



**CITY OF BATTLE CREEK**  
**POLICEMEN AND FIREMEN RETIREMENT**  
**SYSTEM**



**ANNUAL REPORT AS OF JUNE 30, 2017**

The name of the retirement system is ‘City of Battle Creek Policemen and Firemen Retirement System’ and 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**

Joseph Newman, Chair	Commission appointee	term to expire 6/30/2019
Stanley Chubinski, Vice Chair	Commission appointee	term to expire 6/30/2017
Gail Budrow-Bradstreet, Treasurer	per Public Act 345	Ex-Officio – no expiration
Capt. John Hausman, Trustee	Fire Representative	term to expire 6/30/2020
Officer Doug Bagwell, Trustee	Police Representative	term to expire 6/30/2018

The five-member 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	Lazard Int’l Equity Select w/EM ADR
Loomis Sayles Fixed Income	Richmond Capital 1-10 Year TIPS
The Boston Partners Large Cap Value	The Boston Partners Small Cap Value
The Boston Company Large Cap Growth	Westfield Capital Mid Cap Growth
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, 2015,**  
**June 30, 2016 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. The results of the June 30, 2016 valuation, June 30, 2017 valuation, valuation based on the established funding objective, are summarized below:

**Employer Contribution Rates**  
**As a Percentage of Active Member Payroll**

<b>Contributions to Provide Benefits</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
Normal Cost: Total	27.51%	26.10%	24.79%
Amortization Payment – Initial Unfunded	15.69%	13.45%	12.91%
Total Contribution Requirement	43.20%	39.55%	37.70%
Member Contribution – Average	9.84%	8.54%	7.81%
Computed Employer Rate	33.36%	31.01%	29.89%

**Funded Status**

	<b>June 30, 2017</b>	<b>June 30, 2016</b>	<b>June 30, 2015</b>
Actuarial Accrued Liability	\$184,652,000	\$171,939,000	\$166,935,000
Actuarial Value of Assets	\$140,243,000	\$135,408,000	\$131,758,000
Funded Ratio	76.0%	78.8%	78.9%

# INVESTMENT PERFORMANCE

Plante Moran Financial Advisors

PORTFOLIO ACTIVITY REPORT (Update pending)

## City of Battle Creek Police and Fire Retirement System

Performance Account(s)

	12/31/2015 To 12/31/2016	12/31/2013 To 12/31/2016	12/31/2011 To 12/31/2016
Beginning Portfolio Value with Accrued Interest	129,385,000	126,985,414	107,138,601
Net Contributions/Withdrawals	-4,280,061	-10,943,099	-18,995,860
Realized Gains	-413,312	-48,377	13,935,497
Unrealized Gains	5,602,802	9,681,271	19,704,238
Interest and Dividends	5,602,802	8,665,351	13,745,095
Management Fees	-458,975	-1,416,458	-2,513,505
Portfolio Fees	-66,770	-160,834	-250,797
Portfolio Value with Accrued Interest	<u>132,878,552</u>	<u>132,878,552</u>	<u>132,878,552</u>
Total Fees	-525,745	-1,577,291	-2,764,303
Total Gain After Fees	7,774,840	16,720,953	44,620,527
Time Weighted Return	6.14%	13.68%	43.72%
Annualized Return	6.14%	4.37%	7.54%
Evaluation Benchmark	6.90%	14.37%	43.11%
Annualized Benchmark	6.90%	4.58%	7.44%
<b>Cumulative Market Indices</b>			
Barclays Capital U.S. Aggregate Bond Index	2.65%	9.37%	11.67%
S&P 500 Index	11.96%	29.05%	98.18%
MSCI EAFE (USD) Index	1.00%	-4.73%	37.22%

## SUMMARY OF CURRENT ASSET INFORMATION

### *Revenues & Expenses*

	<u>2016-17</u>	<u>2015-16</u>	<u>2014-15</u>
Market Value – July 1	\$132,048,993	\$ 133,850,434	\$133,938,665
<b>Revenues:</b>			
Member Contributions	\$1,215,059	\$ 1,077,632	\$ 1,076,523
Employer Contributions	\$4,746,323	\$ 4,664,957	\$ 4,612,446
Interest & dividends	\$2,818,157	\$ 2,841,493	\$ 2,941,508
Realized and Unrealized Gain (Loss)	\$9,253,630	\$ 221,390	\$ 2,210,591
 Total Revenues	 \$18,033,169	 \$ 8,805,472	 \$10,841,068
<b>Expenditures:</b>			
Refunds of Member contributions	\$20,019	\$ 3,067	\$ 22,952
Retirement Benefits Paid Out	\$10,355,887	\$ 9,441,511	\$ 9,362,852
Administrative Expenses	\$219,010	\$ 216,729	\$ 200,499
Health Insurance premiums	\$500,000	\$ 500,000	\$ 1,018,000
Investment Expense	\$477,910	\$ 445,606	\$ 324,996
 Total Expenses	 \$11,572,826	 \$ 10,606,913	 \$ 10,929,299
 Market Value – June 30	 \$138,509,336	 \$132,048,993	 \$133,850,434

### Annual Budget July 1 through June 30

<b>REVENUE</b>	<b>2017/2018</b>	<b>2016/2017</b>
Member Contributions	\$ 1,100,000	\$ 1,200,000
Employer Contributions	5,170,355	4,300,000
Investment Income		
Interest	2,050,000	2,030,000
Dividends	675,000	901,000
Realized Gains	2,445,000	2,623,000
Unrealized Gain	(400,000)	(400,000)
Other		
Class Action/Spinoffs	0	0
Securities Lending	25,000	14,000
Corporate Actions	0	0
Health Contribution	500,000	500,000
 <b>TOTAL REVENUES</b>	 <b>\$ 11,575,355</b>	 <b>\$ 10,958,000</b>

<b>EXPENDITURES</b>	<b>2017/2018</b>	<b>2016/2017</b>
Benefit Payments	\$ 9,560,000	\$ 9,500,000
Health Insurance	500,000	500,000
Refunds of Member Contributions	0	0
Administrative Expense:		
Counseling Fees	96,000	95,289
Investment Management/Consultant Fees	573,000	506,000
Custody Fees	65,000	47,850
Audit & Actuary	26,000	26,100
Legal Fees	2,000	2,000
Memberships	125	125
Conference Expense	4,000	4,000
<b>TOTAL EXPENSES</b>	<b>\$ 10,826,125</b>	<b>\$ 10,681,364</b>

## MEMBER and RETIREE DATA

<b>ACTIVE MEMBERS</b>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Police:			
Lieutenants	5	4	3
Sergeants (POLC)	15	16	14
Non-Supervisory (POLC)	83	80	86
Non-Represented	6	6	6
Fire:			
Chiefs (OSP)	4	4	1
Firefighters (IAFF)	75	77	77
Non-Represented	1	1	1
<b>RETIREES</b>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Age & Service Benefits:			
Straight Life benefit-terminates @ death	43	47	49
Straight Life benefit-60% survivor benefit	163	163	166
Option 2 benefit-50% joint & survivor	1	1	1
Survivor benefit (retiree deceased)	32	30	28
Casualty Benefits			
Duty Disability benefits	4	4	4
Non-duty Disability benefits	2	1	1
Non-duty Death benefits	3	3	3

<b>ANNUAL BENEFITS</b>	<u>Age &amp; Service Retirees</u>	<u>Disability Retirees</u>	<u>Survivor Beneficiaries</u>
<b>2017</b>			
Number of	206	6	36
Total benefits paid	\$8,737,832	\$134,573	\$659,443
Average	\$42,417	\$22,429	\$18,318
<b>2016</b>			
Number of	210	6	34
Total benefits paid	\$8,693,339	\$134,573	\$618,276
Average	\$41,397	\$22,429	\$18,185
<b>2015</b>			
Number of	215	5	32
Total benefits paid	\$8,750,843	\$122,225	\$566,996
Average	\$40,702	24,445	\$17,719

### **COMPUTED AND ACTUAL CITY CONTRIBUTIONS COMPARATIVE STATEMENT**

Fiscal Year	Valuation Date June 30	Actual Dollar Contribution	Valuation Payroll	City's Computed % of payroll Contributions
2018/19	2017	N/A	\$14,216,474	33.36%
2017/18	2016	N/A	\$13,470,636	31.01%
2016/17	2015	\$4,728,234	\$13,495,955	29.89%

### **BATTLE CREEK P&F ASSET CLASS RETURN ASSUMPTIONS**

<u>Asset Class</u>	<u>Projected Real Returns (2017-2026)</u>
Domestic Large Cap equity	4.50%
Domestic Small/Mid Cap Equity	4.75%
International equity	4.75%
Broad Fixed income	0.75%
Cash	0.00%
Assumed Inflation	2.25%

## ACTUARIAL ASSUMPTIONS

**Assumed Rate of Investment Return:** 6.50% per year, compounded annually  
(decreased from 6.75% in prior year)

**Assumed rate of long-term wage inflation** 4.00% annually  
(decreased from 4.25% prior year)

**Five-year smoothing method used to determine funding value of assets**

**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 (27 years remaining as of the June 30, 2017 valuation, which determines the fiscal year 2019 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.

### 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;

(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.

Active member payroll was assumed to increase 4.00% a year for the purpose of determining the level percent contributions. Characteristics of this method of amortization are illustrated on the following page.

**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	Amortization Payment	Previous Payment	Percent-of Payroll
<b><u>Initial Unfunded</u></b>									
2017		27			\$23,149,171	19.5460	\$1,184,345		7.99%
<b><u>Benefit Changes</u></b>									
2007	30	20	\$4,422,379	\$5,055,672	5,086,588	15.5922	326,226	\$312,178	2.20%
2008	30	21	390,603	442,834	446,534	16.1948	27,573	26,385	0.19%
2009	30	22	121,354	136,165	137,581	16.7834	8,197	7,844	0.06%
2014	30	27	(135,876)	(141,213)	(143,806)	19.5261	(7,365)	(7,048)	(0.05%)
2016	30	29	954,398	954,398	971,927	20.5451	47,307	45,378	0.32%
2017	30	30	1,322,624	0	1,322,624	21.0413	62,858	0	0.42%
<b><u>Actuarial Cost Methods/Assumptions</u></b>									
2009	30	22	1,503,821	1,687,351	1,704,894	16.7834	101,582	97,208	0.68%
2015	30	28	6,841,876	6,967,535	7,087,389	20.0466	353,547	339,133	2.39%
2017	30	30	4,645,879	0	4,645,879	21.0413	220,798	0	1.49%