Kent County Retiree Health Care Plan

Actuarial Valuation Report December 31, 2022



Table of Contents

Section	Page	_
		Cover Letter
	1-2	Executive Summary
Α		Valuation Results
	1 2 3 4-5 6 7-9	Development of the Actuarially Determined Contribution Determination of Unfunded Actuarial Accrued Liability Direct and Indirect Components of Actuarial Accrued Liability and Normal Cost Comments Other Observations Risk Measures
В	1-4	Retiree Premium Rate Development
С	1-3	Summary of Benefit Provisions
D		Summary of Valuation Data
	1 2 3 4	Active Members by Attained Age and Years of Service Retired Members by Attained Age Asset Information Development of Funding Value of Assets
E		Actuarial Cost Method and Actuarial Assumptions
	1 2-5 6-7	Actuarial Cost Method Actuarial Assumptions Miscellaneous and Technical Assumptions
F		Michigan Public Act 202
	1-2 3 4 4	State Reporting Supplementary Information Schedule of Funding Progress Schedule of Employer Contributions
G	1-2	Glossary





May 12, 2023

Mr. Jeff Dood Fiscal Services Director Kent County Retiree Health Care Plan 300 Monroe Avenue, N.W. Grand Rapids, Michigan 49503

Dear Mr. Dood:

Submitted in this report are the results of an Actuarial Valuation of the assets and benefit values associated with the employer financed retiree health benefits provided by Kent County. The date of the valuation was December 31, 2022.

This report was prepared at the request of the Board and is intended for use by the Retiree Health Care Plan and those designated or approved by the Board. This report may be provided to parties other than the Plan only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purposes of the valuation are to measure the Plan's funding progress and to determine the employer contribution rate for the fiscal year ending December 31, 2024. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different. This report does not satisfy the disclosure requirements of Governmental Accounting Standards Board (GASB) Statements No. 74 and No. 75, which are issued in a separate report.

The contribution rate in this report is determined using the actuarial assumptions and methods disclosed in Section E of this report. This report includes risk metrics on pages A-7 through A-9 but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this Plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The findings in this report are based on data and other information through December 31, 2022. This valuation was based upon information furnished by the County concerning Retiree Health Care Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the County.

Mr. Jeff Dood Kent County Retiree Health Care Plan May 12, 2023 Page 2

This report was prepared using assumptions adopted by the Board. The assumptions are established by the Board after consulting with the actuary. All actuarial assumptions used in this report are reasonable for the purposes of this valuation and have no material limitations or known weaknesses. The actuarial methods and assumptions used in the actuarial valuation are summarized in Section E of this report.

This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

This report has been prepared by actuaries who have substantial experience valuing public employee retiree plans. To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the Kent County Retiree Health Care plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

James D. Anderson, Derek Henning, and Abra D. Hill are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Jaroes D. Anderson, FSA, EA, FCA, MAAA

amis D. anderson

Derek Henning, ASA, EA, FCA, MAAA

Abra D. Hill, ASA, FCA, MAAA

Abra D Hill

Derch Senning

JDA/DH/ADH:dj

C0608





Executive Summary

Actuarially Determined Contribution

The Actuarially Determined Contribution (ADC) for the fiscal year ending December 31, 2024 is \$2,183,611 or 1.86% of projected payroll. Actual claims and premiums paid on behalf of retirees from outside of the plan assets may be treated as employer contributions in relation to the ADC. The expected employer portion of the claims and premium amounts paid is estimated to be \$3,674,301 for the fiscal year ending December 31, 2024. This amount reflects the retiree only premium rates and the implicit subsidy for retirees and covered spouses. The expected employer portion is comprised of \$2,135,268 in County benefits to retirees and \$1,539,033 in retiree health care costs in excess of the premiums charged.

If the employer portion of premiums for existing retirees is paid from existing plan assets, the County can still treat the associated implicit subsidy as contributions toward the ADC. Therefore, if the actual premiums and flat dollar subsidies paid from plan assets turn out to be equal to the estimate of \$2,135,268 and the County contributes \$644,578 (the difference between the total ADC of \$2,183,611 and \$1,539,033) to the trust, then the ADC will be met.

Per capita costs and illustrative rates were developed from the premiums, claims and enrollment data provided to us. The process used to determine these per capita costs and the results of these calculations are provided in Section B.

Additional OPEB Reporting Requirements

Please note that beginning with the fiscal year ending December 31, 2017, GASB Statement No. 43 was replaced by GASB Statement No. 74. Also, beginning with the fiscal year ending December 31, 2018, GASB Statement No. 45 was replaced by GASB Statement No. 75. The report dated April 30, 2021 complies with the actuarial requirements of GASB Statement No. 74 and Statement No. 75 for the fiscal year ending December 31, 2022.

Liabilities and Assets

The present value of all benefits expected to be paid to current plan members as of December 31, 2022 is \$71,250,838. The actuarial accrued liability, which is the portion of the \$71,250,838 attributable to service accrued by plan members as of December 31, 2022, is \$60,889,159. As of December 31, 2022, there is \$50,148,796 in valuation assets available to offset the liabilities of the plan.

The funded status of the plan, which is the ratio of plan assets to actuarial accrued liability, as of December 31, 2022 is 82.4%. This is an increase from 68.6% as of December 31, 2021.



Executive Summary

Assumption and Method Changes

The health care trend assumption was updated in accordance with the Uniform Assumption reporting requirements for the Fiscal Year 2022. The non-Medicare initial trend rate was reduced from 7.50% to 7.25%. The Medicare initial trend rate was reduced from 5.75% to 5.50%. The health care trend assumption is described on page B-3.

The actuarial assumptions reflected in the December 31, 2022 valuation are in accordance with the Uniform Assumption reporting requirements for Fiscal Year 2022 under Michigan Public Act 202.

Benefit Change

There were no benefit changes reflected in the December 31, 2022 valuation.



SECTION A

VALUATION RESULTS

Development of the Actuarially Determined Contribution for Other Postemployment Benefits Fiscal Year Ending December 31, 2024

Contributions for	Development of the Actuarially Determined Contribution for January 1, 2024 - December 31, 2024
Normal Cost	
Normal Retirement	\$ 1,091,805
Early Retirement	176,098
Death-in-Service	35,220
Disability	58,699
Future Refund of Member Contributions	0
Total Normal Cost	\$ 1,361,822
Annual Active Member Contribution	\$ 0
Employer Normal Cost	\$ 1,361,822
Amortization of Unfunded Actuarial Accrued Liabilities (Amortized over 18 years)	\$ 821,789
Actuarially Determined Contribution (ADC)	\$ 2,183,611
Projected Payroll for the Fiscal Year	
Ending December 31, 2024	\$117,398,368
ADC as a Percentage of Projected Payroll	1.86%
ADC Per Active Participant (1,564 Actives)	\$ 1,396

The unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll over a period of 18 years.



Determination of Unfunded Actuarial Accrued Liability as of December 31, 2022

A. P	resent Value of Future Benefits			
	Retirees and Beneficiaries	\$31,571,241		
	2. Vested Terminated Members	0		
	3. Active Members	<u>39,679,597</u>		
	Total Present Value of Future Benefits	\$71,250,838		
В.	Present Value of Future Employer Normal Costs	\$10,361,679		
C.	Present Value of Future Contributions from Current Active Members	\$ 0		
D.	Actuarial Accrued Liability (ABC.)	\$60,889,159		
E.	Funding Value of Assets	\$50,148,796		
F.	Unfunded Actuarial Accrued Liability (DE.)	\$10,740,363		
G.	Funded Status (E./D.)	82.4%		

The Unfunded Actuarial Accrued Liability (UAAL) is not booked as an expense all in one year and does not appear in the Employer's Statement of Net Assets. Nevertheless, it is reported in the Notes to the Financial Statements and in the Required Supplementary Information. These are information sections within the employer's financial statements.



Direct and Indirect Components of Actuarial Accrued Liability as of December 31, 2022 and Normal Cost Projected to Fiscal Year Ending December 31, 2024

	Actuarial Accrued Liability			Normal Cost			
Group	Indirect Direct Total		Indirect	Direct	Total		
Active	\$ 16,153,613	\$ 13,164,305	\$ 29,317,918	\$ 810,050	\$ 551,772	\$ 1,361,822	
Pre-65 Retirees	8,512,395	4,237,684	12,750,079				
Post-65 Retirees		18,821,162	18,821,162				
Total	\$ 24,666,008	\$ 36,223,151	\$ 60,889,159	\$ 810,050	\$ 551,772	\$ 1,361,822	

For this purpose, "direct" costs represent the plan provided employer subsidy (e.g., \$400/month). "Indirect" costs represent additional employer costs due to the difference between the total cost of retiree benefits and the portion covered by the sum of "direct" costs and retiree contributions.



Comments

Comment A: Overall plan experience was more favorable than expected. Factors contributing to the favorable experience include, but are not limited to:

- Projected claims costs increasing by less than expected for pre-65 members (i.e. lower projected implicit rate subsidy); and
- Favorable premium rate experience for post-65 members (i.e. lower projected direct costs).

The favorable experience was slightly offset by a lower than expected return on the funding value of assets.

Comment B: One of the key assumptions used in any valuation of the cost of postemployment benefits is the long-term rate of investment return on plan assets. We have calculated the actuarial accrued liability and the resulting Actuarially Determined Contribution (ADC) using an assumed investment return of 6.50%, as adopted by the Board.

Comment C: Due to the Board's use of a four-year smoothed market asset valuation method, lower than expected market returns were only 25% recognized, and combined with the scheduled phase-in of the prior three years unrecognized investment income. As a result, the market value of assets returned (14.1%) in 2022 while the return on valuation assets was 5.5%.

Given annual investment returns of 6.50% going forward, net investment losses are scheduled for the next three years (see page D-4 for further details). This will exert upward pressure on computed County contribution rates and downward pressure on the funded ratio.

Selected comparative Retiree Health Care Plan metrics follow:

Valuation Date	12/31/2022	12/31/2021
Funded Status = AAL - FVA	\$10.7 Million	\$20.3 Million
Funded Percentage = FVA/AAL	82.4%	68.6%
Funded Percentage = MVA/AAL	72.8%	74.4%
Employer Contribution	1.86%	2.60%
Employer Contribution – MVA	2.25%	2.36%
FVA/MVA	113.1%	92.3%

AAL = Actuarial Accrued Liability, FVA = Funding Value of Assets, MVA = Market Value of Assets

Comment D: The ADC shown in this report has been calculated to increase at the same rate as the projected increase in active member payroll (3.5% per year).

Comment E: The contribution rates shown include amortization of the unfunded actuarial accrued liability over 18 years.

Comment F: Retirees who are currently waiving coverage through the County are assumed to continue waiving coverage indefinitely.



Comments (Concluded)

Comment G: If the employer portion of premiums for existing retirees is paid from existing plan assets, the County can still treat the associated implicit subsidy as contributions toward the ADC. Therefore, if the actual premiums and flat dollar subsidies paid from plan assets turn out to be \$2,135,268 and the County contributes \$644,578 (the difference between \$2,183,611 and \$1,539,033) to the trust, then the ADC will be met.

Comment H: Currently, no trend is being applied to the monthly flat dollar subsidy, as it is not expected to be increased in the future. If the amount of the flat dollar subsidy is expected to increase, then application of a trend may be appropriate.

Comment I: Health-care related assumptions were last reviewed in the Experience Study covering the fiveyear period ending December 31, 2017. We recommend that the Board review the health-care related assumptions including rates of election of health care coverage, health care trend, and age-grading factors prior to the December 31, 2023 valuation by conducting an experience study with the actuary covering the five-year period ending December 31, 2022.

Since the covered population of the Retiree Health Care Plan is nearly identical to the Kent County Retirement Plan population, many of the demographic assumptions used in the VEBA valuation (rates of mortality, retirement, turnover, etc.) are identical to those used in the Retirement Plan valuation. These assumptions will be reviewed in conjunction with the Retirement Plan experience study.

Comment J: Michigan Public Act 202 of 2017 created new reporting and other requirements for local units of government. Section F of this report satisfies the Public Act 202 uniform assumptions reporting for Fiscal Year 2022.



Other Observations

General Implications of Contribution Allocation Procedure or Funding Policy on Future Expected System Contributions and Funded Status

Given the Plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the Plan earning 6.50% on the funding value of assets), it is expected that:

- (1) The employer normal cost as a percentage of pay will be sufficient to finance benefits accruing each year;
- (2) The Unfunded Actuarial Accrued Liabilities (UAAL) will be fully amortized after 18 years (December 31, 2041); and
- (3) The funded status of the plan will increase gradually towards a 100% funded ratio.

The above statements assume that the full Actuarially Determined Employer Contribution (ADC) is contributed each year.

Limitations of Funded Status Measurements

Unless otherwise indicated, a funded status measurement presented in this report is based upon the actuarial accrued liability and the funding value of assets. Unless otherwise indicated, with regard to any funded status measurements presented in this report:

- (1) The measurement is inappropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the System's benefit obligations; for example, transferring the liability to an unrelated third party in a market value type transaction.
- (2) The measurement is dependent upon the actuarial cost method which, in combination with the Plan's amortization policy (funding policy), affects the timing and amounts of future contributions. The amounts of future contributions will most certainly differ from those assumed in this report due to future actual experience differing from assumed experience based upon the actuarial assumptions. Even if the funded status measurement in this report was 100%, it would not be synonymous with no required future contributions. If the funded status were 100%, the Plan would still require future normal cost contributions (i.e., contributions to cover the cost of the active membership accruing an additional year of service credit).



Risks Associated with Measuring the Accrued Liability and **Actuarially Determined Contribution**

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

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 due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

- 1. **Investment Risk** actual investment returns may differ from the expected returns;
- 2. Asset/Liability Mismatch Risk changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
- 3. Contribution Risk actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
- 4. Salary and Payroll Risk actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
- 5. Longevity Risk members may live longer or shorter than expected and receive benefits for a period of time other than assumed; and
- 6. Other Demographic Risks members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.



Plan Maturity Measures

Risks facing a retiree health plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	Retiree Health Care Plan			n
	2022	2021	2020	2019
Ratio of the market value of assets to total payroll	0.40	0.45	0.39	0.34
Ratio of actuarial accrued liability to payroll	0.56	0.61	0.61	0.61
Ratio of actives to retirees and beneficiaries	2.03	2.07	2.20	2.19
Ratio of net cash flow to market value of assets	7.2%	4.5%	8.7%	4.5%
Duration of the actuarial accrued liability	12.44	12.31	12.42	12.56

Ratio of Market Value of Assets to Payroll

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

Ratio of Actuarial Accrued Liability to Payroll

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

Ratio of Actives to Retirees and Beneficiaries

A young plan with many active members and few retirees will have a high ratio of actives to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.



Ratio of Net Cash Flow to Market Value of Assets

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

Duration of Actuarial Accrued Liability

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, a duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

Additional Risk Assessment

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.





RETIREE PREMIUM RATE DEVELOPMENT

For the self-insured plans, initial premium rates were developed for pre-65 retirees only. The rates were calculated by using actual claims and exposure data for the period of January 2020 through December 2022, plus the load for administration fees. The self-insured medical and prescription drug data were provided by the County. Prescription drug claims and the medical claims were analyzed separately since they exhibit different trends and claim payment patterns.

For the fully-insured plans, initial premium rates were developed for the two classes of retirees (pre-65 and post-65). The January 1, 2023 fully-insured rates provided by Kent County were utilized to determine the appropriate per capita costs. The pre-65 fully-insured medical premiums are blended rates based on the combined experience of active and pre-65 retired members; therefore, there is an implicit employer subsidy for the non-Medicare eligible retirees since the average costs of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees. The true per capita cost for the pre-65 retirees is developed by adjusting the demographic differences between the active employees and retirees to reflect this implicit rate subsidy for the retirees. For the post-65 retirees, the fully-insured premium rate is used as the basis of the initial per capita cost without adjustments since the rate reflects the demographics of the post-65 retiree group.

The medical and prescription drug claims experience was better than expected leading to lower than expected self-insured medical per capita costs. Fully-insured drug premiums decreased since the last valuation. The aggregate effect of these elements has led to lower than expected increases in the per capita rates used in the valuation.

The per capita costs shown on the following page are the weighted average costs of the fully-insured and self-insured premiums based on the actual enrollment by plan as of the valuation date. The Medicare Supplemental Plan F (Transamerica) and Part D Prescription Drug (Humana) plans are only available to retirees eligible for Medicare as of January 1, 2020. Therefore, the post-65 per capita claims costs are different for current retirees versus future retirees.



Age graded and sex distinct premiums are utilized in this valuation. The premiums developed by the preceding process are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. The age/sex specific costs more accurately reflect the health care utilization and cost at that age.

The tables below show the resulting medical and prescription drug one-person monthly premiums at select ages. The premium (or per capita costs) rates shown below reflect the use of age grading.

For Those Not Eligible for Medicare			
Age	Female		
45	\$ 562.97	\$ 776.98	
50	733.05	903.05	
55	964.61	1,053.22	
60	1,245.85	1,226.74	

For Those Eligible for Medicare (Current Retirees)			
Age	Male	Female	
65	\$ 260.44	\$ 245.65	
70	283.72	274.54	
75	304.72	297.34	

For Those Eligible for Medicare (Future Retirees)			
Age	Age Male		
65	\$ 148.66	\$ 140.21	
70	161.94	156.70	
75	173.93	169.72	



Health Care Trend Assumption

The health care cost trend rate is the rate of change in per capita health care claims over time as a result of factors such as medical inflation, utilization of health care services, plan design, and technological improvements. It is a crucial economic assumption that is required for measuring retiree health care benefit obligations.

Retiree health care valuations use a health care cost trend assumption (trend vector) that changes over the years. The trend vector used in this valuation begins with a near-term trend assumption and declines over a time to an ultimate trend rate. The near-term rates reflect the increases in the current cost of health care goods and services. The process of trending down to a lower ultimate trend relies on the theory that premiums will moderate over the long term; otherwise, the health care sector would eventually consume the entire GDP. The health care trend assumption was updated in accordance with the Michigan Public Act 202 Uniform Assumption reporting requirements for the Fiscal Year 2022.

Health care trend rates used in the valuation were as shown below:

	Medical and Drug Trend Rates		
Year	Non-Medicare	Medicare	
2023	7.25%	5.50%	
2024	7.00	5.25	
2025	6.75	5.00	
2026	6.50	4.75	
2027	6.25	4.50	
2028	6.00	4.50	
2029	5.75	4.50	
2030	5.50	4.50	
2031	5.25	4.50	
2032	5.00	4.50	
2033	4.75	4.50	
2034	4.50	4.50	
2035	4.50	4.50	
2036	4.50	4.50	
2037	4.50	4.50	
2038 & Later	4.50	4.50	



Actuarial Disclosures

The premium rates used in this valuation were developed using proprietary Excel models which, in James E. Pranschke's professional judgment, provide initial projected costs which are consistent with the purposes of the valuation. We performed tests to ensure that the models, in their entirety, reasonably represent that which is intended to be modeled.

Aging factors used in the premium development models were developed based on information and data from a 2013 study commissioned by the Society of Actuaries entitled "Health Care Costs – From Birth to Death."

James E. Pranschke is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to certify the per capita retiree health care rates shown above.

James E. Branschke
James E. Pranschke, FSA, FCA, MAAA

5/12/2023 Date





SUMMARY OF BENEFIT PROVISIONS

Summary of Benefit Provisions as of December 31, 2022

Plan Participants

Members of Kent County with continued employee/retiree participation in employer sponsored health care plans are eligible to receive retiree health care benefits.

Health Care Benefit Provided

		Monthly Flat
Pension		Dollar Subsidy
Group	OPEB Group	Amount
35	POLC – Captains/ Lieutenants	\$400
11	APAA – Prosecuting Attorneys	\$400
20	UAW	\$400
22	TPOAM	\$400
55	Teamsters - Parks	\$400
50	Teamsters - PHN	\$400
31	FOP	\$400
30	KCDSA	\$400
60	MPP	\$400
65	Judges	\$400
70	Elected Officials	\$400
75	Commissioners	\$400
60	Non- Exempt MPP	\$400
17	Circuit Court Referees	\$400

Subsidy prorated for service less than 25 years.

Pension Groups 20, 35, 50, 55, 60, 65, 70, and 75 – Employees hired on or after January 1, 2016 (January 1, 2015 for Pension Groups 31), upon their retirement, will be in a separate group for retiree health premium rating purposes.

Pension Groups 11, 17, 22 and 30 – Employees hired on or after July 1, 2016, upon their retirement, will be in a separate group for retiree health premium rating purposes.

Normal Retirement Eligibility

Age 60 with 5 years of service or 25 years of service regardless of age. Military service may be purchased.

For members hired on or after January 1, 2011, age 62 with 5 years of service or age 60 (age 55 for Captains/Lieutenants) with 25 years of service, for the following groups: MPP, Judges, Elected Officials, Commissioners, UAW, TPOAM, and Prosecuting Attorneys.

For members hired on or after January 1, 2012, age 62 with 5 years of service or age 60 with 25 years of service, for the following groups: Teamsters-Parks, Teamsters-PHN, and Circuit Court Referees.

For KCDSA members hired on or after January 1, 2013, age 60 with 5 years of service or age 50 with 25 years of service.

For FOP members hired on or after January 1, 2015, age 60 with 5 years of service or age 50 with 25 years of service.



Summary of Benefit Provisions as of December 31, 2022

Early Retirement Eligibility

Members who retire at age 55 or older with 15 or more years of service are eligible for the flat dollar subsidy above, pro-rated for service less than 25 years.

Deferred Retirement Eligibility

Retirees who terminate employment prior to eligibility for early or normal retirement are not eligible for retiree health care benefits.

Duty Disability Eligibility

Employees who retire under a duty disability retirement are immediately eligible for full subsidy. The County pays a pro-rated amount of the flat dollar subsidy on page C-1 for groups 35, 60, 65, 70 and 75.

Non-Duty Disability Eligibility

Members who become disabled with ten or more years of service will receive the flat dollar on page C-1, pro-rated for service less than 25 years for groups 30, 31 and 35. All other employees are covered by the Long-Term Disability Plan.

Death-in-Service Eligibility

Survivors of employees who become deceased while employed are eligible to purchase retiree health care benefits at full rates.

Benefit for Spouses of Retired Members

Spouses of retired employees are eligible to purchase health care through the County. Surviving spouses of deceased retirees are also eligible to purchase health care through the County if receiving a pension benefit from the Kent County Retirement Plan.

Non-Medicare and Medicare-Eligible Provisions

Retiree and spouse are required to enroll in Medicare once eligible. Retiree and spouse pay the Medicare Part B premiums.

Vision and Dental Insurance Eligibility

The County offers fully-insured retiree vision and dental plans to retirees. Retirees pay full cost of premiums.

Life Insurance Eligibility

The County does not offer life insurance coverage for retirees or their dependents.

This is a brief summary of the Kent County Retiree Health Care Plan provisions. In the event that any description contained herein differs from the actual eligibility or benefit, the appropriate employee contract or governing document will prevail.



Designated MPP Parks Unit Members Summary of Benefit Provisions as of December 31, 2022

Plan Participants

Designated Members of Kent County MPP Parks Bargaining Unit with continued employee/retiree participation in employer sponsored health care plans are eligible to receive retiree health care benefits.

Health Care Benefit Provided

The County pays 80% of the retiree health care premiums for eligible retirees and spouse named at retirement. Dental and Drug coverage ceases at age 65.

Normal Retirement Eligibility

Members are eligible for retiree health care at age 55 with 20 years of service or at age 55 if the sum of age and service is 75 or greater.

Early Retirement Eligibility

Members who retire under early retirement are eligible for a reduced benefit.

El	įρ	ik	il	ity	

Age 55 and service sum to 70-74 Age 55 and service sum to 65-69

Benefit Paid by County

75% of premium 50% of premium

Benefit for Spouses of Retired Members

Spouses of retired employees are eligible to purchase health care through the County.

Non-Medicare and Medicare-Eligible Provisions

Retiree and spouse are required to enroll in Medicare once eligible. Retiree and spouse pay the Medicare Part B premiums.

Dental Eligibility

The County provides 100% paid dental until the age of 65.

Vision Insurance Eligibility

The County offers a fully insured retiree vision plan to retirees. Retirees pay full cost of premiums.

Life Insurance Eligibility

The County does not offer life insurance coverage for retirees or their dependents.

This is a brief summary of the Kent County Retiree Health Care Plan provisions for the designated MPP Parks Unit. In the event that any description contained herein differs from the actual eligibility or benefit, the appropriate employee contract or governing document will prevail.





SUMMARY OF VALUATION DATA

Total Active Members as of December 31, 2022 by Attained Age and Years of Service

		Yea	rs of Serv	ice to Va	luation D	ate		Totals	
Attained									Valuation
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Payroll
20-24	28							28	\$ 1,278,942
25-29	123	30						153	8,411,264
30-34	126	93	11					230	14,344,149
35-39	72	66	44	19	2			203	14,140,306
40-44	44	54	35	65	46			244	18,370,567
45-49	35	33	23	43	87	12		233	16,940,528
50-54	31	18	19	31	72	44	6	221	17,768,342
55-59	23	14	15	19	35	16	8	130	9,307,103
60-64	14	8	15	15	18	6	7	83	6,243,322
65 & Over		7	4	3	11	7	7	39	2,788,110
Totals	496	323	166	195	271	85	28	1,564	\$109,592,633

There is 1 MPP member in the above totals.

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 43.2 years Service: 11.7 years

Annual Pay: \$70,072



Total Retired Members as of December 31, 2022 by Attained Age

Attained	Number of Re	tirees and Surv	Average Flat	
Age	Male	Female	Total	Dollar Subsidy (Monthly)
Under 55	29	14	43	\$363.50
55-59	29	37	66	327.17
60-64	53	92	145	308.15
65 & Over	237	279	516	180.61
Totals	348	422	770	\$227.40

The number counts above only include those retirees who receive retiree health care coverage through the Kent County Retiree Health Care Plan. There are 70 retirees included in the above number counts who are not receiving a County Supplement (i.e., Flat Dollar Subsidy = \$0) and are paying the full "premium" for health care coverage.



Asset Information

Balance Sheet

Reported Assets – Market Value					
	December 31, 2022				
Cash & equivalents	\$ 860,127				
Receivables & accruals	308,151				
Stocks	26,533,558				
Bonds & government securities	14,339,252				
Real Estate	2,848,415				
Other - Accounts Payable	(559,500)				
Total Current Assets	\$ 44,330,003				

Revenues and Expenditures

	2022
Balance – December 31, 2021 Adjustment	\$ 48,174,698 -
Balance – January 1	\$ 48,174,698
Revenues:	
Employees' contributions	-
Employer contributions	\$ 5,263,756
Other Additions	-
Investment income	(6,827,424)
Total	(1,563,668)
Expenditures:	
Benefit payments	\$ 2,089,370
Refund of member contributions	-
Administrative and investment expenses	191,657
Total	\$ 2,281,027
Balance - December 31	\$44,330,003
Rate of Return	(14.1)%



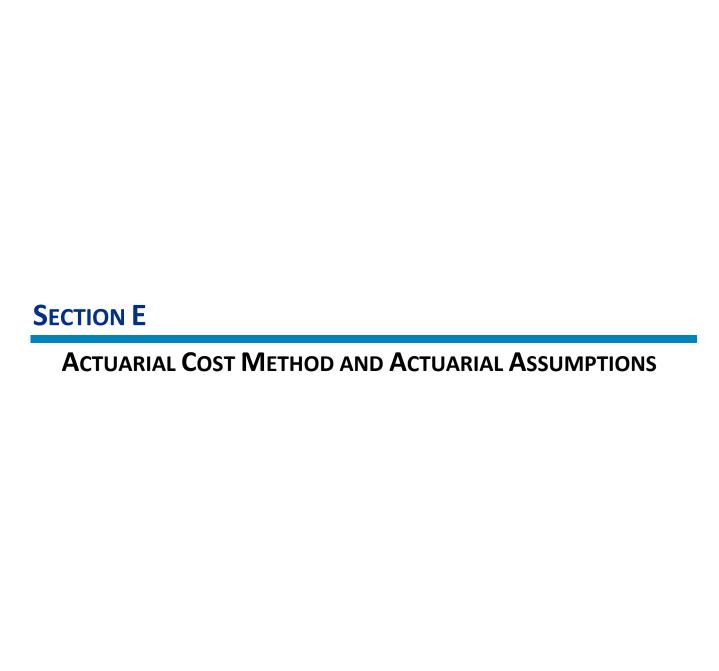
Development of Funding Value of Assets

Year Ended December 31:	2019	2020	2021	2022	2023	2024	2025
A. Funding Value Beginning of Year	\$ 28,509,900	\$ 31,940,824	\$ 38,450,952	\$ 44,455,328			
B. Market Value End of Year *	32,734,859	41,296,891	48,174,698	44,330,003			
C. Market Value Beginning of Year	25,891,112	32,734,859	41,296,891	48,174,698			
D. Non-Investment Net Cash Flow	1,482,760	3,584,248	2,179,043	3,174,386			
E. Investment Income:							
E1. Expected Rate of Return	6.75%	6.75%	6.75%	6.50%	6.50%		
E2. Market Total: B - C - D	\$5,360,987	\$ 4,977,784	\$ 4,698,764	\$ (7,019,081)			
E3. Amount for Immediate Recognition: E1*(D/2+A)	1,974,461	2,276,974	2,668,982	2,992,764			
E4. Amount for Phased-In Recognition: E2-E3	3,386,526	2,700,810	2,029,782	(10,011,845)			
F. Phased-In Recognition of Investment Income:							
F1. Current Year: 0.25 x E4	846,632	675,203	507,446	(2,502,961)			
F2. First Prior Year	(872,929)	846,632	675,203	507,446	(2,502,961)		
F3. Second Prior Year	-	(872,929)	846,632	675,203	507,446 \$	(2,502,961)	
F4. Third Prior Year	-	-	(872,930)	846,630	675,201	507,444	(2,502,962)
F5. Total Recognized Investment Gain	(26,297)	648,906	1,156,351	(473,682)	(1,320,314)	(1,995,517)	(2,502,962)
G. Funding Value End of Year: A + D + E3 + F5	31,940,824	38,450,952	44,455,328	50,148,796			
H. Difference between Market & Funding Value	794,035	2,845,939	3,719,370	(5,818,793)			
I. Recognized Rate of Return	6.7%	8.7%	9.7%	5.5%			
J. Market Rate of Return	20.1%	14.4%	11.1%	(14.1)%			
K. Ratio of Funding to Market Value	97.6%	93.1%	92.3%	113.1%			

^{*} Unaudited amount.

The Funding Value of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased-in over a closed four-year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than market value. The Funding Value of Assets is **unbiased** with respect to Market Value. At any time, it may be either greater or less than Market Value. If actual and assumed rates of investment income are exactly equal for three consecutive years, the Funding Value will become equal to Market Value.





Actuarial Cost Method

Normal cost and the allocation of benefit values between service rendered before and after the valuation date was determined using an individual entry-age normal cost method having the following characteristics:

- (i) The annual normal costs for each individual active member, payable from the date of employment to the date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement; and
- (ii) Each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Asset Valuation Method. Valuation assets are the funding value of assets smoothed over four years as of the valuation date.

Financing of Unfunded Actuarial Accrued Liabilities. Unfunded actuarial accrued liabilities were amortized by level (principal & interest combined) percent-of-payroll contributions over a closed period of 18 years. The 18-year amortization factor used was 13.8341.



Actuarial Assumptions

The rate of investment return was 6.50% a year, compounded annually net of expenses. The assumed real rate of return (the net return in excess of the wage inflation rate) is 3.00%.

The wage inflation assumption, or base rate of salary increase, used for individual members was 3.5% per year.

The price inflation assumption was 2.5% (not explicit in the valuation).

The number of active members is assumed to remain constant in the future.

If the number of active members remains constant, then the total active payroll is expected to increase 3.5% annually, the base portion of the individual salary increase assumptions. The payroll growth rate for financing Unfunded Actuarial Accrued Liabilities was assumed to be 3.5% per year.

The rates of salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefit amounts will be based.

	Salary Increase Assumptions For an Individual Member						
Sample	Merit &	Base	Increase				
Ages	Seniority	(Economic)	Next Year				
20	7.0 %	3.5 %	10.5 %				
25	5.8	3.5	9.3				
30	3.5	3.5	7.0				
35	2.1	3.5	5.6				
40	1.4	3.5	4.9				
45	1.1	3.5	4.6				
50	0.8	3.5	4.3				
55	0.5	3.5	4.0				
60	0.2	3.5	3.7				
65	0.0	3.5	3.5				



Actuarial Assumptions (Continued)

The mortality table used was the RP-2014 Mortality Table with 2-dimensional, fully generational improvements projected with the MP-2018 Mortality Improvement Scales. The projection tables were first used for the December 31, 2018 valuation.

Attained		t Dying	Future Life		
Age in		Year	Expectancy (Years)		
2022*	Male	Female	Male	Female	
50	0.4083%	0.2721%	34.48	37.10	
55	0.5718%	0.3832%	29.76	32.18	
60	0.8133%	0.5840%	25.21	27.42	
65	1.1797%	0.8565%	20.89	22.89	
70	1.7323%	1.2889%	16.83	18.58	
75	2.7125%	2.0880%	13.08	14.55	
80	4.5344%	3.5819%	9.72	10.91	

^{*} Mortality and life expectancy for a person retired in 2022. Retirements in future years will reflect improvements in life expectancy.

This assumption is used to measure the probabilities of each benefit payment being made after retirement. A margin for future mortality improvements is included in these tables.



Actuarial Assumptions (Continued)

The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

i -					
9	Service Based				
Years of					
Service Retiring Next Yea					
25	25%				
26	20				
27	15				
28	15				
29	20				
30	20				
31	20				
32	30				
33	40				
34	40				
35	60				
36	60				
37	60				
38	60				
39	60				
40	100				

Age and Service Based						
Active Members Retiring Next Year						
	No	rmal				
Retirement	Eligible	Eligible				
Ages	at Age 60	at Age 55	Early			
55		25%	5%			
56		20	5			
57		15	5			
58		15	5			
59		20	5			
60	20%	20	5			
61	20	20	5			
62	20	30				
63	20	40				
64	20	40				
65	20	60				
66-69	30	60				
70-74	35	100				
75	100	100				

For Captains and Lieutenants, KCDSA and FOP members hired after a certain date who are subject to the 55 & 25 or 50 & 25 retirement eligibility conditions, the "age and service" retirement rates for these groups are set to the "service based" retirement rates shown above.



Actuarial Assumptions (Concluded)

Rates of separation from active membership were as shown below (rates do not apply to members eligible to retire). This assumption measures the probabilities of members remaining in employment.

Sample	Years of	% of Active Members
Ages	Service	Separating within Next Year
ALL	0	18.00 %
	1	13.00
	2	10.00
	3	8.00
	4	7.00
25	5 & Over	5.40
30		5.40
35		4.86
40		3.96
45		3.33
50		3.00
55		3.00
60		3.00

Rates of disability among active members.

Sample	% of Active Members Becoming
Ages	Disabled within Next Year
20	0.02 %
25	0.03
30	0.04
35	0.07
40	0.10
45	0.14
50	0.23
55	0.38
60	0.55

25% of disabilities were assumed to be duty related.



Miscellaneous and Technical Assumptions

Decrement Operation: Disability and mortality decrements do not operate during the first

five years of service. Disability and withdrawal do not operate

during retirement eligibility.

Decrement Timing: Decrements of all types are assumed to occur mid-year.

Eligibility Testing: Eligibility for benefits is determined based upon the age nearest

birthday and service nearest whole year on the date the

decrement is assumed to occur.

Incidence of Contributions: Contributions are assumed to be received continuously

> throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time

contributions are made.

Marriage Assumption: Male spouses are assumed to be three years older than female

spouses for active member valuation purposes.

Beginning of (fiscal) year. This is equivalent to assuming that Pay Increase Timing:

reported pays represent amounts paid to members during the

year ended on the valuation date.

Medicare Coverage: Assumed to be available for all covered employees on attainment

of age 65. Disabled retirees were assumed to be eligible for

Medicare coverage at age 65.

It was assumed that 37% of female retirees and 52% of male **Election Percentage:**

> retirees would choose not to receive retiree health care benefits through the County. Of those assumed to elect coverage, 33% of males and 21% of females were assumed to elect two-person coverage, if eligible. For those that elect two-person coverage, it was assumed that coverage would continue to 10% of the

surviving spouses upon death of the retiree, if eligible.

The employer's portion of the per capita cost is assumed to be the **Employer Cost:**

implicit subsidy and the applicable flat dollar subsidy. All flat dollar

subsidies are assumed to remain level.



Miscellaneous and Technical Assumptions (Concluded)

Employer Subsidy:

For each individual member, the employer subsidy ("direct cost") valued is the maximum of the flat dollar subsidy available (reported as 'County Supplement') and the one-person premium for the medical and/or prescription drug plan elected. The one-person premiums are expected to increase according to the health care trend assumption outlined on page B-3. The employer subsidy paid in future years is capped at the flat dollar subsidy amount, which is not expected to increase in future years.

The one-person premiums for medical and prescription drug coverage for the 2023 plan year are summarized below:

Pre/Post-65	Medical Plan	One-Perso	
Pre-65	BCBS Wellness PPO	\$	579.59
Pre-65	Blue Care Network HMO	\$	447.62
Post-65	Medicare Supplement (Plan F) - Transamerica	\$	154.89
Post-65	Medicare Advantage (Part C) - Humana*	\$	164.62

Pre/Post-65	Prescription Drug Plan	e-Person emium
Pre-65	Capital Rx	\$ 144.55
Post-65	Part D - Humana	\$ 130.22

^{*} Medicare Advantage (Part C) – Humana includes Medical and Prescription Drug coverage.

Current pre-65 retirees were assumed to elect the Medicare Advantage plan after attaining age 65.



SECTION **F**

MICHIGAN PUBLIC ACT 202

State Reporting Assumptions as of December 31, 2022

The Protecting Local Government Retirement and Benefits Act, Public Act 202 of 2017 (PA 202), was put into law effective December 20, 2017. One outcome of the law is the requirement for the local unit of government to provide select reporting disclosures to the State. Section 5(1) of the Act provides the State treasurer with the authority to annually establish uniform actuarial assumptions for purposes of developing the requisite disclosures. Below you will find information which may be used to assist the local unit of government with required reporting.

Uniform Assumptions, as applicable to the measurement and the required disclosures under uniform assumptions are denoted below. Additional discussion of the PA 202 and uniform assumptions may be found on the State website.

Uniform Assumption	PA 202	Valuation Assumption Used	Uniform Assumption Used
Investment Rate of Return Discount Rate	Maximum of 6.85%^	6.50%	6.50%
Salary Increase	Minimum of 3.00% or based on experience study within last 5 years	3.50% + Merit and longevity (based on experience study dated November 8, 2018)	3.50% + Merit and longevity (based on experience study dated November 8, 2018)
Mortality	Version of the Pub-2010 with future mortality improvement projected generationally using Scale MP-2020 or based on experience study within last 5 years	A version of RP-2014 with future mortality improvement projected generationally using Scale MP-2018 (Based on experience study dated November 8, 2018)	A version of RP-2014 with future mortality improvement projected generationally using Scale MP-2018 (Based on experience study dated November 8, 2018)
Healthcare Inflation (for Medical and Drug)	Non-Medicare: Initial rate of 7.25% decreasing 0.25% per year to a 4.50% long-term rate Medicare: Initial rate of 5.50% decreasing 0.25% per year to a 4.50% long-term rate	Non-Medicare: Initial rate of 7.25% decreasing 0.25% per year to a 4.50% long-term rate Medicare: Initial rate of 5.50% decreasing 0.25% per year to a 4.50% long-term rate	Non-Medicare: Initial rate of 7.25% decreasing 0.25% per year to a 4.50% long-term rate Medicare: Initial rate of 5.50% decreasing 0.25% per year to a 4.50% long-term rate
Amortization of the Unfunded Accrued Actuarial Liability: Period	Maximum Period of 27 Years	18 years for all groups	18 years for all groups
Method	Closed Plans: Level Dollar Open Plans: Level Percent of Payroll or Level Dollar	Level Percent of Payroll	Level Percent of Payroll
Туре	Closed	Closed	Closed

[^] A blended rate calculated using GASB Statement No. 75 methodology. For periods in which projected plan assets are sufficient to make projected benefit payments – maximum of 6.85%; for periods in which projected plan assets are NOT sufficient to make projected benefit payments - 2.16%.



State Reporting as of December 31, 2022

The following information has been prepared to provide some of the information necessary to complete the pension reporting requirements for the State of Michigan's Local Government Retirement System Annual Report (Form 5572). Additional resources are available on the State website.

Line	Descriptive Information	
19	Actuarial Assumptions	
20	Assumed Rate of Investment Return ¹	6.50%
21	Enter discount rate	6.50%
22	Amortization method utilized for funding the system's unfunded actuarial accrued liability, if any	Level Percent
23	Amortization period utilized for funding the system's unfunded actuarial accrued liability, if any	18
24	Is each division within the system closed to new employees?	No
25	Health care inflation assumption for the next year	7.25%/5.50%
26	Health care inflation assumption - Long-Term Trend Rate	4.50%
27	Uniform Assumptions ²	
28	Enter retirement pension system's actuarial value of assets using uniform assumptions	\$50,148,796
29	Enter retirement pension system's actuarial accrued liabilities using uniform assumptions	\$60,889,159
30	Funded ratio using uniform assumptions	Auto ³
31	Actuarially Determined Contribution (ADC) using uniform assumptions ⁴	\$ 2,183,611
32	All systems combined ADC/Governmental fund revenues	Auto ³

¹ Net of administrative expenses.



² Information on lines 28-32 is based on assumptions listed on the prior page as of the most recent valuation date, December 31, 2022, after reflecting uniform assumptions.

³ Automatically calculated by State of Michigan Form 5572.

⁴ 1.86% Percent-of-Payroll contribution rate multiplied by projected pay for the fiscal year ending December 31, 2024.

Supplementary Information

Valuation Date

Actuarial Cost Method

Amortization Method

Remaining Amortization Periods

Asset Valuation Method

Actuarial Assumptions:

Investment Rate of Return

Projected Salary Increases

Health Care Cost Trend Rate Non-Medicare

Medicare

December 31, 2022

Individual Entry Age

Level Percent-of-Payroll Closed

18 Years

4-Year Smoothed

6.50%

3.5% - 10.5%

7.25% Initial decreasing by 0.25% per year to 4.5% Ultimate 5.50% Initial decreasing to 0.25% per year to 4.5% Ultimate



Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets* (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ([b-a]/c)
12/31/2013	\$ 15,178,339	\$ 50,174,616	\$ 34,996,277	30.3%	\$ 91,589,536	38.2%
12/31/2014	16,705,220	52,899,776	36,194,556	31.6%	90,860,847	39.8%
12/31/2015	17,140,234	55,167,726	38,027,492	31.1%	96,580,051	39.4%
12/31/2016	19,656,145	53,997,661	34,341,516	36.4%	88,846,626	38.7%
12/31/2017	25,315,572	52,996,963	27,681,391	47.8%	92,095,534	30.1%
12/31/2018	28,509,900	58,948,727	30,438,827	48.4%	98,195,782	31.0%
12/31/2019	31,940,824	59,480,568	27,539,744	53.7%	97,692,497	28.2%
12/31/2020	38,450,952	64,164,023	25,713,071	59.9%	104,925,555	24.5%
12/31/2021	44,455,328	64,783,885	20,328,557	68.6%	105,998,699	19.2%
12/31/2022	50,148,796	60,889,159	10,740,363	82.4%	109,592,633	9.8%

^{*} Incorporated asset smoothing effective with the 12/31/2018 valuation.

Schedule of Employer Contributions

	Fiscal	Actuarially	
Valuation	Year	Determined	
Date	Ending	Contribution	
12/31/2013	12/31/2015	\$ 3,940,154	
12/31/2014	12/31/2016	3,351,181	
12/31/2015	12/31/2017	3,394,981	
12/31/2016	12/31/2018	3,151,965	
12/31/2017	12/31/2019	2,908,628	
12/31/2018	12/31/2020	3,513,339	
12/31/2019	12/31/2021	3,338,355	
12/31/2020	12/31/2022	3,416,926	
12/31/2021	12/31/2023	2,952,260	
12/31/2022	12/31/2024	2,183,611	



SECTION G

GLOSSARY

Glossary

Accrued Service - The service credited under the plan, which was rendered before the date of the actuarial valuation.

Actuarial Accrued Liability - The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability."

Actuarial Assumptions - Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method - A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Equivalent - A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

Actuarial Present Value - The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Actuarially Determined Contribution (ADC) - The ADC is the normal cost plus the portion of the unfunded actuarial accrued liability to be amortized in the current period. The ADC is an amount that is actuarially determined in accordance with the requirements so that, if paid on an ongoing basis, it would be expected to provide sufficient resources to fund both the normal cost for each year and the amortized unfunded liability.

Amortization - Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Governmental Accounting Standards Board (GASB) - GASB is the private, nonpartisan, nonprofit organization that works to create and improve the rules U.S. state and local governments follow when accounting for their finances and reporting them to the public.

Medical Trend Rate (Health Care Inflation) - The increase in the cost of providing health care benefits over time. Trend includes such elements as pure price inflation, changes in utilization, advances in medical technology, and cost shifting.

Normal Cost - The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.



Glossary (Concluded)

Other Postemployment Employee Benefits (OPEB) - OPEB are postemployment benefits other than pensions. OPEB generally takes the form of health insurance and dental, vision, prescription drugs or other health care benefits.

Reserve Account - An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

Unfunded Actuarial Accrued Liability - The difference between the actuarial accrued liability and valuation assets. referred to as "unfunded accrued liability."

Valuation Assets - The value of current plan assets recognized for valuation purposes.

