

CITY OF GROSSE POINTE WOODS
EMPLOYEES RETIREMENT SYSTEM

ACTUARIAL VALUATION
AS OF JUNE 30, 2021

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR BEGINNING JULY 1, 2022

GASB 67/68 DISCLOSURE INFORMATION
AS OF JUNE 30, 2021



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS



September 20, 2021

Board of Trustees
City of Grosse Pointe Woods Employees Retirement System

Re: Actuarial Valuation Report (including GASB Statements No. 67 and No. 68) – City of Grosse Pointe Woods Employees Retirement System

Dear Board of Trustees:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Grosse Pointe Woods Employees Retirement System. Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and could produce significantly different results.

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflect laws and regulations issued to date pursuant to the Retirement System, as well as applicable federal laws and regulations. In our opinion, the assumptions used in this valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuations, we did not perform an analysis of the potential range of such future measurements.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the Board, financial reports prepared by the custodian bank and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The total pension liability, net pension liability, and certain sensitivity information shown in the GASB results are based on an actuarial valuation performed as of the valuation date.

In performing the analysis, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models to generate the costs. All internally developed models are reviewed as part of the process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.


The undersigned are familiar with the immediate and long-term aspects of pension valuations and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

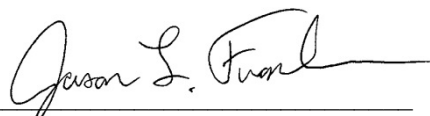
To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Grosse Pointe Woods, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the City of Grosse Pointe Woods Employees Retirement System. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 630-620-0200.

Respectfully submitted,

Foster & Foster, Inc.

By: 
Sandra W. Rodwan, EA, MAAA

By: 
Jason L. Franken, FSA, EA, MAAA

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Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Grosse Pointe Woods Employees Retirement System, performed as of June 30, 2021, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year beginning July 1, 2022.

The contribution requirements, compared with those set forth in the June 30, 2020 actuarial report, are as follows:

Valuation Date	6/30/2021	6/30/2020
Applicable to Fiscal Year Beginning	<u>7/1/2022</u>	<u>7/1/2021</u>
Total Recommended Contribution	\$2,318,511	
% of Projected Annual Payroll	41.28%	41.50%
Member Contributions (Est.)	(325,220)	
% of Projected Annual Payroll	(5.79%)	(5.42%)
City Recommended Contribution	1,993,291	1,833,259
% of Projected Annual Payroll	35.49%	36.08%

As you can see, the City Recommended Contribution shows an increase June 30, 2020 actuarial valuation report. The contribution as a percentage of payroll decreased slightly.

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. The primary source of favorable experience was an investment return of 9.99% (Actuarial Asset Basis) which exceeded the 7.50% assumption. This gain was offset in part by a loss associated with an average salary increase of 12.40% which exceeded the 4.48% assumption.

CHANGES SINCE THE PRIOR VALUATION

The valuation reflects no plan changes.

The valuation reflects no assumption changes since the prior valuation.

The valuation reflects the following method changes:

- In conjunction with the acquisition of Rodwan Consulting Company by Foster & Foster, the valuation reflects a change in actuarial software.
- The calculation of the recommended contribution was updated as follows:
 - The recommended contribution calculation includes an adjustment for assumed interest.
 - The amortization payment calculation reflects beginning of year amortization factors rather than continuous factors.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

Valuation Date	<u>6/30/2021</u>	<u>6/30/2020</u>
A. Participant Data		
Number Included		
Actives	78	77
Service Retirees	86	86
Beneficiaries	16	13
Disability Retirees	0	0
Terminated Vested	<u>13</u>	<u>14</u>
Total	193	190
Total Projected Annual Payroll	\$5,616,709	\$5,003,657
Payroll Under Assumed Ret. Age	5,616,709	5,003,657
Annual Rate of Payments to:		
Service Retirees	2,912,997	3,292,987 ¹
Beneficiaries	494,303	0
Disability Retirees	0	0
Terminated Vested	148,979	161,188
B. Assets		
Actuarial Value	41,121,607	39,020,573
Market Value	45,943,628	35,546,210
C. Liabilities		
Present Value of Benefits (PVB)		
Actives		
Retirement Benefits	23,467,261	20,162,167
Disability Benefits	1,696,845	1,784,574
Death Benefits	280,339	241,009
Vested Benefits	624,104	569,906
Service Retirees ²	37,735,035	41,482,217 ¹
Beneficiaries	4,745,522	0
Disability Retirees	0	0
Terminated Vested	<u>1,192,327</u>	<u>1,381,709</u>
Total	69,741,433	65,621,582

¹ The 6/30/2020 Retiree annual payments and present value of benefits include retirees and beneficiaries.

C. Liabilities - (Continued)	<u>6/30/2021</u>	<u>6/30/2020</u>
Present Value of Future Salaries	46,823,263	N/A
Normal Cost (Retirement)	683,244	579,617
Normal Cost (Disability)	76,585	95,247
Normal Cost (Death)	15,058	11,223
Normal Cost (Vesting)	<u>47,505</u>	<u>89,883</u>
Total Normal Cost (EAN)	822,392	775,970
Present Value of Future Normal Costs	6,655,766	6,152,614
Accrued Liability (Retirement)	17,853,421	15,550,842
Accrued Liability (Disability)	1,075,164	1,022,625
Accrued Liability (Death)	171,866	155,676
Accrued Liability (Vesting)	312,332	(124,101)
Accrued Liability (Inactives)	<u>43,672,884</u>	<u>42,863,926</u>
Total Actuarial Accrued Liability	63,085,667	59,468,968
Unfunded Actuarial Accrued Liability (UAAL)	21,964,060	20,448,395
Funded Ratio (AVA / AL)	65.2%	65.6%

	<u>6/30/2021</u>	<u>6/30/2020</u>
D. Actuarial Present Value of Accrued Benefits		
Vested Accrued Benefits		
Inactives	43,672,884	N/A
Actives	5,634,279	N/A
Member Contributions	<u>4,396,347</u>	<u>N/A</u>
Total	53,703,510	N/A
Non-vested Accrued Benefits	<u>3,661,772</u>	<u>N/A</u>
Total Present Value Accrued Benefits	57,365,282	N/A
Funded Ratio (MVA / PVAB)	80.1%	N/A
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	0	
Benefits Paid	0	
Interest	0	
Other	<u>0</u>	
Total	0	

Valuation Date	6/30/2021	6/30/2020
Applicable to Fiscal Year Beginning	<u>7/1/2022</u>	<u>7/1/2021</u>

E. Pension Cost

Normal Cost ¹	\$884,071	
% of Total Annual Payroll ¹	15.74	16.20
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 25 years (as of 6/30/2021) ¹	1,434,440	
% of Total Annual Payroll ¹	25.54	25.30
Total Recommended Contribution	2,318,511	
% of Total Annual Payroll ¹	41.28	41.50
Expected Member Contributions ¹	(325,220)	
% of Total Annual Payroll ¹	(5.79)	(5.42)
Expected City Contribution	1,993,291	1,833,259
% of Total Annual Payroll ¹	35.49	36.08

F. Past Contributions

Plan Years Ending: 6/30/2021

Total Recommended Contribution	1,745,230
City Requirement	1,463,027

Actual Contributions Made:

Members (excluding buyback)	282,203
City	<u>1,623,075</u>
Total	1,905,278

G. Net Actuarial (Gain)/Loss 1,121,732

¹ Contributions developed as of 6/30/2021 displayed above have been adjusted to account for assumed interest.

H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability as of:

<u>Year</u>	<u>Projected Unfunded Accrued Liability</u>
2021	21,964,060
2022	22,176,924
2023	22,391,851
2029	23,725,866
2035	25,139,358
2040	26,381,384
2046	27,953,081

I. (i) 3 Year Comparison of Actual and Assumed Salary Increases

		<u>Actual</u>	<u>Assumed</u>
Year Ended	6/30/2021	12.40%	4.48%
Year Ended	6/30/2020	N/A	N/A
Year Ended	6/30/2019	N/A	N/A

(ii) 3 Year Comparison of Investment Return on Actuarial Value

		<u>Actual</u>	<u>Assumed</u>
Year Ended	6/30/2021	9.99%	7.50%
Year Ended	6/30/2020	0.42%	7.50%
Year Ended	6/30/2019	3.36%	7.75%

PENSION COST BY DIVISION

	<u>General</u>	<u>Public Safety</u>	<u>Total</u>
Projected Payroll	2,956,636	2,660,073	5,616,709
Total Normal Cost ¹	400,031	484,040	884,071
% of Total Annual Payroll ¹	13.53	18.20	15.74
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 25 years (as of 6/30/2021) ¹			
	755,089	679,351	1,434,440
% of Total Annual Payroll ¹	25.54	25.54	25.54
Total Recommended Contribution ¹	1,155,120	1,163,391	2,318,511
% of Total Annual Payroll ¹	39.07	43.74	41.28
Expected Member Contributions ¹	(160,508)	(164,712)	(325,220)
% of Total Annual Payroll ¹	(5.43)	(6.19)	(5.79)
Expected City Contribution	994,612	998,679	1,993,291
% of Total Annual Payroll ¹	33.64	37.54	35.49

¹ Contributions developed as of 6/30/2021 displayed above have been adjusted to account for assumed interest.

DEVELOPMENT OF JUNE 30, 2021 AMORTIZATION PAYMENT

(1) Unfunded Actuarial Accrued Liability as of June 30, 2020	\$20,448,395
(2) Sponsor Normal Cost developed as of June 30, 2020	506,273
(3) Expected administrative expenses for the year ended June 30, 2021	0
(4) Expected interest on (1), (2) and (3)	1,571,600
(5) Sponsor contributions to the System during the year ended June 30, 2021	1,623,075
(6) Expected interest on (5)	60,865
(7) Expected Unfunded Actuarial Accrued Liability as of June 30, 2021, (1)+(2)+(3)+(4)-(5)-(6)	20,842,328
(8) Change to UAAL due to Assumption Change	0
(9) Change to UAAL due to Actuarial (Gain)/Loss	1,121,732
(10) Unfunded Accrued Liability as of June 30, 2021	21,964,060
(11) UAAL Subject to Amortization (100% AAL less Actuarial Assets)	21,964,060

<u>Date</u> <u>Established</u>	<u>Years</u> <u>Remaining</u>	<u>6/30/2021</u> <u>Amount</u>	<u>Amortization</u> <u>Amount</u>
6/30/2021	25	21,964,060	1,334,363

P.A. 202 REPORTING
AS OF JUNE 30, 2021

Michigan Public Act 202 of 2017 requires municipal retirement systems in the state to submit information concerning their actuarial accrued liabilities and funded status based on uniform assumptions. The information is to be furnished by the municipality on Form 5572.

Form 5572		
Line		
24	Actuarial Value of Assets	41,121,607
25	Actuarial Accrued Liabilities	66,499,210
26	Funded Ratio	61.8%
27	Actuarially Determined Contribution	2,562,757

The information was calculated based on the following assumptions, in compliance with the Uniform Assumptions pursuant to PA 202, applicable for fiscal year 2021. All other assumptions are as described in the Actuarial Assumptions and Methods section of this report.

Investment Rate of Return	7.00%
Discount Rate (equivalent single rate used)	7.00%
Periods with sufficient assets	7.00%
Periods without sufficient assets	2.20%
Salary Increase	Experience-based rates
Mortality Table	Pub-2010 with MP-2019
Amortization Period for Unfunded	
Actuarial Accrued Liability	18 years
Cost Method	Entry Age Normal
Amortization Method	Level percent of pay, open
Payroll Growth Assumption	3.50%

FUNDING HISTORY

						General	Public Safety
Valuation Date	Applicable Fiscal Year Beginning	Valuation Assets ¹	Actuarial Accrued Liabilities ¹	Funded Ratio	Unfunded Actuarial Accrued Liabilities ¹	Recommended Employer Contribution - as a% of Payroll	Recommended Employer Contribution - as a% of Payroll
6/30/2001	7/1/2002	38,298	29,108	131.6%	(9,190)	0.00%	0.00%
6/30/2002	7/1/2003	37,739	30,427	124.0%	(7,312)	0.00%	0.00%
6/30/2003	7/1/2004	35,745	32,137	111.2%	(3,608)	1.40%	5.74%
6/30/2004	7/1/2005	34,404	33,804	101.8%	(600)	8.12%	12.64%
6/30/2005	7/1/2006	33,329	36,141	92.2%	2,812	12.54%	15.50%
6/30/2006	7/1/2007	33,549	36,846	91.1%	3,297	15.21%	18.59%
6/30/2007	7/1/2008	35,801	38,744	92.4%	2,943	14.65%	17.98%
6/30/2008	7/1/2009	37,728	36,310	103.9%	(1,418)	6.22%	7.98%
6/30/2009	7/1/2010	37,149	40,417	91.9%	3,268	10.56%	12.26%
6/30/2010	7/1/2011	36,074	41,541	86.8%	5,467	12.64%	14.28%
6/30/2011	7/1/2012	37,667	42,738	88.1%	5,071	12.55%	14.25%
6/30/2012	7/1/2013	37,369	44,747	83.5%	7,378	15.29%	16.99%
6/30/2013	7/1/2014	37,171	44,950	82.7%	7,779	16.12%	18.14%
6/30/2014	7/1/2015	37,751	45,453	83.1%	7,702	16.82%	19.24%
6/30/2015	7/1/2016	39,363	49,481	79.6%	10,118	20.28%	23.57%
6/30/2016	7/1/2017	39,271	51,299	76.6%	12,028	23.55%	26.03%
6/30/2017	7/1/2018	40,087	50,976	78.6%	10,889	22.31%	24.18%
6/30/2018	7/1/2019	40,347	53,727	75.1%	13,380	25.39%	28.75%
6/30/2019	7/1/2020	39,610	55,232	71.7%	15,622	27.56%	31.19%
6/30/2020	7/1/2021	39,021	59,469	65.6%	20,448	33.85%	38.46%
6/30/2021	7/1/2022	41,122	63,086	65.2%	21,964	33.64%	37.54%

¹Dollar values reported in thousands.

PROJECTION OF BENEFIT PAYMENTS

Year	Payments for Current Actives	Payments for Current Inactives	Total Payments
2021	452,416	3,399,579	3,851,995
2022	433,216	3,444,308	3,877,524
2023	508,389	3,480,109	3,988,498
2024	616,895	3,521,942	4,138,837
2025	684,148	3,565,489	4,249,637
2026	1,085,286	3,585,621	4,670,907
2027	1,251,347	3,611,392	4,862,739
2028	1,311,614	3,640,438	4,952,052
2029	1,500,494	3,676,562	5,177,056
2030	1,705,164	3,671,270	5,376,434
2031	2,132,239	3,658,810	5,791,049
2032	2,271,441	3,639,280	5,910,721
2033	2,330,302	3,612,837	5,943,139
2034	2,467,818	3,584,119	6,051,937
2035	2,569,488	3,553,649	6,123,137
2036	2,640,770	3,516,150	6,156,920
2037	2,744,111	3,460,957	6,205,068
2038	2,799,279	3,397,898	6,197,177
2039	2,882,598	3,328,359	6,210,957
2040	3,066,730	3,251,533	6,318,263
2041	3,140,414	3,171,543	6,311,957
2042	3,242,919	3,085,993	6,328,912
2043	3,553,131	2,990,669	6,543,800
2044	3,580,743	2,893,294	6,474,037
2045	3,658,511	2,790,931	6,449,442
2046	3,719,416	2,669,336	6,388,752
2047	3,844,133	2,536,863	6,380,996
2048	3,874,346	2,411,336	6,285,682
2049	3,918,554	2,270,139	6,188,693
2050	3,968,606	2,109,677	6,078,283
2051	3,974,854	1,957,516	5,932,370
2052	3,997,321	1,825,516	5,822,837
2053	3,997,090	1,701,083	5,698,173
2054	3,991,717	1,580,858	5,572,575
2055	3,976,020	1,460,693	5,436,713
2056	3,953,854	1,342,346	5,296,200
2057	3,913,435	1,225,778	5,139,213
2058	3,867,764	1,111,939	4,979,703
2059	3,812,181	1,010,355	4,822,536
2060	3,745,575	917,221	4,662,796

SUPPLEMENTAL ANNUITY VALUATION

Valuation Date	6/30/2021	6/30/2020
Applicable to Fiscal Year Beginning	<u>7/1/2022</u>	<u>7/1/2021</u>
Total Actuarial Accrued Liability	3,849,603	3,767,677
Market Value of Assets	<u>2,605,835</u>	<u>1,907,226</u>
Unfunded Actuarial Accrued Liability	1,243,768	1,860,451
Pension Cost		
Total Normal Cost (EAN) ¹	48,535	43,011
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 10 years (as of 6/30/2021) ¹	181,199	261,359
Total Recommended Contribution	229,734	304,370

¹ Contributions developed as of 6/30/2021 displayed above have been adjusted to account for assumed interest.

SUPPLEMENTAL ANNUITY VALUATION
BY DIVISION

	<u>General</u>	<u>Public Safety</u>	<u>Total</u>
Total Actuarial Accrued Liability	3,473,012	376,591	3,849,603
Market Value of Assets	<u>2,350,917</u>	<u>254,918</u>	<u>2,605,835</u>
Unfunded Actuarial Accrued Liability	1,122,095	121,673	1,243,768
 Pension Cost - Total			
Total Normal Cost	48,535	0	48,535
UAAL Amortization	<u>163,473</u>	<u>17,726</u>	<u>181,199</u>
Total Recommended Contribution	212,008	17,726	229,734
 Pension Cost - Dollars Per Active Member			
Total Normal Cost	991	0	
UAAL Amortization	<u>3,336</u>	<u>611</u>	
Total Recommended Contribution	4,327	611	
 Participant Summary			
Counts			
Actives	49	29 ¹	78
Retirees and Beneficiaries	47	9	56
 Supplemental Annuities			
Total Annuities	224,947	42,524	267,471
Average Annuities	4,786	4,725	4,776

¹ Summarized for cost per active member only. Currently no Public Safety members are eligible.

ACTUARIAL ASSUMPTIONS AND METHODS

Interest Rate	7.50% per year compounded annually, net of investment related expenses.
Mortality Rate	<p><i>Active Lives</i> PubS-2010 and PubG-2010 Employee mortality tables, with generational improvements using Scale MP-2018.</p> <p><i>Inactive Lives</i> PubS-2010 and PubG-2010 Healthy Retiree mortality tables, with generational improvements using Scale MP-2018.</p>
Retirement Age	See table later in this section.
Disability Rate	See table later in this section. 100% of disabilities are assumed to be in the non-duty.
Termination Rate	See table later in this section.
Inflation	2.50%.
Salary Increases	See table below.

Ages	Inflation	Merit and Longevity	
		General	Public Safety
20	3.50%	3.84%	2.99%
25	3.50%	3.13%	2.99%
30	3.50%	2.69%	2.60%
35	3.50%	2.37%	1.10%
40	3.50%	2.14%	0.20%
45	3.50%	1.68%	0.20%
50	3.50%	1.14%	0.20%
55	3.50%	0.66%	0.10%
60	3.50%	0.16%	0.00%

Marital Status	90% of Members are assumed to be married.
Spouse's Age	Males are assumed to be three years older than females.
Member Contribution Interest	2.00%.
Cost-of-Living Adjustment	2.50%

Annuity Withdrawal Assumptions	100% of members are assumed to elect a lump sum of member contributions in exchange for a reduced annuity benefit at retirement. The annuity offset is equal to the annuitized value of the member contributions using a 7.50% assumed interest rate
Funding Method	Entry Age Normal.
Actuarial Asset Method	Investment gains and losses are smoothed over a five-year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of the Market Value of Assets.
Funding Policy Amortization Method	The unfunded present value of benefits is amortized according to a level percentage of payroll method over an open 25 year period.
Payroll Growth	3.50%.

Decrement Tables

General - % Terminating During the Year							Public Safety - % Terminating During the Year						
	Service							Service					
Age	0	1	2	3	4	5+	Age	0	1	2	3	4	5+
< 27	20%	15%	12%	10%	8%	6.0%	< 27	12%	9%	8%	7%	6%	4.5%
30	20%	15%	12%	10%	8%	6.0%	30	12%	9%	8%	7%	6%	3.9%
35	20%	15%	12%	10%	8%	5.0%	35	12%	9%	8%	7%	6%	2.3%
40	20%	15%	12%	10%	8%	3.0%	40	12%	9%	8%	7%	6%	0.9%
45	20%	15%	12%	10%	8%	2.0%	45	12%	9%	8%	7%	6%	0.5%
50	20%	15%	12%	10%	8%	2.0%	50	12%	9%	8%	7%	6%	0.5%
55+	20%	15%	12%	10%	8%	1.0%	55+	12%	9%	8%	7%	6%	1.0%

% Becoming Disabled
During the Year

Age	General Rate	Public Safety Rate
20	0.039%	0.088%
25	0.039%	0.144%
30	0.039%	0.296%
35	0.039%	0.488%
40	0.101%	0.680%
45	0.133%	0.872%
50	0.246%	1.064%
55	0.447%	1.264%
60	0.707%	1.464%
65+	0.829%	0.000%

% Retiring
During the Year

Age	General Rate	Public Safety Rate
50	30%	40%
51	25%	40%
52 - 54	20%	30%
55	30%	40%
56	30%	30%
57 - 59	25%	30%
60	30%	40%
61	15%	15%
62	35%	20%
63 - 64	15%	15%
65	60%	60%
66	30%	30%
67	40%	40%
68	50%	50%
69	90%	70%
70+	100%	100%

GLOSSARY

Total Annual Payroll is the projected annual rate of pay for the fiscal year following the valuation date of all covered members.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

Normal (Current Year's) Cost is the current year's cost for benefits yet to be funded.

Unfunded Accrued Liability is a liability which arises when a pension plan is initially established or improved and such establishment or improvement is applicable to all years of past service.

Total Recommended Contribution is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over open period (25 years as of June 30, 2021). The recommended amount is adjusted for interest according to the timing of contributions during the year.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

- (a) The normal cost accrual rate equals:
 - (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
 - (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.
- (b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.
- (c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.
- (d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined under various assumption scenarios. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- Investment Return: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.
- Salary Increases: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.
- Payroll Growth: The plan's payroll growth assumption, if one is used, causes a predictable annual increase in the plan's amortization payment in order to produce an amortization payment that remains constant as a percentage of payroll if all assumptions are realized. If payroll does not increase according to the plan's payroll growth assumption, the plan's amortization payment can increase significantly as a percentage of payroll even if all assumptions other than the payroll growth assumption are realized.
- Demographic Assumptions: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

- **Contribution Risk:** This risk results from the potential that actual employer contributions may deviate from actuarially determined contributions, which are determined in accordance with the Board’s funding policy. The funding policy is intended to result in contribution requirements that if paid when due, will result in a reasonable expectation that assets will accumulate to be sufficient to pay plan benefits when due. Contribution deficits, particularly large deficits and those that occur repeatedly, increase future contribution requirements and put the plan at risk for not being able to pay plan benefits when due.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature plans with a substantial inactive liability. Similarly, mature plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled “Plan Maturity Measures and Other Risk Metrics”. Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has stayed about the same from June 30, 2020 to June 30, 2021, indicating that the plan's maturity level has not significantly changed during the period.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 69.2%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors will need to be made up for over a shorter time horizon than would be needed for a less mature plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has stayed approximately the same from June 30, 2020 to June 30, 2021, due to sufficient plan contributions.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, increased from -5.1% on June 30, 2018 to -3.7% on June 30, 2021. The current Net Cash Flow Ratio of -3.7% indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

It is important to note that the actuary has identified the risks above as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	<u>6/30/2021</u>	<u>6/30/2020</u>
<u>Support Ratio</u>		
Total Actives	78	77
Total Inactives	115	113
Actives / Inactives	67.8%	68.1%

Asset Volatility Ratio

Market Value of Assets (MVA)	45,943,628	35,546,210
Total Annual Payroll	5,616,709	5,003,657
MVA / Total Annual Payroll	818.0%	710.4%

Accrued Liability (AL) Ratio

Inactive Accrued Liability	43,672,884	42,863,926
Total Accrued Liability	63,085,667	59,468,968
Inactive AL / Total AL	69.2%	72.1%

Funded Ratio

Actuarial Value of Assets (AVA)	41,121,607	39,020,573
Total Accrued Liability	63,085,667	59,468,968
AVA / Total Accrued Liability	65.2%	65.6%

Net Cash Flow Ratio

Net Cash Flow ¹	(1,712,263)	(1,805,866)
Market Value of Assets (MVA)	45,943,628	35,546,210
Ratio	-3.7%	-5.1%

¹ Determined as total contributions minus benefit payments and administrative expenses.

STATEMENT OF FIDUCIARY NET POSITION
June 30, 2021

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents	447,548
Total Cash and Equivalents	447,548
Receivables:	
Accrued Interest and Dividends	2
Total Receivable	2
Investments:	
Fixed Income	7,472,737
Domestic and International Equities	17,535,492
Other Investments	20,487,849
Total Investments	45,496,078
Other Assets	0
Total Assets	45,943,628
 <u>LIABILITIES</u>	
Liabilities:	
Payable:	
Total Liabilities	0
Net Assets:	
Active and Retired Members' Equity	45,943,628
NET POSITION RESTRICTED FOR PENSIONS	45,943,628
TOTAL LIABILITIES AND NET ASSETS	45,943,628

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
 FOR THE YEAR ENDED June 30, 2021
 Market Value Basis

ADDITIONS

Contributions:		
Member	282,203	
City	1,623,075	
 Total Contributions		 1,905,278
Investment Income:		
Net Increase in Fair Value of Investments		12,172,320
Less Expenses ¹		(62,639)
 Net Investment Income		 12,109,681
 Other		 0
 Total Additions		 14,014,959

DEDUCTIONS

Distributions to Members:		
Benefit Payments	3,570,576	
 Total Distributions		 3,570,576
 Administrative Expenses		 46,965
 Other		 0
 Total Deductions		 3,617,541
 Net Increase in Net Position		 10,397,418
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		35,546,210
 End of the Year		 45,943,628

¹ Expenses include investment advisory, custodial and performance monitoring fees

ACTUARIAL ASSET VALUATION

June 30, 2021

Development of Actuarial Value of Assets

Market Value of Assets, 6/30/2021	45,943,628
(Gains)/Losses Not Yet Recognized	<u>(4,822,021)</u>
Preliminary Actuarial Value of Assets, 6/30/2021	41,121,607
6/30/2021 Limited Actuarial Assets	41,121,607

Development of Investment Gain/Loss

Market Value of Assets, 6/30/2020	35,546,210
Actuarial Value of Assets, 6/30/2020	39,020,573
Contributions Less Benefit Payments and Administrative Expenses	(1,712,263)
Expected Investment Earnings ¹	2,862,333
Actual Net Investment Earnings	<u>12,109,681</u>
2021 Actuarial Investment Gain/(Loss)	9,247,348

¹ Expected Investment Earnings = 7.50% x (39,020,573 + 0.5 x -1,712,263)

Gains/(Losses) Not Yet Recognized

Plan Year Ending	Gain/(Loss)	Amounts Not Yet Recognized by Valuation Year				
		2021	2022	2023	2024	2025
6/30/2018	(829,679)	(165,936)	0	0	0	0
6/30/2019	(1,760,767)	(704,307)	(352,153)	0	0	0
6/30/2020	(2,842,690)	(1,705,614)	(1,137,076)	(568,538)	0	0
6/30/2021	9,247,348	7,397,878	5,548,409	3,698,939	1,849,470	0
Total		4,822,021	4,059,180	3,130,401	1,849,470	0

Development of Asset Returns

(A) 6/30/2020 Actuarial Assets:	39,020,573
(I) Net Investment Income:	
1. Change in Actuarial Value	3,875,936
2. Investment Expenses	<u>(62,639)</u>
Total	3,813,297
(B) 6/30/2021 Preliminary Actuarial Assets:	41,121,607
Actuarial Asset Rate of Return = (2 x I) / (A + B - I):	9.99%
Market Value of Assets Rate of Return:	34.91%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	950,964

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
 June 30, 2021
 Actuarial Asset Basis

INCOME	
Contributions:	
Member	282,203
City	1,623,075
Total Contributions	1,905,278
Earnings from Investments	
Change in Actuarial Value	3,875,936
Total Earnings and Investment Gains	3,875,936
EXPENSES	
Administrative Expenses:	
Investment Related ¹	62,639
Other	46,965
Total Administrative Expenses	109,604
Distributions to Members:	
Benefit Payments	3,570,576
Supplemental Benefit	0
Total Distributions	3,570,576
Change in Net Assets for the Year	2,101,034
Net Assets Beginning of the Year	39,020,573
Net Assets End of the Year ²	41,121,607
Excess Earnings Reserve	

¹ Investment Related expenses include investment advisory, custodial and performance monitoring fees.

² Net Assets may be limited for actuarial consideration.

STATISTICAL DATA

Valuation Date	6/30/2021	6/30/2020
<u>Actives</u>		
Number	78	77
Average Current Age	45.1	45.8
Average Age at Employment	33.0	33.5
Average Past Service	12.1	12.3
Average Annual Salary	\$68,880	\$62,222
<u>Service Retirees</u>		
Number	86	86
Average Current Age	69.4	N/A
Average Annual Benefit	\$33,872	\$33,262 ¹
<u>Beneficiaries</u>		
Number	16	13
Average Current Age	74.8	N/A
Average Annual Benefit	\$30,894	N/A
EDROs incl. in Beneficiaries	2	2
<u>Disability Retirees</u>		
Number	0	0
Average Current Age	N/A	N/A
Average Annual Benefit	N/A	N/A
<u>Terminated Vested</u>		
Number	13	14
Average Current Age	N/A	N/A
Average Annual Benefit	\$11,460	\$11,513

¹ 6/30/2020 Retiree average annual benefit amount includes retirees, beneficiaries and disableds.

STATISTICAL DATA BY DIVISION

	<u>6/30/2021</u>	<u>6/30/2020</u>	<u>6/30/2019</u>	<u>6/30/2018</u>
<u>Actives - General</u>				
Number	49	48	N/A	N/A
Average Current Age	46.3	47.6	N/A	N/A
Average Age at Employment	35.8	36.6	N/A	N/A
Average Past Service	10.6	11.0	N/A	N/A
Average Annual Salary	\$57,476	\$51,583	N/A	N/A
<u>Actives - Public Safety</u>				
Number	29	29	N/A	N/A
Average Current Age	43.1	42.7	N/A	N/A
Average Age at Employment	28.5	28.3	N/A	N/A
Average Past Service	14.6	14.4	N/A	N/A
Average Annual Salary	\$88,148	\$79,832	N/A	N/A

AGE AND SERVICE DISTRIBUTION
TOTAL

AGE	PAST SERVICE											Total	Total Pay ¹
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+		
20 - 24	0	1	0	0	0	0	0	0	0	0	0	1	\$ 45,342
25 - 29	3	1	0	1	2	0	0	0	0	0	0	7	\$ 446,080
30 - 34	1	0	0	2	0	2	0	0	0	0	0	5	\$ 228,614
35 - 39	2	2	0	1	0	1	2	2	0	0	0	10	\$ 685,302
40 - 44	1	0	1	0	0	1	2	7	1	0	0	13	\$ 1,007,473
45 - 49	0	1	1	0	1	1	1	4	6	0	0	15	\$ 1,101,557
50 - 54	0	0	1	1	0	2	0	2	5	1	0	12	\$ 907,168
55 - 59	0	0	0	0	0	2	0	0	4	0	0	6	\$ 457,424
60 - 64	1	1	0	0	1	1	0	2	0	1	0	7	\$ 353,939
65+	0	0	0	0	0	1	0	0	1	0	0	2	\$ 139,731
Total	8	6	3	5	4	11	5	17	17	2	0	78	\$ 5,372,630

¹ Total Pay is salaries for the period ending 6/30/2021.

AGE AND SERVICE DISTRIBUTION
GENERAL

AGE	PAST SERVICE											Total	Total Pay ¹
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+		
20 - 24	0	1	0	0	0	0	0	0	0	0	0	1	\$ 45,342
25 - 29	2	1	0	0	0	0	0	0	0	0	0	3	\$ 140,464
30 - 34	1	0	0	2	0	2	0	0	0	0	0	5	\$ 228,614
35 - 39	2	0	0	1	0	1	2	0	0	0	0	6	\$ 380,368
40 - 44	1	0	1	0	0	1	1	0	1	0	0	5	\$ 267,278
45 - 49	0	1	1	0	0	1	0	2	4	0	0	9	\$ 554,206
50 - 54	0	0	1	1	0	1	0	1	3	0	0	7	\$ 444,012
55 - 59	0	0	0	0	0	2	0	0	2	0	0	4	\$ 262,370
60 - 64	1	1	0	0	1	1	0	2	0	1	0	7	\$ 353,939
65+	0	0	0	0	0	1	0	0	1	0	0	2	\$ 139,731
Total	7	4	3	4	1	10	3	5	11	1	0	49	\$ 2,816,325

¹ Total Pay is salaries for the period ending 6/30/2021.

AGE AND SERVICE DISTRIBUTION
PUBLIC SAFETY

AGE	PAST SERVICE											Total	Total Pay ¹
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+		
20 - 24	0	0	0	0	0	0	0	0	0	0	0	0	\$ 0
25 - 29	1	0	0	1	2	0	0	0	0	0	0	4	\$ 305,616
30 - 34	0	0	0	0	0	0	0	0	0	0	0	0	\$ 0
35 - 39	0	2	0	0	0	0	0	2	0	0	0	4	\$ 304,934
40 - 44	0	0	0	0	0	0	1	7	0	0	0	8	\$ 740,194
45 - 49	0	0	0	0	1	0	1	2	2	0	0	6	\$ 547,351
50 - 54	0	0	0	0	0	1	0	1	2	1	0	5	\$ 463,156
55 - 59	0	0	0	0	0	0	0	0	2	0	0	2	\$ 195,053
60 - 64	0	0	0	0	0	0	0	0	0	0	0	0	\$ 0
65+	0	0	0	0	0	0	0	0	0	0	0	0	\$ 0
Total	1	2	0	1	3	1	2	12	6	1	0	29	\$2,556,305

¹ Total Pay is salaries for the period ending 6/30/2021.

AGE DISTRIBUTION
RETIREES, DISABLEDS AND BENEFICIARIES

AGE	<u>General</u>		<u>Public Safety</u>		<u>Total</u>	
	Count	Annual Pensions	Count	Annual Pensions	Count	Annual Pensions
< 45	0	\$ 0	0	\$ 0	0	\$ 0
45 - 49	0	\$ 0	2	\$ 85,607	2	\$ 85,607
50 - 54	3	\$ 86,961	0	\$ 0	3	\$ 86,961
55 - 59	2	\$ 46,622	7	\$ 278,023	9	\$ 324,645
60 - 64	4	\$ 89,699	10	\$ 422,094	14	\$ 511,793
65 - 69	10	\$ 239,121	8	\$ 391,207	18	\$ 630,328
70 - 74	12	\$ 244,447	11	\$ 472,960	23	\$ 717,407
75 - 79	3	\$ 48,407	9	\$ 332,023	12	\$ 380,430
80 - 84	10	\$ 233,967	6	\$ 286,599	16	\$ 520,566
85 - 89	2	\$ 29,949	2	\$ 87,366	4	\$ 117,315
90 - 94	0	\$ 0	0	\$ 0	0	\$ 0
95 - 99	1	\$ 32,247	0	\$ 0	1	\$ 32,247
100 +	0	\$ 0	0	\$ 0	0	\$ 0
Total	47	\$ 1,051,420	55	\$ 2,355,879	102	\$ 3,407,300

AGE DISTRIBUTION
INACTIVE VESTED MEMBERS

AGE	Count	<u>Total</u> Annual Pensions
< 45	1	\$ 7,739
45 - 49	2	\$ 22,314
50 - 54	6	\$ 71,959
55 - 59	2	\$ 34,374
60 - 64	1	\$ 6,354
65 - 69	1	\$ 6,240
Total	13	\$ 148,979

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 6/30/2020	77
b. Terminations	
i. Vested (partial or full) with deferred benefits	0
ii. Non-vested or full lump sum distribution received	0
iii. Refunded	(4)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(3)
f. Continuing participants	70
g. New entrants	<u>8</u>
h. Total active life participants in valuation	78

2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested <u>Deferred</u>	<u>Total</u>
a. Number prior valuation	86	13	0	14	113
Retired	4	0	0	(1)	3
Vested Deferred	0	0	0	0	0
Death, With Survivor	(2)	3	0	0	1
Death, No Survivor	(2)	0	0	0	(2)
Disabled	0	0	0	0	0
Refund of Contributions	0	0	0	0	0
Rehires	0	0	0	0	0
New EDROs	0	0	0	0	0
Data Corrections	0	0	0	0	0
Hired/Termed in Same Year	0	0	0	0	0
b. Number current valuation	86	16	0	13	115

SUMMARY OF CURRENT PLAN PROVISIONS

Plan Administration	<p>The Plan is a single employer defined benefit pension plan administered by a Board of Trustees comprised of five members:</p> <ul style="list-style-type: none">a.) The Mayor,b.) A member of the City Council,c.) A resident appointed by the Mayor, andd.) Two employees (one general and one public safety).
Final Average Compensation (FAC)	<p>General members: Highest 4 years.</p> <p>Communications Dispatcher: Highest 4 years.</p> <p>Public Safety Officers: Highest 4 years.</p> <p>Public Safety Command Officers: Highest 3 calendar years of compensation out of the last eight calendar years prior to retirement.</p>
Regular Retirement	
Eligibility	<p>Age 50 with 25 years of service, age 55 with 20 years of service, or age 60 with 10 or more years of service.</p>
Annual Benefit	<p>General members hired before March 30, 2011: FAC times sum of 2.00% times the first 25 years of service plus 1.00% times years of service in excess of 25 years.</p> <p>General members hired after March 30, 2011: 1.75% times FAC times years of service.</p> <p>Dispatchers/Communications Dispatcher hired before July 1, 2011: 2.125% times FAC times years of service.</p> <p>Dispatchers/Communications Dispatcher hired after July 1, 2011: 1.75% times FAC times years of service.</p> <p>Public Safety Officers and Command hired before July 1, 2011: 2.50% times FAC times years of service, maximum of 75% of FAC.</p> <p>Public Safety Officers and Command hired after July 1, 2011: 2.00% times FAC times years of service, maximum of 75% of FAC..</p>

Duty Disability Retirement

Eligibility	No age or service requirements.
Benefit	Computed as regular retirement with additional service credit granted to the earlier of the date the member would attain age 55 years or the date the member would have satisfied regular retirement eligibility conditions had the member continued in City employment. General/Communications Dispatcher members have worker's compensation offsets. Public Safety members, depending upon whether or not they are eligible for a service retirement at the time of injury, may elect to choose between worker's compensation benefits or a disability pension.

Non-Duty Disability Retirement

Eligibility	10 or more years of credited service.
Benefit	Computed as a regular retirement.

Deferred Retirement

Eligibility	10 or more years of service.
Annual Benefit	Computed as regular retirement but based on service and final average compensation at time of termination. Benefits begin at age 60.

Duty Death in Service Survivor's Pension

Eligibility	No age or service requirements. Must be in receipt of worker's compensation.
Benefit	Upon termination of worker's compensation a benefit equal to the worker's compensation amount shall be paid to the widow, unmarried children under 18 and dependent parents. Maximum benefit to the widow: 50% of final average compensation, to the children: 20% of final average compensation, and to the parents: 16-2/3% of final average compensation.

Non-Duty Death in Service Survivor's Pension

Eligibility	10 years of service.
Benefit	Computed as a regular retirement but actuarially reduced in accordance with a 100% joint and survivor election.

Member Contributions

General members: 5.00% of annual compensation.

Communications Dispatcher hired before July 1 2008: 6.00% of annual compensation.

Communications Dispatcher hired after July 1 2008: 5.00% of annual compensation.

Public Safety Members hired before July 1 2007: 6.00% of annual compensation.

Public Safety Members hired on or after after July 1 2007: 5.00% of annual compensation.

Annuity Withdrawal

A member may withdraw accumulated member contributions in a lump sum at retirement. The retirement allowance is reduced by the actuarial equivalent of the annuity withdrawn, based on actuarial assumptions concerning interest and mortality used in the annual actuarial valuation.

Pop-Up Provision

Upon the death of the beneficiary, a retiree who had previously selected either Option II or Option III will have the retirement allowance recomputed as a straight life allowance.

Supplemental Annuities

Eligibility

Age 50 with 25 years of service, age 55 with 20 years of service, or age 60 with 20 years of service. General members who qualify for a disability retirement are also eligible. Public Safety members with retirements effective after December 31, 1994 are not eligible.

Amount

<u>Years of Service</u>	<u>Monthly Benefit</u>
10-14	\$250
15-19	300
20-24	350
25+	400

Post-Retirement Cost-of-Living

Eligibility

Hired before July 1, 2016.

Amount

Annual adjustments based upon changes in the Consumer Price Index subject to a maximum increase of 2.5% of the adjusted retirement allowance. The cost-of-living adjustment shall be paid on both the base pensions and, for retirements on or after 7/1/90, supplemental annuity distributions.

SUMMARY

Valuation Date	6/30/2021	6/30/2020
Measurement Date	6/30/2021	6/30/2020
Plan Membership:		
Inactives Currently Receiving Benefits	102	97
Inactives Not Yet Receiving Benefits	13	14
Active Plan Members	<u>78</u>	<u>77</u>
Total	193	188
Covered Payroll	\$ 5,372,630	\$ 4,791,109
Net Pension Liability		
Total Pension Liability	\$ 70,648,274	\$ 82,338,984
Plan Fiduciary Net Position	<u>45,943,628</u>	<u>35,546,210</u>
Net Pension Liability	\$ 24,704,646	\$ 46,792,774
Plan Fiduciary Net Position		
As a Percentage of Total Pension Liability	65.03%	43.17%
Net Pension Liability		
As a Percentage of Covered Payroll	459.82%	976.66%
Total Pension Expense	\$ 2,255,154	\$ 7,213,753
Development of Single Discount Rate		
Single Discount Rate	6.46%	5.06%
Long-Term Expected Rate of Return	7.50%	7.50%
High-quality Municipal Bond Rate	2.18%	2.45%
Number of Years Future Benefit Payments Are Expected to be Paid	48	34

SCHEDULE OF CHANGES IN NET PENSION LIABILITY
PLAN AND CITY REPORTING

GASB 68 Reporting Period Ending	06/30/2021	06/30/2020
Measurement Date	<u>06/30/2021</u>	<u>06/30/2020</u>
Total Pension Liability		
Service Cost	1,459,769	1,381,734
Interest	4,149,881	4,160,628
Changes of Benefit Terms	-	-
Differences Between Expected and Actual Experience	(219,966)	(2,041,992)
Changes of Assumptions	(13,509,818)	1,372,928
Contributions - Buy Back	-	-
Benefit Payments, Including Refunds of Employee Contributions	<u>(3,570,576)</u>	<u>(3,403,902)</u>
Net Change in Total Pension Liability	(11,690,710)	1,469,396
Total Pension Liability - Beginning	<u>82,338,984</u>	<u>80,869,588</u>
Total Pension Liability - Ending (a)	\$ 70,648,274	\$ 82,338,984
 Plan Fiduciary Net Position		
Contributions - Employer	1,623,075	1,406,409
Contributions - Employee	282,203	262,296
Contributions - Buy Back	-	-
Net Investment Income	12,109,681	157,140
Benefit Payments, Including Refunds of Employee Contributions	(3,570,576)	(3,403,902)
Administrative Expense	(46,965)	(70,669)
Other	-	-
Net Change in Plan Fiduciary Net Position	<u>10,397,418</u>	<u>(1,648,726)</u>
Plan Fiduciary Net Position - Beginning	35,546,210	37,194,936
Adjustment to beginning of year	-	-
Plan Fiduciary Net Position - Ending (b)	\$ 45,943,628	\$ 35,546,210
 Net Pension Liability - Ending (a) - (b)	\$ 24,704,646	\$ 46,792,774
 Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	65.03%	43.17%
 Covered Payroll	\$ 5,372,630	\$ 4,791,109
Net Pension Liability as a Percentage of Covered Payroll	459.82%	976.66%

STATEMENT OF CHANGES IN NET PENSION LIABILITY
CITY REPORTING

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances at June 30, 2020	\$ 82,338,984	\$ 35,546,210	\$ 46,792,774
Adjustment to beginning of year	-	-	-
Changes for a Year:			
Service Cost	1,459,769	-	1,459,769
Interest	4,149,881	-	4,149,881
Differences Between Expected and Actual Experience	(219,966)	-	(219,966)
Changes of Assumptions	(13,509,818)	-	(13,509,818)
Changes of Benefit Terms	-	-	-
Contributions - Employer	-	1,623,075	(1,623,075)
Contributions - Employee	-	282,203	(282,203)
Contributions - Buy Back	-	-	-
Net Investment Income	-	12,109,681	(12,109,681)
Benefit Payments, Including Refunds of Employee Contributions	(3,570,576)	(3,570,576)	-
Administrative Expense	-	(46,965)	46,965
Other Changes	-	-	-
Net Changes	(11,690,710)	10,397,418	(22,088,128)
Balances at June 30, 2021	\$ 70,648,274	\$ 45,943,628	\$ 24,704,646

Sensitivity of Net Pension Liability to changes in the Discount Rate:

	Current Discount		
	1% Decrease	Rate	1% Increase
	5.46%	6.46%	7.46%
Sponsor's Net Pension Liability	\$ 33,951,166	\$ 24,704,646	\$ 17,101,896

Pension Plan Fiduciary Net Position

Detailed information about the Pension Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF
RESOURCES RELATED TO PENSIONS
YEAR-END JUNE 30, 2021

For the year ended June 30, 2021, the Sponsor will recognize a pension expense of \$2,255,154. On June 30, 2021, the Sponsor reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between actual and expected experience	14,167	1,185,970
Changes of assumptions	686,464	10,762,509
Net difference between projected and actual earnings on pension plan investments	0	5,244,253
Total	\$700,631	\$17,192,732

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year-ended June 30:

2022	(\$5,130,502)
2023	(\$4,657,080)
2024	(\$4,802,934)
2025	(\$1,901,585)
2026	\$0
Thereafter	\$0

COMPONENTS OF PENSION EXPENSE
YEAR-END JUNE 30, 2021

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning Balance	\$ 46,792,774	\$ 3,124,310	\$ 9,352,416	
Total Pension Liability Factors:				
Service Cost	1,459,769	-	-	1,459,769
Interest	4,149,881	-	-	4,149,881
Changes in Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience With Regard to Economic or Demographic Assumptions	(219,966)	219,966	-	-
Current Year Amortization	-	(565,490)	(490,279)	(75,211)
Changes in Assumptions About Future Economic or Demographic Factors or Other Inputs	(13,509,818)	13,509,818	-	-
Current Year Amortization	-	(4,077,615)	(4,812,648)	735,033
Benefit Payments, Including Refunds of Employee Contributions	(3,570,576)	-	-	-
Net Change	<u>(11,690,710)</u>	<u>9,086,679</u>	<u>(5,302,927)</u>	<u>6,269,472</u>
Plan Fiduciary Net Position:				
Contributions - Employer	1,623,075	-	-	-
Contributions - Employee	282,203	-	-	(282,203)
Projected Net Investment Income	2,601,756	-	-	(2,601,756)
Difference Between Projected and Actual Earnings on Pension Plan Investments	9,507,925	9,507,925	-	-
Current Year Amortization	-	(2,164,097)	(986,773)	(1,177,324)
Benefit Payments, Including Refunds of Employee Contributions	(3,570,576)	-	-	-
Administrative Expenses	(46,965)	-	-	46,965
Net Change	<u>10,397,418</u>	<u>7,343,828</u>	<u>(986,773)</u>	<u>(4,014,318)</u>
Ending Balance	<u>\$ 24,704,646</u>	<u>\$ 19,554,817</u>	<u>\$ 3,062,716</u>	<u>\$ 2,255,154</u>

AMORTIZATION SCHEDULE – EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience

Year Base Established	Differences Between Expected and Actual Experience	Recognition Period (Years)	2021	2022	2023	2024	2025	Thereafter
2021	\$ (219,966)	4	\$ (54,990)	\$ (54,992)	\$ (54,992)	\$ (54,992)	\$ -	\$ -
2020	\$ (2,041,992)	4	\$ (510,500)	\$ (510,498)	\$ (510,496)	\$ -	\$ -	\$ -
2019	\$ 61,369	3.9	\$ 15,736	\$ 14,167	\$ -	\$ -	\$ -	\$ -
2018	\$ 1,898,141	4	\$ 474,543	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (1,943,674)	4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			(75,211)	(551,323)	(565,488)	(54,992)	-	-

AMORTIZATION SCHEDULE – CHANGES OF ASSUMPTIONS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions

Year Base Established	Effects of Changes in Assumptions	Recognition Period (Years)	2021	2022	2023	2024	2025	Thereafter
2021	\$ (13,509,818)	4	\$(3,377,453)	\$(3,377,455)	\$(3,377,455)	\$(3,377,455)	\$ -	\$ -
2020	\$ 1,372,928	4	\$ 343,232	\$ 343,232	\$ 343,232	\$ -	\$ -	\$ -
2019	\$ (2,730,629)	3.9	\$ (700,162)	\$ (630,144)	\$ -	\$ -	\$ -	\$ -
2018	\$ 17,877,664	4	\$ 4,469,416	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (3,946,934)	4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 735,033	\$(3,664,367)	\$(3,034,223)	\$(3,377,455)	\$ -	\$ -

AMORTIZATION SCHEDULE – INVESTMENTS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Differences Between Projected and Actual Earnings on Pension Plan Investments

Year Base Established	Differences		Increase (Decrease) in Pension Expense Arising from the Recognition of the Differences Between Projected and Actual Earnings on Pension Plan Investments						
	Between Projected and Actual Earnings	Recognition Period (Years)	2021	2022	2023	2024	2025	Thereafter	
2021	\$ (9,507,925)	5	\$ (1,901,585)	\$(1,901,585)	\$(1,901,585)	\$(1,901,585)	\$(1,901,585)	\$ -	
2020	\$ 2,655,490	5	\$ 531,098	\$ 531,098	\$ 531,098	\$ 531,098	\$ -	\$ -	
2019	\$ 1,565,588	5	\$ 313,118	\$ 313,118	\$ 313,118	\$ -	\$ -	\$ -	
2018	\$ 712,784	5	\$ 142,557	\$ 142,557	\$ -	\$ -	\$ -	\$ -	
2017	\$ (1,312,549)	5	\$ (262,512)	\$ -	\$ -	\$ -	\$ -	\$ -	
Net Increase (Decrease) in Pension Expense			\$ (1,177,324)	\$ (914,812)	\$(1,057,369)	\$(1,370,487)	\$(1,901,585)	\$ -	

SCHEDULE OF CONTRIBUTIONS

Plan Year-End	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
06/30/2021	1,623,075	1,623,075	-	5,372,630	30.21%
06/30/2020	1,406,409	1,406,409	-	4,791,109	29.35%

The following assumptions were used to determine the Actuarially Determined Contribution for the plan year ending June 30, 2021:

Calculation Timing	The Actuarially Determined Contribution is calculated using a June 30, 2019 valuation date.
Interest Rate	7.75%
Mortality Rate	RP-2014 Mortality Table.
Assumptions	All other assumptions and methods used for determining the Actuarially Determined Contribution can be found in the June 30, 2019 Actuarial Valuation Report for the City of Grosse Pointe Woods Employees Retirement System prepared by Rodwan Consulting Company.

ASSUMPTIONS – GASB PENSION LIABILITY AND PENSION EXPENSE

The GASB 67/GASB 68 Pension Liability for Plan reporting as of June 30, 2021 and GASB 68 Pension Expense were determined as follows:

Valuation Date	June 30, 2021
Measurement Date	June 30, 2021
GASB 68 Expense	
Measurement Period	July 1, 2020 - June 30, 2021
Reporting Period	July 1, 2020 - June 30, 2021
Discount Rate	6.46%
Inflation	2.50%
Salary Increases	Age-based rates
Other Assumptions	A summary of complete assumptions can be found in the accompanying Actuarial Valuation as of June 30, 2021 for the City of Grosse Pointe Woods Employees Retirement System prepared by Foster & Foster Actuaries and Consultants.

The GASB 67/GASB 68 Total Pension Liability and GASB 68 Pension Expense reflects the following assumption change:

- The discount rate was updated from 5.06% to 6.46%.

NOTES TO THE FINANCIAL STATEMENTS

Discount Rate

The Discount Rate used to measure the Total Pension Liability was 6.46 percent.

The projection of cash flows used to determine the Discount Rate assumed that current Plan Member and Sponsor contributions will be made at the current contribution rate. Future Member's contributions in excess of their normal cost were also included.

Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to provide future benefit payments for 48 years. These payments were discounted using a Discount Rate equal to the Long-Term Expected Rate of return of 7.50 percent.

Future benefit payments beyond 48 years were discounted using a high-quality municipal bond rate of 2.18 percent. The high-quality municipal bond rate was based on the daily rate closest to, but not later than the measurement date of the S&P Municipal Bond 20 Year High Grade Rate Index.

The single equivalent Discount Rate was 6.46 percent.

SUMMARY OF CURRENT PLAN

Plan Administration

The Plan is a single employer defined benefit pension plan administered by a Board of Trustees comprised of five members:

- a.) The Mayor,
- b.) A member of the City Council,
- c.) A resident appointed by the Mayor, and
- d.) Two employees (one general and one public safety).

Benefits Provided

The Plan provides retirement, termination, disability and death benefits.

A summary of the benefit provisions can be found in the accompanying Actuarial Valuation as of June 30, 2021 for the City of Grosse Pointe Woods Employees Retirement System prepared by Rodwan Consulting Company.

The valuation reflects no benefit changes.

SUMMARY

Valuation Date	6/30/2021	6/30/2020
Measurement Date	6/30/2021	6/30/2020
Plan Membership:		
Inactives Currently Receiving Benefits	56	55
Inactives Not Yet Receiving Benefits	0	0
Active Plan Members	<u>49</u>	<u>48</u>
Total	105	103
Covered Payroll	\$ 2,816,325	\$ 2,475,978
Net Pension Liability		
Total Pension Liability	\$ 3,841,331	\$ 3,783,060
Plan Fiduciary Net Position	<u>2,605,835</u>	<u>1,907,226</u>
Net Pension Liability	\$ 1,235,496	\$ 1,875,834
Plan Fiduciary Net Position		
As a Percentage of Total Pension Liability	67.84%	50.41%
Net Pension Liability		
As a Percentage of Covered Payroll	43.87%	75.76%
Total Pension Expense	\$ 226,510	\$ 293,830
Development of Single Discount Rate		
Single Discount Rate	7.50%	7.46%
Long-Term Expected Rate of Return	7.50%	7.50%
High-quality Municipal Bond Rate	2.18%	2.45%
Number of Years Future Benefit Payments Are Expected to be Paid	99	71

SCHEDULE OF CHANGES IN NET PENSION LIABILITY
PLAN AND CITY REPORTING

GASB 68 Reporting Period Ending	06/30/2021	06/30/2020
Measurement Date	<u>06/30/2021</u>	<u>06/30/2020</u>
Total Pension Liability		
Service Cost	43,432	51,793
Interest	275,505	272,594
Changes of Benefit Terms	-	-
Differences Between Expected and Actual Experience	21,271	(151,559)
Changes of Assumptions	(15,148)	(198,496)
Contributions - Buy Back	-	-
Benefit Payments, Including Refunds of Employee Contributions	<u>(266,789)</u>	<u>(278,103)</u>
Net Change in Total Pension Liability	58,271	(303,771)
Total Pension Liability - Beginning	<u>3,783,060</u>	<u>4,086,831</u>
Total Pension Liability - Ending (a)	\$ 3,841,331	\$ 3,783,060
 Plan Fiduciary Net Position		
Contributions - Employer	318,174	335,830
Contributions - Employee	-	-
Contributions - Buy Back	-	-
Net Investment Income	649,743	7,796
Benefit Payments, Including Refunds of Employee Contributions	(266,789)	(278,103)
Administrative Expense	(2,520)	(3,506)
Other	-	-
Net Change in Plan Fiduciary Net Position	<u>698,608</u>	<u>62,017</u>
Plan Fiduciary Net Position - Beginning	1,907,226	1,845,209
Adjustment to beginning of year	<u>-</u>	<u>-</u>
Plan Fiduciary Net Position - Ending (b)	\$ 2,605,835	\$ 1,907,226
 Net Pension Liability - Ending (a) - (b)	\$ 1,235,496	\$ 1,875,834
 Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	67.84%	50.41%
 Covered Payroll	\$ 2,816,325	\$ 2,475,978

STATEMENT OF CHANGES IN NET PENSION LIABILITY
CITY REPORTING

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances at June 30, 2020	\$ 3,783,060	\$ 1,907,226	\$ 1,875,834
Adjustment to beginning of year	-	-	-
Changes for a Year:			
Service Cost	43,432	-	43,432
Interest	275,505	-	275,505
Differences Between Expected and Actual Experience	21,271	-	21,271
Changes of Assumptions	(15,148)	-	(15,148)
Changes of Benefit Terms	-	-	-
Contributions - Employer	-	318,174	(318,174)
Contributions - Employee	-	-	-
Contributions - Buy Back	-	-	-
Net Investment Income	-	649,743	(649,743)
Benefit Payments, Including Refunds of Employee Contributions	(266,789)	(266,789)	-
Administrative Expense	-	(2,520)	2,520
Other Changes	-	-	-
Net Changes	58,271	698,608	(640,337)
Balances at June 30, 2021	\$ 3,841,331	\$ 2,605,835	\$ 1,235,496

Sensitivity of Net Pension Liability to changes in the Discount Rate:

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.50%	7.50%	8.50%
Sponsor's Net Pension Liability	\$ 1,647,891	\$ 1,235,496	\$ 888,174

Pension Plan Fiduciary Net Position

Detailed information about the Pension Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF
RESOURCES RELATED TO PENSIONS
YEAR-END JUNE 30, 2021

For the year ended June 30, 2021, the Sponsor will recognize a pension expense of \$226,510. On June 30, 2021, the Sponsor reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between actual and expected experience	62,117	81,067
Changes of assumptions	13,851	135,602
Net difference between projected and actual earnings on pension plan investments	0	283,476
Total	\$75,968	\$500,145

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year-ended June 30:

2022	(\$94,976)
2023	(\$132,740)
2024	(\$96,711)
2025	(\$99,750)
2026	\$0
Thereafter	\$0

COMPONENTS OF PENSION EXPENSE
YEAR-END JUNE 30, 2021

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning Balance	\$ 1,875,834	\$ 314,474	\$ 438,970	
Total Pension Liability Factors:				
Service Cost	43,432	-	-	43,432
Interest	275,505	-	-	275,505
Changes in Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience With Regard to Economic or Demographic Assumptions	21,271	-	21,271	-
Current Year Amortization	-	(40,805)	(75,300)	34,495
Changes in Assumptions About Future Economic or Demographic Factors or Other Inputs	(15,148)	15,148	-	-
Current Year Amortization	-	(62,506)	(138,514)	76,008
Benefit Payments, Including Refunds of Employee Contributions	(266,789)	-	-	-
Net Change	<u>58,271</u>	<u>(88,163)</u>	<u>(192,543)</u>	<u>429,440</u>
Plan Fiduciary Net Position:				
Contributions - Employer	318,174	-	-	-
Contributions - Employee	-	-	-	-
Projected Net Investment Income	144,874	-	-	(144,874)
Difference Between Projected and Actual Earnings on Pension Plan Investments	504,869	504,869	-	-
Current Year Amortization	-	(110,620)	(50,044)	(60,576)
Benefit Payments, Including Refunds of Employee Contributions	(266,789)	-	-	-
Administrative Expenses	(2,520)	-	-	2,520
Net Change	<u>698,608</u>	<u>394,249</u>	<u>(50,044)</u>	<u>(202,930)</u>
Ending Balance	\$ 1,235,496	\$ 620,560	\$ 196,383	\$ 226,510

AMORTIZATION SCHEDULE – EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience

Year Base Established	Differences Between Expected and Actual Experience	Recognition Period (Years)	2021	2022	2023	2024	2025	Thereafter
2021	\$ 21,271	5	\$ 4,255	\$ 4,254	\$ 4,254	\$ 4,254	\$ 4,254	\$ -
2020	\$ (151,559)	4.3	\$ (35,246)	\$ (35,246)	\$ (35,246)	\$ (10,575)	\$ -	\$ -
2019	\$ 136,155	4.3	\$ 31,664	\$ 31,664	\$ 9,498	\$ -	\$ -	\$ -
2018	\$ 161,463	4.1	\$ 39,381	\$ 3,939	\$ -	\$ -	\$ -	\$ -
2017	\$ (227,980)	4.1	\$ (5,559)	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			34,495	4,611	(21,494)	(6,321)	4,254	-

AMORTIZATION SCHEDULE – CHANGES OF ASSUMPTIONS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions

Year Base Established	Effects of Changes in Assumptions	Recognition Period (Years)	2021	2022	2023	2024	2025	Thereafter
2021	\$ (15,148)	5	\$ (3,028)	\$ (3,030)	\$ (3,030)	\$ (3,030)	\$ (3,030)	\$ -
2020	\$ (198,496)	4.3	\$ (46,162)	\$ (46,162)	\$ (46,162)	\$ (13,848)	\$ -	\$ -
2019	\$ (57,257)	4.3	\$ (13,316)	\$ (13,316)	\$ (3,994)	\$ -	\$ -	\$ -
2018	\$ 567,907	4.1	\$ 138,514	\$ 13,851	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 76,008	\$ (48,657)	\$ (53,186)	\$ (16,878)	\$ (3,030)	\$ -

AMORTIZATION SCHEDULE – INVESTMENTS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Differences Between Projected and Actual Earnings on Pension Plan Investments

Year Base Established	Differences		Increase (Decrease) in Pension Expense Arising from the Recognition of the Differences Between Projected and Actual Earnings on Pension Plan Investments						
	Between Projected and Actual Earnings	Recognition Period (Years)	2021	2022	2023	2024	2025	Thereafter	
2021	\$ (504,869)	5	\$ (100,973)	\$ (100,974)	\$ (100,974)	\$ (100,974)	\$ (100,974)	\$ -	
2020	\$ 137,309	5	\$ 27,462	\$ 27,462	\$ 27,462	\$ 27,462	\$ -	\$ -	
2019	\$ 77,259	5	\$ 15,452	\$ 15,452	\$ 15,452	\$ -	\$ -	\$ -	
2018	\$ 35,650	5	\$ 7,130	\$ 7,130	\$ -	\$ -	\$ -	\$ -	
2017	\$ (48,211)	5	\$ (9,647)	\$ -	\$ -	\$ -	\$ -	\$ -	
Net Increase (Decrease) in Pension Expense			\$ (60,576)	\$ (50,930)	\$ (58,060)	\$ (73,512)	\$ (100,974)	\$ -	

SCHEDULE OF CONTRIBUTIONS

Plan Year-End	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
06/30/2021	318,174	318,174	-	2,816,325	11.30%
06/30/2020	335,830	335,830	-	2,475,978	13.56%

The following assumptions were used to determine the Actuarially Determined Contribution for the plan year ending June 30, 2021:

Calculation Timing	The Actuarially Determined Contribution is calculated using a June 30, 2019 valuation date.
Interest Rate	7.75%
Mortality Rate	RP-2014 Mortality Table.
Assumptions	All other assumptions and methods used for determining the Actuarially Determined Contribution can be found in the June 30, 2019 Actuarial Valuation Report for the City of Grosse Pointe Woods Employees Retirement System prepared by Rodwan Consulting Company.

ASSUMPTIONS – GASB PENSION LIABILITY AND PENSION EXPENSE

The GASB 67/GASB 68 Pension Liability for Plan reporting as of June 30, 2021 and GASB 68 Pension Expense were determined as follows:

Valuation Date	June 30, 2021
Measurement Date	June 30, 2021
GASB 68 Expense Measurement Period	July 1, 2020 - June 30, 2021
Reporting Period	July 1, 2020 - June 30, 2021
Discount Rate	7.50%
Inflation	2.50%
Salary Increases	Age-based rates
Other Assumptions	A summary of complete assumptions can be found in the accompanying Actuarial Valuation as of June 30, 2021 for the City of Grosse Pointe Woods Employees Retirement System prepared by Foster & Foster Actuaries and Consultants.

The GASB 67/GASB 68 Total Pension Liability and GASB 68 Pension Expense reflects the following assumption change:

- The discount rate was updated from 7.46% to 7.50%.

NOTES TO THE FINANCIAL STATEMENTS

Discount Rate

The Discount Rate used to measure the Total Pension Liability was 7.50 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments (7.50 percent) was applied to all periods of projected benefit payments to determine the Total Pension Liability.

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.50 percent. The municipal bond rate is 2.18 percent (based on the daily rate closest to, but not later than the measurement date of the S&P Municipal Bond 20 Year High Grade Rate Index). The resulting single discount rate is 7.50 percent.

SUMMARY OF CURRENT PLAN

Plan Administration

The Plan is a single employer defined benefit pension plan administered by a Board of Trustees comprised of five members:

- a.) The Mayor,
- b.) A member of the City Council,
- c.) A resident appointed by the Mayor, and
- d.) Two employees (one general and one public safety).

Benefits Provided

The Plan provides a supplementary retirement benefit.

A summary of the benefit provisions can be found in the accompanying Actuarial Valuation as of June 30, 2021 for the City of Grosse Pointe Woods Employees Retirement System prepared by Rodwan Consulting Company.

The valuation reflects no benefit changes.