

CITY OF GRAND RAPIDS GENERAL OTHER POSTEMPLOYMENT BENEFITS ACTUARIAL VALUATION REPORT JUNE 30, 2016

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December 8, 2016

Mr. Scott Buhrer Chief Financial Officer City of Grand Rapids 300 Monroe Avenue, N. W. Grand Rapids, MI 49503

Dear Mr. Buhrer:

Submitted in this report are the results of an Actuarial Valuation of the benefit values associated with the employer financed Other Postemployment Benefits provided by the City of Grand Rapids for General Employees. The date of the valuation was June 30, 2016, effective for the fiscal year beginning July 1, 2017. This report was prepared at the request of the City of Grand Rapids.

The actuarial calculations were prepared for purposes of complying with the requirements of Statements No. 43 and No. 45 of the Governmental Accounting Standards Board (GASB). The calculations reported herein have been made on a basis consistent with our understanding of these accounting standards. Determinations of the liability associated with the benefits described in this report for purposes other than satisfying the System's financial reporting requirements may produce significantly different results. This report is not compliant with GASB Statements No. 74 and No. 75. A separate report that incorporates GASB Statements No. 74 and No. 75 will be issued at a later date once implementation guides are issued for these new standards.

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 or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This report may be provided to parties other than the City of Grand Rapids only in its entirety and only with the permission of the City of Grand Rapids. GRS is not responsible for unauthorized use of this report. This report should not be relied on for any purpose other than the purpose described herein.

The funded ratio reported in this valuation is not appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations.

The valuation was based upon information, furnished by the City and Meritain, concerning retiree health care benefits, individual members, and financial data. Data was checked for internal consistency, but was not audited. We are not responsible for the accuracy or completeness of the information provided by the City and Meritain.

Mr. Scott Buhrer December 8, 2016 Page 2

To the best of our knowledge, this report is complete and accurate and was made in accordance with generally recognized actuarial methods.

James D. Anderson 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

James D. anclesson

Yames D. Anderson, FSA, EA, MAAA

Abra D. Hill, ASA, MAAA

Abra D. Hill

JDA/ADH:mrb



EXECUTIVE SUMMARY

Annual Required Contribution

This report presents the Annual Required Contribution calculated in compliance with the accounting requirements of Governmental Accounting Standards Board (GASB) Statement No. 45. In addition, the plan may need to comply with GASB Statement No. 43. Please consult with legal counsel and your auditors to determine whether you have a plan for GASB Statement No. 43 purposes.

The Annual Required Contribution (ARC) for the fiscal year beginning July 1, 2017 was determined to be \$5,328,910 (\$5,153,594 for DB, \$175,316 for RHSA). Actual claims and/or premiums paid on behalf of retirees may be treated as employer contributions in relation to the ARC and act to reduce the NET OPEB Obligation (NOO) if paid from outside of plan assets. The expected employer portion of the claims and premium amounts paid during the fiscal year beginning July 1, 2017 are estimated to be \$5,769,609 for DB and \$0 for RHSA. These amounts reflect the employer portion of the retiree only premium rates and the implicit subsidy for retirees and covered spouses.

For additional details, please see Section A of the report.

Additional OPEB Reporting Requirements

In addition to the annual OPEB costs described above, employers will have to disclose a Net OPEB Obligation (or asset). The Net OPEB Obligation is the cumulative difference between annual OPEB costs and annual employer contributions in relation to the ARC, accumulated from the implementation of GASB Statement No. 45.

The requirements for determining the employer's contributions in relation to the ARC are described in paragraph 13g. of GASB Statement No. 45. Additional information required to be disclosed in the employer's financial statements is detailed in paragraphs 24 through 27 of GASB Statement No. 45.

EXECUTIVE SUMMARY (CONCLUDED)

Liabilities and Assets

The present value of all benefits expected to be paid to current plan members as of June 30, 2016 is \$66,518,488 (\$64,878,467 for DB, \$1,640,021 for RHSA). The actuarial accrued liability, which is the portion of the \$66,518,488 attributable to service accrued by plan members as of June 30, 2016, is \$58,696,918 (\$57,924,116 for DB, \$772,802 for RHSA). The assets currently set aside for OPEB purposes as of June 30, 2016 are \$9,411,146. Assets are currently only allocated to the Defined Benefit portion of the plan. Thus, the General DB plan is 16.2% funded.



VALUATION RESULTS

DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTIONS FOR THE OTHER POSTEMPLOYMENT BENEFITS

	General - Annual Required Contribution			
	Defined			
Contributions for	Benefit ¹	RHSA ²	Total	
Normal Cost				
Normal and Early Retirement	\$ 898,536			
Termination Benefits	0			
Disability/Death-In-Service	30,058			
Total Normal Cost	\$ 928,594	\$ 102,355	\$ 1,030,949	
Amortization of Unfunded Actuarial Accrued Liabilities (Amortized over 16 years)	\$ 4,225,000	\$ 72,961	\$ 4,297,961	
Annual Required Contribution (ARC) for the Fiscal Year Ending June 30, 2018	\$ 5,153,594	\$ 175,316	\$ 5,328,910	

¹ For City budgeting purposes related to the defined benefit plan.

The Unfunded Actuarial Accrued Liabilities (UAAL) were amortized as level dollar. A 16-year amortization period for unfunded actuarial accrued liabilities was used. Thirty years is the maximum period that complies with GASB requirements. The assumptions used to calculate the results shown above include a 5% investment return rate. This rate is intended to be a blend of a short-term and long-term investment return assumptions.

² RHSA information as required for GASB disclosure which reflects the ability of Defined Contribution RHSA participants to access the Health Care plan at reduced costs due to blended implied rates.

DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY AS OF JUNE 30, 2016

		General	
	Defined Benefit ¹	$RHSA^2$	Total
A. Present Value of Future Benefits			
Retirees and Beneficiaries	\$29,963,971	\$ 0	\$29,963,971
2. Vested Terminated Members	0	0	0
3. Active Members	34,914,496	1,640,021	36,554,517
Total Present Value of Future Benefits	\$64,878,467	\$1,640,021	\$66,518,488
B. Present Value of Future Employer Normal Costs	6,954,351	867,219	7,821,570
C. Actuarial Accrued Liability (AB.)	57,924,116	772,802	58,696,918
D. Market Value of Assets	9,411,146	0	9,411,146
E. Unfunded Actuarial Accrued Liability (CD.)	\$48,512,970	\$ 772,802	\$49,285,772
F. Funded Ratio (D./C.)	16.2%	0.0%	16.0%

¹ For City budgeting purposes related to the defined benefit plan.

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.

² RHSA information as required for GASB disclosure which reflects the ability of Defined Contribution RHSA participants to access the Health Care plan at reduced costs due to blended implied rates.

PROJECTIONS AS OF JUNE 30, 2016*

Year	Asset	Annual	Health		
Ending	Value	Required	Care	Investment	Asset Value
June 30,	BOY	Contribution	Benefits^	Income	EOY
2018	\$ 8,859,190	\$ 5,153,594	\$ 5,769,609	\$ 427,747	\$ 8,670,922
2019	8,670,922	5,095,403	5,551,739	422,277	8,636,863
2020	8,636,863	5,047,401	5,589,716	418,451	8,512,999
2021	8,512,999	4,998,883	5,356,281	416,824	8,572,425
2022	8,572,425	4,941,869	5,167,061	423,060	8,770,293
2023	8,770,293	4,879,260	5,109,633	432,826	8,972,746
2024	8,972,746	4,819,434	5,204,725	439,123	9,026,578
2025	9,026,578	4,759,008	4,894,658	447,979	9,338,907
2026	9,338,907	4,698,077	4,496,451	471,925	10,012,458
2027	10,012,458	4,641,084	4,122,087	513,440	11,044,895
2028	11,044,895	4,584,671	3,989,221	566,949	12,207,294
2029	12,207,294	4,521,676	4,090,623	621,010	13,259,357
2030	13,259,357	4,450,934	4,114,098	671,286	14,267,479
2031	14,267,479	4,381,521	4,240,522	716,856	15,125,334
2032	15,125,334	4,323,690	4,296,104	756,948	15,909,868
2033	15,909,868	4,283,463	4,041,242	801,475	16,953,564
2034	16,953,564	37,346	3,547,952	760,984	14,203,942
2035	14,203,942	22,160	3,066,109	635,027	11,795,020
2036	11,795,020	13,031	2,738,203	522,453	9,592,301
2037	9,592,301	7,597	2,363,466	421,437	7,657,869
2038	7,657,869	4,379	1,891,201	336,298	6,107,345
2039	6,107,345	2,465	1,563,470	266,818	4,813,158
2040	4,813,158	1,366	1,336,379	207,690	3,685,835
2041	3,685,835	741	1,210,577	154,415	2,630,414
2042	2,630,414	403	995,151	106,955	1,742,621
2043	1,742,621	206	669,124	70,612	1,144,315
2044	1,144,315	103	500,474	44,859	688,803
2045	688,803	46	345,501	25,909	369,257
2046	369,257	20	220,999	13,006	161,284
2047	161,284	10	103,761	5,502	63,035
2048	63,035	2	64,594	1,557	-

^{*} The projected results above are based on the existing Defined Benefit active, deferred, and retired members on the valuation date. Any benefits and/or contributions associated with Defined Contribution RHSA members, or members hired after the valuation date have not been included in these results.

Unfunded actuarial accrued liabilities were amortized over a 16-year period.

[^] Health Care Benefit payments were loaded to reflect children's coverage and the cost of future excise taxes.

COMMENTS

COMMENT A: The Annual Required Contributions determined in this report are higher than those determined in last year's report primarily due to claims experience and resetting the health care trend rate.

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 the plan assets that will be used to pay plan benefits. If a plan sponsor chooses to pre-fund with contributions less than the ARC, the Governmental Accounting Standards Board (GASB) requires using an assumed investment return on assets that reflects the expected return on the plan sponsor's general assets. If a plan sponsor chooses to pre-fund with contributions equal to the ARC, a higher interest rate may be used. As directed by the City, we have calculated the liability and the resulting ARC using an assumed investment return of 5.0%. It is our understanding that the City of Grand Rapids is funding only the Defined Benefit portion of the ARC. It is also our understanding that the City will need to comply with GASB Statement No. 74 reporting effective with the fiscal year ending June 30, 2017. Please verify this with the auditor.

COMMENT C: Based on the number of plan members as of this valuation, the plan sponsor is required by GASB to perform actuarial valuations at least biennially, unless there are material changes to the OPEB plan.

COMMENT D: The contribution rates shown include amortization of the unfunded actuarial accrued liability over 16 years beginning July 1, 2017. A shorter amortization period would result in a higher ARC, and a longer amortization period would result in a lower ARC. The maximum time period permitted by GASB Statements No. 43 and No. 45 is 30 years.

COMMENT E: Actual claims and/or premiums paid on behalf of retirees may be treated as employer contributions in relation to the ARC and act to reduce the Net OPEB Obligation (NOO) if paid from outside of plan assets. For the fiscal year ending June 30, 2018, the amount of estimated claims and/or premiums paid by the employer on behalf of retirees including the effect of the implicit rate subsidy under GASB is \$5,769,609. This entire amount is allocated to the Defined Benefit group.

COMMENTS

COMMENT F: The cost of health care coverage for the children of retirees was similar to the last measurement. An 8% load was applied to all health care liabilities and projections of benefits paid to value the additional cost of children's coverage.

COMMENT G: Projections presented in this report will differ from those provided in the Trend Report draft dated November 11, 2016 due to:

- Age-based projection methodology used in this report versus non age-based projections used in the Trend Report;
- Data variances;
- Projected cash flows in this report are net of retiree contributions; and
- The valuation year starts July 1st while the rating year (for Trend Report purposes) starts January 1st.

COMMENT H: 100% of future eligible RHSA retirees were assumed to participate in the City of Grand Rapids Retiree Health Care Plan. The ARC for the RHSA was provided for GASB reporting purposes. It is the decision of the City of Grand Rapids how to pre-fund the RHSA portion of the ARC, if at all. Active RHSA balances were not provided, and have not been used to offset benefits for future Duty Disability Retirements.

COMMENTS

COMMENT I: The GASB issued Statements Nos. 74 and 75 for OPEB valuations similar to the new pension standards. GASB Statement No. 74 for the plan OPEB disclosures is effective for fiscal years beginning after June 15, 2016. GASB Statement No. 75 for employer OPEB disclosures is effective for employer fiscal years beginning after June 15, 2017. The GASB has not yet issued implementation guides for these new standards. These guides will provide additional clarification related to the implementation of Statement Nos. 74 and 75. Our understanding of the application of the recent GASB Statements is stated below, however GRS consultants are not auditors and we recommend consultation with your auditors for final determination of which standards will be applicable. The City currently partially prefunds the defined benefits portion of the benefits and has the assets set aside in a qualified trust; as a result, the City will need to comply with both GASB Statement Nos. 74 and 75. The information necessary for GASB Statement No. 74 for the June 30, 2017 fiscal year end will be provided at a later date, following the availability of the necessary information and the end of the fiscal year. The basis for the GASB Statement No. 74 information will be the June 30, 2016 valuation, where roll-forward techniques will be applied.

COMMENT J: GASB Statements No. 43 and No. 45 stipulate that plan assets must be placed in a trust or equivalent arrangement that meets the following criteria:

- Employer contributions to the plan are irrevocable;
- Assets are dedicated to providing benefits to retirees and their beneficiaries; and
- Assets are legally protected from creditors.

The calculations within this report have been performed incorporating \$9,411,146 in retiree health assets. We understand from the plan sponsor that these assets reside in a GASB Statements No. 43 and No. 45 qualifying trust and can, therefore, be used in determining the ARC.



RETIREE PREMIUM RATE DEVELOPMENT

The initial per capita health care costs are an important part of a retiree health valuation. The per capita health care costs used in this valuation are based on analysis performed in connection with the annual Trend Report prepared for the City dated November 11, 2016. The following process is used to determine per capita health costs for the valuation from the results provided in the Trend Report:

- The pre-65 retiree only "2017 Calculated Premium Rates" developed on page 19 of the Trend Report serve as the basis of pre-65 per capita costs used in the valuation. The per contract rates are converted to per member rates and then converted to age-graded rates.
- The 2017 blended (pre-65 retiree and active) implemented rates (page 20 of the Trend Report) serve as the basis for pre-65 retiree contributions.
- The post-65 retirees pay 100% of the true cost developed on page 19 (2017 Calculated Premium Rates).

Please see the Trend Report for other important details regarding the rate setting process. A general description of the process follows. This year's trend report is being revised once new tier factors (by type of participant) are developed, but the adjustment will not impact this valuation report.

Background

Eligible City retirees (and eligible spouses) receive benefits from the self-insured plan. For Non-Medicare retirees, there is one benefit option and for Medicare retirees, there is a choice of four options with the same medical benefits but differing drug copays.

Rate Development

For the self-insured medical plans, initial per capita costs were developed separately for pre-65 and post-65 retirees using medical claims experience from July 2014 to June 2016 supplied by Meritain in conjunction with exposure data for the retired members of the health care program. These medical claims were projected on an incurred claim basis (using best estimate assumptions), adjusted for plan design changes, and loaded for administrative expenses.

For the self-insured drug plans, initial per capita costs were developed using drug claims experience July 2014 to June 2016 supplied by Meritain in conjunction with exposure data for the retired members of the health care program. These drug claims were projected on an incurred claim basis, adjusted for plan design changes and administrative expenses.

RETIREE PREMIUM RATE DEVELOPMENT

No Early Retirement Reinsurance Program (ERRP) reimbursements were reflected in the rates due to the short-term nature of the program.

The initial medical and drug premium rates used in the valuation are a weighted average cost of the 2-year experience period to smooth out any large year to year fluctuations.

Age graded and sex distinct per capita costs are utilized by this valuation. The initial costs developed 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. This process more accurately reflects health care costs in the retired population over the projection period.

The table below shows the combined medical and prescription drug one-person monthly per capita costs at select ages.

Cu	Current and Future Retirees								
For Those Not Eligible for Medicare									
Age	Age Male Female								
45	\$	524.73	\$	724.20					
50		683.26		841.71					
55		899.09		981.68					
60		1,161.23		1,143.41					

The dental and vision per capita costs used in this valuation of the plan were not "age graded" since these claims do not vary significantly by age. The monthly dental per capita cost used in this valuation is \$43.23 per person per month. The monthly vision per capita cost used in this valuation is \$8.61 per person per month.

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. Pranschke James E. Pranschke, FSA, MAAA

CONSIDERATION OF HEALTH CARE REFORM

Excise Tax on High-Cost Employer Health Plans (aka Cadillac Tax) Effective 1/1/2020. The "Cadillac" tax is a 40% excise tax paid by the coverage provider (employer and/or insurer) on the value of health plan costs in excess of certain thresholds. The thresholds are \$10,200 for single coverage or \$27,500 for family coverage in 2020. Many plans are below the thresholds today, but are likely to exceed them in the next decade. The thresholds will be indexed at CPI-U, which is lower than the medical inflation rates affecting the cost of the plans. There is considerable uncertainty about how the tax would be applied, and considerable latitude in grouping of participants for tax purposes. Combining early retiree and Medicare eligible retiree costs is allowed and can keep plans under the thresholds for a longer period of time.

For this Plan it is intended that, for purposes of the test, the pre and post Medicare members will be blended. Should the excise tax ever become applicable, and since all the health care plans are self-funded, then the plan sponsor will be the coverage provider paying the tax. The plan sponsor will need to decide whether to reduce benefits to avoid the tax, or how the additional cost will be allocated between the employer and the members. A 7.0% load was applied to all health care liabilities and projections of benefits paid to approximate the cost for future excise tax.

We have not identified any other specific provision of health care reform that would be expected to have a significant impact on the measured obligation. As additional guidance on the legislation is issued, we will review and monitor those impacts.

SECTION C

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

CITY OF GRAND RAPIDS GENERAL RETIREE HEALTH CARE PLAN GREIU CITY, GREIU COURT, CST, AND ECO SUMMARY OF BENEFITS AS OF JUNE 30, 2016

Plan Participants

Members of the Defined Benefit City of Grand Rapids Retiree Health Care Plan are eligible to receive retiree health care benefits. The City covers up to 100% of retiree health care coverage up to age 65 for those currently retired.

Benefit Amount

Through the Defined Benefit Retiree Health Care Plan, the City pays up to 100% of retiree health care premiums through age 65 based on an accrual schedule. As of October 21, 2008, future retirees will pay a minimum of 20% of BLENDED active/pre-65 retiree cost per contract. Active employees with less than 8 years are no longer eligible for the Defined Benefit plan.

Retiree Health Care Percent of Blended Composite Rate

		Contract	City	Blended	Premium
Years	Months	City%	Maximum	City %	EE%
8	96	23.00%	80%	18.40%	81.60%
9	108	26.50%	80%	21.20%	78.80%
10	120	30.00%	80%	24.00%	76.00%
11	132	33.50%	80%	26.80%	73.20%
12	144	37.00%	80%	29.60%	70.40%
13	156	40.50%	80%	32.40%	67.60%
14	168	44.00%	80%	35.20%	64.80%
15	180	47.50%	80%	38.00%	62.00%
16	192	51.00%	80%	40.80%	59.20%
17	204	54.50%	80%	43.60%	56.40%
18	216	58.00%	80%	46.40%	53.60%
19	228	61.50%	80%	49.20%	50.80%
20	240	65.00%	80%	52.00%	48.00%
21	252	68.50%	80%	54.80%	45.20%
22	264	72.00%	80%	57.60%	42.40%
23	276	75.50%	80%	60.40%	39.60%
24	288	79.00%	80%	63.20%	36.80%
25	300	82.50%	80%	66.00%	34.00%
26	312	86.00%	80%	68.80%	31.20%
27	324	89.50%	80%	71.60%	28.40%
28	336	93.00%	80%	74.40%	25.60%
29	348	96.50%	80%	77.20%	22.80%
30	360	100.00%	80%	80.00%	20.00%
Age 62 & 8	years svc.	100.00%	80%	80.00%	20.00%
Disability Re	tirement	100.00%	80%	80.00%	20.00%

CITY OF GRAND RAPIDS GENERAL RETIREE HEALTH CARE PLAN GREIU CITY, GREIU COURT, CST, AND ECO SUMMARY OF BENEFITS AS OF JUNE 30, 2016

Normal Retirement Eligibility

Members are eligible for benefits at age 50 or older with 30 or more years of service or at age 62 with 8 or more years of service.

Early Retirement Benefits

Members are eligible for benefits at age 50 or older with 8 or more years of service.

Deferred Retirement Benefits

Deferred retiree health care is not available. Coverage must be continuous.

Duty/Non-Duty Death-in-Service Retirement Benefits

Deceased member must be eligible for retirement at death. Surviving spouse pays any accrual and applicable premium sharing amount until such time as the covered person would have reached age 65.

Duty/Non-Duty Disabled Retirement Benefits

No age or service requirement. Benefits commence immediately for qualified disabled member.

Benefits for Spouses of Retired Employees

Spouses of retired employees are eligible to receive health care benefits as long as the retiree is eligible. Coverage continues to surviving spouses of deceased retirees until the earlier of when retiree would have reached age 65 or when the spouse reaches age 65.

Medicare-Eligible Provisions

Retirees are required to enroll in Medicare once eligible. Retiree is responsible for paying the full premium for retiree Medicare coverage offered through the City.

Dental/Vision Coverage

Same as Retiree Health Care Eligibility Conditions.

Life Insurance Coverage

City does not provide life insurance for retirees.

Opt-Out

City does not provide Opt-Out payments or payment in lieu of retiree health care coverage for retirees.

Other Employment and Compensation

A retiree, spouse or other dependent who has coverage from an employer who provides medical coverage should coordinate benefits, making the City's coverage secondary.

This is a brief summary of the City of Grand Rapids 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.

CITY OF GRAND RAPIDS GENERAL RETIREE HEALTH CARE PLAN NON-REPRESENTED AND OFFICERS OPTION SUMMARY OF BENEFITS AS OF JUNE 30, 2016

Plan Participants

Non-Represented and Officers Option members of the Defined Benefit City of Grand Rapids Retiree Health Care Plan are eligible to receive retiree health care benefits. The City covers up to 100% of retiree health care coverage up to age 65 for those currently retired.

Benefit Amount

Through the Defined Benefit Retiree Health Care Plan, the City pays up to 100% of retiree health care premiums through age 65 based on an accrual schedule. As of October 21, 2008, future retirees will pay a minimum of 20% of BLENDED active/pre-65 retiree cost per contract. Active employees with less than 8 years are no longer eligible for the Defined Benefit plan.

Retiree Health Care Percent of Blended Composite Rate

		Contract	City	Blended F	Premium
Years	Months	City%	Maximum	City %	EE%
8	96	26.67%	80%	21.33%	78.67%
9	108	30.00%	80%	24.00%	76.00%
10	120	33.33%	80%	26.66%	73.34%
11	132	36.67%	80%	29.33%	70.67%
12	144	40.00%	80%	32.00%	68.00%
13	156	43.33%	80%	34.66%	65.34%
14	168	46.67%	80%	37.33%	62.67%
15	180	50.00%	80%	40.00%	60.00%
16	192	53.33%	80%	42.66%	57.34%
17	204	56.67%	80%	45.33%	54.67%
18	216	60.00%	80%	48.00%	52.00%
19	228	63.33%	80%	50.66%	49.34%
20	240	66.67%	80%	53.33%	46.67%
21	252	70.00%	80%	56.00%	44.00%
22	264	73.33%	80%	58.66%	41.34%
23	276	76.67%	80%	61.33%	38.67%
24	288	80.00%	80%	64.00%	36.00%
25	300	83.33%	80%	66.66%	33.34%
26	312	86.67%	80%	69.33%	30.67%
27	324	90.00%	80%	72.00%	28.00%
28	336	93.33%	80%	74.66%	25.34%
29	348	96.67%	80%	77.33%	22.67%
30	360	100.00%	80%	80.00%	20.00%
A 90 62 8 9	voore evo	100.00%	80%	80.00%	20.00%
Age 62 & 8	•				
Disability Re	tirement	100.00%	80%	80.00%	20.00%

CITY OF GRAND RAPIDS GENERAL RETIREE HEALTH CARE PLAN NON-REPRESENTED AND OFFICERS OPTION SUMMARY OF BENEFITS AS OF JUNE 30, 2016

Normal Retirement Eligibility

Members are eligible for benefits at age 50 or older with 30 or more years of service or at age 62 with 8 or more years of service.

Early Retirement Benefits

Members are eligible for benefits at age 50 or older with 8 or more years of service.

Deferred Retirement Benefits

Deferred retiree health care is not available. Coverage must be continuous.

Duty/Non-Duty Death-in-Service Retirement Benefits

Deceased member must be eligible for retirement at death. Surviving spouse pays any accrual and applicable premium sharing amount until such time as the covered person would have reached age 65.

Duty/Non-Duty Disabled Retirement Benefits

No age or service requirement. Benefits commence immediately for qualified disabled member.

Benefits for Spouses of Retired Employees

Spouses of retired employees are eligible to receive health care benefits as long as the retiree is eligible. Coverage continues to surviving spouses of deceased retirees until the earlier of when retiree would have reached age 65 or when the spouse reaches age 65.

Medicare-Eligible Provisions

Retirees are required to enroll in Medicare once eligible. Retiree is responsible for paying the full premium for retiree Medicare coverage offered through the City.

Dental/Vision Coverage

Same as Retiree Health Care Eligibility Conditions.

Life Insurance Coverage

The City does not provide life insurance for retirees.

Opt-Out

The City does not provide Opt-Out payments or payment in lieu of retiree health care coverage for retirees.

Other Employment and Compensation

A retiree, spouse or other dependent who has coverage from an employer who provides medical coverage should coordinate benefits, making the City's coverage secondary.

This is a brief summary of the City of Grand Rapids 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.

CITY OF GRAND RAPIDS GENERAL RETIREE HEALTH CARE PLAN EMERGENCY COMMUNICATIONS SUPERVISORS SUMMARY OF BENEFITS AS OF JUNE 30, 2016

Plan Participants

Emergency Communications Supervisors of the Defined Benefit City of Grand Rapids Retiree Health Care Plan are eligible to receive retiree health care benefits. The City covers up to 100% of retiree health care coverage up to age 65 for those currently retired.

Benefit Amount

Through the Defined Benefit Retiree Health Care Plan, the City pays up to 100% of retiree health care premiums through age 65 based on an accrual schedule. As of March 31, 2010, future retirees will pay a minimum of 20% of BLENDED active/pre-65 retiree cost per contract. Active employees with less than 10 years are no longer eligible for the Defined Benefit plan.

Retiree Health Care Percent of Blended Composite Rate

		Reti	red on or afte	er June 30, 2	2010	Re	etired before	June 30, 20	10
		Contract	City	Blended	Premium	Contract	City	Blended	Premium
Years	Months	City%	Maximum	City%	EE%	City%	Maximum	City%	EE%
8	96	26.67%	80%	21.33%	78.67%	32.00%	80%	25.60%	74.40%
9	108	30.00%	80%	24.00%	76.00%	36.00%	80%	28.80%	71.20%
10	120	33.33%	80%	26.66%	73.34%	40.00%	80%	32.00%	68.00%
11	132	36.67%	80%	29.33%	70.67%	44.00%	80%	35.20%	64.80%
12	144	40.00%	80%	32.00%	68.00%	48.00%	80%	38.40%	61.60%
13	156	43.33%	80%	34.66%	65.34%	52.00%	80%	41.60%	58.40%
14	168	46.67%	80%	37.33%	62.67%	56.00%	80%	44.80%	55.20%
15	180	50.00%	80%	40.00%	60.00%	60.00%	80%	48.00%	52.00%
16	192	53.33%	80%	42.66%	57.34%	64.00%	80%	51.20%	48.80%
17	204	56.67%	80%	45.33%	54.67%	68.00%	80%	54.40%	45.60%
18	216	60.00%	80%	48.00%	52.00%	72.00%	80%	57.60%	42.40%
19	228	63.33%	80%	50.66%	49.34%	76.00%	80%	60.80%	39.20%
20	240	66.67%	80%	53.33%	46.67%	80.00%	80%	64.00%	36.00%
21	252	70.00%	80%	56.00%	44.00%	84.00%	80%	67.20%	32.80%
22	264	73.33%	80%	58.66%	41.34%	88.00%	80%	70.40%	29.60%
23	276	76.67%	80%	61.33%	38.67%	92.00%	80%	73.60%	26.40%
24	288	80.00%	80%	64.00%	36.00%	96.00%	80%	76.80%	23.20%
25	300	83.33%	80%	66.66%	33.34%	100.00%	80%	80.00%	20.00%
26	312	86.67%	80%	69.33%	30.67%				
27	324	90.00%	80%	72.00%	28.00%				
28	336	93.33%	80%	74.66%	25.34%				
29	348	96.67%	80%	77.33%	22.67%				
30	360	100.00%	80%	80.00%	20.00%				
ge 62 & 8	years svc.	100.00%	80%	80.00%	20.00%	100.00%	80%	80.00%	20.00%
isability Re	etirement	100.00%	80%	80.00%	20.00%	100.00%	80%	80.00%	20.00%

CITY OF GRAND RAPIDS GENERAL RETIREE HEALTH CARE PLAN EMERGENCY COMMUNICATIONS SUPERVISORS SUMMARY OF BENEFITS AS OF JUNE 30, 2016

Normal Retirement Eligibility

Members are eligible for benefits at age 50 or older with 30 or more years of service or at age 55 with 8 or more years of service.

Early Retirement Benefits

Members are eligible for benefits at age 50 or older with 8 or more years of service.

Deferred Retirement Benefits

Deferred retiree health care is not available. Coverage must be continuous.

Duty/Non-Duty Death-in-Service Retirement Benefits

Deceased member must be eligible for retirement at death. Surviving spouse pays any accrual and applicable premium sharing amount until such time as the covered person would have reached age 65.

Duty/Non-Duty Disabled Retirement Benefits

No age or service requirement. Benefits commence immediately for qualified disabled member.

Benefits for Spouses of Retired Employees

Spouses of retired employees are eligible to receive health care benefits as long as the retiree is eligible. Coverage continues to surviving spouses of deceased retirees until the earlier of when retiree would have reached age 65 or when the spouse reaches age 65.

Medicare-Eligible Provisions

Retirees are required to enroll in Medicare once eligible. Retiree is responsible for paying the full premium for retiree Medicare coverage offered through the City.

Dental/Vision Coverage

Same as Retiree Health Care Eligibility Conditions.

Life Insurance Coverage

City does not provide life insurance for retirees.

Opt-Out

City does not provide Opt-Out payments or payment in lieu of retiree health care coverage for retirees.

Other Employment and Compensation

A retiree, spouse or other dependent who has coverage from an employer who provides medical coverage should coordinate benefits, making the City's coverage secondary.

This is a brief summary of the City of Grand Rapids 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.

CITY OF GRAND RAPIDS GENERAL RETIREE HEALTH CARE PLAN APA CITY AND APA 61ST

SUMMARY OF BENEFITS AS OF JUNE 30, 2016

Plan Participants

APA members of the Defined Benefit City of Grand Rapids Retiree Health Care Plan are eligible to receive retiree health care benefits. The City covers up to 100% of retiree health care coverage up to age 65 for those currently retired.

Benefit Amount

Through the Defined Benefit Retiree Health Care Plan, the City pays up to 100% of retiree health care premiums through age 65 based on an accrual schedule. As of October 21, 2008, future retirees will pay a minimum of 20% of BLENDED active/pre-65 retiree cost per contract. Active employees with less than 8 years are no longer eligible for the Defined Benefit plan.

Retiree Health Care Percent of Blended Composite Rate

		Reti	red on or afto	er June 30, 2	2010	Re	tired before	June 30, 20	10
		Contract	City	Blended	Premium	Contract	City	Blended	Premium
Years	Months	City%	Maximum	City%	EE%	City%	Maximum	City%	EE%
8	96	26.67%	80%	21.33%	78.67%	32.00%	80%	25.60%	74.40%
9	108	30.00%	80%	24.00%	76.00%	36.00%	80%	28.80%	71.20%
10	120	33.33%	80%	26.66%	73.34%	40.00%	80%	32.00%	68.00%
11	132	36.67%	80%	29.33%	70.67%	44.00%	80%	35.20%	64.80%
12	144	40.00%	80%	32.00%	68.00%	48.00%	80%	38.40%	61.60%
13	156	43.33%	80%	34.66%	65.34%	52.00%	80%	41.60%	58.40%
14	168	46.67%	80%	37.33%	62.67%	56.00%	80%	44.80%	55.20%
15	180	50.00%	80%	40.00%	60.00%	60.00%	80%	48.00%	52.00%
16	192	53.33%	80%	42.66%	57.34%	64.00%	80%	51.20%	48.80%
17	204	56.67%	80%	45.33%	54.67%	68.00%	80%	54.40%	45.60%
18	216	60.00%	80%	48.00%	52.00%	72.00%	80%	57.60%	42.40%
19	228	63.33%	80%	50.66%	49.34%	76.00%	80%	60.80%	39.20%
20	240	66.67%	80%	53.33%	46.67%	80.00%	80%	64.00%	36.00%
21	252	70.00%	80%	56.00%	44.00%	84.00%	80%	67.20%	32.80%
22	264	73.33%	80%	58.66%	41.34%	88.00%	80%	70.40%	29.60%
23	276	76.67%	80%	61.33%	38.67%	92.00%	80%	73.60%	26.40%
24	288	80.00%	80%	64.00%	36.00%	96.00%	80%	76.80%	23.20%
25	300	83.33%	80%	66.66%	33.34%	100.00%	80%	80.00%	20.00%
26	312	86.67%	80%	69.33%	30.67%				
27	324	90.00%	80%	72.00%	28.00%				
28	336	93.33%	80%	74.66%	25.34%				
29	348	96.67%	80%	77.33%	22.67%				
30	360	100.00%	80%	80.00%	20.00%				
Age 62 & 8	years svc.	100.00%	80%	80.00%	20.00%	100.00%	80%	80.00%	20.00%
Disability Re	etirement	100.00%	80%	80.00%	20.00%	100.00%	80%	80.00%	20.00%

CITY OF GRAND RAPIDS GENERAL RETIREE HEALTH CARE PLAN APA CITY AND APA 61ST

SUMMARY OF BENEFITS AS OF JUNE 30, 2016

Normal Retirement Eligibility

Members are eligible for benefits at age 50 or older with 30 or more years of service or at age 62 with 8 or more years of service.

Early Retirement Benefits

Members are eligible for benefits at age 55 or older with 10 or more years of service.

Deferred Retirement Benefits

Deferred retiree health care is not available. Coverage must be continuous.

Duty/Non-Duty Death-in-Service Retirement Benefits

Deceased member must be eligible for retirement at death. Surviving spouse pays any accrual and applicable premium sharing amount until such time as the covered person would have reached age 65.

Duty/Non-Duty Disabled Retirement Benefits

No age or service requirement. Benefit commences immediately for qualified disabled member.

Benefits for Spouses of Retired Employees

Spouses of retired employees are eligible to receive health care benefits as long as the retiree is eligible. Coverage continues to surviving spouses of deceased retirees until the earlier of when retiree would have reached age 65 or when the spouse reaches age 65.

Medicare-Eligible Provisions

Retirees are required to enroll in Medicare once eligible. Retiree is responsible for paying the full premium for retiree Medicare coverage offered through the City.

Dental/Vision Coverage

Same as Retiree Health Care Eligibility Conditions.

Life Insurance Coverage

The City does not provide life insurance for retirees.

Opt-Out

The City does not provide Opt-Out payments or payment in lieu of retiree health care coverage for retirees.

Other Employment and Compensation

A retiree, spouse or other dependent who has coverage from an employer who provides medical coverage should coordinate benefits, making the City's coverage secondary.

This is a brief summary of the City of Grand Rapids 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.

CITY OF GRAND RAPIDS GENERAL RETIREE HEALTH CARE PLAN RHSA MEMBERS

SUMMARY OF BENEFITS AS OF JUNE 30, 2016

Plan Participants

RHSA members of the City of Grand Rapids Retiree Health Care Plan are eligible to purchase retiree health care benefits until Medicare eligible.

Benefit Amount

Defined Contribution RHSA members can purchase retiree health care coverage through the City by paying the full blended (active/pre-65 retiree) premium. For Duty Death-In-Service retirements and Duty Disability retirements, after RHSA is exhausted, the City will resume paying the premiums less any applicable premium sharing amount until such time as the covered person would have reached age 65. Defined contributions paid by the City or the member into the RHSA accounts were not included in this valuation.

Normal Retirement Eligibility

Age 50 with 10 years.

Deferred Retirement Benefits

Retiree health care is not available to deferred RHSA retirees whose coverage ceases during deferral period. RHSA members can purchase retiree health care coverage through the City by paying the full blended (active/pre-65 retiree) premium.

Duty Death-in-Service Retirement Benefits

Deceased member must be eligible for retirement at death. Survivor spouse benefits are immediate. Premiums shall be first paid to the City from funds in the employee's RHSA account if the surviving spouse and/or eligible dependents wish to continue to receive retiree health care. When RHSA is exhausted, the City shall resume paying the premiums, less any applicable premium sharing amount until such time as the covered person would have reached age 65.

Non-Duty Death-in-Service Retirement Benefits

Deceased member must be eligible for retirement at death. Survivor spouse benefits are immediate. Premiums shall be first paid to the City from funds in the employee's RHSA account if the surviving spouse and/or eligible dependents wish to continue to receive retiree health care. When RHSA is exhausted, the survivor shall start paying the premiums.

Duty Disabled Retirement Benefits

No age or service requirement. Benefits commence immediately for qualified disabled member. Premiums shall be first paid to the City from funds in the employee's RHSA account if the surviving spouse and/or eligible dependents wish to continue to receive retiree health care. When RHSA is exhausted, the City shall resume paying the premiums, less any applicable premium sharing amount until such time as the covered person would have reached age 65.

Non-Duty Disabled Retirement Benefits

No age or service requirement. Benefits commence immediately for qualified disabled member. Premiums shall be first paid to the City from funds in the employee's RHSA account if the retiree wishes to continue to receive retiree health care. When RHSA is exhausted, the member shall start paying the premiums.

CITY OF GRAND RAPIDS GENERAL RETIREE HEALTH CARE PLAN RHSA MEMBERS

SUMMARY OF BENEFITS AS OF JUNE 30, 2016

Benefits for Spouses of Retired Employees

Spouses of retired employees are eligible to receive health care benefits as long as the retiree is eligible. Coverage continues to surviving spouses of deceased retirees until the earlier of when retiree would have reached age 65 or when the spouse reaches age 65.

Medicare-Eligible Provisions

Retirees are required to enroll in Medicare once eligible. Retiree is responsible for paying the full premium for retiree Medicare coverage offered through the City.

Dental/Vision Coverage

Same as Retiree Health Care Eligibility Conditions.

Life Insurance Coverage

The City does not provide life insurance for retirees.

Opt-Out

The City does not provide Opt-Out payments or payment in lieu of retiree health care coverage for retirees.

Other Employment and Compensation

A retiree, spouse or other dependent who has coverage from an employer who provides medical coverage should coordinate benefits, making the City's coverage secondary.

This is a brief summary of the City of Grand Rapids 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.

CITY OF GRAND RAPIDS GENERAL EMPLOYEES ACTIVE MEMBER DEMOGRAPHIC DATA AS OF JUNE 30, 2016

		Years of Service to Valuation Date						
								Total
Age	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.
15-19	1							1
20-24	16							16
25-29	57	5						62
30-34	50	21	1	1				73
35-39	37	23	10	13				83
40-44	28	16	20	36	3			103
45-49	26	19	12	32	31	5		125
50-54	17	26	7	32	23	22	1	128
55-59	8	17	19	31	25	24	6	130
60-64	9	14	11	11	15	16	7	83
65 & Over	1	4	2	3	1			11
Totals	250	145	82	159	98	67	14	815

The active member counts above include current active employees who participate in the City's defined contribution plan and are eligible to purchase retiree health benefits through the City.

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

	<u>DB</u>	<u>RHSA</u>	<u>Total</u>
Count:	325	490	815
Age (Years):	51.8	42.4	46.2
Service (Years):	21.3	5.9	12.0

CITY OF GRAND RAPIDS GENERAL RETIRED AND DEFERRED MEMBER DEMOGRAPHIC DATA AS OF JUNE 30, 2016

Defined Benefit General Retirees

	Number of Retirees						
Age	Male	Male Female Total					
Under 55	11	12	23				
55-59	42	34	76				
60-64	105	58	163				
65 & Over	36	37	73				
Totals	194	141	335				

The above exhibit includes only defined benefit retirees receiving retiree health care benefits from the City. There are no RHSA General retirees.

General Vested Deferred

	Number of Deferred Members		
Age	Male	Female	Total
Under 40	0	0	0
40-44	0	0	0
45-49	0	0	0
50 & Over	0	0	0
Totals	0	0	0

Only retirees and vested deferred members valued in this report are shown in the exhibits above.

SECTION D

ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

VALUATION METHODS

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 Actuarial Cost Method having the following characteristics:

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

Actuarial gains (losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Financing of Unfunded Actuarial Accrued Liabilities. Unfunded Actuarial Accrued Liabilities (UAAL) were amortized on a level dollar basis. The UAAL were determined using the funding value of assets and actuarial accrued liability calculated as of the valuation date. The UAAL amortization payment is the amount required to fully amortize the UAAL over a 16-year period beginning July 1, 2017. This UAAL payment reflects payments expected to be made between the valuation date and the fiscal year for which the contributions in this report have been calculated. The 16-year amortization factor used is 11.1065.

ACTUARIAL ASSUMPTIONS

The rationale for the assumptions used in this valuation is included in the 5-year experience study ending June 30, 2014, approved by the Board in November 2015. All assumptions are expectations of future experience, not market measures.

Rates of Investment Return under a partially funded arrangement. 5.0% per year, compounded annually, net of expenses. This rate consists of a real rate of return of 1.5% per year plus a long-term rate of wage growth of 3.5% per year. This assumption is used to equate the value of payments due at different points in time.

The total number of active defined benefit retiree health care participants is expected to decline in the future.

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

	% Increase in Salary at Sample Ages		
Sample Ages	Merit & Seniority	Base (Economic)	Increase Next Year
20	4.16 %	3.50 %	7.66 %
25	2.88	3.50	6.38
30	1.98	3.50	5.48
35	1.52	3.50	5.02
40	1.10	3.50	4.60
45	0.66	3.50	4.16
50	0.32	3.50	3.82
55	0.14	3.50	3.64
60	0.00	3.50	3.50
65	0.00	3.50	3.50

Service at _	% Increase in Salary		
Beginning	Merit &	Base	Increase
of Year	Seniority	(Economic)	Next Year
1	4.00 %	3.50 %	7.50 %
2	3.00	3.50	6.50
3	1.75	3.50	5.25
4	1.75	3.50	5.25
5	1.75	3.50	5.25

ACTUARIAL ASSUMPTIONS (CONTINUED)

The mortality tables used to project the mortality experience of General plan members is the RP-2014 Healthy Annuitant Mortality Table projected to 2019 using the MP-2014 mortality improvement scale. For disabled General retirees, RP-2014 Disabled Retirees Mortality Table projected to 2019 using the MP-2014 mortality improvement scale was used.

	Probability of		Future Life	
Sample	Dying Next Year		Expectancy (years)	
Ages	Men	Women	Men	Women
50	0.37 %	0.26 %	33.25	35.95
55	0.53	0.35	28.92	31.44
60	0.74	0.49	24.73	27.02
65	1.04	0.74	20.70	22.74
70	1.56	1.17	16.85	18.67
75	2.45	1.90	13.26	14.86
80	4.06	3.18	10.01	11.41

This assumption is used to measure the probabilities of each benefit payment being made after retirement.

ACTUARIAL ASSUMPTIONS (CONTINUED)

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

Retirement Ages	Percent of Eligible Active Members Retiring within Next Year	
50	40	%
51	40	
52	40	
53	40	
54	40	
55	40	
56	40	
57	40	
58	40	
59	40	
60	40	
61	40	
62	40	
63	40	
64	40	
65	50	
66	60	
67	70	
68	80	
69	90	
70	100	

A member is eligible for pension retirement after completing 30 or more years of service or after both attaining age 62 and completing 8 or more years of service. Prior to the above eligibility, members who are eligible for early reduced retirement are assumed to elect this option at a 3% rate per year until eligible for Normal Retirement.

ACTUARIAL ASSUMPTIONS (CONTINUED)

Rates of separation from active membership are used to estimate the number of employees at each age that are expected to terminate employment before qualifying for retirement benefits. The withdrawal rates do not apply to members eligible to retire, and do not include separation on account of death or disability.

Sample rates of separation from active employment are shown below:

% of Active Members Separating

Sample	Years of	within Next Year	
Ages	Service	Male	Female
ALL	0	15.00 %	15.00 %
	1	8.00	8.00
	2	7.00	7.00
	3	6.00	6.00
	4	5.00	5.00
25	5 & Over	3.44	7.72
30		3.29	7.22
35		3.05	6.28
40		2.72	5.15
45		2.30	3.98
50		1.61	2.56
55		0.61	0.94
60		0.06	0.09

ACTUARIAL ASSUMPTIONS (CONCLUDED)

Rates of disability among active members are used to estimate the incidence of member disability in future years. 70% of General disabilities were assumed to be non-duty related and 30% of disabilities are assumed to be duty related.

Sample Ages	Percent Becoming Disabled within Next Year
20	0.01 %
25	0.01
30	0.01
35	0.04
40	0.07
45	0.16
50	0.31
55	0.47
60	0.61

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

	Medical and		
Year	Prescription Drugs	Dental	Vision
2017	8.00 %	3.50 %	3.50 %
2018	8.00	3.50	3.50
2019	8.00	3.50	3.50
2020	7.50	3.50	3.50
2021	7.00	3.50	3.50
2022	6.50	3.50	3.50
2023	5.75	3.50	3.50
2024	5.00	3.50	3.50
2025	4.25	3.50	3.50
2026	3.50	3.50	3.50
2027	3.50	3.50	3.50
2028 & Later	3.50	3.50	3.50

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

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

five years of service. Disability also does 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.

Marriage Assumption: 100% of General males and females are assumed to be married for

purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses for active member

valuation purposes.

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

age 65.

Children: An 8% load was applied for children's coverage.

Election Percentage: (General) It was assumed that 100% of retirees would choose to

receive retiree health care benefits through the City. Of those assumed to elect coverage, 65% of retirees were assumed to elect two-person coverage, if eligible. For those that elect two-person coverage, it was assumed that coverage would continue to the

spouse upon death of the retiree 100% of the time, if eligible.

Retiree Opt-Outs: Retirees and spouses who have opted-out of coverage are assumed

to not re-enroll.

Patient Protection and In general, changes related to the Patient Protection and Affordable

Care Act are reflected to the extent that they are already implemented in the Plan and future changes will be reflected as they become effective. However, a contingency load of 7% was applied to the valuation results in anticipation of future cost increases resulting from this Act. Actual cost increases could be higher. For example, the excise tax applicable to health plan benefits over certain statutory limits is estimated at this time to be 13% of claims.

This could raise valuation results an additional 6% (13% - 7%).

Deferred and Retired Members: All retired members valued in this valuation were assumed to be part

of the Defined Benefit plan. Current deferred members not electing to continue coverage through the deferral period are ineligible to

participate in the Defined Benefit Retiree Health Care plan.

Affordable Care Act:

SECTION EGASB DISCLOSURES

This information is presented in draft form for review by the Plan and/or City auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the Plan and/or City financial statements.

GASB STATEMENTS NO. 43 AND NO. 45 REQUIRED SUPPLEMENTARY INFORMATION

Valuation Date

Actuarial Cost Method

Amortization Method

Remaining Amortization Periods

Asset Valuation Method

Actuarial Assumptions:

Discount Rate

Projected Salary Increases General

Valuation Health Care Cost Trend Rate Medical and Drug Dental and Vision June 30, 2016

Individual Entry Age Normal Cost

Level Dollar Closed

16 Years

Market Value of Assets

5.0% Per Year

3.50% - 7.70%

8.0% in 2017-2019, Grading to 3.5% in 2026 3.5% in All Years

GASB STATEMENTS NO. 43 AND NO. 45 REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Funding Progress

Actuarial Valuation Date June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b)-(a)	Funded Ratio (a)/(b)	
2009	\$ 0	\$ 113,928,362	\$ 113,928,362	0.0 %	
2011	2,362,070	78,395,349	76,033,279	3.0	
2012	7,102,336	66,882,845	59,780,509	10.6	
2013	8,526,338	64,235,682	55,709,344	13.3	
2014	9,563,129	60,370,567	50,807,438	15.8	
2015	9,036,095	56,720,399	47,684,304	15.9	
2016	9,411,146	58,696,918	49,285,772	16.0	

Calculation of Net OPEB Obligation

	Fiscal					
Valuation	Year	Annual	Annual	Percentage of	Percentage of	Net
Date	Ending	Required	OPEB	ARC	OPEB Costs	OPEB
June 30	June 30	Contribution	Costs*	Contributed	Contributed	Obligation*
						Φ. 5.712.220
						\$ 5,713,229
2009	2010	\$ 7,230,885	\$ 7,168,588	137.8%	139.0%	2,915,023
2009	2011	7,230,885	7,240,682	100.0%	99.8%	2,926,305
2011	2012	7,177,017	7,106,398	154.1%	155.6%	(1,026,647)
2011	2013	7,155,236	7,182,041	87.9%	87.5%	(131,506)
2012	2014	5,735,863	5,739,585	96.4%	96.4%	76,211
2013	2015	5,583,728	5,581,386	89.2%	89.2%	678,321
2014	2016	5,258,867	5,236,160	110.7%	111.2%	91,794
2015	2017	5,071,594	5,068,239	N/A	N/A	N/A
2016	2018	5,328,910	N/A	N/A	N/A	N/A

^{*} Figures prior to FY 2012 are based on client provided information. The NOO for the fiscal year ending June 30, 2016 was calculated using an employer contribution of \$5,822,687.

The exhibits on this page show results for both the Defined Benefit group and the RHSA group combined.

APPENDIX A

OVERVIEW

GASB BACKGROUND

The purpose of this valuation is to provide information on the cost associated with providing postemployment benefits other than pensions, or OPEB, to current and former employees. The information is designed to assist you in complying with Governmental Accounting Standards Board (GASB) Statements No. 43 and No. 45. OPEB benefits are most often associated with postemployment health care, but cover almost any benefit not provided through a pension plan, including life insurance, dental and vision benefits. It is important to note that OPEB benefits, by definition, do not include benefits *currently* being provided to active employees – however, this report includes the liabilities for benefits expected to be paid to current active employees in the future when they retire.

GASB Statements No. 43 and No. 45 were released in the spring of 2004. GASB Statement No. 43 covers the accounting rules for OPEB *plans* while GASB Statement No. 45 describes the rules for *employers* sponsoring OPEB plans. Your auditor can assist you in determining which statements apply to your particular situation.

The specific items required to be disclosed on an OPEB sponsor's financial statements are described in detail in GASB Statements No. 43 and No. 45.

GASB Statement No. 45

Among the requirements of Statement No. 45 are recognition each year of an expense called the Annual OPEB Cost, and the accumulation of a liability to be disclosed on the employer's Statement of Net Assets called the Net OPEB Obligation (NOO).

The fundamental items required to determine the Annual OPEB Cost and the NOO are:

- the Annual Required Contribution (ARC)
- the Employer's Contributions in relation to the ARC

Although GASB does not require OPEB contributions, it has chosen to call the base component of the annual OPEB cost the Annual Required Contribution. The ARC is provided in this report.

GASB BACKGROUND (CONCLUDED)

Paragraph 13g. of Statement No. 45 states:

"An employer has made a contribution in relation to the ARC if the employer has:

- 1. made payments of benefits directly to or on behalf of a retiree or beneficiary,
- 2. made premium payments to an insurer, or
- 3. irrevocably transferred assets to a trust, or equivalent arrangement in which Plan assets are dedicated to providing benefits to retirees and their beneficiaries in accordance with the terms of the Plan and are legally protected from creditors of the employer(s) or plan administrator."

For each fiscal year shown in this report, we have provided the ARC and the estimated benefits and/or premiums (based on valuation assumptions).

The NOO is the cumulative difference between the Annual OPEB Cost each year and the Employer's Contribution in relation to the ARC. The Annual OPEB Cost for a year is equal to:

- the ARC, plus
- interest on the prior year's NOO, plus
- amortization of the prior year's NOO.

The Annual OPEB Cost and NOO are generally developed by the Plan Sponsor's auditor based on information contained herein and elsewhere.

GASB Statement No. 43

If the Plan has assets for Statement No. 43 purposes, then certain additional information useful in complying with the Statement is contained in this report.

OPEB PRE-FUNDING

Many employers fund retiree health care benefits using the pay-as-you-go (or cash disbursement) method. Under this method, the employer's annual contribution is equal to the actual disbursements during the year for OPEB for retired employees. This method of funding will result in increasing contributions over time. First, per capita cash disbursements will tend to increase from year to year as the cost of health care services, or the utilization of these services, increases. Second, the number of retired members is likely to increase for years to come. The more retirees, the greater the disbursements as a percentage of employee payroll.

A retiree health care plan is similar to a defined benefit pension plan in that promises are made to employees to provide them with a benefit payable at some future date. For defined benefit pension plan sponsors, a common funding objective is to contribute to a fund, annual amounts which will i) remain level as a percentage of active member payroll, and ii) when combined with present assets and future investment return be sufficient to meet the financial obligations of the Plan to current and future retirees.

The GASB statements are not funding requirements. They are accounting standards that require plan sponsors to calculate the annual expense associated with OPEB using certain methods.

The ultimate determination as to the level of pre-funding will be the result of decisions made in an attempt to support benefit security for members and the fiscal management needs of the employer.

APPENDIX B

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.

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.

GLOSSARY (CONCLUDED)

Annual Required Contribution (ARC) - The ARC is the normal cost plus the portion of the unfunded actuarial accrued liability to be amortized in the current period. The ARC 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.

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.

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 is not generally available for other uses.

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

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



December 8, 2016

Mr. Scott Buhrer Chief Financial Officer City of Grand Rapids 300 Monroe Avenue, N.W. Grand Rapids, MI 49503

Re: City of Grand Rapids General Other Postemployment Benefits Valuation

Dear Mr. Buhrer:

Enclosed are four copies of our report of the actuarial valuation as of June 30, 2016 of the City of Grand Rapids General Other Postemployment Benefits.

Respectfully submitted,

Yames D. Anderson, FSA, EA, MAAA

JDA:ah Enclosure

cc: Jeff Dood (Grand Rapids)