.000	0.553
55	44.430	0.000	44.430	44.430



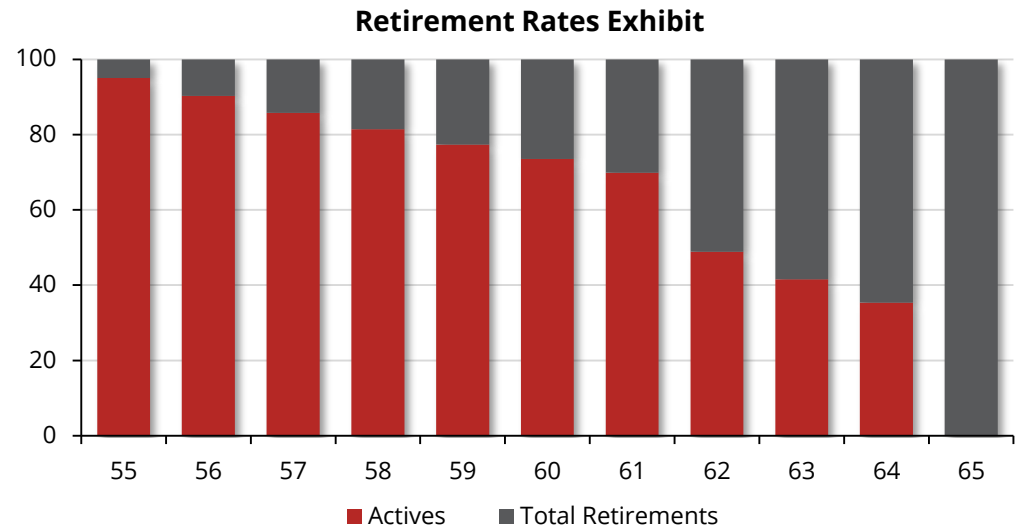
⁴ The above rates are illustrative rates and are not used in our GASB calculations.

Glossary – Retirement Rates Exhibit

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. The illustrated retirement rates show the number of employees who are assumed to retire annually based on 100 employees age 55 who are eligible for retiree health care coverage. The average age at retirement is 62.0.

Age	Active Employees BOY	Annual Retirement Rates*	# Retirements per Year	Active Employees EOY
55	100.000	5.0%	5.000	95.000
56	95.000	5.0%	4.750	90.250
57	90.250	5.0%	4.513	85.738
58	85.738	5.0%	4.287	81.451
59	81.451	5.0%	4.073	77.378
60	77.378	5.0%	3.869	73.509
61	73.509	5.0%	3.675	69.834
62	69.834	30.0%	20.950	48.884
63	48.884	15.0%	7.333	41.551
64	41.551	15.0%	6.233	35.318
65	35.318	100.0%	35.318	0.000



* The above rates are illustrative rates and are not used in our GASB calculations.

Glossary – Definitions

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

GASB 75 defines several unique terms not commonly employed in the funding of pension and retiree health plans. The definitions of the terms used in the GASB actuarial valuations are noted below.

1. **Actuarial Assumptions** – Assumptions as to the occurrence of future events affecting health care costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided health care 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.
2. **Actuarial Cost Method** – A procedure for determining the Actuarial Present Value of Future Benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Service Cost and a Total OPEB Liability.
3. **Actuarially Determined Contribution** - A target or recommended contribution to a defined benefit OPEB plan for the reporting period, determined in accordance with the parameters and in conformity with Actuarial Standards of Practice.
4. **Actuarial Present Value** – The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:
 - a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, Social Security, marital status, etc.);
 - b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned; and
 - c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.
5. **Deferred Outflow / (Inflow) of Resources** – represents the following items that have not been recognized in the OPEB Expense:
 - a. Differences between expected and actual experience of the OPEB plan
 - b. Changes in assumptions
 - c. Differences between projected and actual earnings in OPEB plan investments (for funded plans only)
6. **Explicit Subsidy** – The difference between (a) the amounts required to be contributed by the retirees based on the premium rates and (b) actual cash contribution made by the employer.
7. **Funded Ratio** – The actuarial value of assets expressed as a percentage of the Total OPEB Liability.

Glossary – Definitions

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

8. **Healthcare Cost Trend Rate** – The rate of change in the per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.
9. **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 (which, because of the effect of age on claim costs, generally will be higher than the blended premium rates for all group members) and (b) the amounts required to be contributed by the retirees.
10. **OPEB** – Benefits (such as death benefits, life insurance, disability, and long-term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.
11. **OPEB Expense** – Changes in the Net OPEB Liability in the current reporting period, which includes Service Cost, interest cost, changes of benefit terms, expected earnings on OPEB Plan investments, reduction of active employees' contributions, OPEB plan administrative expenses, and current period recognition of Deferred Outflows / (Inflows) of Resources.
12. **Pay-as-you-go** – A method of financing a benefit 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.
13. **Per Capita Costs** – The current cost of providing postretirement health care benefits for one year at each age from the youngest age to the oldest age at which plan participants are expected to receive benefits under the plan.
14. **Present Value of Future 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 plus investment earnings will provide sufficient assets to pay total projected benefits when due.
15. **Real Rate of Return** – the rate of return on an investment after adjustment to eliminate inflation.

Glossary – Definitions

Kent County Levy Court GASB 74/75 Valuation for Fiscal Year Ending June 30, 2019

16. **Select and Ultimate Rates** – Actuarial assumptions that contemplate different rates for successive years. Instead of a single assumed rate with respect to, for example, the investment return assumption, the actuary may apply different rates for the early years of a projection and a single rate for all subsequent years. For example, if an actuary applies an assumed investment return of 8% for year 20W0, then 7.5% for 20W1, and 7% for 20W2 and thereafter, then 8% and 7.5% select rates, and 7% is the ultimate rate.
17. **Service Cost** – The portion of the Actuarial Present Value of projected benefit payments that are attributed to a valuation year by the Actuarial Cost Method.
18. **Substantive Plan** – The terms of an OPEB plan as understood by the employer(s) and plan members.
19. **Total OPEB Liability** – That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Benefits which is attributed to past periods of employee service (or not provided for by the future Service Costs).