

City of St. Clair Shores
Retiree Health Care Plans
Actuarial Valuation Report
as of June 30, 2020



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June 18, 2021

General Employee Retiree Health Care Board
Police and Fire Retiree Health Care Trust Board
Attn: Board Members
City of St. Clair Shores
27600 Jefferson Circle Drive
St. Clair Shores, Michigan 48081-2093

**Re: City of St. Clair Shores Actuarial Valuation as of June 30, 2020
Actuarial Disclosures**

Dear Board Members:

The results of the June 30, 2020 Actuarial Valuation of the City of St. Clair Shores General Retiree Health Care Plan and the City of St. Clair Shores Police and Fire Retiree Health Care Plan are presented in this report.

This report was prepared at the request of the City 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 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 System's funding progress and to determine the Actuarially Determined Contributions for the fiscal years ending June 30, 2022 and June 30, 2023. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different. This report does not satisfy Governmental Accounting Standards Board (GASB) Statements No. 74 or No. 75.

The contributions in this report are determined using the actuarial assumptions and methods disclosed in Section E of this report. Additional assessment of risks was outside the scope of this assignment.

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

The findings in this report are based on data and other information through June 30, 2020. 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 St. Clair Shores, 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 St. Clair Shores.

This report was prepared using assumptions adopted by the City of St. Clair Shores. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. Additional information about the actuarial assumptions is included in the section of this report entitled Actuarial Cost Methods and Assumptions.

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

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Mark Buis and Laura Frankowiak are Members of the American Academy of Actuaries (MAAA). These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

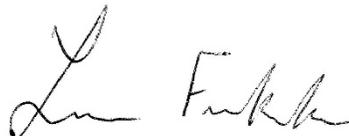
Gabriel, Roeder, Smith & Company will be pleased to review this valuation and report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY



Mark Buis, FSA, EA, FCA, MAAA



Laura Frankowiak, ASA, FCA, MAAA

MB/LF:sc

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EXECUTIVE SUMMARY

Executive Summary

Actuarially Determined 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. It is our understanding that the City of St. Clair Shores Retiree Health Care Plans are required to comply with both GASB Statement Nos. 74 and 75, and as such require separate GASB Statement Nos. 74 and 75 reports at the completion of each fiscal year.

We have calculated the Actuarially Determined Contribution for the fiscal years ending June 30, 2022 and June 30, 2023 under the interest rate assumptions of 5.00% and 6.00% for General group and Police and Fire group, respectively. Below is a summary of the results.

General	Actuarially Determined Contribution	Estimated Claims and Premiums Paid for Retirees
Fiscal Year Ending June 30, 2022	\$3,401,913	\$2,306,111
Fiscal Year Ending June 30, 2023	3,351,011	2,383,786

Police and Fire	Actuarially Determined Contribution	Estimated Claims and Premiums Paid for Retirees
Fiscal Year Ending June 30, 2022	\$5,262,402	\$3,031,023
Fiscal Year Ending June 30, 2023	5,309,105	3,265,191

For additional details please see the Section titled "Valuation Results."

Executive Summary

Liabilities and Assets

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").

General	
1. Present Value of Future Benefit Payments	\$50,320,589
2. Actuarial Accrued Liability	46,386,274
3. Plan Assets	8,904,250
4. Unfunded Actuarial Accrued Liability (2) – (3)	37,482,024
5. Funded Ratio (3)/(2)	19.2%

Police & Fire	
1. Present Value of Future Benefit Payments	\$80,491,606
2. Actuarial Accrued Liability	65,521,800
3. Plan Assets	17,632,402
4. Unfunded Actuarial Accrued Liability (2) – (3)	47,889,398
5. Funded Ratio (3)/(2)	26.9%

SECTION A

VALUATION RESULTS

City of St. Clair Shores – Results by Plan as of June 30, 2020

	<u>General</u>	<u>Police/Fire</u>
A. Present Value of Future Benefits		
i) Retirees and Beneficiaries	\$30,173,555	\$42,151,202
ii) Vested Terminated Members	4,064,300	2,712,174
iii) Active Members	<u>16,082,734</u>	<u>35,628,230</u>
Total Present Value of Future Benefits	\$50,320,589	\$80,491,606
B. Present Value of Future Normal Costs	\$3,934,315	\$14,969,806
C. Actuarial Accrued Liability (A.-B.)	46,386,274	65,521,800
D. Actuarial Value of Assets	8,904,250	17,632,402
E. Unfunded Actuarial Accrued Liability (C.-D.)	\$37,482,024	\$47,889,398
F. Funded Ratio (D./C.)	19.2%	26.9%
G. Fiscal Year Ending June 30, 2022		
i) Employer Normal Cost	\$ 618,753	\$ 1,334,373
ii) Amortization of Unfunded Actuarial Accrued Liability*	<u>2,783,160</u>	<u>3,928,029</u>
iii) Actuarially Determined Contribution	\$ 3,401,913	\$ 5,262,402
iv) Annual Normal Cost \$ per Active Member ^		11,028
H. Fiscal Year Ending June 30, 2023		
i) Employer Normal Cost	\$ 567,851	\$ 1,381,076
ii) Amortization of Unfunded Actuarial Accrued Liability	<u>2,783,160</u>	<u>3,928,029</u>
iii) Actuarially Determined Contribution	3,351,011	5,309,105
iv) Annual Normal Cost \$ per Active Member ^		11,414

* The unfunded actuarial accrued liabilities were amortized over a closed period of 24 years for the fiscal year ending June 30, 2022 and decreasing by 1 each year thereafter. The unfunded actuarial accrued liabilities were amortized as a level dollar amount.

^ The police and fire plan is open to new hires. Michigan Public Act 202 requires the local unit of government to pay normal costs for employees hired after June 30, 2018. The results shown above have been enhanced to include an annual normal cost dollar per person, which provides the City the information necessary to comply with 38.2804 Sec (4) (1) (a) (i) of PA 202.

The long-term rates of investment return used in this valuation were 5.00% for the General group and 6.00% for the Police and Fire group.



Comments

COMMENT A: For the Police and Fire Retiree Health Care Plan, the Actuarially Determined Contribution has decreased since the last valuation. Factors contributing to this decrease include, but are not limited to:

- More favorable health care claims experience than expected.

Partially offsetting these factors were increases due to:

- Resetting the initial healthcare cost trend rates (separately for pre-65 and post-65); and
- Contributions to the Plan at a lower level than the recommended actuarially determined contribution.

The combination of changing the pre-65 and post-65 healthcare cost trend rates resulted in an increase in accrued liability of approximately \$2.3 million.

COMMENT B: For the General Retiree Health Care Plan, the Actuarially Determined Contribution has decreased since the last valuation. Factors contributing to this decrease include, but are not limited to:

- More favorable health care claims experience than expected.

Partially offsetting these factors were increases due to:

- Resetting the initial healthcare cost trend rates (separately for pre-65 and post-65); and
- Contributions to the Plan at a lower level than the recommended actuarially determined contribution.

The combination of changing the pre-65 and post-65 healthcare cost trend rates resulted in an increase in accrued liability of approximately \$1 million.

COMMENT C: 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 result in a lower Actuarially Determined Contribution. Lower returns will tend to increase the Actuarially Determined Contribution. We have calculated the liability and the resulting Actuarially Determined Contribution using an assumed annual rate of investment return of 5.00% for the General Plan and 6.00% for the Police and Fire Plan. The investment return assumption should not exceed reasonable market expectations.

COMMENT D: The Plan Sponsor is required by GASB to perform actuarial valuations at least biennially, unless there are significant changes in the OPEB.

COMMENT E: The contribution rates shown include amortization of the unfunded actuarial accrued liability over a closed period of 24 years, and decreasing by one each year thereafter.

Comments

COMMENT F: On December 20, 2019, the “Further Consolidated Appropriations Act of 2020,” H.R. 1865, was signed into law. The Act repeals the “Cadillac tax” which was a tax provision from the Affordable Care Act (ACA). As a result, any liability/provision analysis included as part of the prior funding valuation is no longer required. In addition, no further adjustments associated with the “Cadillac tax” are required. For purposes of the City of St. Clair Shores Retiree Health Care Plan funding valuation, the repeal of the “Cadillac tax” does not have an impact on plan liabilities because no load was applied as part of the June 30, 2018 funding valuation.

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 needs to comply with both GASB Statement Nos. 74 and 75 for each future fiscal year ending June 30. The information necessary for GASB Statement Nos. 74 and 75 will need to be developed at a later date. The basis for the GASB Statement Nos. 74 and 75 information is expected to be this valuation (as of June 30, 2020), where roll-forward techniques will be applied.

COMMENT H: The Michigan State Treasurer has established uniform actuarial assumptions as required by Public Act 202 (PA 202) of 2017 for use with the annual Form 5572 (Retirement System Annual Report). The use of the uniform assumptions for reporting purposes is required for the fiscal year ending June 30, 2021. GRS plans to provide the necessary PA 202 uniform assumption information as part of the June 30, 2021 GASB Statement Nos. 74 and 75 reports.

COMMENT I: Unless otherwise indicated, a funded status measurement presented in this report is based upon the actuarial accrued liability and the market 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;
- A funded status measurement of 100% is not synonymous with no required future contributions. If the funded status were 100%, the Plan would still require future normal cost contributions (i.e., contributions to cover the cost of the active membership accruing an additional year of service credit); and
- The measurement is inappropriate for assessing the need for or the amount of future employer contributions.

Comment J: This report does not reflect the recent and still-developing impact of COVID-19, which is likely to influence demographic and economic experience, at least in the short term. We will continue to monitor these developments and their impact on the Retiree Health Care Plan. Actual experience will be reflected in each subsequent funding valuation, as experience emerges.

SECTION B

RETIREE PREMIUM RATE DEVELOPMENT

City of St. Clair Shores

Retiree Premium Rate Development

The medical coverage for both pre-65 and post-65 segments and the prescription drugs for pre-65 segment are self-insured. For the self-insured segments, actual incurred retiree claims and exposure data for the period of July 2018 to June 2020 was provided by the City of St. Clair Shores. Initial medical premium rates were developed for the two classes of retirees (pre-65 and post-65). For the pre-65 retirees, the prescription drug rates were calculated by using the self-insured data and for the post-65 retirees, the fully-insured prescription drug 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.

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.

The combined monthly one-person medical and drug premiums at select ages are shown below.

Pre-65 Participants

Age	Future Retirees		Current Retirees	
	Male	Female	Male	Female
45	\$ 447.19	\$ 617.18	\$ 468.36	\$ 646.39
50	582.30	717.33	609.85	751.28
55	766.24	836.62	802.50	876.21
60	989.63	974.45	1,036.47	1,020.57
64	1,203.42	1,135.70	1,260.38	1,189.45

Post-65 Participants

Age	Future Retirees		Current Retirees	
	Male	Female	Male	Female
65	\$ 313.24	\$ 295.45	\$ 365.54	\$ 344.78
70	341.23	330.19	398.21	385.33
75	366.49	357.61	427.69	417.33



City of St. Clair Shores

Retiree Premium Rate Development

We did not “age grade” the vision premium rates for this valuation, since vision claims do not vary significantly by age. The average monthly vision premium used in this valuation for pre-65 and post-65 General retirees is \$4.00 and \$3.24, respectively.

Monthly Vision Premiums				
Age	Pre-65		Post-65	
1st Person	\$ 4.00	\$	3.24	
2nd Person	4.00		3.24	

Health Care Cost Trend Assumption

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

Retiree health care valuations use a health care cost trend assumption (trend vector) that changes over the years. The trend vector used in this valuation begins with a near-term trend assumption and declines over a time to an ultimate trend rate. The near-term rates reflect the increases in the current cost of health care goods and services. The process of trending down to a lower ultimate trend relies on the theory that premiums will moderate over the long- term, otherwise the healthcare sector would eventually consume the entire GDP. It is on this basis that we project premium rate increases will continue to exceed wage inflation for the next twelve years, but by less each year until leveling off at an ultimate rate, assumed to be 3.50% in this valuation.

While experience is often the best starting point for future costs, GRS does not rely on a group’s experience in setting the near-term trend assumptions since trends vary significantly from year to year and are not credible for most groups. Therefore, professional judgment, trends from GRS’ book of business and industry benchmarks (e.g., trend reports from various Pharmacy Benefit Management (PBM) organizations and national healthcare benefit consulting firms) are used in conjunction with a group’s historical experience to establish the trend assumptions.

Year After Valuation	Medical and Prescription Drugs		Medicare Part A	Medicare Part B	Vision
	Pre 65	Post 65			
1	7.50 %	6.25 %	5.50 %	2.70 %	3.5 %
2	7.25	6.00	5.50	5.50	3.5
3	6.75	5.75	5.50	5.50	3.5
4	6.50	5.50	5.50	5.50	3.5
5	6.00	5.25	5.25	5.25	3.5
6	5.75	5.00	5.00	5.00	3.5
7	5.25	4.75	4.75	4.75	3.5
8	5.00	4.50	4.50	4.50	3.5
9	4.50	4.25	4.25	4.25	3.5
10	4.25	4.00	4.00	4.00	3.5
11	3.75	3.75	3.75	3.75	3.5
12 & Later	3.50	3.50	3.50	3.50	3.5



Actuarial Disclosures

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

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

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



James E. Pranschke, FSA, FCA, MAAA

SECTION C

SUMMARY OF BENEFITS

City of St. Clair Shores General Retiree Health Care Plan Summary of Benefits as of June 30, 2020

AFSCME

Leaving Employment as a Result of	Eligibility for Benefit	Benefit Provided by Employer		Retiree Share of Cost	Other Info
		Retiree	Spouse		
Normal Retirement					
Hired before 2/19/2008	50/25 60/10	Medical, Vision and prescription drug	Medical, Vision and prescription drug	Medical: None RX: Co-pays Spouse coverage continues as long as they receive a pension	Retiree is reimbursed for Medicare Part B Life Insurance, Dental: None Opt-Out: No
Hired after 2/19/2008 (DC Members)	50/25 60/15	same as above	same as above	Medical: 15 years of service: 40% of costs for member, spouse, dependents Each add'l. yr., 4% will be reduced up to add'l. 10 yrs. RX: Co-pays Spouse coverage continues as long as they receive a pension	same as above
Hired after 6/30/2013*	None				
Early Retirement	None				
Deferred Vested Termination					
Hired before 10/18/2004	10 years of service	same as above	same as above	same as hired before above	same as above
Hired after 10/18/2004 & before 2/19/2008	20 years of service	same as above	same as above	same as hired before above	same as above
Hired after 2/19/2008 (DC Members)	15 years of service	same as above	same as above	same as hired after above	same as above
Non-Duty Disability					
Hired before 10/18/2004	10 years of service	same as above	same as above	same as hired before above	same as above
Hired after 10/18/2004 & before 2/19/2008	15 years of service	same as above	same as above	same as hired before above	same as above
Hired after 2/19/2008 (DC Members)	15 years of service	same as above	same as above	same as hired after above	same as above
Duty Disability					
Hired before 2/19/2008	No age or service requirement	same as above	same as above	same as hired before above	same as above
Hired after 2/19/2008 (DC Members)	No age or service requirement	same as above	same as above	same as hired after above	same as above
Non-Duty Death-in-Service					
Hired before 10/18/2004	10 years of service	same as above	same as above	same as hired before above	same as above
Hired after 10/18/2004 & before 2/19/2008	20 years of service	same as above	same as above	same as hired before above	same as above
Hired after 2/19/2008 (DC Members)	15 years of service	same as above	same as above	same as hired after above	same as above
Duty Death-in-Service					
Hired before 2/19/2008	No age or service requirement	same as above	same as above	same as hired before above	same as above
Hired after 2/19/2008 (DC Members)	No age or service requirement	same as above	same as above	same as hired after above	same as above

* Not eligible for retiree health benefit. Participate in RHSP only.



City of St. Clair Shores General and Police and Fire Retiree Health Care Plan Summary of Benefits as of June 30, 2020

AR4/City Manager

Leaving Employment as a Result of	Eligibility for Benefit	Benefit Provided by Employer		Retiree Share of Cost	Other Info
		Retiree	Spouse		
Normal Retirement					
Hired before 7/1/2005	50/25 60/10	Medical, Vision and prescription drug	Medical, Vision and prescription drug	Medical: None RX: Co-pays Spouse coverage continues as long as they receive a pension	Retiree is reimbursed for Medicare Part B Life Insurance, Dental: None Opt-Out: No
Hired after 7/1/2005 (DC Members and Police/Fire)	50/25 60/15	same as above	same as above	Medical: 15 years of service: 40% of costs for member, spouse, dependents Each add'l. yr., 4% will be reduced up to add'l. 10 yrs. RX: Co-pays Spouse coverage continues as long as they receive a pension	same as above
Hired after 9/30/2009 (DC Members)*	None				
Early Retirement	None				
Deferred Vested Termination					
Hired before 7/1/2005	60/10	same as above	same as above	same as hired before above	same as above
Hired after 7/1/2005 (DC Members)	60/15	same as above	same as above	same as hired after above	same as above
Non-Duty Disability					
Hired before 7/1/2005	60/10	same as above	same as above	same as hired before above	same as above
Hired after 7/1/2005 (DC Members)	60/15	same as above	same as above	same as hired after above	same as above
Duty Disability	No age or service requirement	same as above	same as above	same as hired before above	same as above
Non-Duty Death-in-Service					
Hired before 7/1/2005	60/10	same as above	same as above	same as hired before above	same as above
Hired after 7/1/2005 (DC Members)	60/15	same as above	same as above	same as hired after above	same as above
Duty Death-in-Service	No age or service requirement	same as above	same as above	same as hired before above	same as above

* General members hired after 9/30/2009 are not eligible for retiree health benefit. These members participate in RHSP only. Police and Fire members hired after 9/30/2009 continue to participate in the retiree health plan.



City of St. Clair Shores General Retiree Health Care Plan Summary of Benefits as of June 30, 2020

Court Clerical

Leaving Employment as a Result of	Eligibility for Benefit	Benefit Provided by Employer		Retiree Share of Cost	Other Info
		Retiree	Spouse		
Normal Retirement					
Hired before 1/7/2008	50/25 60/10	Medical, Vision and prescription drug	Medical, Vision and prescription drug	Medical: None RX: Co-pays Spouse coverage continues as long as they receive a pension	Retiree is reimbursed for Medicare Part B Life Insurance, Dental: None Opt-Out: No
Hired after 1/7/2008 (DC Members)	same as above	same as above	same as above	Medical: 15 years of service: 40% of costs for member, spouse, dependents Each addl. yr., 4% will be reduced up to add'l. 10 yrs. RX: Co-pays Spouse coverage continues as long as they receive a pension	same as above
Hired After 6/30/2013*	None				
Early Retirement	None				
Deferred Vested Termination					
Hired before 1/7/2008	10 years of service	same as above	same as above	same as hired before above	same as above
Hired after 1/7/2008 (DC Members)	50/25 60/10	same as above	same as above	same as hired after above	same as above
Non-Duty Disability					
Hired before 1/7/2008	10 years of service 50/25	same as above	same as above	same as hired before above	same as above
Hired after 1/7/2008 (DC Members)	60/10	same as above	same as above	same as hired after above	same as above
Duty Disability					
Hired before 1/7/2008	10 years of service 50/25	same as above	same as above	same as hired before above	same as above
Hired after 1/7/2008 (DC Members)	60/10	same as above	same as above	same as hired after above	same as above
Non-Duty Death-in-Service					
Hired before 1/7/2008	10 years of service 50/25	same as above	same as above	same as hired before above	same as above
Hired after 1/7/2008 (DC Members)	60/10	same as above	same as above	same as hired after above	same as above
Duty Death-in-Service	No age or service requirement	same as above	same as above	same as hired before above	same as above

* Not eligible for retiree health benefit. Participate in RHSP only.



City of St. Clair Shores General Retiree Health Care Plan Summary of Benefits as of June 30, 2020

PEA & UAW

Leaving Employment as a Result of	Eligibility for Benefit	Benefit Provided by Employer		Retiree Share of Cost	Other Info
		Retiree	Spouse		
Normal Retirement					
Hired before 7/1/2002	50/25 60/10	Medical, Vision and prescription drug	Medical, Vision and prescription drug	Medical: None RX: Co-pays Spouse coverage continues as long as they receive a pension	Retiree is reimbursed for Medicare Part B Life Insurance, Dental: None Opt-Out: No
Hired after 7/1/2002 & before 11/15/2006	50/25 60/15	same as above	same as above	same as above	same as above
Hired after 11/15/2006 (DC)	50/25 60/15	same as above	same as above	Medical: 15 years of service: 40% of costs for member, spouse, dependent Each add'l. yr., 4% will be reduced up to add'l. 10 yrs. RX: Co-pays Spouse coverage continues as long as they receive a pension	same as above
Hired after 9/30/2009*	None				
Early Retirement	None				
Deferred Vested Termination					
Hired before 7/1/2002	60/10	same as above	same as above	same as hired before above	same as above
Hired after 7/1/2002 & before 11/15/2006	60/15	same as above	same as above	same as hired before above	same as above
Hired after 11/15/2006	60/15	same as above	same as above	same as hired after above	same as above
Non-Duty Disability					
Hired before 7/1/2002	60/10	same as above	same as above	same as hired before above	same as above
Hired after 7/1/2002 & before 11/15/2006	60/15	same as above	same as above	same as hired before above	same as above
Hired after 11/15/2006	60/15	same as above	same as above	same as hired after above	same as above
Duty Disability	No age or service requirement	same as above	same as above	same as hired before above	same as above
Non-Duty Death-in-Service					
Hired before 7/1/2002	60/10	same as above	same as above	same as hired before above	same as above
Hired after 7/1/2002 & before 11/15/2006	60/15	same as above	same as above	same as hired before above	same as above
Hired after 11/15/2006	60/15	same as above	same as above	same as hired after above	same as above
Duty Death-in-Service	No age or service requirement	same as above	same as above	same as hired before above	same as above

Effective 10/19/2009: New hires will not be eligible for retiree health benefits. Instead, they will participate in a Retiree Health Savings account.

* Not eligible for retiree health benefit. Participate in RHSP only.



City of St. Clair Shores General Retiree Health Care Plan Summary of Benefits as of June 30, 2020

Dispatchers

Leaving Employment as a Result of	Eligibility for Benefit	Benefit Provided by Employer		Retiree Share of Cost	Other Info
		Retiree	Spouse		
Normal Retirement	50/25 60/10	Medical, Vision and prescription drug	Medical, Vision and prescription drug	Medical: None RX: Co-pays Spouse coverage continues as long as they receive a pension	Retiree is reimbursed for Medicare Part B Life Insurance, Dental: None Opt-Out: No
Early Retirement	None				
Deferred Vested Termination	10 years of service	same as above	same as above	same as above	same as above
Non-Duty Disability	10 years of service	same as above	same as above	same as above	same as above
Duty Disability	10 years of service	same as above	same as above	same as above	same as above
Non-Duty Death-in-Service	10 years of service	same as above	same as above	same as above	same as above
Duty Death-in-Service	No age or service requirement	same as above	same as above	same as above	same as above

Effective 2/1/2009: New hires will not be eligible for retiree health benefits. Instead, they will participate in a Retiree Health Savings account.

Effective 9/01/2011: No active Suffix for Dispatch employees; all transferred to SERESA insurance. Only will have original SCS Dispatchers as retirees.



City of St. Clair Shores General Retiree Health Care Plan Summary of Benefits as of June 30, 2020

Court Non-Union

Leaving Employment as a Result of	Eligibility for Benefit	Benefit Provided by Employer		Retiree Share of Cost	Other Info
		Retiree	Spouse		
Normal Retirement					
Hired before 7/1/2005	50/25 60/10	Medical, Vision and prescription drug	Medical, Vision and prescription drug	Medical: None RX: Co-pays Spouse coverage continues as long as they receive a pension	Retiree is reimbursed for Medicare Part B Life Insurance, Dental: None Opt-Out: No
Hired after 7/1/2005 (DC Members)	50/25 60/15	same as above	same as above	Medical: 15 years of service: 40% of costs for member, spouse, dependents Each add'l. yr., 4% will be reduced up to add'l. 10 yrs. RX: Co-pays Spouse coverage continues as long as they receive a pension	same as above
Hired after 6/30/2013*					
Early Retirement	None				
Deferred Vested Termination					
Hired before 7/1/2005	10 years of service	same as above	same as above	same as hired before above	same as above
Hired after 7/1/2005 (DC Members)	15 years of service	same as above	same as above	same as hired after above	same as above
Non-Duty Disability					
Hired before 7/1/2005	10 years of service	same as above	same as above	same as hired before above	same as above
Hired after 7/1/2005 (DC Members)	15 years of service	same as above	same as above	same as hired after above	same as above
Duty Disability	No age or service requirement	same as above	same as above	same as hired before above	same as above
Non-Duty Death-in-Service					
Hired before 7/1/2005	10 years of service	same as above	same as above	same as hired before above	same as above
Hired after 7/1/2005 (DC Members)	15 years of service	same as above	same as above	same as hired after above	same as above
Duty Death-in-Service	No age or service requirement	same as above	same as above	same as hired before above	same as above

* Not eligible for retiree health benefit. Participate in RHSP only.



City of St. Clair Shores Police and Fire Retiree Health Care Plan Summary of Benefits as of June 30, 2020

Police Command

Leaving Employment as a Result of	Eligibility for Benefit	Benefit Provided by Employer		Retiree Share of Cost	Other Info
		Retiree	Spouse		
Normal Retirement	25 years of service 60/10	Medical and prescription drug	Medical and prescription drug	Medical: None RX: Co-pays Spouse coverage continues as long as they receive a pension	Retiree is reimbursed for Medicare Part B Life Insurance, Dental, Vision: None Opt-Out: No
Early Retirement	None				
Deferred Vested Termination	10 years of service	same as above	same as above	same as above	same as above
Non-Duty Disability	10 years of service	same as above	same as above	same as above	same as above
Duty Disability	No age or service requirement	same as above	same as above	same as above	same as above
Non-Duty Death-in-Service	10 years of service	same as above	same as above	same as above	same as above
Duty Death-in-Service	No age or service requirement	same as above	same as above	same as above	same as above

New hire employees after April 22, 2011 will pay 2% of their pay to the retiree health care fund. These employees shall be vested for purposes of retiree health care after ten years. Effective July 1, 2011, all current employees shall contribute 1% of their pay to the retiree health care fund, and shall be vested.



City of St. Clair Shores

Police and Fire Retiree Health Care Plan

Summary of Benefits

as of June 30, 2020

Police Patrol

Leaving Employment as a Result of	Eligibility for Benefit	Benefit Provided by Employer		Retiree Share of Cost	Other Info
		Retiree	Spouse		
Normal Retirement	25 years of service 60/10	Medical and prescription drug	Medical and prescription drug	Medical: None RX: Co-pays Spouse coverage continues as long as they receive a pension	Retiree is reimbursed for Medicare Part B Life Insurance, Dental, Vision: None Opt-Out: No
Early Retirement	None				
Deferred Vested Termination					
Hired before 7/1/2003	10 years of service	same as above	same as above	same as above	same as above
Hired after 7/1/2003	20 years of service	same as above	same as above	same as above	same as above
Non-Duty Disability					
Hired before 7/1/2003	10 years of service	same as above	same as above	same as above	same as above
Hired after 7/1/2003	20 years of service	same as above	same as above	same as above	same as above
Duty Disability					
Hired before 7/1/2003	10 years of service	same as above	same as above	same as above	same as above
Hired after 7/1/2003	20 years of service	same as above	same as above	same as above	same as above
Non-Duty Death-in-Service					
Hired before 7/1/2003	10 years of service	same as above	same as above	same as above	same as above
Hired after 7/1/2003	20 years of service	same as above	same as above	same as above	same as above
Duty Death-in-Service	No age or service requirement	same as above	same as above	same as above	same as above

New hire employees after the date of the award will pay 2% of their pay to the retiree health care fund. These employees shall be vested for purposes of retiree health care, after ten years. (signed 9/23/11)

Effective July 1, 2011, all current employees shall contribute 1% of their pay to the retiree health care fund.

All current employees who have not attained ten years as of July 1, 2011, shall become vested on their tenth anniversary date of employment for purposes of retiree health care.

All current employees who have ten years or more of employment as of July 1, 2011, shall be immediately vested for purposes of retiree health care.



City of St. Clair Shores Police and Fire Retiree Health Care Plan Summary of Benefits as of June 30, 2020

Fire

Leaving Employment as a Result of	Eligibility for Benefit	Benefit Provided by Employer		Retiree Share of Cost	Other Info
		Retiree	Spouse		
Normal Retirement					
Hired before 1/1/2010	25 years of service 60/10	Medical and prescription drug	Medical and prescription drug	Medical: None RX: Co-pays Spouse coverage continues as long as they receive a pension	Retiree is reimbursed for Medicare Part B Life Insurance, Dental, Vision: None Opt-Out: No
Hired after 1/1/2010	50/25 60/10	same as above	same as above	same as above	same as above
Early Retirement	None				
Deferred Vested Termination					
Hired before 12/9/2005	10 years of service	same as above	same as above	same as above	same as above
Hired after 12/9/2005	20 years of service	same as above	same as above	same as above	same as above
Non-Duty Disability					
Hired before 12/9/2005	5 years of service	same as above	same as above	same as above	same as above
Hired after 12/9/2005	20 years of service	same as above	same as above	same as above	same as above
Duty Disability	No age or service requirement	same as above	same as above	same as above	same as above
Non-Duty Death-in-Service					
Hired before 12/9/2005	10 years of service	same as above	same as above	same as above	same as above
Hired after 12/9/2005	20 years of service	same as above	same as above	same as above	same as above
Duty Death-in-Service	No age or service requirement	same as above	same as above	same as above	same as above

New hire employees after the signing of the 2008-2011 agreement will pay 2% of their pay to the retiree health care fund. The agreement was assumed to be signed 7/1/2008.



SECTION D

SUMMARY OF PARTICIPANT DATA

City of St. Clair Shores – General Active Members as of June 30, 2020 by Age and Years of Service

Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24									
25-29									
30-34									
35-39			1	2				3	\$ 202,426
40-44		2	5	3	1			11	723,968
45-49			2	3	5	1		11	715,396
50-54		3	4	1	6			14	881,267
55-59		4	1	2	6	1		14	955,344
60-64			1	1	3		3	8	637,407
65 & Over		1			2			3	248,808
Totals		10	14	12	23	2	3	64	\$ 4,364,616

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

Age: 51.8 years
Service: 17.9 years
Annual Pay: \$68,197

City of St. Clair Shores – Police and Fire Active Members as of June 30, 2020 by Age and Years of Service

Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	1							1	\$ 29,906
25-29	15	4						19	1,103,992
30-34	5	16	7					28	2,229,090
35-39		7	12	4				23	2,093,871
40-44		4	5	13	5			27	2,593,790
45-49		1	1	3	9	1		15	1,551,537
50-54					5	1		6	633,509
55-59					2			2	249,580
60-64									
65 & Over									
Totals	21	32	25	20	21	2		121	\$ 10,485,275

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

Age: 37.8 years
Service: 12.1 years
Annual Pay: \$86,655

City of St. Clair Shores – General Deferred and Retired Members as of June 30, 2020

Number of Retiree and Beneficiary Contracts

	Opt-Out/ Ineligible	One-Person Coverage	Two-Person Coverage*	Total
Male	5	36	58	99
Female	14	64	30	108
Total	19	100	88	207

* Includes family coverage.

Number of Retiree and Beneficiary Contracts by Age

Age	Number of Those with Coverage		
	Male	Female	Total
Under 55	0	1	1
55-59	6	0	6
60-64	12	11	23
65 & Over	76	82	158
Totals	94	94	188

Number of Deferred Contracts by Age

Age	Number of Deferred		
	Male	Female	Total
Under 45	0	1	1
45-49	0	1	1
50-54	2	5	7
55 & over	3	4	7
Totals	5	11	16

City of St. Clair Shores – Police and Fire Deferred and Retired Members as of June 30, 2020

Number of Retiree and Beneficiary Contracts

	Opt-Out/ Ineligible	One-Person Coverage	Two-Person Coverage*	Total
Male	3	40	121	164
Female	13	43	2	58
Total	16	83	123	222

* Includes family coverage.

Number of Retiree and Beneficiary Contracts by Age

Age	Number of Those with Coverage		
	Male	Female	Total
Under 55	21	4	25
55-59	24	3	27
60-64	18	1	19
65 & Over	98	37	135
Totals	161	45	206

Number of Deferred Contracts by Age*

Age	Number of Deferred		
	Male	Female	Total
Under 45	0	0	0
45-49	3	0	3
50-54	5	0	5
55 & over	1	0	1
Totals	9	0	9

*Includes 8 members currently in DROP status

SECTION E

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; 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) (full funding credit if assets exceed liabilities) were amortized as a level dollar amount. 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 Determined Contribution for the fiscal years shown:

	Fiscal Year Ending June 30,	
	2022	2023
General (Level Dollar)	14.1408	13.8230
Police (Level Dollar)	12.9232	12.6689

Actuarial Assumptions – General

The rate of investment return was 5.00% a year, compounded annually net after investment expenses.

Rates of price inflation are not explicitly utilized in the calculation of valuation results. A price inflation of approximately 2.75% was assumed.

The rates of salary increase used for individual members are in accordance with the following table.

Sample Salary Adjustment Factors Used to Project Salaries in Years 2020 and Beyond

Age at Beginning of Year	Salary Increase Assumptions for an Individual Member		
	Merit & Seniority	Base (Economic)	Increase Next Year
20	3.7 %	3.5 %	7.2 %
30	2.7	3.5	6.2
40	1.4	3.5	4.9
50	0.2	3.5	3.7
60	0.0	3.5	3.5
62 & Over	0.0	3.5	3.5

Actuarial Assumptions – General

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

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year
	All Others
50	20 %
51	20
52	20
53	20
54	20
55	25
56	25
57	25
58	25
59	25
60	30
61	30
62	30
63	30
64	30
65	100

These rates were first used for the June 30, 2008 valuation.

Actuarial Assumptions – General

Mortality. This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement. The mortality rates utilized are based upon the RP-2014 tables, as extended, and include a margin for future mortality improvement projected using a fully generational improvement scale. The tables used are as follows:

- **Healthy Pre-Retirement:** The RP-2014 Employee Generational Mortality Tables, with blue-collar adjustments and extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale. A base year of 2006 with future mortality improvements assumed each year using scale MP-2015.
- **Healthy Post-Retirement:** The RP-2014 Healthy Annuitant Generational Mortality Tables, with blue-collar adjustments and extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale. A base year of 2006 with future mortality improvements assumed each year using scale MP-2015.
- **Disability Retirement:** The RP-2014 Disabled Mortality Table, extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale. A base year of 2006 with future mortality improvements assumed each year using scale MP-2015.

Sample Attained Ages	Healthy Pre- Retirement		Healthy Post-Retirement		Disabled Retirement	
	Future Life Expectancy (Years)*		Future Life Expectancy (Years)*		Future Life Expectancy (Years)*	
	Men	Women	Men	Women	Men	Women
55	30.67	35.80	29.50	32.39	22.44	26.22
60	25.80	30.79	24.91	27.63	19.30	22.57
65	21.24	25.87	20.54	23.04	16.26	18.95
70	17.03	21.09	16.47	18.67	13.31	15.42
75	13.19	16.53	12.76	14.64	10.55	12.17
80	9.76	12.24	9.53	11.07	8.08	9.37

* Based on retirements in 2020. Retirements in future years will reflect improvements in life expectancy.

These rates were first used for the June 30, 2016 valuation.

Actuarial Assumptions – General

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:

<u>Sample Ages</u>	<u>Years of Service</u>	<u>% of Active Members Separating within Next Year</u>
ALL	0	15.00 %
	1	12.00
	2	10.00
	3	8.00
	4	6.00
25	5 & Over	5.00
30		5.00
35		4.50
40		3.00
45		2.60
50		1.50
55		1.50
60		1.50

The rates were first used for the June 30, 2008 valuation.

Rates of disability are represented by the following table:

<u>Sample Ages</u>	<u>Percent Becoming Disabled Within Next Year</u>
20	0.03 %
25	0.05
30	0.07
35	0.13
40	0.19
45	0.28
50	0.45
55	0.76

These rates were first used for the June 30, 1986 valuation. For purposes of the valuation we assume that all disabilities are ordinary, as opposed to duty disabilities.



Miscellaneous and Technical Assumptions – General

Administrative Expenses:	No explicit assumption has been made for administrative expenses.
Decrement Operation:	All decrements operate during the first 5 years of service. Only mortality operates during retirement eligibility.
Decrement Timing:	Decrements of all types are assumed to occur mid-year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Incidence of Contributions:	Contributions are assumed to be received continuously throughout the year based upon the computed contribution shown in this report.
Marriage Assumption:	100% of males and 100% of females in the General Retirement System 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:	Medicare Coverage is assumed to be available for all covered employees on attainment of age 65. Medicare Part B premium reimbursement is assumed to be available for all covered employees on attainment of age 65. For current retirees it was assumed that the relative value of the reported hold harmless premium and income adjusted premium will continue in the future.
Loads:	A 50% load was applied to the deferred member liability for anticipated spouses.
Assumption Rationale:	Certain actuarial assumptions were based upon the results of an assumption study for the City of St. Clair Shores Employees Retirement System. A report dated August 11, 2016 presented the results of this study. Other assumptions were based upon an experience study dated, September 23, 2008. The interest rate utilized was requested by the Plan Sponsor. We believe these assumptions continue to be suitable for the purposes of this study.
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.

General	One-Person	Two-Person/Family		Opt-Out
		Electing	Continuing	
Male	20%	75%	100%	5%
Female	20%	75%	100%	5%

Actuarial Assumptions – Police and Fire

The rate of investment return was 6.00% a year, compounded annually net after investment expenses.

Rates of price inflation are not explicitly utilized in the calculation of valuation results. A price inflation of approximately 2.60% was assumed.

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.

Age at Beginning of Year	Salary Increase Assumptions for an Individual Member		
	Merit & Seniority	Base (Economic)	Increase Next Year
20	3.0 %	3.5 %	6.5 %
30	2.6	3.5	6.1
40	0.2	3.5	3.7
50	0.2	3.5	3.7
60 & Over	0.0	3.5	3.5

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

The growth rate for amortizing the Unfunded Actuarial Accrued Liabilities was assumed to be 3.5%.

Actuarial Assumptions – Police and Fire

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

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year	
	All Others	Fire Hired After 1/1/2010
45	30 %	
46	30	
47	30	
48	30	
49	30	
50	30	50 %
51	30	30
52	40	40
53	40	40
54	40	40
55	40	40
56	50	50
57	50	50
58	50	50
59	50	50
60 and above	100	100

Actuarial Assumptions – Police and Fire

The mortality rates utilized are based upon the RP-2014 tables, as extended, and include a margin for future mortality improvements projected using a fully generational improvement scale. The tables used were as follows:

Post-Retirement Mortality: The RP-2014 Healthy Annuitant Generational Mortality Tables, with blue collar adjustments and extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale. A base year of 2006 with future mortality improvements assumed each year using scale MP-2015.

Pre-Retirement Mortality: RP-2014 Employee Generational Mortality Tables, with blue collar adjustments and extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale. A base year of 2006 with future mortality improvements assumed each year using scale MP-2015.

Post-Retirement Disabled Mortality: The RP-2014 Disabled Mortality Tables, extended via cubic spline. This table is adjusted backwards to 2006 with the MP-2014 scale. A base year of 2006 with future mortality improvements assumed each year using scale MP-2015.

These tables were first used for the June 30, 2015 valuation. Sample values for Post-Retirement Mortality follow:

Sample Ages	Single Life Retirement Values			
	Present Value of		Future Life	
	\$1 Monthly for Life*		Expectancy (Years)*	
	Men	Women	Men	Women
45	\$176.99	\$181.60	39.38	42.43
50	168.80	174.51	34.35	37.33
55	158.87	165.83	29.50	32.39
60	147.16	155.28	24.91	27.63
65	133.27	142.35	20.54	23.04
70	117.23	126.89	16.47	18.67
75	99.42	109.24	12.76	14.64
80	80.80	90.26	9.53	11.07

* Based on retirements in 2020. Retirements in future years will reflect improvements in life expectancy.

This assumption is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement. For purposes of the valuation, we assume that 75% of deaths-in-service are duty related and 25% of deaths-in-service are non-duty related.

Actuarial Assumptions – Police and Fire

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:

Sample Ages	Years of Service	% of Active Members Separating Within Next Year
ALL	0	10.00 %
	1	7.00
	2	5.00
	3	4.00
	4	3.50
25	5 & Over	3.50
30		2.90
35		1.50
40		0.60
45		0.50
50		0.50
55		0.50
60		0.50

Rates of disability were as follows:

Sample Ages	Percent Becoming Disabled Within Next Year	
	Male	Women
20	0.08 %	0.10 %
25	0.08	0.10
30	0.08	0.10
35	0.08	0.10
40	0.20	0.36
45	0.27	0.41
50	0.49	0.57
55	0.89	0.77
60	1.41	1.02

For purposes of the valuation we assume that 75% of disabilities are duty related and 25% of disabilities are non-duty related.

Miscellaneous and Technical Assumptions – Police and Fire

Administrative Expenses:	No explicit assumption has been made for administrative expenses.
Decrement Operation:	All decrements operate during the first 5 years of service. Only mortality operates during retirement eligibility.
Decrement Timing:	Decrements of all types are assumed to occur mid-year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Incidence of Contributions:	Contributions are assumed to be received continuously throughout the year based upon the contribution shown in this report.
Marriage Assumption:	100% of males and 100% of females in the Police and Fire Retirement System 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:	Medicare Coverage is assumed to be available for all covered employees on attainment of age 65. Medicare Part B premium reimbursement is assumed to be available for all covered employees on attainment of age 65. For current retirees it was assumed that the relative value of the reported hold harmless premium and income adjusted premium will continue in the future. Medicare Part A premium reimbursement is assumed to apply only to those reported with reimbursement. No future retirees were assumed to be eligible for Medicare Part A premium reimbursement.
Loads:	A 50% load was applied to the deferred member liability for anticipated spouses.
Assumption Rationale:	Certain actuarial assumptions were based upon the results of a limited scope assumption study for the City of St. Clair Shores Police and Fire Retirement System. A report dated July 20, 2015 presented the results of this study. We believe these assumptions continue to be suitable for the purposes of this study.
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.

Police/Fire	One-Person	Two-Person/Family		Opt-Out
		Electing	Continuing	
Male	5%	95%	100%	0%
Female	5%	95%	100%	0%

APPENDIX

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 Determined Contribution. The Actuarially Determined Contribution is the normal cost plus the portion of the unfunded actuarial accrued liability to be amortized in the current period. The Actuarially Determined Contribution 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 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.



Glossary

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.