

# City of Victoria Retiree Health Care Plan

ACTUARIAL VALUATION REPORT  
AS OF DECEMBER 31, 2017



# Table of Contents

## Page

### **Executive Summary**

Executive Summary ..... 1

### **Section A Valuation Results**

Development of the Actuarially Determined Contributions and Unfunded Actuarial  
Accrued Liability ..... 1

Comments ..... 2

10-Year Projection of Net Employer Provided Benefits ..... 3

Actuarially Accrued Liability by Group ..... 3

### **Section B Sensitivity Analysis**

Postemployment Health Insurance – Sensitivity Tests ..... 1

Sensitivity Analysis ..... 2

### **Section C Underlying Retiree Claims Cost Development**

Underlying Retiree Claims Cost Development ..... 1

### **Section D Summary of Benefits**

Summary of Benefits ..... 1-5

### **Section E Summary of Participant Data**

Active Members by Attained Age and Years of Services ..... 1

Retired Members by Attained Age ..... 2

### **Section F Actuarial Cost Method and Actuarial Assumptions**

Valuation Methods ..... 1

Actuarial Assumptions ..... 2-6

Miscellaneous and Technical Assumptions ..... 7-8

### **Appendix Glossary**

Glossary ..... 1-2

March 26, 2019

Mr. Gilbert P. Reyna, Jr., CPA  
Director of Finance  
City of Victoria  
700 Main Center, Suite 100  
Victoria, TX 77901

Dear Mr. Reyna:

Submitted in this report are the results of an Actuarial Valuation of the assets and benefits associated with the employer-financed retiree healthcare benefits provided by the City of Victoria. The date of the valuation was December 31, 2017. The Actuarially Determined Contribution (ADC) has been calculated for the fiscal years ending September 30, 2018, 2019 and 2020. We certify that the information contained in this report is accurate and fairly presents the actuarial position of the retiree healthcare plan as of December 31, 2017.

Results of this report should not be used for any other purpose without consultation with the undersigned. This report was prepared at the request of the City and is intended for use by the City and designated staff and those designated or approved by the City. This report may be provided to parties, other than those described above, only in its entirety and only with the permission of the City.

#### ***Actuarial Valuation***

The primary purposes of the valuation report are to determine the employer's contribution for the upcoming fiscal years and to describe the current financial condition of the Plan. Valuations are prepared biennially, as of December 31 of each odd year.

#### ***Governmental Accounting Standards Board***

The Plan will begin complying with Governmental Accounting Standards Board Statement No. 74 (GASB No. 74) with the plan year ending December 31, 2017 and the City will begin complying with GASB Statement No. 75 with its fiscal year ending September 30, 2018. The liabilities provided in this report are for funding purposes only. All GASB related material will be provided in a separate report.

#### ***Financial Objectives and Funding Policy***

The employer contribution is established by the City. The City's current funding policy is to pay the benefits using its own assets and to contribute an additional appropriation of \$200,000 per year to the OPEB trust. Based on this funding policy, the City's total contributions towards OPEB are expected to exceed the Actuarially Determined Contribution (ADC). The ADC is determined by the Plan's normal cost plus the amount necessary to amortize the unfunded actuarial accrued liability (UAAL) over a closed period of 20 years, starting in fiscal year ending 2018 (FYE18). The ADC for FYE18, FYE19 and FYE20 are \$1,050,147, \$1,054,239, and \$1,058,453 respectively.

***Progress Toward Realization of Financial Objectives***

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) as of December 31, 2017 is 15.08%.

***Benefit Provisions***

The actuarial valuation reflects the benefit and contribution provisions set forth in the Plan as of the valuation date. There are no ancillary benefits funded by a source independent of the Plan. Please see Section D of this report for more details regarding the benefit provisions.

***Assumptions and Methods***

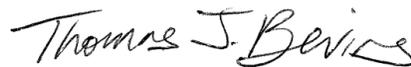
The actuarial assumptions and methods are set by the City, based upon the recommendation of the actuary. This report has used the same demographic assumptions used to value the defined benefit retirement plan in which the members participate. We are reliant upon the retirement plan actuaries to develop the demographic assumptions. Based on our experience, the assumptions appear reasonable. The assumptions which are specific to the OPEB valuation are reviewed during each valuation and adjusted when deemed necessary. We believe that the actuarial assumptions used in the measurements for funding purposes are reasonable and appropriate for that purpose, and that the assumptions are internally consistent, reasonable, and, where appropriate, based on the actual experience of the Plan. For a more detailed description of all of the actuarial assumptions, please see Section F of this report. The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience frequently deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. The actuarial calculations are intended to provide information for rational decision making.

The signing actuaries are independent of the plan sponsor. To the best of our knowledge, this report is complete and accurate and was made in accordance with generally recognized actuarial methods. Mr. Riazi and Mr. Bevins are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Mehdi Riazi, FSA, EA, MAAA



Thomas J. Bevins, ASA, MAAA

## Actuarial Standards of Practice Disclosure Statements

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 funded status alone is not appropriate for assessing the need for or the amount of future contributions and is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

This report should not be relied on for any purpose other than the purpose described above. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

The valuation was based upon information furnished by the City's administrative staff, concerning the Plan's benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the City's administrative staff.

The developed findings included in this report consider data as of December 31, 2017 and retiree premiums as of October 1, 2017 and October 1, 2018.

# EXECUTIVE SUMMARY

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# Executive Summary

## Actuarially Determined Contribution

The Actuarially Determined Contribution (ADC) for the fiscal years ending September 30, 2018, 2019 and 2020 are shown below:

<u>Actuarially Determined Contribution</u>	<u>FYE2018</u>	<u>FYE2019</u>	<u>FYE2020</u>
Fiscal Year Ending September 30	\$1,050,147	\$1,054,239	\$1,058,453

For additional details please see Section A of the report.

## Liabilities and Assets

The results presented in this valuation are based on the City's current funding policy. The City has established an irrevocable trust dedicated to retiree medical benefits and is expected to consistently make OPEB contributions that are at least equal to the ADC. The discount rate used in the valuation was equal to the 6.50% expected long-term return of the assets in the trust.

The present value of all benefits expected to be paid to current plan members as of December 31, 2017 is \$13,193,950. The actuarial accrued liability, which is the portion of the \$13,193,950 attributable to service accrued by plan members as of December 31, 2017, is \$12,237,467. As of December 31, 2017, there is \$1,845,298 in valuation assets available to offset the liabilities of the plan.

The funded status of the plan, which is the ratio of plan assets to actuarial accrued liability, as of December 31, 2017 is 15.08%.

## **SECTION A**

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### **VALUATION RESULTS**

## City of Victoria

### Development of the Actuarially Determined Contribution and Unfunded Actuarial Accrued Liability

Contributions for	Development of the Actuarially Determined Contribution
	<b><u>Fiscal Year Ending 2018</u></b>
Employer Normal Cost	\$136,377
<u>Amortization of UAAL</u>	913,770
Actuarially Determined Contribution (ADC)	\$1,050,147
ADC Per Active Participant	\$1,846
ADC for Fiscal Year Ending September 30, 2019	\$1,054,239
ADC for Fiscal Year Ending September 30, 2020	\$1,058,453

The normal costs shown above include plan administrative expenses.

	Determination of Unfunded Actuarial Accrued Liability
	<b><u>December 31, 2017</u></b>
A. Present Value of Future Benefits	
i) Retirees and Beneficiaries	\$8,547,715
ii) Vested Terminated Members	0
iii) Active Members	<u>4,646,235</u>
Total Present Value of Future Benefits	\$13,193,950
B. Present Value of Future Normal Costs	\$956,483
C. Actuarial Accrued Liabilities (A.-B.)	\$12,237,467
D. Actuarial Value of Assets	\$1,845,298
E. Unfunded Actuarial Accrued Liability (C.-D.)	\$10,392,169
F. Funded Ratio (D./C.)	15.08%

## Comments

**COMMENT A:** One of the key assumptions used in any valuation of the cost of post-employment benefits is the rate of return on Plan assets. Higher assumed investment returns will result in a lower actuarially determined contribution (ADC). Lower returns will tend to increase the computed ADC. The assumed long-term rate of return on the OPEB trust is 6.50%.

**COMMENT B:** The ADC shown in this report has been calculated using a level dollar amortization of the unfunded actuarial accrued liability. The unfunded actuarial accrued liabilities were amortized over a closed period of 20 years, beginning in FYE18.

## City of Victoria 10-Year Projection of Net Employer Provided Benefits

Year	Net Employer Benefits
2018	\$1,039,000
2019	1,074,000
2020	1,109,000
2021	1,161,000
2022	1,227,000
2023	1,242,000
2024	1,202,000
2025	1,191,000
2026	1,088,000
2027	1,012,000

The projected benefit payments shown above are based on the active employees and retirees as of the valuation date.

### Actuarially Accrued Liability by Group

	Count	Actuarial Accrued Liability (AAL)	Percent of AAL
Retired as of 12/31/2008	98	\$3,144,552	25.7%
Retired after 12/31/2008	60	\$5,403,163	44.2%
Actives	569	\$3,689,752	30.1%
<b>Total</b>	<b>727</b>	<b>\$12,237,467</b>	<b>100.0%</b>

## **SECTION B**

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### **SENSITIVITY ANALYSIS**

## Postemployment Health Insurance -- Sensitivity Tests

Actuarial valuations deal with the cost of benefits to be paid in the future. The payments considered will range from one month in the future to decades from the valuation date (for a young, newly hired employee who may retire many years from now and live many years after that). In order to establish a present day cost for these future benefit obligations, the actuary bases the valuation on a number of assumptions about future occurrences. The occurrences that must be considered include employee turnover, pay increases, disablement, retirements, deaths and investment income on anticipated plan assets.

When the benefits being valued are health care benefits, a key factor is the future cost of the medical benefits being promised. This is projected using the current cost of the System's health care benefits and assumed future health care cost increases. The final cost of providing retiree health care benefits will depend upon how the charges for health care services actually increase in the future.

In order to demonstrate how the cost of these benefits can vary depending upon future health care cost increases, we have performed additional valuations based upon alternative health care cost increase assumptions. The schedules on page B-2 compare (i) the computed cost of the retiree health care benefits using the valuation (Intermediate) assumptions to (ii) results of alternate valuations. The pessimistic and optimistic scenarios provide the impact on the valuation results of a 1% increase or decrease to the trend assumption.

## City of Victoria Sensitivity Analysis

The selection of future health care cost increases is one of the key assumptions in determining plan liabilities. If the health care cost trend rates upon which the calculation of the Actuarially Determined Contribution was based were changed by 1% in each future year, the annual contribution for the combined groups (illustrated using the entry age normal cost method) would change as follows.

Contributions for	Development of the Actuarially Determined Contribution		
	<u>Fiscal Year Ending 2018</u>		
	<u>Pessimistic</u>	<u>Intermediate</u>	<u>Optimistic</u>
Employer Normal Cost	\$154,234	\$136,377	\$121,497
Amortization of UAAL*	<u>960,903</u>	<u>913,770</u>	<u>872,423</u>
Actuarially Determined Contribution (ADC)	\$1,115,137	\$1,050,147	\$993,920
ADC Per Active Participant	\$1,960	\$1,846	\$1,747

\* Unfunded Actuarial Accrued Liabilities (UAAL) were amortized over 20 years.  
All three scenarios are based on a 6.50% discount rate.

	Determination of Unfunded Actuarial Accrued Liability		
	<u>Pessimistic</u>	<u>Intermediate</u>	<u>Optimistic</u>
A. Present Value of Future Benefits			
i) Retirees and Beneficiaries	\$8,740,855	\$8,547,715	\$8,368,043
ii) Vested Terminated Members	0	0	0
iii) Active Members	<u>5,167,966</u>	<u>4,646,235</u>	<u>\$4,216,683</u>
Total Present Value of Future Benefits	\$13,908,821	\$13,193,950	\$12,584,726
B. Present Value of Future Normal Costs	\$1,135,322	\$956,483	\$817,493
C. Actuarial Accrued Liabilities (A.-B.)	\$12,773,499	\$12,237,467	\$11,767,233
D. Actuarial Value of Assets	\$1,845,298	\$1,845,298	\$1,845,298
E. Unfunded Actuarial Accrued Liability (C.-D.)	\$10,928,201	\$10,392,169	\$9,921,935
F. Funded Ratio (D./C.)	14.45%	15.08%	15.68%

## **SECTION C**

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### **UNDERLYING RETIREE CLAIMS COST DEVELOPMENT**

## Underlying Retiree Claims Cost Development

The initial per capita costs were developed for the pre-65 retirees using active and retiree claims experience for calendar years 2015 through 2017 in conjunction with census data for the active and retired members of the retiree health care program. The claims were projected on an incurred claim basis, adjusted for large claims, adjusted for plan changes, and loaded for administrative expenses. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. The costs were developed based on the actual experience and are used for both current and future retirees for all plans combined.

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

The monthly one-person estimated claims costs including medical and prescription drug benefits at select ages are shown below:

FOR THOSE NOT ELIGIBLE FOR MEDICARE		
AGE	MALE	FEMALE
40	\$419.72	\$682.01
50	680.35	838.13
60	1,156.29	1,138.55
64	1,406.08	1,326.96

Medicare eligible retirees are not eligible to participate in the City’s self-insured health care plan. However, they may be eligible for a flat dollar contribution to a Retiree Reimbursement Account. See Section D in this report for additional details.

## **SECTION D**

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### **SUMMARY OF BENEFITS**

# Summary of Benefits As of December 31, 2017

## Plan Participants

Full-time employees of the City who are on the City's health care plan at the time of separation and eligible to retire with TMRS are eligible to participate in the retiree health care plan. Beginning January 1, 2019, to receive City health benefits upon retirement, employees must have been with the City of Victoria for five (5) continuous years and be employed by the City of Victoria until the date of retirement.

## Retirement Benefits

The City participates in the Texas Municipal Retirement System (TMRS). Employees are eligible for retirement after completing 20 years of service, or at age 60 with 5 years of service. Service for retirement eligibility can include TMRS service earned with a different employer. However, eligibility for the City's contribution toward retiree health care premiums is based on the number of years of consecutive service with the City of Victoria. Service accruals for the purpose of determining retiree health care benefits were frozen as of December 31, 2008.

### Category 1 (retired as of 12/31/08)

Retirees under age 65 on the City's self-insured health plan

Years of Service At Retirement	City/Retiree Premium Cost Allocation
0 – 19	0%/100%
20 - 29	60%/40%
30 +	80%/20%

Retirees age 65 and older with a Retiree Reimbursement Account (RRA)

Years of Service At Retirement	City RRA Contribution Amount*
0 – 19	\$0
20 – 29	\$213.72
30 +	\$284.96

\*City contribution is provided as a flat amount deposited from the City into the Retiree Reimbursement Account.

## Summary of Benefits As of December 31, 2017 (continued)

### Category 2 (employed at 12/31/08; retired on or after January 1, 2009)

Retirees under age 65 on the City's self-insured health plan

Years of Service At 1/1/2009	City/Retiree Premium Cost Allocation*
0 – 9	\$340/Remaining Cost
10 - 19	\$408/Remaining Cost
20 +	\$544/Remaining Cost

Retirees age 65 and older with a Retiree Reimbursement Account (RRA)

Years of Service At 1/1/2009	City RRA Contribution Amount*
0 – 9	\$0
10 - 19	\$204
20 +	\$272

\*City's contribution amounts are not expected to increase in future years.

### Category 3 (hired on or after January 1, 2009)

Retirees under age 65 on the City's self-insured health plan

City/Retiree Premium Cost Allocation
\$340/Remaining Cost

Retirees age 65 and older with a Retiree Reimbursement Account (RRA)

City RRA Contribution Amount*
\$0

\*City's contribution amounts are not expected to increase in future years.

The City's contributions are not expected to increase in the future for retirees under age 65 on the City's self-insured health plan for Category 2 and 3; however, there could be an increase for Category 1.

### **Vested Termination Benefit**

Members terminating before normal retirement conditions are not eligible for retiree health care when their vested pension benefit commences.

## **Summary of Benefits As of December 31, 2017 (continued)**

### **Death in Service Benefits**

If the employee is eligible for the City's Pre-65 Retiree Health Plan at the time of their death, the spouse may continue as a survivor under COBRA coverage for up to 36 months.

### **Disabled Retirement Benefits**

Disabled retirement benefits are provided similar to non-disabled retirement benefits but, at one-half the premium amount. The same provisions apply to disabled retirees as non-disabled retirees. Once the retiree attains age 65, they are no longer on the City's self-insured plan and are only eligible for the Retiree Reimbursement Account contribution.

### **Spouse/Dependent Coverage**

Retirees may carry spouse and/or dependent coverage on the City's self-insured plan, but the City does not provide any additional contributions toward premiums. The cost sharing allocation applies only to the retiree-only premium amount. The City does not provide any post-65 Retiree Reimbursement Account on behalf of a spouse or dependent.

### **Benefits for Surviving Spouses of Retired Employees**

Surviving spouses may remain on the City's self-insured plan until attaining age 65, but are required to pay the full premium.

### **Medicare–Eligible Provisions**

Upon attaining age 65, retirees may no longer participate in the City's self-insured plan. The City provides a flat dollar contribution to a Retiree Reimbursement Account in accordance with the service-based tables above.

### **Vision Coverage**

Vision benefits are not provided to retirees.

### **Dental Coverage**

Dental benefits are provided to retirees through the City's self-insured plan. Retirees pay 100% of the dental premiums.

## Summary of Benefits As of December 31, 2017 (continued)

### Life Insurance Coverage

The City does not provide a life insurance benefit for retirees.

### Retiree Opt-Out

There are no additional benefits provided to retirees who choose to not participate.

### Re-enrollment and Early Exit Option

Retirees cannot re-enroll in the City's plan if there is a lapse in coverage. If a retiree has coverage on the City's self-insured health care plan, they must maintain coverage until age 65 in order to be eligible to receive a Retiree Reimbursement Account contribution (if applicable) from the City.

### FYE 2018 Retiree Premiums

#### Category 1 (Retired as of 12/31/08)

Plan Coverage	Total Premium		
	Plan #1 (PPO)	Plan #2 (HDHP)	Medicare Plan (Retiree Reimbursement Account)
Retiree Only, 20-29 YOS	\$774.90	\$672.91	\$ 213.72
Retiree Only, 30+ YOS	\$757.93	\$669.58	\$ 284.96
Spouse	\$428.38	\$331.23	N/A
Children	\$369.39	\$285.62	N/A
Family	\$493.57	\$381.63	N/A

#### Category 2 and 3 (Retired on or after January 1, 2009)

Plan Coverage	Total Premium		
	Plan #1 (PPO)	Plan #2 (HDHP)	Medicare Plan (Retiree Reimbursement Account)
Retiree Only, 0-9 YOS	\$785.97	\$672.91	\$ 0.00
Retiree Only, 10-19 YOS	\$778.59	\$671.58	\$ 204.00
Retiree Only, 20+ YOS	\$761.62	\$668.92	\$ 272.00
Spouse	\$428.38	\$331.23	N/A
Children	\$369.39	\$285.62	N/A
Family	\$493.57	\$381.63	N/A

## Summary of Benefits As of December 31, 2017 (continued)

### FYE 2019 Retiree Premiums

#### Category 1 (Retired as of 12/31/08)

Plan Coverage	Total Premium		
	Plan #1 (HDHP)	Plan #2 (HDHP)	Medicare Plan (Retiree Reimbursement Account)
Retiree Only, 20-29 YOS	\$811.80	\$732.88	\$ 213.72
Retiree Only, 30+ YOS	\$811.80	\$732.88	\$ 284.96
Spouse	\$471.22	\$364.35	N/A
Children	\$406.33	\$314.18	N/A
Family	\$542.93	\$419.79	N/A

#### Category 2 and 3 (Retired on or after January 1, 2009)

Plan Coverage	Total Premium		
	Plan #1 (HDHP)	Plan #2 (HDHP)	Medicare Plan (Retiree Reimbursement Account)
Retiree Only, 0-9 YOS	\$811.80	\$732.88	\$ 0.00
Retiree Only, 10-19 YOS	\$811.80	\$732.88	\$ 204.00
Retiree Only, 20+ YOS	\$811.80	\$732.88	\$ 272.00
Spouse	\$471.22	\$364.35	N/A
Children	\$406.33	\$314.18	N/A
Family	\$542.93	\$419.79	N/A

## **SECTION E**

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### **SUMMARY OF PARTICIPANT DATA**

**City of Victoria**  
**Total Active Members as of December 31, 2017**  
**By Attained Age and Years of Service**

Attained Age	Years of Service to Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	
Under 20	1							1
20-24	44							44
25-29	69	15						84
30-34	44	36	14					94
35-39	32	22	15	9				78
40-44	16	11	14	21	5			67
45-49	10	7	6	12	11	6	1	53
50-54	16	6	5	8	8	16	6	65
55-59	10	8	5	6	6	14	13	62
60-64	2	7	2	3	2	2	3	21
65 & Over								
<b>Totals</b>	<b>244</b>	<b>112</b>	<b>61</b>	<b>59</b>	<b>32</b>	<b>38</b>	<b>23</b>	<b>569</b>

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

**Age:** 40.3 years  
**Service:** 9.9 years

**City of Victoria**  
**Total Retired Members as of December 31, 2017**  
**By Attained Age**

<b>Attained Age</b>	<b>Number of Retirees</b>		
	<b>Male</b>	<b>Female</b>	<b>Total</b>
Under 55	8	2	10
55-59	16	8	24
60-64	22	3	25
65 & Over	76	23	99
<b>Totals</b>	<b>122</b>	<b>36</b>	<b>158</b>

The number counts above only include those retirees who have elected to receive retiree health care coverage through the City of Victoria Retiree Health Care Plan or are receiving a contribution from the City to a Retiree Reimbursement Account.

## **SECTION F**

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### **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 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 by level dollar contributions. The UAAL was determined using the funding value of assets and actuarial accrued liability calculated as of the valuation date. The UAAL amortization payment (one component of the contribution requirement), is the dollar amount required to fully amortize the UAAL over a 20-year period (starting in FYE18).

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

## Actuarial Assumptions

**The rate of inflation** is assumed to be 2.50% per year.

**The discount rate** used in the valuation was 6.50% a year, compounded annually, net after investment and expenses.

**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.

TMRS Years of Service	% Increase in Salary
1	10.50%
2	7.50
3	7.00
4	6.50
5	6.00
6	5.50
7	5.25
8-10	4.75
11	4.50
12-13	4.25
14-16	4.00
17-24	3.75
25+	3.50

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

### **The rates of post retirement mortality for healthy retirees:**

The gender-distinct RP2000 Combined Healthy Mortality Tables with Blue Collar Adjustment are used with male rates multiplied by 109% and female rates multiplied by 103%. The rates are projected on a fully generational basis by scale BB to account for future mortality improvements.

### **The rates of post retirement mortality for disabled retirees:**

The same as for healthy retirees, except with a 3 year set-forward. In addition, there is a 3% minimum mortality probability to reflect impaired mortality for this group.

### **The rates of mortality for active members:**

The gender-distinct RP2000 Combined Healthy Mortality Tables with Blue Collar Adjustment with male rates multiplied by 54.5% and female rates multiplied by 51.5%. The rates are projected on a fully generational basis by scale BB to account for future mortality improvements.

## Actuarial Assumptions

The rates of retirement are shown in the following table.

The base table rates vary by gender, entry age group, and age. These rates are adjusted then multiplied by 2 factors based on 1) employee contribution rate and employer match and 2) if the city has a recurring COLA. The base retirement rates shown in the table below do not include the employer-specific plan design adjustments.

Age	Males Entry Age Groups			Females Entry Age Groups		
	Ages 32 & Under	Ages 33 - 47	Ages 48 & Over	Ages 32 & Under	Ages 33 - 47	Ages 48 & Over
40-44	0.06	-	-	0.06	-	-
45-49	0.06	-	-	0.06	-	-
50-52	0.08	-	-	0.08	-	-
53	0.08	0.10	-	0.08	0.10	-
54	0.08	0.10	-	0.11	0.10	-
55-59	0.14	0.10	-	0.11	0.10	-
60	0.20	0.15	0.10	0.14	0.15	0.10
61	0.25	0.30	0.20	0.28	0.26	0.20
62	0.32	0.25	0.12	0.28	0.17	0.12
63	0.32	0.23	0.12	0.28	0.17	0.12
64	0.32	0.35	0.20	0.28	0.22	0.20
65	0.32	0.32	0.20	0.28	0.27	0.20
66-69	0.22	0.22	0.17	0.22	0.22	0.17
70-74	0.20	0.22	0.25	0.22	0.22	0.25
75 and over	1.00	1.00	1.00	1.00	1.00	1.00

Note: For cities without a 20-year/any age retirement provision, the rates for entry ages 32 and under are loaded by 20% for ages below 60.

### Plan Design Factors Applied to Base Retirement Rates

Employer Match	Employee Contribution Rate		
	5%	6%	7%
1 - 1	0.75	0.80	0.84
1.5 - 1	0.81	0.86	0.92
2 - 1	0.86	0.93	1.00

Recurring COLA: 1.00

No Recurring COLA: 0.90

The plan design factors are applied to the base retirement rates for ages less than 62.

## Actuarial Assumptions

**Rates of separation from active membership** were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability).

1. For the first 10 years of service, the base table rates vary by gender, entry age, and length of service. For each city, the base table is then multiplied by a factor from 75% to 125% based on the experience of the individual city in comparison to the group as a whole. A further multiplier is applied depending on an employee's classification: 1) Fire - 63%, 2) Police - 88%, or 3) Other - 108%. Sample base rates are shown below:

Male Age	SERVICE									
	0	1	2	3	4	5	6	7	8	9
20	0.2920	0.2623	0.2186	0.1932	0.1850	0.1673	0.1529	0.1243	0.1022	0.0816
25	0.2563	0.2269	0.1812	0.1554	0.1429	0.1267	0.1148	0.1006	0.0926	0.0757
30	0.2451	0.2052	0.1610	0.1322	0.1079	0.0998	0.0896	0.0774	0.0744	0.0621
35	0.2505	0.2070	0.1577	0.1265	0.1050	0.0994	0.0848	0.0719	0.0621	0.0567
40	0.2467	0.2060	0.1561	0.1213	0.1046	0.0943	0.0805	0.0710	0.0601	0.0577
45	0.2268	0.1934	0.1556	0.1220	0.1053	0.0926	0.0813	0.0711	0.0605	0.0575
50	0.2078	0.1731	0.1412	0.1149	0.1016	0.0887	0.0807	0.0716	0.0604	0.0578
55	0.2003	0.1668	0.1265	0.1074	0.0861	0.0864	0.0771	0.0682	0.0609	0.0560
60	0.1999	0.1542	0.1231	0.1060	0.0790	0.0868	0.0753	0.0683	0.0571	0.0549
65	0.2000	0.1463	0.1238	0.1063	0.0803	0.0867	0.0757	0.0700	0.0547	0.0551
70	0.2000	0.1477	0.1237	0.1063	0.0802	0.0867	0.0756	0.0697	0.0551	0.0551

Female Age	SERVICE									
	0	1	2	3	4	5	6	7	8	9
20	0.3030	0.2790	0.2221	0.2098	0.1997	0.2021	0.1536	0.1539	0.1564	0.1574
25	0.2782	0.2409	0.2067	0.1962	0.1710	0.1663	0.1369	0.1352	0.1186	0.1125
30	0.2574	0.2188	0.1949	0.1762	0.1347	0.1348	0.1276	0.1126	0.0973	0.0804
35	0.2424	0.2118	0.1805	0.1438	0.1273	0.1238	0.1112	0.1085	0.1000	0.0769
40	0.2244	0.1993	0.1614	0.1342	0.1295	0.1097	0.1023	0.0924	0.0834	0.0733
45	0.2191	0.1853	0.1427	0.1337	0.1054	0.1017	0.0894	0.0784	0.0705	0.0725
50	0.2201	0.1793	0.1347	0.1229	0.0886	0.0881	0.0823	0.0723	0.0675	0.0617
55	0.2200	0.1738	0.1350	0.1199	0.0834	0.0806	0.0713	0.0705	0.0685	0.0551
60	0.2200	0.1523	0.1350	0.1172	0.0798	0.0843	0.0646	0.0639	0.0429	0.0379
65	0.2200	0.1431	0.1350	0.1150	0.0800	0.0857	0.0667	0.0593	0.0276	0.0280
70	0.2200	0.1447	0.1350	0.1154	0.0800	0.0854	0.0664	0.0601	0.0303	0.0298

The rates shown above do not include the employer and employee specific loads.

# Actuarial Assumptions

## Rates of Separation (continued)

2. After 10 years of service, separation rates vary by gender and by the number of years remaining until first retirement eligibility. For each city, the base table is then multiplied by a factor from 75% to 125% based on the experience of the individual city in comparison to the group as a whole (same factor as above). A further multiplier is applied depending on an employee's classification: 1) Fire - 52%, 2) Police - 79%, or 3) Other - 115%. Sample base rates are shown below:

Years from Retirement	Male	Female
1	1.72%	2.20%
2	2.29	2.97
3	2.71	3.54
4	3.06	4.01
5	3.35	4.41
6	3.61	4.77
7	3.85	5.10
8	4.07	5.40
9	4.28	5.68
10	4.47	5.94
11	4.65	6.19
12	4.82	6.43
13	4.98	6.66
14	5.14	6.87
15	5.29	7.08

Termination rates end at first eligibility for retirement.

The rates shown above do not include the employer and employee specific loads.

## Actuarial Assumptions

**Rates of disability** among active members. Sample rates are shown below:

<b>Ordinary Disability</b>		
<b>Sample Ages</b>	<b>% Becoming Disabled within Next Year</b>	
	<b>Male</b>	<b>Female</b>
20	0.00%	0.00%
25	0.00	0.00
30	0.01	0.01
35	0.03	0.03
40	0.05	0.05
45	0.08	0.08
50	0.12	0.12
55	0.16	0.16
60	0.22	0.22
65	0.28	0.28

**Health cost increases** for active members are displayed in the following table:

<b>Year</b>	<b>Health Care Trend Inflation Rates</b>
	<b>Medical and Drug</b>
2018	7.50%
2019	7.20
2020	6.90
2021	6.70
2022	6.50
2023	6.30
2024	6.10
2025	5.90
2026	5.70
2027	5.50
2028	5.30
2029	5.10
2030	4.90
2031	4.70
2032	4.50
2033 & Later	4.25

## Miscellaneous and Technical Assumptions

**Administrative Expenses** The age-related claims shown on page C-1 include administrative expenses.

**Claims Utilization** To model the impact of aging on the underlying health care costs, the valuation relied on the Society of Actuaries' 2013 Study "Health Care Costs – From Birth to Death". Chart 1 (2010 Aggregate Commercial Costs) was used to model the impact of aging for ages less than 65.

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

**Decrement Operation** Disability does not operate during retirement eligibility.

**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** 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.

**Demographic Assumptions** This report has used the same demographic assumptions used to value the defined benefit retirement plan in which the members participate. We are reliant upon the retirement plan actuary to develop the demographic assumptions. Based on our experience, the assumptions appear reasonable.

## Miscellaneous and Technical Assumptions

### Election Percentage

All future retirees are in either Category 2 or 3. It was assumed that retirees would choose to receive retiree health care benefits through the City of Victoria according to the schedule below.

Service with Victoria as of 1/1/2009	Pre- 65 Election Rate in City's Plan
< 10	15%
10 – 19	35%
20+	70%

Since retirees must be on the City's plan upon attainment of age 65 in order to be eligible for City contributions to a Retiree Reimbursement Account (RRA), the rates above are multiplied by 120% at ages 63 and 64 for those eligible for RRA contributions.

Of those assumed to elect coverage, 35% of males and 20% of females were assumed to elect two-person coverage, if eligible. For those that elect two-person coverage, it was assumed that coverage would not continue to the spouse upon death of the retiree.

In addition, 100% of employees retiring after attaining age 65, who are eligible to receive a RRA contribution from the City, were assumed to participate.

### Excise Tax and Health Care Reform

The liabilities do not reflect any impact from the excise tax on high-cost employer health plans effective January 1, 2022. 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 legislated thresholds. Because the City's explicit subsidies for Category 2 and 3 participants are fixed dollar amounts, we believe any future costs attributable to the "Cadillac" tax will be passed onto retirees.

# APPENDIX

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## 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)

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

**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 Post-Employment Employee Benefits (OPEB).** OPEB are post-employment benefits other than pensions. OPEB generally takes the form of health insurance and dental, vision, prescription drugs or other health care benefits.

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

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

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