



CITY OF BATTLE CREEK
POLICEMEN AND FIREMEN RETIREMENT
SYSTEM



ANNUAL REPORT AS OF JUNE 30, 2019

The name of the retirement system is ‘City of Battle Creek Policemen and Firemen Retirement System’ and is often referred to as Police and Fire Pension Fund/System in other publications. Further reference within this document shall be “P&F Pension Fund.”

Board of Trustees

Stanley Chubinski, Chair	Commission appointee	term to expire 6/30/2021
Edward Guzzo, Vice Chair	Commission appointee	term to expire 6/30/2023
Tammy Giannunzio, Treasurer	per Public Act 345	Ex-Officio – no expiration
Lt. Jake Martin, Trustee	Fire Representative	term to expire 6/30/2024
Lt. Doug Bagwell, Trustee	Police Representative	term to expire 6/30/2022

The five-members of the Retirement Board are either elected or appointed in accordance with Public Act 345 of 1937 (“the Act). Two members shall be appointed by the legislative body of the city (the Commission) upon completing an application to serve. One member is an active member of the retirement system and elected by a majority vote of the active members of the police department. One member is an active member of the retirement system and elected by a majority vote of the active members of the fire department. The treasurer of the city is a member per the Act. All terms are four years.

Investment Fiduciaries

Comerica Bank – Custodial Bank	Earnest Partners Intermediate Duration
Harding Loevner International ADR Equity	Lazard International Equity w/EM ADR
Loomis Sayles Fixed Income	Richmond Capital 1-10 Year TIPS
Robeco Boston Partners Large Cap Value	Boston Partners Small Cap Value Equity
The Boston Company Large Cap Growth	Westfield Mid Cap Growth Equity
World Asset Management 500 Index	

Actuary & Investment Consultant

Gabriel Roeder Smith & Company – Actuary
 Plante Moran Financial Advisors – Financial/Investment Consultant

Legal Counsel

Michael VanOverbeke
 VanOverbeke, Michaud and Timmony, PC

COMPARATIVE SUMMARY RESULTS
of the June 30, 2019, June 30, 2018 and June 30, 2017
Actuarial Valuation Reports

The objective of the P&F Pension Fund is to establish and receive contributions, expressed as percents of active member payroll, which will remain approximately level from year-to-year and will not have to be increased for future generations of citizens. This objective meets the requirements of Act No. 345 of the Public Acts of 1937, as amended, and the Michigan constitution.

To determine an appropriate Employer contribution level for the ensuing year and to gauge how the P&F Pension Fund’s funding is meeting this fundamental objective, an independent firm of actuaries, Gabriel Roeder Smith & Company, conducts annual actuarial valuations.

These valuations are based on the P&F Pension Fund’s past experience, information about current members, financial markets and assumptions concerning the future demographic and economic activity. There are no closed divisions within the P&F Pension Fund. The results of the June 30, 2019 valuation, June 30, 2018 valuation, and June 30, 2017 valuation based on the established funding objective, are summarized below:

EMPLOYER CONTRIBUTION RATES
As a Percentage of Active Member Payroll

Contributions to Provide Benefits	July 1, 2020	July 1, 2019	July 1, 2018
Normal Cost: Total	27.83%	27.49%	27.51%
Amortization Payment - Initial Unfunded	17.29%	17.02%	15.69%
Total Contribution Requirement	45.12%	44.51%	43.20%
Member Contribution - Average	9.95%	9.90%	9.84%
Computed Employer Rate	35.17%	34.61%	33.36%

COMPUTED AND ACTUAL CITY CONTRIBUTIONS
Comparative Statement

Fiscal Year	Valuation Date	Budgeted/*Actual	Valuation Payroll	City's Computed % of Payroll Contributions
	June 30	Dollar Contribution		
2020/21	2019	\$6,329,231	\$14,198,563	34.98%
2019/20	2018	*\$5,870,021	\$14,324,168	34.61%
2018/19	2017	*\$5,544,034	\$14,216,474	33.36%

FUNDED STATUS

	June 30, 2019	June 30, 2018	June 30, 2017
Actuarial Accrued Liability	195,637,000	192,915,000	184,652,000
Actuarial Value of Assets	149,653,000	145,749,000	140,243,000
Funded Ratio	76.50%	75.60%	76.00%

SUMMARY OF CURRENT ASSET INFORMATION

Revenues & Expenses

	2018-19	2017-18	2016-17
Market Value - July 1	\$ 144,588,463	\$ 138,509,337	\$ 132,048,993
Revenues:			
Member Contributions	\$ 1,473,592	\$ 1,478,257	\$ 1,215,059
Employer Contributions	\$ 5,544,586	\$ 5,180,487	\$ 4,746,323
Interest & Dividends	\$ 2,851,763	\$ 2,793,846	\$ 2,818,157
Realized and Unrealized Gain (Loss)	\$ 7,471,532	\$ 7,911,067	\$ 9,253,630
Total Revenues	\$ 17,341,473	\$ 17,363,657	\$ 18,033,169
Expenditures:			
Refunds of Member Contributions	\$ 164,866	\$ 68,887	\$ 20,019
Retirement Benefits Paid Out	\$ 10,452,759	\$ 9,997,796	\$ 10,355,887
Administrative Expenses	\$ 177,368	\$ 214,905	\$ 219,010
Health Insurance Premiums	\$ 484,052	\$ 500,000	\$ 500,000
Investment Expense	\$ 541,194	\$ 502,942	\$ 477,910
Total Expenses	\$ 11,820,239	\$ 11,284,530	\$ 11,572,826
Market Value - June 30	\$ 150,109,697	\$ 144,588,464	\$ 138,509,336

BATTLE CREEK P&F ASSET CLASS RETURN ASSUMPTIONS

Asset Class	Projected Real Returns (2020-2029)
Domestic Large Cap equity	4.75%
Domestic Small/Mid Cap Equity	5.00%
International equity	5.00%
Broad Fixed income	0.50%
Cash	0.00%
Assumed Inflation	2.25%

ANNUAL BENEFITS

	<u>Age & Service Retirees</u>	<u>Disability Retirees</u>	<u>Survivor Beneficiaries</u>
2019			
Number of retirees	215	10	38
Total benefits paid	\$9,577,411	\$286,692	\$701,125
Average	\$44,546	\$28,669	\$18,451
2018			
Number of retirees	212	9	35
Total benefits paid	\$9,311,473	\$253,386	\$650,699
Average	\$43,922	\$28,154	\$18,591
2017			
Number of retirees	207	6	36
Total benefits paid	\$8,737,832	\$134,573	\$659,443
Average	\$42,212	\$22,429	\$18,318

MEMBER AND RETIREE DATA

ACTIVE MEMBERS	<u>2019</u>	<u>2018</u>	<u>2017</u>
Police:			
Lieutenants	4	4	5
Sergeants (POLC)	16	17	15
Non-Supervisory (POLC)	79	81	83
Non-Represented	5	5	6
Fire:			
Chiefs (OSP)	4	3	4
Firefighters (IAFF)	68	70	74
Firefighters (IAFF) (DROP)	5	4	1
Non-Represented	1	1	1
RETIREES	<u>2019</u>	<u>2018</u>	<u>2017</u>
Age & Service Benefits:			
Straight Life benefit-terminates @ death	40	40	43
Straight Life benefit-60% survivor benefit	173	171	163
Option 1 benefit-100% joint & survivor	1	0	0
Option 2 benefit-50% joint & survivor	1	1	1
Survivor benefit (retiree deceased)	34	31	32
Casualty Benefits <i>(includes survivor beneficiaries)</i>			
Duty Disability benefits	6	5	4
Non-duty Disability benefits	4	4	2
Duty Death benefits	1	1	1
Non-duty Death benefits	3	3	3

ANNUAL BUDGET VERSUS ACTUAL

7/1/2018 - 6/30/2019

	Budget 2018/2019	Actual 2018/2019
REVENUE		
Member Contributions	\$1,472,000	\$1,473,592
Employer Contributions	\$5,541,254	\$5,044,586
Investment Income		
Interest & Dividends	\$2,725,000	\$2,851,763
Realized & Unrealized Gains (Loss)	\$2,045,000	\$7,457,748
Other		
Securities Lending	\$19,500	\$13,784
Health Contribution	\$500,000	\$500,000
TOTAL REVENUES	\$12,302,754	\$17,341,473
EXPENDITURES		
Benefit Payments	\$9,987,300	\$10,452,759
Health Insurance	\$500,000	\$484,052
Refunds of Member Contributions	\$0	\$164,866
Administrative Expense:		
Investment Settlement (SIGMA)	\$26,248	
Investment Management Fees	\$579,700	\$541,194
Financial Consultant Fees	\$95,000	\$71,250
Custody Fees	\$85,300	\$68,403
Audit & Actuary	\$30,000	\$23,546
Administrative Services	\$8,000	\$6,000
Legal Fees	\$5,000	\$3,255
Memberships	\$125	\$200
Conference Expense	\$4,000	\$2,264
Medical Consultation	\$0	\$2,450
TOTAL EXPENSES	\$11,320,673	\$11,820,239

INVESTMENT PERFORMANCE

Plante Moran Financial Advisors

City of Battle Creek Police and Fire Retirement System

Calendar Year Historical Performance as of December 31, 2018

	12/31/2018	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
Annualized Return (net of fees)	-3.96%	4.80%	4.29%	6.62%	7.85%

SCHEDULE OF AMORTIZATIONS
For Development of Employer Contribution Rates
Attributable to Actuarial Gains and Losses and Changes

Year Established	Initial Years	Years Remaining	Initial Amount	Previous Amount	Current Amount	Amortization Factor	Payment	Previous Payment	Percent of Payroll
<u>Initial Unfunded</u>									
2019		25			\$24,714,879	14.4882	\$1,336,792		9.05%
<u>Benefit Changes</u>									
2007	30	18	\$4,422,379	\$5,105,134	\$5,109,790	14.3434	\$356,247	\$340,906	2.40%
2008	30	19	\$390,603	\$449,264	\$450,902	14.9752	\$30,110	\$28,813	0.20%
2009	30	20	\$121,354	\$138,731	\$139,580	15.5922	\$8,952	\$8,566	0.06%
2014	30	25	-\$135,876	-\$146,253	-\$148,528	18.4678	-\$8,043	-\$7,696	-0.05%
2016	30	27	\$954,398	\$988,646	\$1,004,415	19.5360	\$51,413	\$49,318	0.35%
2017	30	28	\$1,322,624	\$1,343,715	\$1,366,860	20.0466	\$68,184	\$65,373	0.46%
2018	30	29	-\$111,600	-\$111,600	-\$113,379	20.5547	-\$5,516	-\$5,304	-0.04%
2019	30	30	-\$11,845	\$0	-\$11,845	21.0413	-\$563	\$0	0.00%
<u>Actuarial Cost Methods/Assumptions</u>									
2009	30	20	\$1,503,821	\$1,719,139	\$1,729,651	15.5922	\$110,930	\$106,154	0.75%
2015	30	26	\$6,841,876	\$7,200,438	\$7,305,592	19.0133	\$384,237	\$368,572	2.60%
2017	30	28	\$4,645,879	\$4,719,963	\$4,789,746	20.0563	\$238,815	\$229,630	1.62%

ACTUARIAL ASSUMPTIONS

Valuation date:	June 30, 2019
Actuarial cost method:	Entry-age actuarial cost method
Amortization method:	Level percent-of-payroll
Remaining amortization period:	30-year closed for benefit improvements and assumption changes 25-year closed for all other liabilities
Asset valuation method:	5-year smoothed market with 20% corridor
Investment rate of return:	6.50%
Projected salary increases:	4.00% - 16.00%
Assumed rate of payroll growth:	4.00%
Assumed rate of membership growth	0%
Cost-of-living adjustments:	N/A

Amortization Method: The current method for amortizing Unfunded Actuarial Accrued Liability (UAAL) is a level percent of pay approach over a closed period of 30 years beginning July 1, 2015

and ending June 30, 2045 (25 years remaining as of the June 30, 2019 valuation, which determines the fiscal year 2021 contribution). Benefit changes and assumption changes are separately amortized over 30 years as they occur. Absent actuarial gains or losses, a closed amortization period is expected to result in UAAL amortization payments that remain level as a percentage of payroll.

Mortality Tables: This report provides the liabilities and contribution requirements using an updated set of mortality tables. The current mortality rates use the RP-2014 mortality tables with a static projection to the year 2019 using the MP-2014 mortality improvement scale. The proposed mortality rates use the RP-2014 mortality tables with fully generational mortality using the MP-2019 mortality improvement scale. This change would increase the City contribution by 0.19% of payroll for the fiscal year beginning July 1, 2020. This change would also decrease the Accrued Liabilities by about \$350 thousand. The proposed mortality table using the improvement scale was adopted by the Board.

Benefit Changes: The following new benefit provisions were reported for this valuation:

- OSP Chiefs
 - Deferred Retirement Option Plan (DROP) adopted and effective 4/2/2015;
 - Removed benefit multiplier after 25 years of service and reduced maximum benefit to be 75% of FAC;
 - No longer including longevity pay in FAC; and
 - Employee contribution rate increased to 11.65%.

These provisions are reflected for the first time in the June 30, 2019 valuation.

ACTUARIAL COST METHODS USED FOR THE VALUATION

Age and Service Benefits. 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:

(i) the annual normal costs for each individual active member (usually expressed as a percent-of-payroll), payable from the member's date of hire to the member's projected date of retirement, are sufficient to accumulate the actuarial present value of the member's projected benefit at the time of retirement; and

(ii) the actuarial accrued liability under this method is equal to the assets which would have been accumulated had the normal cost contribution been made from the date of entry to the date of the valuation and had all actuarial assumptions been realized.

Casualty Benefits. Normal cost contributions were determined using a one-year term cost method. This method produces contributions sufficient to fund the value of (i) disability benefits likely to be incurred during the year (net of the member's accrued age and service benefits), and

(ii) survivor benefits likely to be incurred during the year because of a member's death while employed.

Funding Value of Assets. The funding value of assets is derived as follows: prior year valuation assets are increased by contributions and expected investment income and reduced by refunds and benefit payments. To this amount is added 20% of the difference between expected and actual investment income for each of the previous five years. Funding value of assets may not be less than 80% nor more than 120% of market value.

Amortization of Unfunded Actuarial Accrued Liabilities. Unfunded actuarial accrued liabilities were amortized by level percent-of-payroll contributions (principal and interest combined) over periods described on page C-6 of the Actuarial Valuation Report. Active member payroll was assumed to increase 4.00% per year for the purpose of determining the level percent contributions. Characteristics of this method of amortization are illustrated on page C-6 of the Actuarial Valuation Report.