Police and Fire Retirement System of the City of Detroit

Financial Report
with Supplemental Information
June 30, 2018

Contents

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Independent Auditor's Report

To the Board of Trustees
Police and Fire Retirement System of the City of Detroit

Report on the Financial Statements

We have audited the accompanying financial statements of the Police and Fire Retirement System of the City of Detroit (the "System") as of and for the year ended June 30, 2018 and the related notes to the financial statements, which collectively comprise the Police and Fire Retirement System of the City of Detroit's basic financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Police and Fire Retirement System of the City of Detroit as of June 30, 2018 and the changes in its fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

To the Board of Trustees
Police and Fire Retirement System of the City of Detroit

Other Matters

Required Supplemental Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and other required supplemental information, as identified in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, which considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplemental information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Report on Summarized Comparative Information

We have previously audited the Police and Fire Retirement System of the City of Detroit's June 30, 2017 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated December 4, 2017. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2017 is consistent, in all material respects, with the audited financial statements from which it has been derived.

Plante & Moran, PLLC

November 26, 2018

Using this Annual Report

This annual report consists of three parts: (1) management's discussion and analysis (this section), (2) the basic financial statements, and (3) the required supplemental information. The financial statements also include notes that explain some of the information in the financial statements and provide more detailed data. The financial statements are followed by sections of required supplemental information that further explain and support the information in the financial statements.

Condensed Financial Information

The table below compares key financial information in a condensed format between the current year and the prior year:

	2018	2017
Assets	$ 3,344,199,389	$ 3,319,639,018
Liabilities	345,285,735	299,820,395
Fiduciary Net Position Restricted for Pensions	**$ 2,998,913,654**	**$ 3,019,818,623**
Additions		
Net investment income	$ 244,318,898	$ 288,289,217
Securities lending income:		
Income	1,942,678	1,666,383
Net gain on collateral pool	397,791	1,429,056
Total securities lending income	2,340,469	3,095,439
Contributions:		
Employer	19,274,356	19,633,772
Employee	9,212,990	8,603,082
Foundation contributions	18,300,000	18,300,000
Total contributions	46,787,346	46,536,854
Other income	1,525,944	1,500,667
Total additions	294,972,657	339,422,177
Deductions		
Retirees' pension and annuity benefits	288,851,671	286,867,526
Member refunds and withdrawals	20,163,415	19,518,004
Other expenses	6,862,540	7,081,690
Total deductions	315,877,626	313,467,220
Net (Decrease) Increase in Fiduciary Net Position Restricted for Pensions	**$ (20,904,969)**	**$ 25,954,957**

Fund Overview, Membership, and Governance

The Police and Fire Retirement System of the City of Detroit (DPFRS or the "System") is a defined benefit pension plan with a defined contribution element, which, as discussed in greater detail below, was frozen by the City of Detroit, Michigan (the "City") at the conclusion of the 2014 fiscal year. This existing plan, the legacy plan (the "Legacy Plan"), is also referred to as "Component II." A new pension plan (the "Hybrid Plan," also referred to as Component I) was created by the City for its uniformed employees on July 1, 2014. Both the Legacy Plan and Hybrid Plan are being reported in these financial statements.

DPFRS exists to pay benefits to its active members, retirees, and beneficiaries. Active members earn service credit that entitles them to receive benefits in the future. Both the employer and municipal plan sponsor for the System, the City, and active members have historically contributed to the System. Retirees, beneficiaries, and disabled members are those currently receiving benefits.

Component I of DPFRS is a newly created plan (effective July 1, 2014), with more active members earning service credit than members eligible to receive or receiving benefits. As of June 30, 2017, there were 2,604 active members, with 64 retirees and 465 terminated plan members entitled to but not yet receiving benefits.

Component II of DPFRS is a relatively mature plan in that there are more retirees and beneficiaries receiving current benefits than active members. Membership of the System at June 30, 2017 consisted of 2,597 active members with 8,187 inactive members receiving benefits and 424 terminated plan members entitled to but not yet receiving benefits. On June 30, 2014, the emergency manager of the City of Detroit, Michigan issued Order No. 29, which froze the existing pension plan, the Legacy Plan. As of June 30, 2014, no new employees were allowed to participate in the Legacy Plan, and benefit accruals for members with respect to service rendered prior to July 1, 2014 were frozen based on the members' years of service, average final compensation, and the pension multiplier formula as of the freeze date. Employees working after July 1, 2014 are now earning service credit in the Hybrid Plan.

On July 1, 2014, the City first published a document entitled The Combined Plan for The Police and Fire Retirement System of the City of Detroit, Michigan (the "Combined Plan"). On October 19, 2014, the emergency manager issued Order No. 43, which amended and restated the Combined Plan. Before leaving office on December 8, 2014, the emergency manager issued Order No. 44, which again amended and restated the Combined Plan. According to Order No. 44, the latest amendments and restatements to the Combined Plan made changes related to collective bargaining agreements, conformed the Combined Plan terms to the requirements of the City of Detroit, Michigan's bankruptcy plan, and made clarifying modifications. The Combined Plan is available at DPFRS' website, www.pfrsdetroit.org.

On October 19, 2014, the emergency manager issued Order No. 43, which amended and restated the Combined Plan. On December 8, 2014, before leaving office, the emergency manager issued Order No. 44, which again amended and restated the Combined Plan. According to Order No. 44, the latest amendments and restatements to the Combined Plan conformed the Combined Plan terms to the requirements of the City's bankruptcy plan, and made clarifying modifications. The Combined Plan is available at DGRS's website, www.rscd.org.

DPFRS governance was modified in December 2014 as part of the City of Detroit, Michigan's bankruptcy plan. DPFRS is governed by a board of trustees comprised of 17 seats, though as of June 30, 2017, there were 15 seats occupied (the "Board"), and while DPFRS' investment management is now the ultimate responsibility of a nine-member investment committee (the "Investment Committee"), the Board maintains its role as the governing board vested with responsibility for the general administration, management, and operation of the System, with which the Investment Committee assists, pursuant to Michigan law.

The Board is composed of six members elected by the active membership to serve three-year terms. Expirations of terms of elected trustees are staggered. Two retired members are elected by the retired membership and serve three-year terms. Eight members serve ex-officio, these members being the mayor of the City of Detroit, Michigan (or designee), the city treasurer (or deputy treasurer), one representative from the Detroit City Council, the Corporation Counsel (or designee), the finance director (or designee), the budget director (or designee), and two ex-officio trustees to be appointed by the mayor. A 17th trustee, who is not a participant of the plan and is not employed by the City, may be selected to serve two years by the board of trustees.

The Investment Committee has five independent members appointed to initial terms with staggered expirations, which terms will all eventually become six years. Four additional members, two active and two retired, serve on the Investment Committee based on appointment by the Board. The Investment Committee will be in place through at least December 2034.

The City of Detroit, Michigan's Chapter 9 Bankruptcy Case, the Plan of Adjustment, and Implementation

In March 2013, after the City had endured years of financial difficulty, the governor appointed an emergency manager for the City pursuant to Michigan Public Act 436 of 2012 (PA 436), which is a law that includes the ability for an emergency manager to file a bankruptcy proceeding. In anticipation of that possibility, DPFRS had assembled a restructuring team of professional legal, financial, actuarial, and other advisors to assist the System's on-staff professionals with meeting the unknown challenges that could arise if the City filed for bankruptcy protection.

On July 18, 2013, the City filed a petition in the United States Bankruptcy Court for the Eastern District of Michigan (the “Bankruptcy Court”) seeking protection from its creditors under Chapter 9 of the United States Bankruptcy Code (the “Chapter 9 Case”). DPFRS, one of the City’s largest creditors because of its duty to collect employer contributions from the City and the City’s delinquency in making required employer contributions as of fiscal year 2013, objected to the City’s request for Chapter 9 relief on the basis that Article IX, Section 24 of the Michigan Constitution of 1963 prevented the City from diminishing accrued pension benefits, even in bankruptcy. On December 5, 2013, after a hearing lasting several weeks, the Bankruptcy Court entered an order determining that the City was eligible for Chapter 9 relief and holding that accrued pension benefits could be impaired in bankruptcy despite the language of the Michigan Constitution. DPFRS immediately filed an appeal with the United States Court of Appeals for the Sixth Circuit.

The Bankruptcy Court also ordered DPFRS and other creditors to mediate their disputes with the City, a process that gained momentum in early 2014. As a result of court-ordered mediation, DPFRS supported a proposed settlement of DPFRS member pension claims, which was memorialized in the City’s Fourth Amended Plan for the Adjustment of Debts of the City of Detroit, filed on May 5, 2014 along with an accompanying Fourth Amended Disclosure Statement (the “Pension Settlement”). On May 12, 2014, the City issued ballots to all DPFRS members as claim holders in Class 10 under the City’s classification system for its creditors, seeking their approval of the Pension Settlement. On June 19, 2014, the Board adopted a resolution supporting treatment of the DPFRS Class 10 claim holders as part of the Pension Settlement. DPFRS thereafter issued correspondence to its membership in support of the treatment of Class 10 claims. Also in June 2014, the Michigan legislature adopted legislation, which the governor signed, conditionally approving the State’s contribution of $194.8 million, split between DPFRS and the General System of the City of Detroit, to the resolution of the Chapter 9 Case.

The Pension Settlement’s terms were carried forward to the Eighth Amended Plan for Adjustment of Debts of the City of Detroit (the “Plan of Adjustment”), filed with the Bankruptcy Court on October 22, 2014. In November 2014, after a confirmation hearing lasting several weeks, the Bankruptcy Court confirmed the Plan of Adjustment, which became effective on December 10, 2014.

The Pension Settlement, as part of the Plan of Adjustment, compromised pension claims and provided support for DPFRS legacy benefit obligations with funding support from the State of Michigan and certain charitable foundations in connection with the Detroit Institute of Arts, and included governance changes for DPFRS. Those governance changes included establishment of the Investment Committee effective December 10, 2014, which officially marked the beginning of implementation of the Plan of Adjustment, though DPFRS had for months already undertaken contingency planning for all of the pension adjustments.

For DPFRS, with respect to Chapter 9 Case benefit adjustments, the Pension Settlement (for which benefit levels were and are contingent on other factors, including receipt of outside contributions), did not reduce DPFRS Legacy Plan pension benefits, but provided for a 55 percent reduction in cost of living adjustments, or “escalators” (COLAs), paid after June 30, 2014. The Plan of Adjustment also includes the possibility of restoration of certain pension benefit cuts based on a program for the most financially vulnerable pensioners and beneficiaries through the State of Michigan Treasury Department, as well as a new feature of the Legacy Plan allowing restoration depending on the System’s funding level over time.

Other components of implementation of the Plan of Adjustment proceeded between December 2014 and March 2015, and included dismissal of related litigation proceedings, including DPFRS’ appeal of the Bankruptcy Court’s eligibility determination in the United States Court of Appeals for the Sixth Circuit. The process of implementing the Plan of Adjustment is expected to continue through 2016 and beyond, with monitoring, compliance, and other activity by DPFRS, its board of trustees, and its Investment Committee. On December 1, 2014, DPFRS provided its retirees and beneficiary members with applications for the Income Stabilization Program (the “ISF Program”) established as part of the State Contribution Agreement, another facet of the Pension Settlement. The ISF Program, supported by city funds arising from an unlimited tax general obligation bonds settlement, is intended to ensure that the most financially vulnerable retirees and beneficiaries do not fall below the poverty line as a result of bankruptcy-related pension changes. The ISF Program was implemented on March 1, 2015, along with other bankruptcy-related pension benefit changes.

As of March 1, 2015, less than three months after the effective date of the Plan of Adjustment, DPFRS successfully implemented the vast majority of benefit changes required by the Plan. In fiscal year 2017, DPFRS continued to implement the Plan of Adjustment, which includes ongoing compliance and meeting additional periodic and interim reporting requirements by the Board and the Investment Committee to the City, the Foundation for Detroit's Future, and the State of Michigan, annual review of benefit levels, and essentially provides for a 40-year plan to close the DPFRS underfunded Legacy Plan liability. DPFRS met its obligations in fiscal years 2016 and 2017 concerning implementation of the Plan of Adjustment, and continued compliance in the fiscal year 2018.

Contributions to the System

Historically, both the City and active employees have made regular contributions to the System. Basic pension and disability benefits have been funded through employer and employee contributions plus investment earnings on those contributions. The required employer contributions have been determined by the System's actuaries using the entry age normal cost method. Assumptions used by the actuaries are subject to experience testing every five years. Effective December 10, 2014, as part of the resolution of the Chapter 9 Case, the investment return assumption and discount rate used by the System's actuary for the purpose of determining the System's assets and liabilities for funding purposes was fixed at 6.75 percent through the period ending June 30, 2023.

Prior to the filing of the Chapter 9 Case, the City stopped making payments related to unsecured funded debt and legacy liabilities, including payments to the System. When the City filed the Chapter 9 Case, obligations owed by the City became potentially subject to compromise in the bankruptcy process. The pension claims of DPFRS members were determined by the Bankruptcy Court to be included as unsecured obligations. The City's last employer contribution before the Chapter 9 Case was made on December 28, 2012. During fiscal year 2014, the City did not make any contributions to the System. In the Chapter 9 Case, DPFRS filed a claim against the City for $72.6 million as of July 18, 2013, reflecting past-due employer contributions with interest for fiscal years 2012 and 2013. This amount did not reflect the full unfunded actuarial accrued liability of the System.

Going forward, the obligations for contributions to the System through 2023 are determined as fixed amounts pursuant to the provisions in the Plan of Adjustment. Pursuant to the Plan of Adjustment, the System was expected to receive contributions totaling $260.7 million, including $96.0 million from the State of Michigan and at least the present value equivalent of $164.7 million from the foundation donors, over a 10-year period covering fiscal year 2015 through fiscal year 2023, as well as at least the present value of $50 million over a 10-year period ending in 2034. The City will retain responsibility for the full funding obligations of the System after 2023, consistent with Michigan law.

The Plan of Adjustment allows for certain of the funding obligations to DPFRS through 2034 to be met by prepayment of the present value equivalent using a discount rate of 6.75 percent. In the fiscal year ended June 30, 2016, a portion of the DIA obligation to make annual $5 million contributions over 10 years ending in 2034 was prepaid. This present value prepayment resulted in DPFRS receiving $19,487,744 on June 30, 2016 from the DIA, which represents the present value, using a 6.75 percent discount rate, of $4,650,000 per year for 10 years ending in 2034. DPFRS still expects to receive the equivalent or actual remaining $375,000 per year from the DIA for that 10-year period from 2025 to 2034.

Impact of City of Detroit Collective Bargaining and Bankruptcy Pension Adjustments

As further noted below, depending on bargaining unit, the following changes became effective with EM Order No. 29:

- The Legacy Plan obligations, or the existing defined contribution plan and defined benefit plan, were frozen as of June 30, 2014, as referenced above.
- As of July 1, 2014, a new defined benefit plan commenced with mandatory contributions as part of the new Hybrid Plan. Members hired on June 30, 2014 or before contribute 6 percent of base compensation, and all employees hired on or after July 1, 2014 will contribute 8 percent of base compensation.

- As of July 1, 2014, a new defined contribution plan became optional for the annuity savings fund in the new Hybrid Plan. Employees may make voluntary Annuity Savings Fund contributions up to 10 percent of total after-tax pay. Interest will be credited at the actual net investment rate of return of DPFRS, but will in no event be lower than 0 percent or higher than 5.25 percent.

In the Legacy Plan, active employees historically made a mandatory contribution of 5 percent of pay toward their defined contribution benefits (annuity savings fund) until the date at which they are eligible for retirement. These employee contributions are maintained in separate accounts in the defined contribution plan solely for the benefit of the contributing employee. Before the Legacy Plan was frozen, employee annuity savings fund accounts were credited with investment earnings equal to the rate of return earned by the System subject to minimum earnings of 0 percent. An active employee is allowed in the Legacy Plan to withdraw his or her accumulated contributions in the annuity savings fund plus investment earnings once he or she is eligible for retirement or upon completion of 25 years of service (DPOA and fire equivalents may do so at 20 years, consistent with new collective bargaining agreements entered in 2014).

Following the freeze of the Legacy Plan, no member was allowed to make contributions into the annuity savings fund of the Legacy Plan with respect to payroll dates occurring on or after August 1, 2014. Mandatory employee contributions of 6 percent of pay after that date support the defined benefits allowed as part of the new Hybrid Plan.

In the new Hybrid Plan, effective July 1, 2014 and beginning with payroll on or after August 1, 2014, active employees were allowed to make voluntary contributions to a new annuity savings fund account of up to 10 percent of total after-tax pay. Interest will be credited to those accounts at the actual net investment rate of return for DPFRS, but will not be lower than 0 percent or more than 5.25 percent. No in-service withdrawals are permitted from the Hybrid Plan annuity savings fund accounts.

In the Hybrid Plan, employer contributions by the City are allocated according to bargaining unit and the respective collective bargaining agreement (CBA). For Detroit Fire Fighter Association employees, the City will contribute 11.2 percent of base compensation prior to the effective date of the CBA and 12.25 percent after the effective date of the CBA. For Detroit Police Command Officers Association employees, the City will contribute 12.25 percent of base compensation. For Detroit Police Officers Association employees, the City will contribute 11.2 percent of base compensation prior to the effective date of the CBA and 12.25 percent after the effective date of the CBA. For Detroit Police Lieutenants and Sergeants Association employees, 12.25 percent of base compensation will be contributed by the City. For all of these employees, a portion of these contributions will be contributed to a rate stabilization fund, as determined by the City.

Additionally, as noted above, as a result of the Chapter 9 Case, cost of living adjustments made to annual pension benefits to account for the effects of inflation (COLA) in the Legacy Plan from and after June 30, 2014 were reduced to 45 percent of the COLAs provided for in police and fire collective bargaining agreements, other contracts, or ordinances. These adjustments were implemented with pension payments made on and after March 1, 2015. Base benefits for DPFRS member benefits accrued through June 30, 2014 were not subject to any cuts in resolution of the Chapter 9 Case.

Beginning on March 1, 2015, certain DPFRS members also received benefit pension cut restoration under the Income Stabilization Fund program administered by DPFRS pursuant to the State Contribution Agreement based on eligibility and benefit payments calculated by the State of Michigan.

Note 10 to the financial statements for the fiscal year ended June 30, 2014 discusses, in further detail, the changes resulting from the Plan of Adjustment.

Benefit Payments

The System exists to pay the benefits that its members have earned pursuant to benefits promised by the City, subject to the Chapter 9 Case benefit adjustments going forward in the Legacy Plan and the new promises in the Hybrid Plan. Benefits are paid monthly. In fiscal year 2018, DPFRS paid out $309 million in benefits, consisting of $288.9 million in benefits to retirees and beneficiaries plus $20.2 million in refunds of annuity savings fund balances. This represents approximately 10.3 percent of the net position of the System as of June 30, 2018. Employer and employee contributions were approximately $46.8 million, or 1.6 percent, of the net position of the System. The excess of benefits over contributions is funded through investment income. The public capital markets represent the primary source of opportunities to earn investment income.

As of June 30, 2014, due to the freeze for the Legacy Plan, no additional benefit accruals are being earned in the Legacy Plan.

Asset Allocation

The Board and Investment Committee believe that the principal determinant of total fund investment performance over long periods of time is asset allocation. The DPFRS asset allocation is built upon the foundation that the obligations of DPFRS to pay the benefits promised to its members are very long-term obligations. Accordingly, the Board and Investment Committee must make investment decisions that it believes will be the most beneficial to the System over many years, not just one or two years.

DPFRS has established asset allocation policies that are expected to deliver more than enough investment income over a very long period of time to satisfy the obligations to pay the benefits promised to the members of the System. The following is a summary of the System's target asset allocation policy as of June 30, 2018:

Asset Class	Target Allocation
Global equity	38.00 %
Global fixed income	28.00
Real estate	13.00
Private equity	10.00
Hedge funds	5.00
MLPs	5.00
Cash	1.00

DPFRS asset allocation policies comply with Michigan law.

Investment Results

DPFRS calculates investment results on a time weighted Global Investment Performance Standard (GIPS) basis, unless explicitly stated otherwise. All returns for periods of one year or greater have been annualized.

Total Fund Composite

DPFRS' total fund composite return for the year was 8.2 percent, net of fees and expenses using a time-weighted methodology. The three-year and five-year annualized total fund returns were 7.2 percent and 8.6 percent, respectively, net of fees and expenses.

DPFRS' well-diversified, global portfolio performed well across most asset classes. Despite a series of unexpected events during the fiscal year, volatility in the equity markets remained subdued, and the strong performance generated by a typical well-diversified portfolio was largely driven by robust global equity returns. International Equities led the way with a total return in excess of 14 percent for the fiscal year.

As part of the resolution of the City of Detroit, Michigan's Chapter 9 Bankruptcy Case, the discount rate assumption used to meet current and future benefit obligations was set at 6.75 percent through the period ending June 30, 2023. This discount rate assumption provided in the Chapter 9 Case does not purport to establish an investment return assumption or discount rate for purposes of, or in accordance with, generally accepted accounting principles. Although the fund's return for this year fell below this assumption, the fund's longer-term return expectation, which this assumption is intended to characterize, still exceeds this assumption.

Total plan returns, net of fees and expenses, for the recent prior fiscal years ended June 30 are shown below:

2017	12.0%
2016	2.6%
2015	3.4%
2014	18.4%
2013	9.7%
2012	(1.5)%
2011	13.8%

Money Weighted Rate of Return

GASB Statement No. 67 requires the disclosure of the annual money-weighted rate of return. A money-weighted rate of return (as opposed to the time-weighted rate of return discussed in the previous section) considers both the size and timing of cash flows over the course of the year to determine an internal rate of return (sometimes referred to as an “IRR”). This return is calculated net of expenses and uses cash flows determined on a monthly basis. The DPFRS money-weighted rate of return for the year using end-of-the-month cash flows was 8.2 percent.

Requests for Further Information

This financial report is intended to provide a general overview of the System’s finances and investment results in relation to actuarial projections. It shows the System’s accountability for the money it receives from employer and employee contributions. If you have questions about this report or need additional information, we welcome you to contact the System’s office or visit its website at www.pfrsdetroit.org or www.rscd.org.

Statement of Fiduciary Net Position

June 30, 2018

	Component II Plan (Legacy)		Component I Plan (Hybrid)	
	Defined Benefit Fund	Income Stabilization Fund	Defined Benefit Fund	Total Combined Plan
Assets				
Cash and cash equivalents (Note 3)	$ 57,033,964	$ 260,219	$ 16,361,957	$ 73,656,140
Investments: (Notes 3 and 4)				
Global equities	1,426,303,608	2,224,429	54,424,352	1,482,952,389
Global fixed income	596,551,639	930,368	22,763,000	620,245,007
Real assets	460,294,117	717,864	17,563,729	478,575,710
Private equity	153,374,279	239,199	5,852,399	159,465,877
Diversifying strategies	170,742,398	266,286	6,515,125	177,523,809
Receivables:				
Accrued interest receivable	6,166,500	9,617	235,299	6,411,416
Contributions (Note 1)	-	-	4,220,826	4,220,826
Other accounts receivable	35,630	-	-	35,630
Notes receivable from participants	6,360,470	-	-	6,360,470
Receivables from investment sales	85,624,465	133,538	3,267,227	89,025,230
Prepaid expenses and other assets	128,266	200	4,895	133,361
Cash and investments held as collateral for securities lending: (Note 3)				
Asset-backed securities	24,228,043	37,785	924,484	25,190,312
Repurchase agreements	40,307,416	62,862	1,538,035	41,908,313
U.S. corporate floating rate	170,856,680	266,464	6,519,484	177,642,628
Capital assets - Net (Note 1)	551,830	-	300,441	852,271
Total assets	3,198,559,305	5,148,831	140,491,253	3,344,199,389
Liabilities				
Claims payable to retirees and beneficiaries	699,877	-	3,108	702,985
Payables for investment purchases	92,477,921	144,227	3,528,737	96,150,885
Due to City of Detroit, Michigan	1,381,128	-	-	1,381,128
Amounts due broker under securities lending arrangements (Note 3)	232,885,808	363,203	8,886,368	242,135,379
Other liabilities	4,810,766	2,938	101,654	4,915,358
Total liabilities	332,255,500	510,368	12,519,867	345,285,735
Net Position - Restricted for pensions	**$ 2,866,303,805**	**$ 4,638,463**	**$ 127,971,386**	**$ 2,998,913,654**

See notes to financial statements.

Statement of Changes in Fiduciary Net Position

Year Ended June 30, 2018
(with comparative totals for the year ended June 30, 2017)

	Component II Plan (Legacy)		Component I Plan (Hybrid)		
	Defined Benefit Fund	Income Stabilization Fund	Defined Benefit Fund	Total Combined Plan 2018	2017
Additions					
Investment income:					
Interest and dividends	$ 71,726,625	$ 104,147	$ 2,589,017	$ 74,419,789	$ 94,303,953
Net increase in fair value of investments	178,410,172	263,463	6,524,441	185,198,076	209,767,693
Investment-related expenses	(14,717,379)	(21,187)	(560,401)	(15,298,967)	(15,782,429)
Net investment income	235,419,418	346,423	8,553,057	244,318,898	288,289,217
Securities lending income:					
Income	1,872,353	2,720	67,605	1,942,678	1,666,383
Net gain on collateral pool	383,391	557	13,843	397,791	1,429,056
Net securities lending income	2,255,744	3,277	81,448	2,340,469	3,095,439
Contributions:					
Employer	-	29,550	19,244,806	19,274,356	19,633,772
Employee	42,114	-	9,170,876	9,212,990	8,603,082
Foundations (Note 2)	18,300,000	-	-	18,300,000	18,300,000
Total contributions	18,342,114	29,550	28,415,682	46,787,346	46,536,854
Transfer from Component II to Component I (Note 9)	-	-	-	-	20,000,000
Other income	1,469,201	1,389	55,354	1,525,944	1,500,667
Total additions - Net	257,486,477	380,639	37,105,541	294,972,657	359,422,177
Deductions					
Retirees' pension and annuity benefits	288,443,573	62,801	345,297	288,851,671	286,867,526
Member refunds and withdrawals	19,947,151	-	216,264	20,163,415	19,518,004
Transfer to Component I from Component II (Note 9)	-	-	-	-	20,000,000
General and administrative expenses	4,933,926	-	1,928,614	6,862,540	7,081,690
Total deductions	313,324,650	62,801	2,490,175	315,877,626	333,467,220
Net (Decrease) Increase in Net Position Held in Trust	(55,838,173)	317,838	34,615,366	(20,904,969)	25,954,957
Net Position Restricted for Pensions - Beginning of year	2,922,141,978	4,320,625	93,356,020	3,019,818,623	2,993,863,666
Net Position Restricted for Pensions - End of year	**$ 2,866,303,805**	**$ 4,638,463**	**$ 127,971,386**	**$ 2,998,913,654**	**$ 3,019,818,623**

See notes to financial statements.

Note 1 - Significant Accounting Policies

Reporting Entity

The City of Detroit, Michigan (the "City") sponsors the Police and Fire Retirement System of the City of Detroit (the "System"), which consists of two single-employer retirement plans, as described below.

Component II

This is the legacy plan (the "Legacy Plan"), which represents the original defined benefit plan, and which includes a defined benefit component and a defined contribution component. Component II generally applies to benefits accrued by members prior to July 1, 2014. On June 30, 2014, as a result of negotiations between the City and the public employee unions, the existing plan benefit formulas were frozen, and no new employees were allowed to earn benefits under the existing plan. The emergency manager issued Order No. 29 (Police and Fire Retirement System of the City of Detroit) on June 30, 2014, which put these changes into effect. Except as specifically provided in the Combined Plan, benefits provided under Component II are frozen effective June 30, 2014.

Component I

As of July 1, 2014, all current and future employees participate in the new hybrid pension plan (the "Hybrid Plan"), or Component I. This hybrid plan includes a defined benefit component and a defined contribution component. Component I of the plan document applies to benefits accrued by members on or after July 1, 2014.

Active city employees who participate in the current plan will receive the benefits they have earned under the System through June 30, 2014 plus an additional benefit under the new hybrid plan formula, assuming all vesting requirements are met.

The Combined Plan is a separate and independent trust qualified under applicable provisions of the Internal Revenue Code; it is an independent entity (separate and distinct from the employer/plan sponsor), as required by (1) state law and (2) Internal Revenue Code provisions setting forth qualified plan status. The trustees of the plan have a fiduciary obligation and legal liability for any violations of fiduciary duties as independent trustees. The Combined Plan provides retirement, disability, and survivor benefits to plan members and beneficiaries.

The financial statements for fiscal year 2018 represent the Legacy Plan, or "Component II," as well as the new Hybrid Plan, or "Component I." Component II also includes the Income Stabilization Fund. The fund, which is part of Component II only and established as a special plan of adjustment provision, was established for the sole purpose of paying the Income Stabilization Benefits and Income Stabilization Benefits Plus to eligible pensioners. Any funds received by the System that are designated by the City as UTGO Bond Tax Proceeds or a contribution to the Income Stabilization Fund are credited to the Income Stabilization Fund, as defined in the State Contribution Agreement, which is an exhibit to the Plan of Adjustment. After 2022, the Investment Committee may recommend to the board of trustees (the "Board") that a portion or all of the assets that exceed income stabilization benefits (including Income Stabilization Benefits Plus) to be paid in the future be used to fund regular pension payments.

The financial statements for the System are also reported in the financial statements of the City of Detroit, Michigan as a pension trust fund. The assets of the pension trust funds include no securities of or loans to the City or other related parties.

These financial statements include comparative columns for 2017. Such information is not meant to be a complete presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements for the year ended June 30, 2017.

Note 1 - Significant Accounting Policies (Continued)

Plan Sponsor Financial Condition - Impact on the System

In the past, the City of Detroit, Michigan (the "plan sponsor") had experienced significant financial difficulty and liquidity concerns. As of June 2013, the City had defaulted on approximately $71 million of pension contributions due to the System. During fiscal year 2014, the City did not pay any employer contributions into the System, despite the fact that there were actuarially required contributions.

In February 2013, the governor appointed a financial review team, which determined that a local government financial emergency existed in the City. This culminated in bankruptcy proceedings, which the City initiated in July 2013. Part of the federal court's ruling in December 2013 indicated that the bankruptcy status usurped whatever protections may be offered to governmental pensions under the Michigan Constitution. On December 10, 2014, the City exited from bankruptcy though confirmation of the Eighth Amended Plan for the Adjustment of Debts of the City of Detroit (the "POA"). The POA specifies certain provisions pertinent to the Legacy and Hybrid plans, including contributions and benefits.

In fiscal year 2018, the contributions that were received by the System were made in accordance with the provisions of the POA. See Note 10 for significant changes that were implemented by the System under the POA.

Summary of Significant Accounting Policies

The following is a summary of the significant accounting policies used by the Police and Fire Retirement System of the City of Detroit.

Accounting and Reporting Principles

The System follows accounting principles generally accepted in the United States of America (GAAP) as applicable to governmental units. Accounting and financial reporting pronouncements are promulgated by the Governmental Accounting Standards Board.

Basis of Accounting

The System uses the economic resources measurement focus and the full accrual basis of accounting. Revenue is recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Plan member contributions are recognized in the period in which the contributions are due. Employer contributions are recognized when due pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

Specific Balances and Transactions

Cash and Cash Equivalents

The System considers cash on hand, demand deposits, and short-term investments with an original maturity of three months or less when purchased to be cash equivalents.

Investments

Investments are reported at fair value or estimated fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. Mortgages are valued on the basis of future principal and interest payments. The fair value of real estate investments is based on periodic appraisals, as well as the judgment of independent real estate advisors and management. Investments that do not have an established market value are reported at estimated fair value as determined by the System's management.

Approximately $61,000,000 or 2 percent of the System's net position as of June 30, 2018 does not have a readily determinable market value and has been estimated by management.

Note 1 - Significant Accounting Policies (Continued)

Investments for which market quotations are readily available are generally priced by the custodian using nationally recognized pricing services and practices. For investments that do not have readily observable market prices, including, but not limited to, private equity, public and private real estate, alternatives, and direct loans, management's estimate of their fair value is based on information provided by investment managers, general partners, real estate advisors, and other means. These sources are held to a standard of reasonable care in verifying that the valuations presented reasonably reflect the underlying fair value of the investments. A variety of factors is considered in the valuation process, including the nature of the investment, local market conditions, trading values on public exchanges for comparable investments, and current and projected operating performance. However, due to the inherent uncertainty and the degree of judgment involved in determining fair value for such investments, the values reflected in the financial statements may differ significantly from values that would have been used had a readily determinable market value for the investments existed, and the difference could be material.

Contributions Receivable

At June 30, 2018, there was $4,220,826 in employer contributions receivable. This amount relates to fiscal year 2018 Component I contributions and was paid in July 2018.

As a result of the Plan of Adjustment, payments on the UTGO Stub Bonds were assigned to the Income Stabilization Fund of Component II of the System. The City was to remit payments on the UTGO Stub Bonds to the System through 2028. In fiscal year 2017, the City of Detroit, Michigan refunded all of its outstanding UTGO Stub Bonds. Upon refunding, the payments to the System were accelerated with approximately $2.5 million received by the System in fiscal year 2017.

The remaining balance owed to the System, excluding interest, was $598,809. This amount, which had been recognized as part of employer contributions during June 30, 2017, was remitted by an escrow agent to the System during the year ended June 30, 2018.

Receivable/Payable from Investment Sales/Purchases

The System liquidated investments prior to year end and reported a receivable from investment sales at June 30, 2018 in the amount of $89,025,230. The proceeds from the sales were received subsequent to year end. In addition, the System purchased investments prior to year end and reported a payable from investment purchases at June 30, 2018 in the amount of $96,150,885. This amount was paid subsequent to year end.

Notes Receivable from Participants

In Component II (Legacy), any active, terminated, or retired police and fire employee who is or has been a participant in the 1973 defined contribution plan (annuity savings fund) may be eligible for the employee loan program. The minimum amount of the loan was established at $1,000. The maximum loan is the lesser of 50 percent of the member's account balance in the annuity saving fund or $10,000. Members can borrow as either a general purpose loan payable in one to five years or a residential loan payable in 1 to 15 years. A member can have only two outstanding loans. The balance of these loans for the year ended June 30, 2018 was $6,360,470. The balance is measured at the unpaid principal balance plus any accrued but unpaid interest. Participant notes receivable are written off when deemed uncollectible.

Although Component I (Hybrid) allows participant loans, there are none outstanding at June 30, 2018.

Capital Assets

Capital assets for the System include software, office equipment, and furniture. Depreciation expense is calculated by allocating the net cost of the assets over their estimated useful lives.

Note 1 - Significant Accounting Policies (Continued)

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the Unites States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions during the reporting period. Actual results could differ from those estimates.

Note 2 - Pension Plan Description

Component II (Legacy Plan) and Component I (Hybrid Plan)

Plan Administration

The System's governance was modified in December 2014 as part of the City's bankruptcy plan. The System's board of trustees and Investment Committee administer the Police and Fire Retirement System of the City of Detroit Pension Plan, a single-employer defined benefit and defined contribution plan that provides retirement benefits, as well as survivor and disability benefits, for plan members and beneficiaries. Plan members include active employees, retirees, and beneficiaries from various departments within the City of Detroit, Michigan. Benefit terms have been established by contractual agreements between the System and the employees' collective bargaining unit, as modified by the POA. Future amendments are subject to the same process. However, pursuant to the POA, pension benefit terms presently expressed in the System are not subject to amendment before June 30, 2023, unless an amendment is required to maintain the tax-qualified status of the System. The obligation to contribute to and maintain the System was established by the City Charter and negotiations with the employees' collective bargaining units.

The board of trustees is composed of 17 seats, occupied by 15 members as of June 30, 2018. Six members of the Board are elected by the active membership to serve three-year terms. Expirations of terms of elected trustees are staggered. Two retired members are elected by the retired membership and serve three-year terms. Eight members serve ex-officio, these members being the mayor of the City of Detroit, Michigan (or designee), the city treasurer (or deputy treasurer), one representative from the Detroit City Council, the Corporation Counsel (or designee), the finance director (or designee), the budget director (or designee), and two ex-officio trustees to be appointed by the mayor.

The Investment Committee has five independent members appointed to initial terms with staggered expirations, which terms will all eventually become six years. Two additional members, two active members, and two retired members serve on the Investment Committee based on appointment by the board. The Investment Committee will be in place through at least December 2034.

Benefits Provided

The System provides retirement, disability, and death benefits. Benefit terms had been established by negotiations between the City Council and the employees' collective bargaining unit and subject to amendment by the City Council. Further changes to benefits were provided for under the POA.

Note 2 - Pension Plan Description (Continued)

Employees Covered by Benefit Terms

The following members were covered by the benefit terms:

	Component II (Legacy Plan)	Component I (Hybrid Plan)
Date of member count	June 30, 2017	June 30, 2017
Inactive plan members or beneficiaries currently receiving benefits	8,187	64
Inactive plan members entitled to but not yet receiving benefits	424	465
Active plan members (includes DROP members of 683 for Component II and 84 for Component I)	2,597	2,604
Total employees covered by the plan	11,208	3,133

As of June 30, 2014, Component II has been frozen. As of that date, no new participants were allowed to enter the plan and no new benefit accruals were allowed for existing participants.

After July 1, 2014, active members will retain existing service credit in the Legacy Plan, but will only earn existing service credit in the new Hybrid Plan.

Contributions

Article 9, Section 24 of the State of Michigan Constitution requires that financial benefits arising on account of employee service rendered in each year be funded during that year. Accordingly, in the past, the System had retained an independent actuary to determine the annual contribution. The actuarially determined rate was the estimated amount necessary to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability. However, until 2024, contributions are based on specific provisions in accordance with the Plan of Adjustment.

The City filed for bankruptcy in 2013, and, on November 12, 2014, the United States Bankruptcy Court for the Eastern District of Michigan entered an order confirming the Eighth Amended Plan for the Adjustment of Debts of the City of Detroit. Going forward, the obligation for the City to contribute to the System will be determined by the provisions in the Eighth Amended Plan for the Adjustment of Debts of the City of Detroit. See Note 10 for further information.

Employer Contributions

<u>Component II</u>

For Component II, during fiscal year 2018, employer contributions are not actuarially determined but determined by the provisions of the POA detailed under Exhibit II.B.3.q.ii.A of the POA. For fiscal year 2018, contributions were from the Foundation for Detroit's Future (the "Foundation") in the amount of $18.3 million. Going forward, no more employer contributions will be made towards Component II until 2024, other than those that will continue to be made from proceeds of the Foundation's contributions, as specified in the POA, assuming all requirements are met.

<u>Component I</u>

For Component I, during fiscal year 2018, employer contributions are not actuarially determined, but are determined by the provisions of the Combined Plan detailed under Section 9.3 of Component I. Per Section 9.3, commencing on July 1, 2014 and ending June 30, 2023, the City is required to contribute 11.2 percent, 12.25 percent of base compensation of active members, depending on bargaining unit. These contribution rates are fixed by the POA through June 30, 2023. During fiscal year 2018, the City contributed $19,244,806 into the Hybrid Plan. Beginning in 2024, the employer contributions will be actuarially determined based on the amount necessary to fund the plan on an actuarial basis.

Note 2 - Pension Plan Description (Continued)

Because there were no actuarially determined contributions for Component I, there is no required schedule of the City's contributions included within these financial statements.

Employee Contributions

Component II

Contribution requirements of plan members were historically established and amended by the board of trustees in accordance with the City Charter, union contracts, and plan provisions. For the year ended June 30, 2018, there were minimal employee contributions into Component II related to repayment of prior refunded contributions, as the plan was frozen as of June 30, 2014.

Component I

Contribution requirements of plan members are established by the Combined Plan. For the year ended June 30, 2018, active member contribution rate for employees hired before July 1, 2014 was 6 percent of annual pay and was 8 percent of annual pay for employees hired after July 1, 2014. During fiscal year 2018, the plan received mandatory and voluntary employee contributions of $9,170,876.

Deferred Retirement Option Program (DROP)

In lieu of terminating employment and accepting a retirement allowance under the plan, any member of the System who is eligible for the DROP program may defer the receipt of his or her retirement allowance, continue services, and be paid compensation. At the time of the DROP election, the member no longer accrues a benefit. The program credits the employee for benefit payments that would have been paid had he or she retired normally by depositing 75 percent of the monthly payment with a third-party administrator in the member's name. The remaining 25 percent of the monthly payments are retained by the System for general purposes. The DROP allocations continue if the member continues to be actively employed as a police officer or a firefighter with the City. The member is eligible to withdraw the amounts deposited with the third-party administrator upon retirement. In addition, upon retirement, the retiree receives 100 percent of his or her retirement benefits. There are no amounts held by the System at June 30, 2018 as all amounts due to the members pursuant to the DROP election are held by a third-party administrator.

Note 3 - Deposits and Investments

The System is authorized by Michigan Public Act 314 of 1965, as amended, to invest in certain reverse repurchase agreements, stocks, diversified investment companies, annuity investment contracts, real estate leased to public entities, mortgages, real estate, debt or equity of certain small businesses, certain state and local government obligations, and certain other specified investment vehicles.

The investment policy adopted by the Board is in accordance with Public Act 196 of 1997 and has authorized investments according to Michigan Public Act 314 of 1965, as amended. The System's deposits and investment policies are in accordance with statutory authority.

The System invests in various investment securities. Investment securities are exposed to various risks, such as interest rate, market, credit risks, and overall market volatility. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and such changes could materially affect the amounts reported on the statement of changes in fiduciary net position.

Note 3 - Deposits and Investments (Continued)

The System's cash and investments are subject to several types of risk, which are examined in more detail below:

Custodial Credit Risk of Bank Deposits

Custodial credit risk is the risk that, in the event of a bank failure, the System's deposits may not be returned to it. The System does not have a deposit policy for custodial credit risk. Approximately $2.6 million of the System's checking account balances was uninsured and uncollateralized at June 30, 2018. The System believes that, due to the dollar amounts of cash deposits and the limits of FDIC insurance, it is impractical to insure all deposits. As a result, the System evaluates each financial institution with which it deposits funds and assesses the level of risk of each institution; only those institutions with an acceptable estimated risk level are used as depositories.

Interest Rate Risk

Interest rate risk is the risk that the value of investments will decrease as a result of a rise in interest rates. The System's investment policy does not restrict investment maturities.

At year end, the average maturities of debt investments were as follows:

Investment Type	Fair Value (in thousands)	Less Than 1 Year	1-5 Years	6-10 Years	More Than 10 Years
U.S. government	$ 10,177	$ 10,177	$ -	$ -	$ -
Convertible bonds	51,757	5,488	25,583	6,176	14,510
Domestic fixed income	416,137	14,963	108,511	115,512	177,151
International fixed income	47,000	3,082	19,652	17,456	6,810
Total	$ 525,071	$ 33,710	$ 153,746	$ 139,144	$ 198,471

** Not all fixed-income securities are subject to interest rate risk.*

Credit Risk

State law limits investments in commercial paper to the top two ratings issued by nationally recognized statistical rating organizations. The System has no investment policy that would further limit its investment choices.

At June 30, 2018, the credit quality ratings of debt securities (other than the U.S. government), as rated by S&P, are as follows:

Investment Type and Fair Value (in thousands)	AAA	AA	A	BBB	BB	B	Lower than B	NR
Convertible bonds	$ -	$ -	$ 8,380	$ 20,192	$ 4,634	$ 697	$ -	$ 17,852
Domestic fixed income	19,603	185,627	26,333	78,534	38,376	33,717	5,891	34,467
International fixed income	-	2,417	12,287	14,462	6,344	7,399	-	3,747
Total	$ 19,603	$ 188,044	$ 47,000	$ 113,188	$ 49,354	$ 41,813	$ 5,891	$ 56,066

Foreign Currency Risk

Foreign currency risk is the risk that an investment denominated in the currency of a foreign country could reduce its U.S. dollar value as a result of changes in foreign currency exchange rates. The System does not restrict the amount of investments in foreign currency.

Note 3 - Deposits and Investments (Continued)

The following securities are subject to foreign currency risk:

Currency	Equity	Fixed Income	Cash	Forward Contracts (Including Receivable/ Payable)	Net Investment (Payable) Receivable
Australian dollar	14,396	$ -	$ 15	$ 381	$ (272)
Brazil real	462	-	2	-	-
Canadian dollar	12,346	-	32	6,745	-
Danish krone	196	-	57	1,809	-
Euro currency unit	84,551	179	729	(7,579)	(26)
Hong Kong dollar	27,767	-	31	(4,970)	(86)
Indian rupee	845	-	-	-	-
Israeli shekel	-	-	5	654	-
Japanese yen	72,083	-	247	(10,297)	(595)
Mexican peso	234	2,558	-	-	-
New Taiwan dollar	1,315	-	-	-	-
Norwegian krone	970	-	6	818	(206)
Pound sterling	34,634	-	17	3,701	77
Singapore dollar	290	-	8	1,280	-
South African rand	-	-	1	-	-
South Korean won	3,865	-	7	961	-
Swedish krona	5,123	-	604	2,956	-
Swiss franc	14,241	-	1,034	1,625	199
Thailand baht	273	-	-	-	-
Turkish lira	613	-	-	-	-
Uruguayan peso	-	98	-	-	-
Total	274,204	$ 2,835	$ 2,795	$ (1,916)	$ (909)

Securities Lending

As permitted by state statutes and under the provisions of a Securities Lending Authorization Agreement, the System lends securities to broker-dealers and banks for collateral that will be returned for the same securities in the future. The System's custodial bank manages the securities lending program and receives cash, government securities, or irrevocable bank letters of credit as collateral. The custodial bank does not have the ability to pledge or sell collateral securities unless the borrower defaults. Borrowers are required to deliver collateral for each loan equal to not less than 102 percent of the market value of the loaned securities.

As of June 30, 2018, the collateral provided was 102.65 percent of the market value of the loaned securities, which is in excess of the required 102 percent.

The System did not impose any restrictions during the fiscal year on the amount of loans made on its behalf by the custodial bank. There were no failures by any borrowers to return loaned securities or pay distributions thereon during the fiscal year. Moreover, there were no losses during the fiscal year resulting from a default of the borrowers or custodial bank.

The System and the borrower maintain the right to terminate all securities lending transactions on demand. The cash collateral received on each loan was invested, together with the cash collateral of other lenders, in an investment pool. The average duration of such investment pool as of June 30, 2018 was 25 days. Because the loans are terminable on demand, their duration did not generally match the duration of the investments made with cash collateral. On June 30, 2018, the System had no credit risk exposure to borrowers. The collateral held (at cost) and the fair market value of the underlying securities on loans for the System as of June 30, 2018 were $242,135,379 and $235,892,052, respectively.

Note 3 - Deposits and Investments (Continued)

The following represents the balances relating to the securities lending transactions as of June 30, 2018; investments are reported at fair value:

Securities Lent	Underlying Securities
U.S. corporate fixed income	$ 29,457,017
U.S. equities	166,869,149
Non-U.S. equities	8,139,501
U.S. governments	31,426,385
Total	$ 235,892,052

The fair market value of the collateral pool related to securities lending at June 30, 2018 was $244,741,253. The investments were in asset-backed securities, time deposits, floating rate notes, and repurchase agreements. Approximately 80 percent of these securities had a duration of less than one year, 17 percent had a duration between one and three years, and 3 percent had a duration over 15 years.

The credit ratings of the securities lending collateral pool held at June 30, 2018, as rated by S&P, are as follows:

Ratings	Amount
AAA	$ 20,373,904
AA	68,780,125
A	105,462,058
CC	5,793,319
CCC	1,090,169
NR	43,241,678
Total	$ 244,741,253

Note 4 - Fair Value Measurements

In accordance with GASB Statement No. 72, *Fair Value Measurement and Application*, the notes to the financial statements now include enhanced disclosures about fair value measurement, the level of fair value hierarchy, and valuation techniques.

The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. Investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy below.

In instances whereby inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The System's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset.

Note 4 - Fair Value Measurements (Continued)

The System has the following recurring fair value measurements as of June 30, 2018:

	Assets Measured at Fair Value on a Recurring Basis at June 30, 2018			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Balance at June 30, 2018
Debt securities:				
Government securities (U.S. and other)	$ 76,628,652	$ 14,276,247	$ -	$ 90,904,899
U.S. government mortgage-backed securities	-	98,256,075	-	98,256,075
Corporate bonds	-	310,045,863	-	310,045,863
Privately negotiated debt	-	-	6,402,140	6,402,140
Corporate floating rate notes	-	177,642,628	-	177,642,628
Asset backed securities	-	25,190,312	-	25,190,312
Total debt securities	76,628,652	625,411,125	6,402,140	708,441,917
Equity securities:				
Common stock	1,184,984,633	-	-	1,184,984,633
Preferred stock	8,546,144	3,422,282	-	11,968,426
Total equity securities	1,193,530,777	3,422,282	-	1,196,953,059
Private equity funds	-	-	4,000,000	4,000,000
Partnership investments	-	-	2,760,000	2,760,000
Real estate private equity funds	-	-	11,770,000	11,770,000
Real estate related investments	-	-	36,075,341	36,075,341
Total	$ 1,270,159,429	$ 628,833,407	$ 61,007,481	1,960,000,317
Investments measured at NAV:				
International equity fund				256,934,359
Fixed-income funds				110,140,074
Global equity funds				156,694,358
Hedge funds				177,523,808
Real estate funds				307,496,939
Private equity funds				152,805,876
Total investments measured at NAV				1,161,595,414
Total investments measured at fair value				$ 3,121,595,731

A total of $41,908,314 of repurchase agreements that are recorded at amortized cost are not included in the fair value table above.

Debt and equity securities classified in Level 1 are valued using prices quoted in active markets for those securities.

The fair value of preferred stock and debt securities at June 30, 2018 was determined primarily based on Level 2 inputs. The System estimates the fair value of these investments using other inputs, such as interest rates and yield curves, that are observable at commonly quoted intervals for identical or similar assets.

Note 4 - Fair Value Measurements (Continued)

The fair value of the remaining investments at June 30, 2018 was determined primarily based on Level 3 inputs. The System estimates the fair value of these investments using the System's own pricing estimate methodology, pricing models, discounted cash flow methodologies, or similar techniques taking into account the characteristics of the asset.

The valuation method for investments measured at net asset value (NAV) per share (or its equivalent) is presented in the following table.

Investments in Entities that Calculate Net Asset Value per Share

The System holds shares or interests in investment companies whereby the fair value of the investments is measured on a recurring basis using net asset value per share (or its equivalent) of the investment companies as a practical expedient.

As of June 30, 2018, the fair value, unfunded commitments, and redemption rules of those investments are as follows:

	Fair Value	Unfunded Commitments	Redemption Frequency, if Eligible	Redemption Notice Period
International equity funds	$ 256,934,359	$ -	Monthly	Up to 30 days
Fixed-income funds	110,140,074	-	Monthly	Up to 30 days
Global equity funds	156,694,358	-	Monthly	Up to 30 days
Hedge funds	177,523,808	-	Annually	Up to 100 days
Real estate funds	307,496,939	74,199,087	Quarterly	Up to 90 days
Private equity funds	152,805,876	232,494,306	N/A	N/A
Total investments measured at NAV	$ 1,161,595,414	$ 306,693,393		

Multiple funds are held in each category. For reporting purposes, the redemption frequency and redemption notice period provided are the most restrictive of any of the funds in the category.

The international equity funds class includes investments in funds that invest predominantly in equity securities of non-U.S. companies. The funds invest in developed and emerging market countries and utilize investments across the capitalization spectrum from large to small companies. The fair values of the investments in this class have been estimated using the net asset value per share of the investments.

The fixed-income funds class include investments in funds that invest predominantly in fixed-income instruments in the U.S., developed, and emerging market countries. The funds invest across a diverse group of security types including government, corporate and mortgage backed debt and across the credit quality spectrum of investment grade and high yield. The fair values of the investments in this class have been estimated using net asset value per share of the investments.

The global equity funds include investments in funds that are designed to achieve a return volatility considerably less that the global equity market while providing market-like or above-market returns over a full market cycle. The fair values of the investments in this class have been estimated using net asset value per share of the investments.

Note 4 - Fair Value Measurements (Continued)

The hedge funds class include investments in funds that achieve capital appreciation through multimanager and/or multistrategy investments. Within this group of funds, there is exposure to investment strategies, including, but not limited to, credit, event-driven, equity, and relative value. The funds have the ability to invest across all markets and across all asset classes to implement their various strategies. The fair values of the investments in this class have been estimated using net asset value per share of the investments. Approximately 1 percent of the value of the investments in the hedge fund class above are in the process of being liquidated by the fund manager. Distributions from each fund will be received as the underlying investments of the fund are liquidated. It is estimated that the underlying investments of the fund will be liquidated over the next 18-24 months.

The real estate funds class include investments in funds whose objective is to operate a core portfolio of real estate investments predominantly located in the U.S. The funds acquire ownership in underlying investments either through direct real estate ownership or ownership in real estate companies or the equity of real estate investment trusts. The funds predominantly target purchases in office, industrial, retail, or multifamily real estate classes. The fair values of the investments in this class have been estimated using net asset value per share of the investments (or its equivalents).

The private equity class is an alternative investment class and consists of investments in companies that are not listed on a public exchange. The Police and Fire Retirement System of the City of Detroit maintains a diversified portfolio of private equity investments by both style (buyout, turnaround, venture capital, etc.) and vintage year exposure. With its private equity allocation, the Police and Fire Retirement System of the City of Detroit seeks to take advantage of the illiquidity premium associated with these private equity investments. The fair values of the investments in this class have been estimated using net asset value per share of the investments (or its equivalents).

Note 5 - Pension Plan Investments - Policy and Rate of Return

Component II (Legacy Plan) and Component I (Hybrid Plan)

Investment Policy

The assets of Component II and I are commingled and invested together, as allowed by the POA. The System's policy in regard to the allocation of invested assets is established and may be amended by governance by a majority vote of its members. It is the policy of the governance to pursue an investment strategy that manages risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The System’s investment policy discourages the use of cash equivalents, except for liquidity purposes, and aims to refrain from dramatically shifting asset class allocations over short time spans. The following was the governance’s adopted asset allocation policy as of June 30, 2018:

Asset Class	Target Allocation
Global equity	38.00 %
Global fixed income	28.00
Real estate	13.00
Private equity	10.00
Hedge funds	5.00
MLPs	5.00
Cash	1.00
Total	100.00 %

Rate of Return

For the year ended June 30, 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 8.2 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Note 6 - Pension Plan Reserves

Component II (Legacy Plan)

In accordance with the Combined Plan for the Police and Fire Retirement System of the City of Detroit, Michigan and state law, the following reserves are required to be set aside within the Component II (Legacy) pension plan:

The annuity reserve fund is an accumulation of transfers that is made from the annuity savings fund when an employee retires, becomes disabled, or if a surviving spouse elects an annuity rather than a lump-sum payout of accumulated employee contributions.

The survivors benefit fund accumulates regular interest on funds contributed by members prior to July 1, 2014 and from which benefits will be paid, but only to the extent sufficient assets are credited to the fund at the time a claim for benefits is made. In the event there are insufficient assets credited to the survivor's benefit fund to pay the benefits, then the benefits will be payable from the pension reserve fund.

The employee reserve (the "Annuity Savings Fund" or ASF) is credited as employee contributions are received throughout the year; the System maintains a record of the amount contributed by each employee and credits interest annually. Eligible active members may elect to withdraw their accumulated (annuity) contributions plus investment earnings. Upon retirement, a member can elect to annuitize or receive a lump sum of his or her accumulated contribution and interest earnings. When an employee retires, becomes disabled, or if a surviving spouse elects an annuity rather than a lump-sum payout of accumulated employee contributions, the balance is transferred to the annuity reserve fund.

The pension accumulation fund is the fund that will accumulate reserves for the pensions and other benefits payable from the contributions made by the City, including various departments thereof, and certain third parties pursuant to the POA and from which pensions and other benefits will be paid on account of members with prior service credit. Contributions to the pension accumulation fund from the effective date of the POA through fiscal year 2023 shall be made only in the amounts and from the sources identified in the POA.

The pension reserve fund represents funded pension benefits available for retired members and is funded by actuarially determined transfers from the pension accumulation fund. The transfers from the pension accumulation fund to the pension reserve fund for fiscal year 2018 retirements have not yet been determined.

The expense fund is the fund that will be credited with all money provided by the City to pay the administrative expenses of the System and from which all the expenses necessary in connection with the administration and operation of the System will be paid. At year end, this reserve balance is zero as all employer contributions were credited to the pension accumulation fund.

The balances of the reserve accounts for Component II (excluding the Income Stabilization Fund) as of June 30, 2018 are included in the table below. The reserve balances as of June 30, 2018 shown below do not include the current year transfer amount related to fiscal year 2018 retirements for amounts that are transferred from the pension accumulation fund to the pension reserve fund.

The balances of the reserve accounts at June 30, 2018 are as follows:

	Required Reserve	Amount Funded
Annuity Savings Fund	$ 74,507,520	$ 74,507,520
Pension Reserve Fund	2,808,564,734	2,759,167,723
Annuity Reserve Fund	29,980,092	29,980,092
Survivor Benefit Fund	N/A	2,648,470
Pension Accumulation Fund	N/A	-

Note 6 - Pension Plan Reserves (Continued)

Component I (Hybrid Plan)

In accordance with the Combined Plan for the Police and Fire Retirement System of the City of Detroit and state law, the following reserves are required to be set aside within the Component I (Hybrid) pension plan:

The accumulated mandatory employee contribution fund shall be the fund in which shall be accumulated the contributions of members to provide their retirement allowances. Upon the retirement, termination, or death of a member with a vested retirement allowance, the member's accumulated mandatory employee contributions shall be deemed to be part of the pension reserve that shall be used to pay the member's retirement allowance.

The accumulated voluntary employee contribution fund shall be the fund in which shall be accumulated the voluntary after-tax contributions of members together with earnings thereon.

The pension accumulation fund shall be the fund in which shall be accumulated reserves for the retirement allowances and other benefits payable from that portion of the employer's annual contribution that is not credited to the rate stabilization fund and amounts transferred to Component I and from which shall be paid retirement allowances and other benefits on account of members. During fiscal year 2018, all employer contributions were directed by the City into the pension accumulation fund, and no amounts were credited to the rate stabilization fund.

The rate stabilization fund shall be the fund that shall be credited with the employer's annual contributions in excess of the amount of the employer's contribution that is credited to the pension accumulation fund and amounts transferred to Component I, as provided in Section G-2(f) of Component II. See Note 9 for details on the transfer provisions related to transfers between Component II and Component I. During fiscal year 2018, no amounts were credited to the rate stabilization fund. Therefore, this reserve balance is zero.

The deferred retirement option plan fund shall accumulate the amounts credited to the DROP accounts of members who have elected to participate in the DROP Program pursuant to Article 12, together with earnings thereon, provided that the DROP accounts are held and invested within the System. At year end, the DROP reserve is zero because the System is not holding those assets.

The medical benefit fund shall be the fund that will be credited with contributions made for the purpose of funding medical benefits. During the year, no such contributions were made and, therefore, this reserve balance is zero.

The expense fund shall be the fund to which will be credited any money provided by the employers to pay the administrative expenses of the System, and from which certain expenses incurred in connection with the administration and operation of the System will be paid. At year end, this reserve balance is zero, as all employer contributions were credited to the pension accumulation fund.

The income fund shall be the fund to which all interest, dividends, and other income derived from the investments of Component I of the System will be credited. Transfers from the income fund will be made to credit earnings and losses to various reserves of the System in accordance with the provisions of Component I of the combined plan document. Amounts credited to the income fund in excess of amounts needed to credit earnings and losses of the System, as provided in Component I for any plan year, shall be transferred to the pension accumulation fund. During fiscal year 2018, investment income was transferred to other reserve funds and, therefore, this reserve balance at June 30, 2018 remains unfunded.

Note 6 - Pension Plan Reserves (Continued)

The balances of the above reserves for Component I that were funded as of June 30, 2018 are as follows:

	Required Reserve	Amount Funded
Accumulated Mandatory Employee Contribution Fund	$ 32,030,640	$ 32,030,640
Accumulated Voluntary Employee Contribution Fund	177,741	177,741
Pension Accumulation Fund	-	95,763,005

Note 7 - Net Pension Liability of the City for Component II (Legacy Plan)

The net pension liability of the City has been measured as of June 30, 2018 and is composed of the following:

Total pension liability	$ 3,725,455,416
Plan fiduciary net position	2,866,303,805
City's net pension liability	$ 859,151,611
Plan fiduciary net position as a percentage of the total pension liability	76.94 %

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2017, which used updated procedures to roll forward the estimated liability to June 30, 2018. The valuation used the following actuarial assumptions applied to all periods included in the measurement:

Inflation	N/A	
Salary increases	N/A	No inflation assumption or salary increases due to plan freeze as of June 30, 2014
Investment rate of return	7.19%	Net of pension plan investment expense, including inflation

Based on an experience study from 2008-2013 issued in February 2015, the mortality table assumption was based on the RP-2014 Blue Collar Annuitant Table for males and females. The tables are projected to be fully generational, based on the two-dimensional sex-distinct mortality scale MP-2014.

The actuarial assumptions, other than mortality and the investment rate of return, used in the June 30, 2017 valuation to calculate the total pension liability as of June 30, 2018 were based on the results of an actuarial experience study for the period from 2002-2007.

Cost of Living Adjustments

For the calculation of the total pension liability, COLA has been limited in accordance with the Plan of Adjustment to 1.0125 percent.

Attribution Period

As addressed more fully in Note 1, as of June 30, 2014, the plan was frozen such that no new benefit accruals were allowed and no new members could join. Starting July 1, 2014, the participants in this Legacy Plan (Component II) will now be earning benefits under a newly created defined benefit plan (Component I). GASB Statement No. 67 requires that the service costs of all pensions be attributed through all assumed exit ages, through retirement. Neither GASB Statement No. 67 nor any other GASB standard has set forth guidance specifically related to frozen plans with successor plans in place. Absent any guidance to the contrary, due to the status as a frozen plan combined with the fact that individuals are now earning service in a new defined benefit pension plan, the retirement date for the purpose of attribution was assumed to be June 30, 2014 for all members. Therefore, the total pension liability at June 30, 2018 is equal to the present value of projected benefit payments.

Note 7 - Net Pension Liability of the City for Component II (Legacy Plan) (Continued)

Note that the long-term assumed rates of return used for the purpose of the GASB Statement No. 67 valuations were determined in accordance with generally accepted accounting principles. This should not be confused with the provisions in the Plan of Adjustment, which established a 6.75 percent assumed rate of return for purposes of the various provisions within the plan; the Plan of Adjustment did not attempt to dictate the long-term rate of return to be used for accounting purposes.

Discount Rate

The discount rate used to measure the total pension liability as of June 30, 2018 was 7.19 percent; however, the single discount rate used at the beginning of the year was 7.17 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that city contributions will be made at rates equal to the difference between actuarially determined contribution rates and the employee rate.

Projected Cash Flows

Based on the above assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees both at the beginning of the year and at the end of the year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate. Contributions to the System are projected to be at the minimum amounts required by the Plan of Adjustment through 2023, followed by actuarially determined contributions beginning in 2024. While no funding policy has been adopted by the City of Detroit, Michigan, the projection of cash flows assumes full funding of contributions such that the plan's net position will be sufficient to make all benefit payments. The System believes that the funding practice adopted by the City will be consistent with the underlying objective used in the projection to develop the single discount rate.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense, and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return as of June 30, 2018 for each major asset class included in the pension plan's target asset allocation, as disclosed in the investment note, are summarized in the following table:

Asset Class	Long-term Expected Real Rate of Return
Global equity	5.24 %
Global fixed income	3.46
Real estate	4.48
Private equity	7.18
Hedge funds	4.06
MLPs	5.71
Cash	0.25

Note 7 - Net Pension Liability of the City for Component II (Legacy Plan) (Continued)

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the City, calculated using the discount rate of 7.19 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.19 percent) or 1 percentage point higher (8.19 percent) than the current rate:

	1 Percent Decrease (6.19%)	Current Discount Rate (7.19%)	1 Percent Increase (8.19%)
Net pension liability of the City	$ 1,240,086,907	$ 859,151,611	$ 538,954,870

Note 8 - Net Pension Asset of the City for Component I (Hybrid Plan)

The net pension asset of the City has been measured as of June 30, 2018 based on benefits in force as of that date and is composed of the following:

Total pension liability	$ 94,784,240
Plan fiduciary net position	127,971,386
City's net pension asset	$ (33,187,146)
Plan fiduciary net position as a percentage of the total pension liability	135.01 %

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2017, which used updated procedures to roll forward the estimated liability to June 30, 2018. The following are the significant assumptions:

Wage inflation assumption was 2 percent for five years, 2.5 percent for the next five years, and 3 percent thereafter.

The investment rate of return (net of pension plan investment expense, including inflation) applied to the beginning of year total pension liability was 7.17 percent as compared to 7.19 percent, which was the assumed long-term rate of return as of the end of year. The rates were determined in accordance with generally accepted accounting principles. This should not be confused with the provisions in the Plan of Adjustment, which established a 6.75 percent assumed rate of return for purposes of the various provisions within the plan; the Plan of Adjustment did not attempt to dictate the long-term rate of return to be used for accounting purposes.

Based on an experience study from 2008-2013 issued in February 2015, the mortality table assumption was based on the RP-2014 Blue Collar Annuitant Table for males and females. The tables are projected to be fully generational, based on the two-dimensional sex-distinct mortality scale MP-2014.

Cost of living adjustments: This plan has a postretirement COLA feature known as the Variable Pension Improvement Factor (VPIF) of a 1 percent compound COLA. It can be granted beginning on July 1, 2015 only if the five-year projection shows the plan's funded status above 90 percent based upon 6.75 percent future investment return. For the purpose of the total pension liability, the actuary assumed a 0.50 percent compound COLA beginning July 1, 2018 to model the potential average COLA over time. Had no COLA been assumed, the net pension asset would have been $(37,952,246). Had the full 1 percent COLA been assumed, the net pension asset would have been $(27,988,603).

There were no changes in benefit provisions during the year affecting the total pension liability.

Note 8 - Net Pension Asset of the City for Component I (Hybrid Plan) (Continued)

Discount Rate

The discount rate used to measure the total pension liability as of June 30, 2018 was 7.19 percent; however, the single discount rate used at the beginning of the year was 7.17 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that city contributions will be made at rates equal to the difference between actuarially determined contribution rates and the employee rate.

Projected Cash Flows

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 active and inactive employees both at the beginning of the year as well as at the end of the year. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate. Contributions to the System are projected to be at the minimum amounts required by the Plan of Adjustment through 2023, followed by actuarially determined contributions beginning in 2024. While no funding policy has been adopted by the City of Detroit, Michigan, the projection of cash flows assumes full funding of contributions such that the plan's net position will be sufficient to make all benefit payments. The System believes that the funding practice adopted by the City will be consistent with the underlying objective used in the projection to develop the single discount rate.

The long-term expected rate of return on future pension plan investments is the same as Component II given that the assets are commingled (see Note 7).

Sensitivity of the Net Pension Asset to Changes in the Discount Rate

The following presents the net pension asset of the City, calculated using the discount rate of 7.19 percent, as well as what the City's net pension asset would be if it were calculated using a discount rate that is 1 percentage point lower (6.19 percent) or 1 percentage point higher (8.19 percent) than the current rate:

	1 Percent Decrease (6.19%)	Current Discount Rate (7.19%)	1 Percent Increase (8.19%)
Net pension asset of the City	$ 15,801,650	$ 33,187,146	$ 47,020,603

Note 9 - Commitments

When the System enters into various investments, it may not completely fund the entire investment at the beginning. Rather, it enters into commitments to fund remaining capital amounts at certain points in time. At June 30, 2018, the remaining capital funding commitment for the System is approximately $307 million.

Note 9 - Commitments (Continued)

In addition, the combined plan document setting forth the Legacy Plan (Component II) contains a provision for the transfer of certain excess investment returns to the new Hybrid Plan (Component I). In any plan year during the period beginning on or after July 1, 2014 and ending June 30, 2023, if the annual rate of return credited to member annuity savings fund accounts is less than the actual rate of return net of expenses of the Plan’s invested assets for the second plan year preceding the plan year in which the annual rate of return is credited, the excess earned shall be transferred to the pension accumulation fund maintained under Component I of the System and will be used to fund transition costs related to Component I. The transition cost is a measure of the liability that Component I has at its inception due to the fact that members in Component I receive vesting and eligibility credit under Component I for service that was earned prior to July 1, 2014 and is otherwise credited to members under Component II. Such transition costs have been calculated by the System’s actuary. Yearly transfers to fund these costs are required in the second year following the year in which the return is earned based on a two-year "lookback"; therefore, for example, any transfers based on the plan year ended June 30, 2015 will be calculated and transferred during the plan year ended June 30, 2018. There were no transfers in fiscal year 2018.

In the fiscal year ended June 30, 2017, while not required based on the two-year "lookback," the System transferred $20 million from Component II to Component I towards the transition costs.

Note 10 - City of Detroit, Michigan's Chapter 9 Bankruptcy Plan of Adjustment and Continuing Impact on the Plan

In March 2013, after enduring years of financial difficulty, the City of Detroit, Michigan filed for bankruptcy protection. The Eighth Amended Plan for Adjustment of Debts of the City of Detroit (the “Plan of Adjustment”) was filed with the Bankruptcy Court on October 22, 2014. In November 2014, after a confirmation hearing lasting several weeks, the Bankruptcy Court confirmed the Plan of Adjustment (POA), which became effective December 10, 2014.

In fiscal year 2015, the System began implementing the provisions of the POA, which included a 55 percent reduction in cost of living adjustments (or "escalators") and a program for income stabilization for certain of the most vulnerable retirees. Separately, at the start of the 2015 fiscal year, the City through the emergency manager adopted ordinances, which resulted in the freeze of Legacy Plan (Component II) as of June 30, 2014, and the creation of a new Hybrid Plan (Component I) effective July 1, 2014.

The POA also required certain governance changes for the System. Those governance changes included establishment of the Investment Committee effective December 10, 2014, which officially marked the beginning of implementation of the POA, though the System had for several months already undertaken contingency planning for all of the pension adjustments. In addition to governance changes, the POA requires of the System, through its board of trustees and Investment Committee, certain periodic and interim reporting obligations to the City, the Foundation for Detroit’s Future, and the State of Michigan. Though there were some delays in fiscal year 2017 in meeting certain obligations because of new actuarial reporting requirements for governmental systems, which in turn impacted the preparation of the System’s audited financial statements, the System believes it has ultimately met its special reporting obligations in fiscal year 2017, and continued to do so in 2018.

Legacy Plan (Component II)

The Fourth Amended Disclosure Statement (the "Pension Settlement"), as part of the POA, compromised pension claims and provided funding support for legacy pension benefit obligations under the Police and Fire Retirement System of the City of Detroit (DPFRS) Component II from the State of Michigan and the Detroit Institute of Arts.

Note 10 - City of Detroit, Michigan's Chapter 9 Bankruptcy Plan of Adjustment and Continuing Impact on the Plan (Continued)

For DPFRS, with respect to Component II benefit adjustments, the Pension Settlement (for which benefit levels were and are contingent on other factors, including receipt of outside contributions) provided for the following:

- A 55 percent reduction in cost of living adjustments, or "escalators" (COLAs), paid after July 1, 2014
- The possibility of restoration of certain pension benefit cuts, based on a program for the most financially vulnerable pensioners and beneficiaries through the State of Michigan Treasury Department, as well as a new feature of Component II allowing restoration depending on the System's funding level over time
- An Income Stabilization Program (the "ISF Program") was established as part of the State Contribution Agreement as another facet of the Pension Settlement. The ISF Program, supported by city funds arising from an unlimited tax general obligation bonds settlement, is intended to ensure that the most financially vulnerable retirees and beneficiaries do not fall below the poverty line as a result of bankruptcy-related pension changes. Beginning on March 1, 2015, certain DPFRS members also received benefit pension cut restoration under the Income Stabilization Program administered by DPFRS, pursuant to the State Contribution Agreement, based on eligibility and benefit payments calculated by the State of Michigan. Following the close of the fiscal year ended June 30, 2016 and pursuant to Component II of the Combined Plan and the State Contribution Agreement, the System implemented the first annual ISF Program benefit adjustments effective July 1, 2016.
- The POA also discusses a "restoration plan." Terms of the pension restoration are contained in "Exhibit II.B.3q.ii.C" of the POA, and the terms govern how accrued pensions, including COLA benefits that were reduced as a part of the POA, may be restored over the 30-year period following the confirmation order. The Investment Committee will supervise the restoration process in accordance with the restoration plan. The restoration plan shall be deemed a part of Component II. The funding levels have not been attained yet as of June 30, 2018 for the restoration process to initiate.

As of March 1, 2015, less than three months after the effective date of the POA, DPFRS successfully implemented the vast majority of benefit changes required by the POA, including the ISF Program coordinated in conjunction with the Michigan Department of Treasury.

Going forward, the obligations for contributions to support Component II of the System through 2023 are determined as fixed amounts by the provisions in the POA. Pursuant to the POA, the System is expected to receive contributions of a total of $260.7 million through fiscal year 2023. The POA calls for the System to receive $96 million from the State of Michigan and at least the present value of $164.7 million from foundation donors covering fiscal year 2015 through fiscal year 2023, as well as at least the present value of $50 million over a 10-year period ending in 2034. After 2023, the City will retain responsibility for the full funding obligations of Component II of the System, consistent with Michigan law.

In fiscal year 2018, DPFRS received all contributions required by the POA from the foundation donors.

Hybrid Plan (Component I)

In the new Hybrid Plan, effective on July 1, 2014, the following provisions were in place:

- Active employees are allowed to make voluntary contributions up to 10 percent of total after-tax pay. Interest will be credited to those accounts at the actual net investment rate of return for DPFRS, but will not be lower than 0 percent or more than 5.25 percent.
- Employer contributions by the City will be between 11.2 percent and 12.25 percent of base compensation.

Note 10 - City of Detroit, Michigan's Chapter 9 Bankruptcy Plan of Adjustment and Continuing Impact on the Plan (Continued)

- A variable pension improvement factor of 1.0 percent, which operates similar to an escalator (or COLA), is available, subject to certain Hybrid Plan (Component I) funding level requirements being maintained.

DPFRS continues to implement the POA, which includes ongoing compliance and additional reporting requirements by the Board and the Investment Committee, annual review of benefit levels, and essentially provides for a 40-year plan to close the DPFRS Legacy Component II underfunded liability.

Note 11 - City of Detroit, Michigan Commitment to Future Funding

In anticipation of significant actuarially required contributions commencing in fiscal year 2024, the City, independent of the System, has established a Retiree Protection Trust Fund (the "Trust"). The Trust, a permanent irrevocable trust under Section 115 and 414(d) of the Internal Revenue Code, is to receive, maintain, and invest city funds restricted for future deposits to the General Retirement System Plan and the Police and Fire Retirement System Plan as part of an effort to manage and stabilize future required city contributions to the plans. The City has set aside $103 million for this Trust as of June 30, 2018 for future contributions to the General Retirement System Plan and the Police and Fire Retirement System Plan. Contributions to the System will be recognized as the City makes distributions from this independent trust to the System.

Required Supplemental Information

Required Supplemental Information
Schedule of Changes in the City's Net Pension Liability and Related Ratios (Legacy Plan)

Last Five Fiscal Years

	2018	2017	2016	2015	2014
Total Pension Liability					
Service cost	$ -	$ -	$ -	$ -	$ 34,967,708
Interest	257,841,119	261,449,503	264,233,821	306,063,331	304,737,369
Changes in benefit terms	-	-	-	(555,898,068)	(102,236,878)
Differences between expected and actual experience	32,674,674	(10,648,606)	45,955,553	(59,621,651)	-
Changes in assumptions	(6,975,457)	(4,082,068)	114,463,362	(95,014,469)	540,356,835
Benefit payments, including refunds	(308,390,724)	(306,098,871)	(304,467,162)	(313,816,916)	(323,540,473)
Net Change in Total Pension Liability	(24,850,388)	(59,380,042)	120,185,574	(718,287,773)	454,284,561
Total Pension Liability - Beginning of year	3,750,305,804	3,809,685,846	3,689,500,272	4,407,788,045	3,953,503,484
Total Pension Liability - End of year	**$ 3,725,455,416**	**$ 3,750,305,804**	**$ 3,809,685,846**	**$ 3,689,500,272**	**$ 4,407,788,045**
Plan Fiduciary Net Position					
Contributions - Employer, State, and Foundation	$ 18,300,000	$ 18,300,000	$ 37,787,744	$ 114,300,000	$ -
Contributions - Employee	42,114	14,055	24,801	593,292	7,783,141
Net investment income	237,675,162	282,398,410	24,618,573	122,736,820	568,760,793
Administrative expenses	(4,933,926)	(4,433,656)	(3,103,689)	(7,630,692)	(11,373,226)
Benefit payments, including refunds	(308,390,724)	(306,098,871)	(304,467,163)	(313,816,916)	(323,540,473)
Other (includes ASF recoupment)	1,469,201	(18,508,410)	855,743	2,368,638	-
Net Change in Plan Fiduciary Net Position	(55,838,173)	(28,328,472)	(244,283,991)	(81,448,858)	241,630,235
Plan Fiduciary Net Position - Beginning of year	2,922,141,978	2,950,470,450	3,194,754,441	3,276,203,299	3,034,573,064
Plan Fiduciary Net Position - End of year	**$ 2,866,303,805**	**$ 2,922,141,978**	**$ 2,950,470,450**	**$ 3,194,754,441**	**$ 3,276,203,299**
Net Pension Liability - Ending	**$ 859,151,611**	**$ 828,163,826**	**$ 859,215,396**	**$ 494,745,831**	**$ 1,131,584,746**
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	76.94 %	77.92 %	77.45 %	86.59 %	74.33 %
Covered Payroll*	$ 145,936,144	$ 137,250,599	$ 130,510,339	$ 131,220,124	$ 165,552,280
Net Pension Liability as a Percentage of Covered Payroll	588.72 %	603.40 %	658.35 %	377.04 %	683.52 %

GASB Statement No. 67 was implemented June 30, 2014 and does not require retroactive implementation. Data will be added as information is available until 10 years of such information is available.

*Covered payroll excludes overtime and longevity pay, which was included as compensation for purposes of determining employer contributions.

Required Supplemental Information
Schedule of Investment Returns (Legacy and Hybrid Plans)

Last Five Fiscal Years

Year Ended June 30

	2018	2017	2016	2015	2014*
Annual money-weighted rate of return, net of investment expense	8.20 %	11.30 %	1.30 %	3.80 %	19.80 %

*GASB Statement No. 67 was implemented June 30, 2014 and does not require retroactive implementation. Data will be added as information is available until 10 years of such information is available.

Fiscal years 2014 and 2015 do not include information related to the Hybrid Plan. The Hybrid Plan was effective July 1, 2014 and for the first year (fiscal year 2015) did not invest in anything other than cash and cash equivalents.

Required Supplemental Information
Schedule of City Contributions (Legacy Plan)

Last Ten Fiscal Years

Year Ended June 30

	2018***	2017***	2016***	2015***	2014**	2013**	2012**	2011	2010*	2009*
Actuarially determined contribution	$ -	$ -	$ -	$ -	$ 50,642,443	$ 42,005,173	$ 49,760,229	$ 81,642,112	$ 57,808,485	$ 61,151,057
Contributions in relation to the actuarially determined contribution	-	-	-	-	-	-	20,733,429	81,642,112	32,808,485	36,151,057
Contribution Deficiency	**$ -**	**$ -**	**$ -**	**$ -**	**$ (50,642,443)**	**$ (42,005,173)**	**$ (29,026,800)**	**$ -**	**$ (25,000,000)**	**$ (25,000,000)**
Covered Payroll	$ -	$ -	$ -	$ -	$ 165,552,280	$ 186,694,166	$ 205,800,278	$ 220,461,691	$ 228,829,999	$ 231,795,528
Contributions as a Percentage of Covered Payroll	- %	- %	- %	- %	- %	- %	10.07 %	37.03 %	14.34 %	15.60 %

* For the years ended June 30, 2010, 2009, and 2008, the System gave various credits to the City that offset the required contributions.

** As of June 30, 2018, a portion of the June 30, 2012 annual required contribution and the entire June 30, 2013 and 2014 annual required contribution has not been paid and has not been recognized as revenue.

*** The contributions starting with fiscal year 2015 were determined by the provisions of the POA; the contributions were not actuarially determined and, therefore, not subject to disclosure in accordance with GASB Statement No. 67 within this schedule.

Notes to Schedule of Pension Contributions (Legacy and Hybrid Plans)

Actuarial valuation information relative to the determination of contributions:

N/A - Starting in fiscal year 2015, contributions are not actuarially determined.

Required Supplemental Information
Schedule of Changes in the City's Net Pension Liability (Asset) and Related Ratios (Hybrid Plan)

Last Four Fiscal Years

	2018	2017	2016	2015
Total Pension Liability				
Service cost	$ 24,811,302	$ 25,414,182	$ 24,068,808	$ 24,835,814
Interest	5,787,404	4,474,574	2,743,066	894,089
Differences between expected and actual experience	(3,622,053)	(10,708,737)	(4,077,124)	-
Changes in assumptions	(305,021)	(221,533)	2,424,058	(1,008,119)
Voluntary employee contributions	96,205	34,134	15,459	14,370
Benefit payments, including refunds	(561,561)	(223,826)	(101,251)	-
Net Change in Total Pension Liability	26,206,276	18,768,794	25,073,016	24,736,154
Total Pension Liability - Beginning of year	68,577,964	49,809,170	24,736,154	-
Total Pension Liability - End of year	**$ 94,784,240**	**$ 68,577,964**	**$ 49,809,170**	**$ 24,736,154**
Plan Fiduciary Net Position				
Contributions - Employer	$ 19,244,806	$ 16,448,246	$ 15,831,763	$ 14,606,971
Mandatory employee contributions	9,074,671	8,554,893	7,958,271	7,390,335
Net investment income	8,634,505	8,897,786	252,426	21,019
Administrative expenses	(1,928,614)	(2,648,034)	(3,000,369)	(685,677)
Voluntary employee contributions	96,205	34,134	15,459	14,370
Benefit payments	(345,297)	(137,325)	(63,882)	(19,554)
Refunds	(216,264)	(86,501)	(37,369)	-
Other income	55,354	20,009,058	-	-
Net Change in Plan Fiduciary Net Position	34,615,366	51,072,257	20,956,299	21,327,464
Plan Fiduciary Net Position - Beginning of year	93,356,020	42,283,763	21,327,464	-
Plan Fiduciary Net Position - End of year	**$ 127,971,386**	**$ 93,356,020**	**$ 42,283,763**	**$ 21,327,464**
City's Net Pension (Asset) Liability - Ending	**$ (33,187,146)**	**$ (24,778,056)**	**$ 7,525,407**	**$ 3,408,690**
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	135.01 %	136.13 %	84.89 %	86.22 %
Covered Payroll	$ 145,936,144	$ 137,250,599	$ 130,510,339	$ 121,627,871
City's Net Pension (Asset) Liability as a Percentage of Covered Payroll	(22.74)%	(18.05)%	5.77 %	2.80 %

Benefit Changes

<u>Legacy Plan</u>

In 2014, the pension plan was frozen. No new employees are allowed to participate in the plan. All benefits for actives were frozen as of June 30, 2014 based on service and average final compensation accrued as of that date.

In 2015, the cost of living adjustments decreased to 1.0125 percent.

Changes in Assumptions

<u>Legacy Plan</u>

In 2014, amounts reported as changes of assumptions resulted from adjustment of the discount rate from 8 percent to 7.2 percent and updating the mortality tables from RP-2000 Combined Table to RP-2014 Blue Collar Annuitant Table.

<u>Legacy and Hybrid Plan</u>

In 2015, amounts reported as changes of assumptions resulted from adjustment of the discount rate from 7.2 percent to 7.47 percent.

In 2016, amounts reported as changes of assumptions resulted from adjustment of the discount rate from 7.47 percent to 7.15 percent.

In 2017, amounts reported as changes of assumptions resulted from adjustment of the discount rate from 7.15 percent to 7.17 percent.

In 2018, amounts reported as changes of assumptions resulted from adjustment of the discount rate from 7.17 percent to 7.19 percent.