City of Fraser Retiree Health Care Plan

Actuarial Valuation Report

As of June 30, 2017

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GRS Retirement Consulting

800.521.0498 | P: 248.799.9000 | F: 248.799.9020 | www.grsconsulting.com

September 21, 2018

Mr. Timothy Sadowski
City Treasurer
City of Fraser
33000 Garfield Road
Fraser, Michigan 48026

Dear Mr. Sadowski:

Submitted in this report are the results of an actuarial valuation of the assets and liabilities associated with the employer financed retiree health benefits provided by the City of Fraser. The date of the valuation was June 30, 2017.

This report was prepared at the request of the City of Fraser and is intended for use by the City and those designated or approved by the City. This report may be provided to parties other than the City of Fraser only in its entirety and only with the permission of the City. 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 Actuarially Computed Employer Contributions for the fiscal years ending June 30, 2020 and June 30, 2021. This report should not be relied on for any purpose other than the purposes described herein. Determinations of the liability associated with the benefits described in this report for purposes other than those identified above may be significantly different. This report does not satisfy Governmental Accounting Standards Board (GASB) Statements No. 74 or No. 75.

The findings in this report are based on data and other information through June 30, 2017 and the understanding that all Dispatch actives were removed from the Plan on June 30, 2018. 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. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

The valuation was based upon information furnished by the City of Fraser concerning retiree health 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 City of Fraser.

This report has been prepared by actuaries who have substantial experience valuing public employee retiree health plans. To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the City of Fraser 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.

The signing actuaries are independent of the plan sponsor.

Shana M. Neeson and Mark Buis 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.

Respectfully submitted,

Shana M Neeson

Shana M. Neeson, ASA, FCA, MAAA

Mark Buis

Mark Buis, FSA, EA, FCA, MAAA

SMN/MB:bd

EXECUTIVE SUMMARY

Executive Summary

Actuarially Computed Employer Contribution

Please note that beginning with the fiscal year ending June 30, 2017, GASB Statement No. 43 was replaced by GASB Statement No. 74. Also, beginning with the fiscal year ending June 30, 2018, GASB Statement No. 45 was replaced by GASB Statement No. 75. A separate GASB report will be required to comply with the actuarial requirements of GASB Statements No. 74 and No. 75 for the fiscal year ending June 30, 2018. As such, there will no longer be an "Annual Required Contribution" calculated in the valuation report. Therefore, we have determined the "Actuarially Computed Employer Contribution."

We have calculated the Actuarially Computed Employer Contribution for the fiscal years ending June 30, 2020 and June 30, 2021 under the interest rate assumption of 5.75%. Below is a summary of the results. The Actuarially Computed Employer Contributions and estimated premiums shown below include the impact of any implicit rate subsidy.

For additional details please refer to Section A, "Valuation Results."

Fiscal Year Ending	Actuarially Computed Employer Contribution	Estimated Claims and Premiums Paid for Retirees
June 30, 2020	$4,345,400	$ 1,913,823
June 30, 2021	4,345,413	2,060,982

Liabilities and Assets - As of June 30, 2017

1. Present Value of Future Benefit Payments	$43,650,756
2. Actuarial Accrued Liability	39,143,978
3. Plan Assets	0
4. Unfunded Actuarial Accrued Liability (2) – (3)	39,143,978
5. Funded Ratio (3)/(2)	0.0%

The Present Value of Future Benefit Payments (PVFB) is the present value of all benefits projected to be paid from the plan for past and future service to current members. The Actuarial Accrued Liability is the portion of the PVFB allocated to past service by the Plan's funding method (see the Section titled "Actuarial Cost Method and Actuarial Assumptions").

SECTION A

VALUATION RESULTS

City of Fraser - Results
As of June 30, 2017

A. Present Value of Future Benefits	
i) Retirees and Beneficiaries	$25,819,072
ii) Vested Terminated Members	2,707,899
iii) Active Members	15,123,785
Total Present Value of Future Benefits	$43,650,756
B. Present Value of Future Normal Costs	4,506,778
C. Actuarial Accrued Liability (A.-B.)	39,143,978
D. Actuarial Value of Assets	0
E. Unfunded Actuarial Accrued Liability (C.-D.)	$39,143,978
F. Funded Ratio (D./C.)	0.0%
G. Fiscal Year Ending June 30, 2020	
i) Employer Normal Cost	$ 605,105
ii) Amortization of UAAL*	3,740,295
Actuarially Computed Employer Contribution	**$ 4,345,400**
H. Fiscal Year Ending June 30, 2021	
Actuarially Computed Employer Contribution	**$ 4,345,413**

** The Unfunded Actuarial Accrued Liabilities (UAAL) were amortized as a level dollar amount over a closed period of 19 years for the fiscal year ending June 30, 2020 and decreasing by one each year thereafter.*

The long-term rate of investment return used in this valuation was 5.75%.

Comments

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

- Increasing the long-term rate of investment return from 4.50% to 5.75%;
- It is our understanding that all Dispatch actives were removed from the Plan on June 30, 2018;
- Updating the mortality tables and other demographic assumptions to be consistent with the MERS pension assumptions;
- More favorable premium rate and claims experience than projected; and
- Decreasing the ultimate trend assumption from 4.00% to 3.75%.

Partially offsetting these factors were increases due to:

- Public Act 152 updates; and
- Resetting the health care trend rates.

While Plan experience of liabilities was more favorable than expected, the recommended contribution increased from about $3.6 million to $4.3 million. This was primarily attributable to additional interest charges associated with the change in assumed return and lower than expected contributions.

Comment B: One of the key assumptions used in any valuation of the cost of postemployment benefits is the rate of return on the assets that will be used to pay Plan benefits. Higher assumed investment returns will tend to decrease the Actuarially Computed Employer Contribution. Lower returns will tend to increase the computed Actuarially Computed Employer Contribution. We have calculated the liability and the resulting Actuarially Computed Employer Contribution using an assumed annual rate of investment return of 5.75%. This investment return assumption was used at the request of the City and is classified as a provision for adverse deviation under Section 3.12 of Actuarial Standard of Practice (ASOP) number 42.

Comment C: The plan sponsor is required by GASB to perform actuarial valuations at least biennially or more frequently if significant changes in the OPEB are made in the interim.

Comment D: The contribution amounts shown in this report were based on a closed 19-year amortization of the unfunded actuarial accrued liability, beginning with the fiscal year ending June 30, 2020.

Comment E: It is our understanding that the City has established a qualifying trust with MERS for purposes of funding the retiree health benefits. The calculations within this report do not incorporate any assets (as of June 30, 2017) because it is our understanding that the first contribution to the trust took place during calendar year 2018. As a result, the applicable assets will be included in the next valuation, as of June 30, 2019.

Comments

Comment F: 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, effective in 2022. The initial thresholds are $10,200 for single coverage or $27,500 for family coverage. 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 valuation, there was no load applied to the health care liabilities to approximate the cost for future excise tax, based on the current plan provisions and assumptions. 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 the impact.

Comment G: The GASB issued Statement 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 implementation guides for Statement Nos. 74 and 75 provide additional clarification related to the implementation of these Statements. It is our understanding that the City of Fraser will need to comply with GASB Statement No. 75 beginning with the fiscal year ending June 30, 2018. The information necessary for GASB Statement No. 75 will need to be developed at a later date. The basis for the GASB Statement No. 75 information is expected to be this valuation (as of June 30, 2017), rolled-forward to the measurement date.

Comment H: Michigan Public Act 202 of 2017 created new reporting and other requirements for local units of government. As such, we can work with the City of Fraser Retiree Health Care Plan to develop a funding policy to document Plan procedures and facilitate compliance.

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

- The measurement is inappropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations, and
- The measure is inappropriate for assessing the need for or the amount of future employer contributions.

SECTION B

RETIREE PREMIUM RATE DEVELOPMENT

Retiree Premium Rate Development

Premium rates for the City of Fraser were developed separately for the self-insured pre-65 portion and the fully-insured post-65 portion.

The self-insured initial premium rates were developed for the pre-65 portion only. The rates were calculated by using incurred claims experience and exposure data for the period of January 2015 to December 2017 adjusted for catastrophic claims, plus the load for administration, network access fee, and stop loss premiums. The self-insured medical and prescription drug data were provided by the City of Fraser. Since the prescription drug claims and the medical claims exhibit different trends and claim payment patterns, we analyzed these claims separately.

The fully-insured initial premium rates were developed for the post-65 retirees. The January 1, 2018 fully-insured Medicare Advantage rates provided by the City of Fraser were utilized to determine the appropriate premium rates. 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 Post-65 plan is a Medicare Advantage Program. In a Medicare Advantage Program, the liability is based on the difference between the present value of future claims minus the present value of future reimbursements from CMS. Each of these items will experience future growth under arguably differing forces. Recently announced changes to the Medicare Advantage Program will most likely result in decreases in the reimbursements from CMS within the next few years. This, in turn, will cause the net employer cost to trend upward at a rate above usual market trends for healthcare costs. When the plan is insured, this effect is buried in the rates being charged by the insurer. To account for this expectation, we have increased the Medicare rates to account for the expected CMS reimbursement lagging behind medical increases. This adjustment will be revisited at the time of the next valuation.

The benefit options available to future retirees are different than current retirees. Future retirees take whatever insurance they have while active with them into retirement. We have developed separate premium rates for future retirees in order to reflect the benefit differences.

Age graded and sex distinct premiums are utilized by 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 premiums more accurately reflect the health care utilization and cost at that age.

Retiree Premium Rate Development

The combined monthly one-person medical and drug premiums used in this valuation of the Plan (at select ages) are shown below:

For Those Not Eligible for Medicare (Pre-65)				
	Future Retirees		Current Retirees	
Age	Male	Female	Male	Female
40	$ 333.88	$ 542.53	$ 334.62	$ 543.73
50	541.21	666.72	542.41	668.20
60	919.81	905.70	921.85	907.71
64	1,118.52	1,055.58	1,121.00	1,057.92

For Those Eligible for Medicare (Post-65)				
	Future Retirees		Current Retirees	
Age	Male	Female	Male	Female
65	$ 482.45	$ 455.05	$ 531.99	$ 501.77
75	564.47	550.79	622.42	607.35
85	596.89	603.92	658.17	665.93

We did not "age grade" the dental and vision premium rates for this valuation, since dental and vision claims do not vary significantly by age. The average monthly dental premiums used in this valuation are $33.45 for the first person with coverage and $29.25 for the second person with coverage. The monthly vision premium used in this valuation is $3.13 for the first person with coverage and $3.13 for the second person with coverage.

In addition to the benefits detailed above, the City also has a program which funds the pre-65 retiree deductible in a retiree Health Savings Account up to $3,000 for single coverage, or $6,000 for 2-person/family coverage at the beginning of July.

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

SECTION C

SUMMARY OF BENEFITS

City of Fraser
Summary of the Benefits as of June 30, 2017

Health insurance coverage is provided by the City outside the Retirement System on the following basis:

- To eligible retired members of the Retirement System who meet the pension eligibility (age 50 with 25 years of service or age 55 with 10 years of service for most employees).
- To eligible spouses of retirees during the retiree's lifetime.
- To eligible surviving spouses after the retiree's death.
- To vested deferred retirements hired before July 1, 1999.
- Retirees pay their own Medicare Part B premiums.
- For any eligible retiree hired before July 1, 1999, the City pays 100% of the cost of coverage for both the retiree and spouse. For those hired after June 30, 1999, the City will pay a portion of the total cost based on the following schedule.

	Portion Paid By City
10 years	40 %
15 years	60
20 years	80
25 years or more of service	100

- The portion of retiree health care costs paid by the City on behalf of eligible retirees (hired after 6/30/2000), is based on the following formula: 4% per year of service.
- Per the 7/1/2008 – 6/30/2011 DPW contract, the 7/1/2009 – 6/30/2012 POLC contract, and the 7/1/2009 – 6/30/2012 PSO/POAM contract, employees hired after each contract was signed shall not be eligible for retiree medical benefits from this Plan. The Office and Management divisions are closed to new hires after 2/12/2009. For all other groups, the plan is closed to new hires effective 7/1/2009. Instead they will have a Health Care Savings Plan (HCSP), and no access to the retiree health care plan.
- Effective 6/30/2018 the Dispatcher division was eliminated from the Plan and the service was contracted outside the Plan.
- Effective August 1, 2012, eligible retirees from City employment will receive the same health benefit plan that they had at the time their City employment ended.
- Members of the POLC and PSO/POAM groups are eligible for non-duty and duty disability retiree health care after accruing 10 years of service.

This is a brief summary of the City of Fraser's Retiree Health Care Benefit 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.

SECTION D

SUMMARY OF PARTICIPANT DATA

City of Fraser
Total Eligible Active Members^ as of June 30, 2017
by Age and Years of Service

Age	Years of Service on Valuation Date							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.
20-24								
25-29		1						1
30-34			1					1
35-39		1	2	5				8
40-44			2	6				8
45-49				6	9	1		16
50-54			1		4	3		8
55-59								
60-64			1	1				2
65 & Over								
Totals		**2**	**7**	**18**	**13**	**4**		**44**

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

Age:	45.2	years
Service:	18.7	years

^ *Excludes Dispatcher employees who were terminated effective 6/30/2018.*

City of Fraser
Inactive Members as of June 30, 2017

Number of Retiree and Beneficiary Contracts#

	Opt-Out/ Ineligible	One-Person Coverage	Two-Person Coverage*	Total
Male	1	11	52	64
Female	0	25	13	38
Total	1	36	65	102

 # Contract counts based on medical/prescription drug coverage elections with the exception of one retiree reported with two-person dental coverage only.

** Includes family coverage.*

Age	Current Retirees Number of Contracts
0-44	
45-49	
50-54	5
55-59	13
60-64	16
65-69	26
70-74	18
75-79	6
80-84	11
85-89	5
90-94	1
95 +	
Totals	101

Fourteen terminated members eligible for deferred Plan benefits were reported in connection with this valuation of the health plan. The average age of these members as of the valuation date is 50.3.

SECTION E

ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

Actuarial Methods for
City of Fraser
As of June 30, 2017

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 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; and

(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 using the level dollar amortization method. The UAAL was determined using the actuarial value of assets and actuarial accrued liability calculated as of the valuation date and projected to the beginning of the fiscal year at the assumed rate of investment return.

Actuarial Value of Assets. The Actuarial Value of Assets is set equal to the reported market value of assets.

Amortization Factors. The following amortization factors were used in developing the Actuarially Computed Employer Contributions for the fiscal years shown:

	Fiscal Year Ending June 30,	
	2020	**2021**
Level Dollar Factor	11.7036	11.3481

Actuarial Assumptions for
City of Fraser
As of June 30, 2017

All assumptions are expectations of future experience, not market measures. The rationale for the rates of merit and longevity salary increase, base wage inflation, rates of mortality, early retirement rates, rates of separation from active membership, and disability rates used in this valuation is included in the MERS 5-year experience study for the period January 1, 2009 to December 31, 2013 performed by the prior MERS pension actuary. We have not performed an independent analysis of plan experience, but we anticipate beginning the next 5-year experience study for the period January 1, 2014 to December 31, 2018 following the completion of the December 31, 2018 pension valuations.

The rate of investment return was 5.75% a year, compounded annually net after investment expenses.

Rates of price inflation are not specifically used for this valuation. However, a rate of price inflation of 2.50% would be consistent with other assumptions in this report.

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 future contributions will be based.

Sample Ages	% Increase in Salary at Sample Ages		
	Merit & Seniority	Base (Economic)	Increase Next Year
20	11.00 %	3.75 %	14.75 %
25	7.20	3.75	10.95
30	3.10	3.75	6.85
35	1.90	3.75	5.65
40	1.20	3.75	4.95
45	0.81	3.75	4.56
50	0.52	3.75	4.27
55	0.30	3.75	4.05
60	0.00	3.75	3.75

Actuarial Assumptions for
City of Fraser
As of June 30, 2017

The rates of mortality used for individual members are in accordance with the following tables.

The mortality table used to project the mortality experience of non-disabled plan members is a 50% Male - 50% Female blend of the following tables:

1. The RP-2014 Healthy Annuitant Mortality Tables, with rates multiplied by 105%
2. The RP-2014 Employee Mortality Tables
3. The RP-2014 Juvenile Mortality Tables

For ages 0-17, we use the rates in Table 3; for ages 18-49, we use the rates in Table 2; for ages 70 and older, we use the rates in Table 1; and for ages 50-69, we blend Table 2 and Table 1 as follows:

a. Age 50, use 60% of Table 2 and 40% of Table 1
b. Age 51, use 57% of Table 2 and 43% of Table 1
c. Etc. …
d. Age 69, use 3% of Table 2 and 97% of Table 1

The mortality table used to project the mortality experience of disabled plan members is a 50% Male - 50% Female blend of the RP-2014 Disabled Retiree Mortality Tables.

Ninety percent (90%) of active member deaths are assumed to be non-duty deaths and 10% of the deaths are assumed to be duty related.

Possible future mortality improvements are reflected in the mortality assumption. The mortality assumptions include a 10% margin for future mortality improvements, relative to the actual mortality experience seen in the 2009-2013 Experience Study, as performed by the prior MERS pension actuary.

Actuarial Assumptions for
City of Fraser
As of June 30, 2017

The life expectancies and mortality rates projected for non-disabled members are shown below for selected ages:

Ages	Expected Years of Life Remaining	Mortality Rates
20	63.06	0.03%
25	58.15	0.03
30	53.24	0.03
35	48.33	0.04
40	43.43	0.05
45	38.56	0.08
50	33.74	0.23
55	29.18	0.37
60	24.79	0.58
65	20.59	0.94
70	16.66	1.56
75	13.07	2.51
80	9.85	4.18

The life expectancies and mortality rates projected for disabled members are shown below for selected ages:

Ages	Expected Years of Life Remaining	Mortality Rates
20	46.95	0.47%
25	43.14	0.54
30	39.24	0.55
35	35.33	0.65
40	31.52	0.82
45	27.98	1.30
50	24.87	1.62
55	21.91	1.89
60	18.97	2.18
65	16.04	2.63
70	13.19	3.43
75	10.54	4.77
80	8.18	6.88

Actuarial Assumptions for
City of Fraser
As of June 30, 2017

Retirement Rates

A schedule of retirement rates is used to measure the probability of eligible members retiring during the next year. To reflect the impact plan design may have on retirement experience, separate retirement rates apply to valuation divisions with pension benefit multipliers less than or equal to 2.50% and greater than 2.50%. Certain retirement ages may not apply, depending on the benefit age of first eligibility.

Normal Retirement - Age Based Benefit Provisions

	Percent of Eligible Active Members Retiring within Next Year*#	
Retirement Ages	Benefit Multiplier Less Than or Equal to 2.50%	Benefit Multiplier Greater Than 2.50%
50	20%	23%
51	20	23
52	20	24
53	20	26
54	20	26
55	20	30
56	20	33
57	21	35
58	21	39
59	21	42
60	21	43
61	22	48
62	22	49
63	22	49
64	23	50
65	25	50
66	25	50
67	26	50
68	28	50
69	30	50
70	100	100

* *For those eligible prior to age 50, the retirement rate is 22% per year. Members in a defined contribution plan follow the retirement pattern of those with a defined benefit multiplier of less than or equal to 2.50% per year.*

\# *All members who reach eligibility for normal retirement pension benefits before reaching eligibility for retiree health benefits are assumed to retire at the rate of 3% per year during the period when they are not eligible for health.*

Actuarial Assumptions for
City of Fraser
As of June 30, 2017

Early Retirement - Reduced Pension Benefit

Retirement Ages	Percent of Eligible Active Members Retiring within Next Year
50	2.00%
51	2.00
52	3.30
53	3.80
54	5.60
55	4.30
56	4.20
57	4.10
58	5.00
59	6.20

Actuarial Assumptions for
City of Fraser
As of June 30, 2017

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 rates of separation from active membership do not apply to members eligible to retire, and do not include separation on account of death or disability. The assumed rates of separation applied in the current valuation are based on years of service and scaled up or down according to each group's experience.

Group	Separation Rate Scaling Factor
All Divisions	30%

The base separation rates (see the table below) are multiplied by the scaling factor to obtain the assumed separation rates. Sample rates of separation from active employment, before application of the scaling factor, are shown below.

Samples Years of Service	% of Active Members Separating within the Next Year
0	19.60%
1	16.30
2	13.30
3	10.50
4	8.60
5	6.90
10	4.60
15	3.40
20	2.60
25	2.20
30 and over	2.20

Actuarial Assumptions for
City of Fraser
As of June 30, 2017

Disability Rates

Disability rates are used in the valuation to estimate the incidence of member disability in future years. The assumed rates of disablement at various ages are shown below:

Sample Ages	Percent Becoming Disabled within the Next Year
20	0.02%
25	0.02
30	0.02
35	0.05
40	0.08
45	0.20
50	0.29
55	0.38
60	0.39
65	0.39

80% of the disabilities are assumed to be non-duty and 20% of the disabilities are assumed to be duty related. For those plans which have adopted disability provision D-2, for pension benefit purposes, 40% of the disabilities are assumed to be non-duty and 60% are assumed to be duty related.

Actuarial Assumptions for
City of Fraser
As of June 30, 2017

Health care cost trend rates are displayed in the following table:

Year After Valuation	Health Care Trend Inflation Rates	
	Medical/Drug	Dental/Vision
1	9.00%	3.75%
2	8.25	3.75
3	7.50	3.75
4	6.75	3.75
5	6.25	3.75
6	5.75	3.75
7	5.25	3.75
8	4.75	3.75
9	4.25	3.75
10 +	3.75	3.75

Miscellaneous and Technical Assumptions for City of Fraser As of June 30, 2017

Administrative Expenses	No explicit assumption has been made for administrative expenses.
Decrement Operation	Disability and withdrawal do not operate during retirement eligibility.
Decrement Relativity	Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
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 contribution shown in this report.
Marriage Assumption	70% of males and 70% of 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. Disabled retirees were assumed to be eligible for Medicare coverage at age 65.
Deferred Vested Retirements	For purposes of determining the liabilities, we assumed all deferred vested members will elect one-person coverage upon commencement of their retiree health benefit.
Health Care Coverage at Retirement	The table below shows the assumed portion of future retirees electing one-person or two-person/family coverage, or opting out of coverage entirely.

		Two-Person/Family		
	One-Person	Electing	Continuing	Opt-Out
Male	20%	80%	100%	0%
Female	20%	80%	100%	0%

APPENDIX

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.

Actuarially Computed Employer Contribution. The Actuarially Computed Employer Contribution is the normal cost plus the portion of the unfunded actuarial accrued liability to be amortized in the current period. The Actuarially Computed Employer Contribution is an amount that, if paid on an ongoing basis, would be expected to provide sufficient resources to fund both the normal cost for each year and the amortized unfunded actuarial accrued 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.

Implicit Rate Subsidy. It is common practice for employers to allow retirees to continue in the employer's group health insurance plan (which also covers active employees), often charging the retiree some portion of the premium charged for active employees. Under the theory that retirees have higher utilization of services, the difference between the true cost of providing retiree coverage and what the retiree is being charged is known as the implicit rate subsidy.

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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 Benefits (OPEB). OPEB are postemployment benefits other than pensions. OPEB generally takes the form of health insurance, dental, vision, prescription drugs, life insurance 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. Sometimes referred to as "unfunded actuarial accrued liability."

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