

November 4, 2020

Village of Grosse Pointe Shores, a Michigan City
Grosse Pointe Shores, Michigan 48236

Attention: Thomas Krolczyk, Interim City Manager

This report contains the results of an actuarial valuation of the liabilities associated with retiree health benefits provided by the Village of Grosse Pointe Shores Retiree Health Care Fund, together with computed contributions to systematically finance these benefits.

The date of the valuation was June 30, 2020.

The purpose of the actuarial valuation is to:

- Compute the liabilities associated with post- employment health benefits likely to be paid on behalf of current retired, inactive vested and active employees, and
- Compute a pre-funding contribution rate to finance post-employment health benefits as they accrue.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. Data concerning active members, retirees and beneficiaries was provided by the City. This data has been reviewed for reasonableness, but no attempt has been made to audit such information.

Respectfully submitted,



Denise M. Jones
Senior Consultant



Sandra W. Rodwan
Member, American Academy of Actuaries

***Village of Grosse Pointe Shores
Retiree Health Care Fund***

Actuarial Valuation as of June 30, 2020

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Section One:
Valuation Summary



Purpose of Valuation

The purpose of the annual actuarial valuation of the Village of Grosse Pointe Shores Retiree Health Care Fund as of June 30, 2020 is to:

- ❖ Compute the liabilities associated with post-employment health benefits likely to be paid on behalf of current retired, inactive vested and active participants,
- ❖ Compute a pre-funding contribution rate to finance the benefits as they accrue.

Assumptions Used in the Valuation

The liabilities and pre-funding contribution rate are very sensitive to the long-term assumptions used in making the valuation. The assumptions used in making this valuation, summarized in Section Four, are only one reasonable set out of a large number of possibilities. To the extent that actual experience differs from the long-term assumptions, the liabilities and contribution rates will be greater or less than those indicated in this report. The assumptions having the greatest impact are the rate of medical care inflation and the investment return rate. We have assumed a 6.0% annual increase for medical care inflation in the first year, decreasing in increments of 0.1% over the next 10 years to the ultimate 5.0% assumption. The assumed investment return rate was 7.00%. Please refer to Comments 2 and 3 on pages 4 and 5. Liabilities and computed contributions can change significantly in future years depending upon the actual and assumed rates of medical care inflation, investment return, benefit provisions and demographics of the participant group.

Actuarial Accrued Liabilities

Accrued liabilities of the post-employment health benefits as of June 30, 2020, were computed to be \$10,275,796. Of this amount, \$4,214,300 was attributable to current active employees, \$1,654,738 was attributable to inactive vested participants and \$4,406,758 was attributable to current retirees.

Funding Value of Assets

As of June 30, 2020 the asset balance (market value) was reported to be \$1,846,062. This amount was used as the funding value of assets for the purpose of this actuarial valuation.

Computed Annual Required Contribution Rate

The total employer contribution rate computed to pre-fund the benefits expressed as a percent of active employee payroll was computed to be 43.10%. There are two components of this rate, the normal cost and an amortization payment for unfunded actuarial accrued liability. The normal cost contribution rate was computed to be 10.52% of active payroll. The amortization payment was computed to be 32.58% of active payroll. The amortization period used was 30 years.

Participants

Active Employees	16
Active Participant Payroll	\$1,447,324
Retirees	30
Inactive Vested Participants	7

Post-Retirement Health Care Rates

Illustrative rates for BCBS, Medicare Advantage and Prescription Drugs, together with current enrollment information, were submitted for current active, retired and deferred vested members.



Section Two:

***Actuarial Calculations –
Funding***



Actuarial Accrued Liabilities

The actuarial accrued liabilities as of June 30, 2020 were computed to be the following:

Active participants	\$4,214,300
Vested inactive participants	1,654,736
Retirees and beneficiaries	<u>4,406,758</u>
Total	10,275,796
Less: Valuation Assets	<u>1,846,062</u>
Unfunded Actuarial Accrued Liabilities	\$8,429,734
Funded Ratio	18.0%

Computed Annual Required Contribution (ARC) – Fiscal Year Beginning July 1, 2020

The computed contribution rate consists of two components: normal cost and amortization of unfunded actuarial accrued liability. Normal cost was computed to be a level percent of payroll from date of hire to date of termination. The normal cost can be considered to be the ongoing cost of the Plan.

The portion of the total present value of future benefits allocated to service already rendered is the actuarial accrued liability. Deducting the valuation assets produces the unfunded actuarial accrued liability. We have amortized the unfunded actuarial accrued liability (UAAL) over 30 years. The amortization payments were computed to remain level as percents of payroll.

The contribution rates shown below are expressed as level percents of active employee payroll. The annual dollar amounts of contributions are assumed to increase as payroll increases. Actual benefits paid on behalf of retirees may be treated as employer contributions for purposes of the Annual Required Contribution.

	Annual Required Contribution As a Level % of Payroll
Normal Cost – Total	11.02%
- Employee Contribution	<u>0.50</u>
- Net	10.52
Unfunded Actuarial Accrued Liability	<u>32.58</u>
Total Computed Contribution Rate	43.10%
Annual Required Contribution	\$623,781

Comments

Comment 1: For purposes of this valuation we have assumed a rate of investment return (7.00%) based upon the assumption that the employer will contribute the actuarially determined annual required contribution. If a lower rate of investment return is assumed, the liabilities and ARC would be greater. If a higher rate of investment return is assumed the liabilities and ARC would be lower.

Comment 2: Liabilities for health benefits are highly dependent upon the underlying assumptions concerning medical care inflation and the investment return rate. For the purposes of this valuation, we assumed a 7.00% investment return rate and a 6.00% annual medical care inflation rate in the first year, decreasing in 0.1% increments over the following 10 years to the ultimate assumed rate of 5.0%. Liabilities and computed contributions would be greater if a higher medical care inflation rate is assumed or a lower investment return rate. Liabilities and computed contributions would be less if a lower medical care inflation rate is assumed or a higher investment return rate. If the employer does not plan to contribute the Annual Required Contribution, the assumed rate of investment return would be lower.



Section Three:
Benefit Provisions



Benefit Provision Summary

The City provides employer financed medical, prescription drug, dental and vision benefits to retirees and beneficiaries in receipt of pension benefits from the Village of Grosse Pointe Shores Employees Retirement System, pursuant to the provisions of the labor agreements.

Eligibility for General and DPW is age 50 with 25 or more years of service or age 55 with 10 or more years of service.

Eligibility for Public Safety is age 50 with 25 years or more of service.

The City pays a percentage of the total cost of providing post-retirement health care, depending on the benefit group. Those percentages are as follows:

Admin

Years of service:	<u>25%</u>	<u>15-24</u>	<u>0-14</u>
	100%	50%	0%

DPW

Years of service:	<u>15+</u>	<u>14</u>	<u>13</u>	<u>12</u>	<u>11</u>	<u>10</u>	<u>0-9</u>
	100%	90%	80%	70%	60%	50%	0%

Public Safety – Hired before June 1, 2012: 4.0% times years of service earned as of May 31, 2012, plus the applicable percent at time of retirement times years of service earned after May 31, 2012 (currently 3.4%).

Public Safety – Hired on or after June 1, 2012: No City paid coverage provided.

Benefits are paid for retired employees and spouses and are continued to surviving spouses receiving pension benefits from the Retirement System.

Non-retired participants contribute 0.5% of pay to the Fund.



Section Four:

***Actuarial Assumptions
And Methods***



Actuarial Assumptions

Economic Assumptions

- (i) Interest Rate 7.00% (net of expenses)
- (ii) Medical Inflation Rate 6.0%, graded down to 5.0% in 0.1% increments over 10 years
- (iii) Salary Increases
 - Across-the-Board 3.0%
 - Merit and Longevity Age related rates

Sample Annual Rates of Salary Increase

Age	Across-the-Board	Merit and Longevity	Total
20	3.0%	3.8%	6.8%
25	3.0	3.1	6.1
30	3.0	2.7	5.7
35	3.0	2.4	5.4
40	3.0	2.1	5.1
45	3.0	1.7	4.7
50	3.0	1.1	4.1
55	3.0	0.7	3.7
60	3.0	0.2	3.2
65	3.0	-	3.0

Demographic Assumptions

(i) Mortality

RP-2014 Healthy Annuitant

Sample Ages	Future Life Expectancy (Years)	
	Men	Women
55	28.2	30.7
60	24.1	26.3
65	20.1	22.0
70	16.2	18.0
75	12.7	14.3
80	9.5	10.9

(ii) Disability

Sample Ages	Percent Becoming Disabled Within Next Year		
	General		Public Safety
	Men	Women	
20	0.07%	0.03%	0.10%
25	0.09	0.05	0.15
30	0.10	0.07	0.20
35	0.14	0.13	0.25
40	0.21	0.19	0.50
45	0.32	0.28	0.65
50	0.52	0.45	0.80
55	0.92	0.76	0.95

(iii) Termination of Employment

Service related rates for first 5 years of employment. Age related rates after first 5 years of employment

Sample Ages	Years of Service	Percent Terminating	
		General	Public Safety
All	0	20.00%	12.00%
	1	15.00	9.00
	2	10.00	7.00
	3	8.00	5.00
	4	7.00	4.50
20	5 & Over	6.00	4.50
25		6.00	4.50
30		5.50	3.90
35		4.40	2.30
40		1.85	0.90
45		1.25	0.50
50		1.25	0.50
55		1.25	0.50
60		1.25	0.50
65		1.25	0.50

(iv) Retirement Rates

Age-related rates

**Active Members Retiring within Year
Following Attainment of Indicated Retirement Age**

Retirement Ages	General	Retirement Ages	Public Safety
50	15%		
51	10		
52	10		
53	10		
54	10		
55	10	50	35%
56	10	51	25
57	10	52	20
58	10	53	15
59	10	54	15
60	10	55	15
61	10	56	15
62	30	57	15
63	20	58	25
64	20	59	30
65	70	60 & Over	100
66	30		
67	40		
68	50		
69	60		
70 and Over	100		

Actuarial Method Used for the Valuation

Normal Cost. Normal cost and the allocation of actuarial present values between service rendered before and after the valuation date were determined using an individual entry age actuarial cost method having the following characteristics:

- ❖ The annual normal costs for each individual active participant, payable from date of hire to date of retirement, are sufficient to accumulate the value of the participant's benefit at the time of retirement;
- ❖ Each annual normal cost is a constant percentage of the participant's year-by-year projected covered pay.

Financing of Unfunded Actuarial Accrued Liability. Unfunded actuarial accrued liability was amortized as a level percent of payroll over 30 years.



Section Five:
Valuation Data



Financial Information

The net market value of assets was reported to be \$1,846,062 as of June 30, 2020. This amount was used as the funding value of assets for the purpose of this actuarial valuation as of June 30, 2020. Reported revenues and expenditures for fiscal year ended June 30, 2020 are as follows:

Market Value 6/30/2019	\$1,911,260
Revenues	
Member Contributions	8,598
Employer Contributions	200,000
Investment Income	<u>86,363</u>
Total Revenues	294,961
Expenditures	
Retiree Health Care Benefits	360,159
Administrative Expenses	0
Total Expenditures	360,159
Market Value 6/30/2020	\$1,846,062

Participant Summary

Retirees and Beneficiaries

As of June 30, 2020 there were 30 retirees included in the valuation.

**Retirees and Beneficiaries
June 30, 2020**

54	1
56-59	6
60-64	5
65-69	2
70-74	2
75-79	7
80-84	2
88	3
90-94	<u>2</u>
	30

Active Participants

As of June 30, 2020, there were 16 active employees.

Number	16
Payroll	\$1,447,234
Averages	
Age	51.2
Service	21.8
Salary	\$90,456

**Total Active Members - June 30, 2020
Age and Service Distribution**

Attained Age						Totals	
	10-14	15-19	20-24	25-29	30-34	No.	Payroll
35-39		1				1	\$ 58,373
45-49	1	3				4	365,808
50-54		1	4	2	1	8	784,261
55-59		1	1			2	129,535
60-64			1			1	109,345
Totals	1	6	6	2	1	16	\$ 1,447,322

Group Averages:

Age: 51.2 years
 Service: 21.8 years
 Annual Pay: \$90,457