



**City of Naperville**

City of Naperville  
Executive Summary

**September 30, 2018**



# 3Q Market Environment

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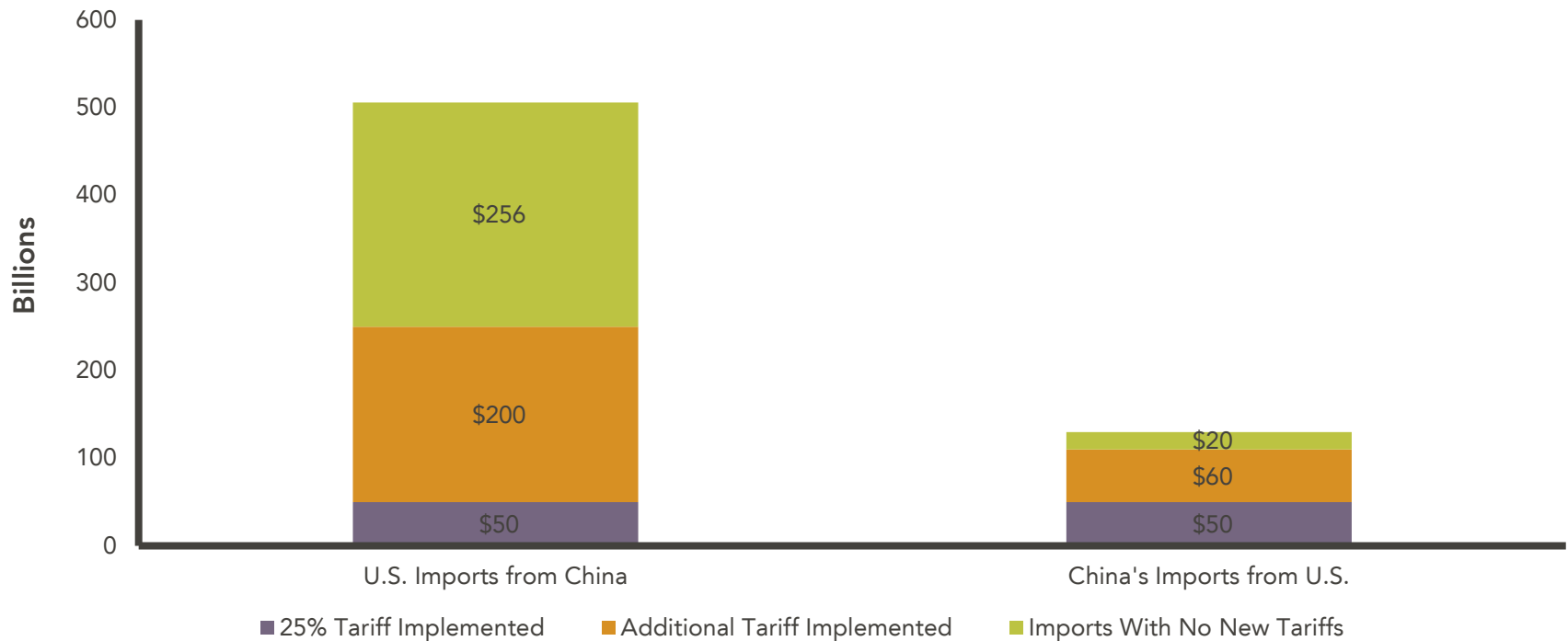
# U.S. economy overview

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- 2Q GDP grew 4.2% thanks to higher personal consumption and net exports; 3Q expected to be about 4.1% according to the Atlanta Fed GDPNow estimate
- The unemployment rate remained at 3.7% in September with 134K nonfarm jobs added
- CPI increased 2.7% over the trailing 12 months, as energy prices have risen 10.2% during this time. Core CPI growth remains steady at 2.2%
- China and U.S. both increased tariffs in September, escalating the trade conflict
- Trump administration reached a deal to revise NAFTA, but still needs to be approved by Congress and ratified by both Mexico and Canada

# The trade war continues

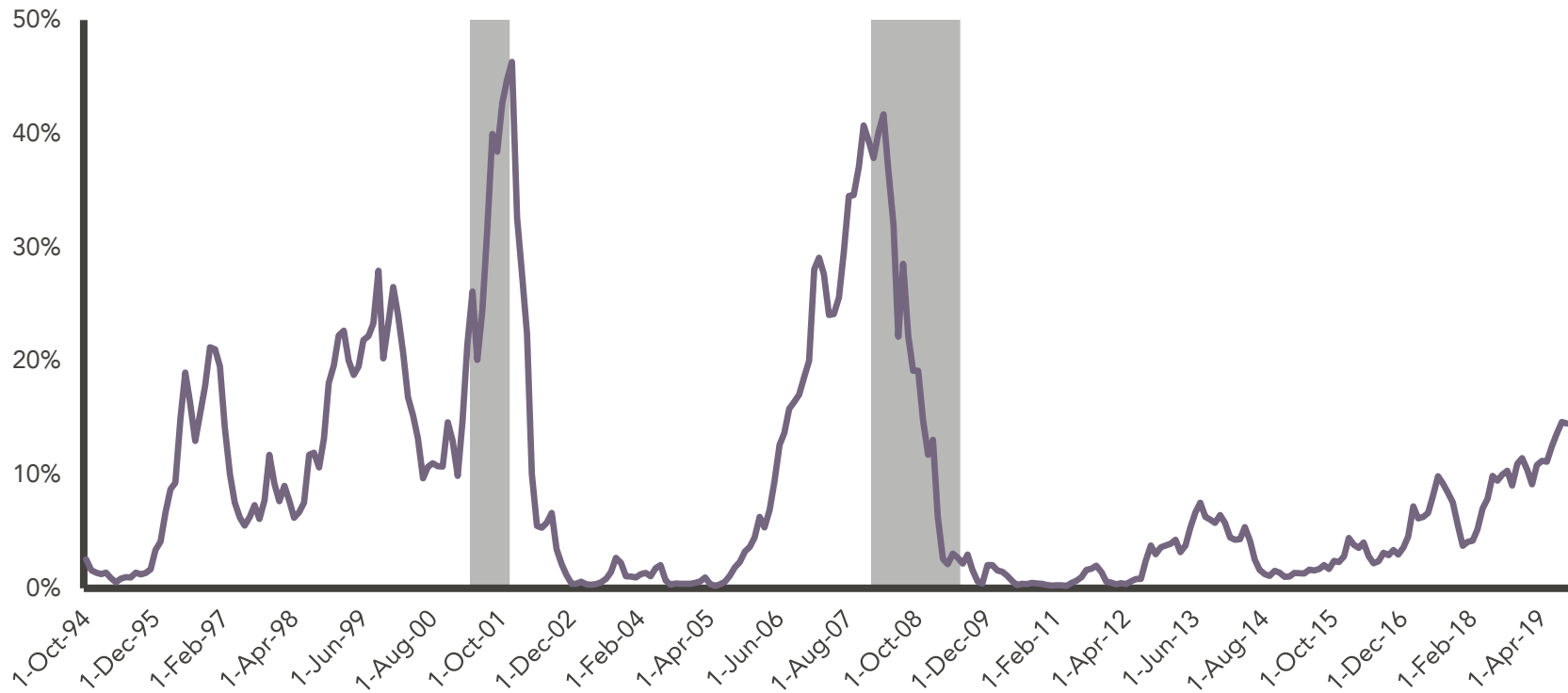
The Trump administration is now threatening to add tariffs on nearly all remaining imports from China, which could make it difficult for China to retaliate



Source: Wall Street Journal

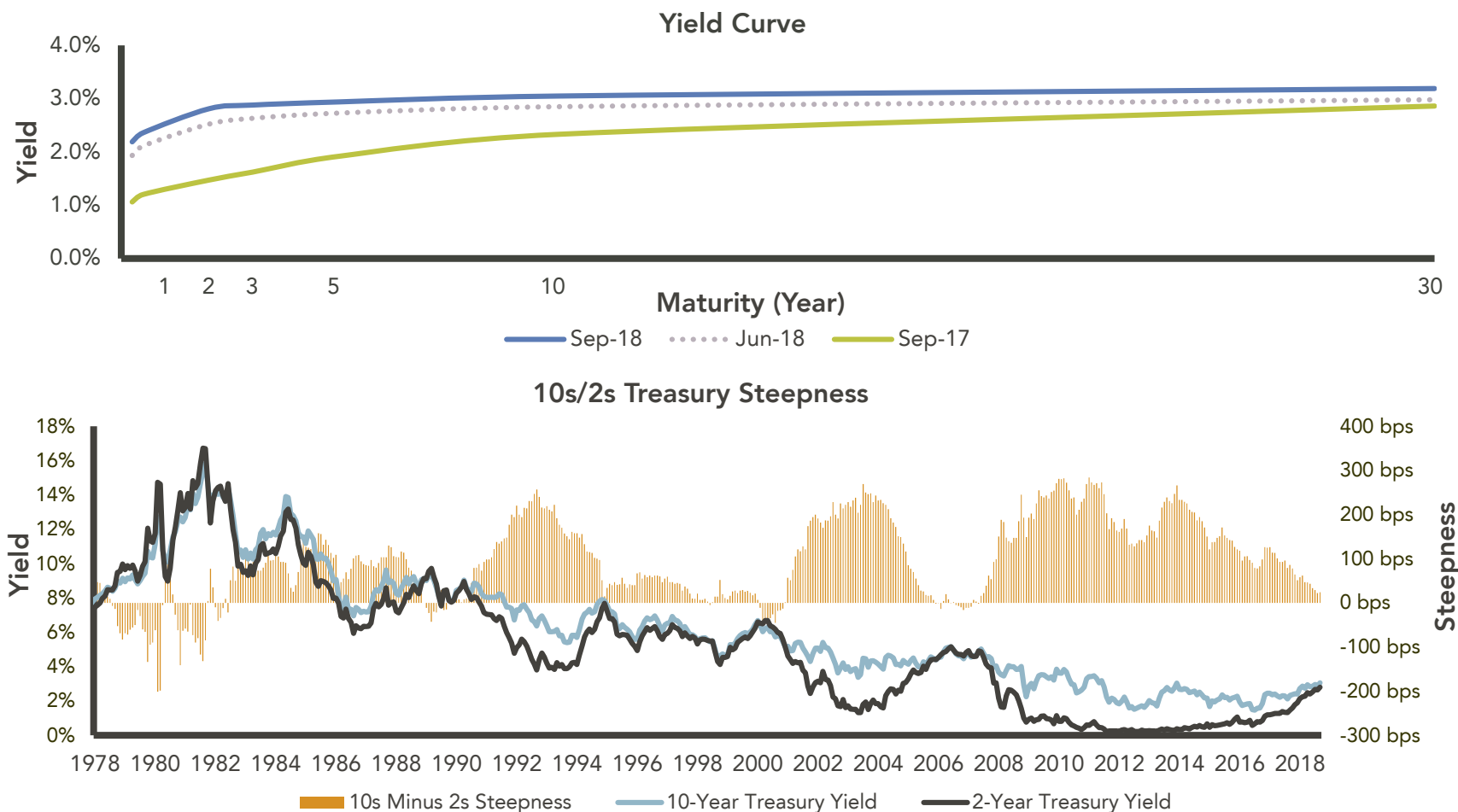
# Recession probability rises

Odds of recession in the next 12 months are still relatively low



Source: NY Federal Reserve

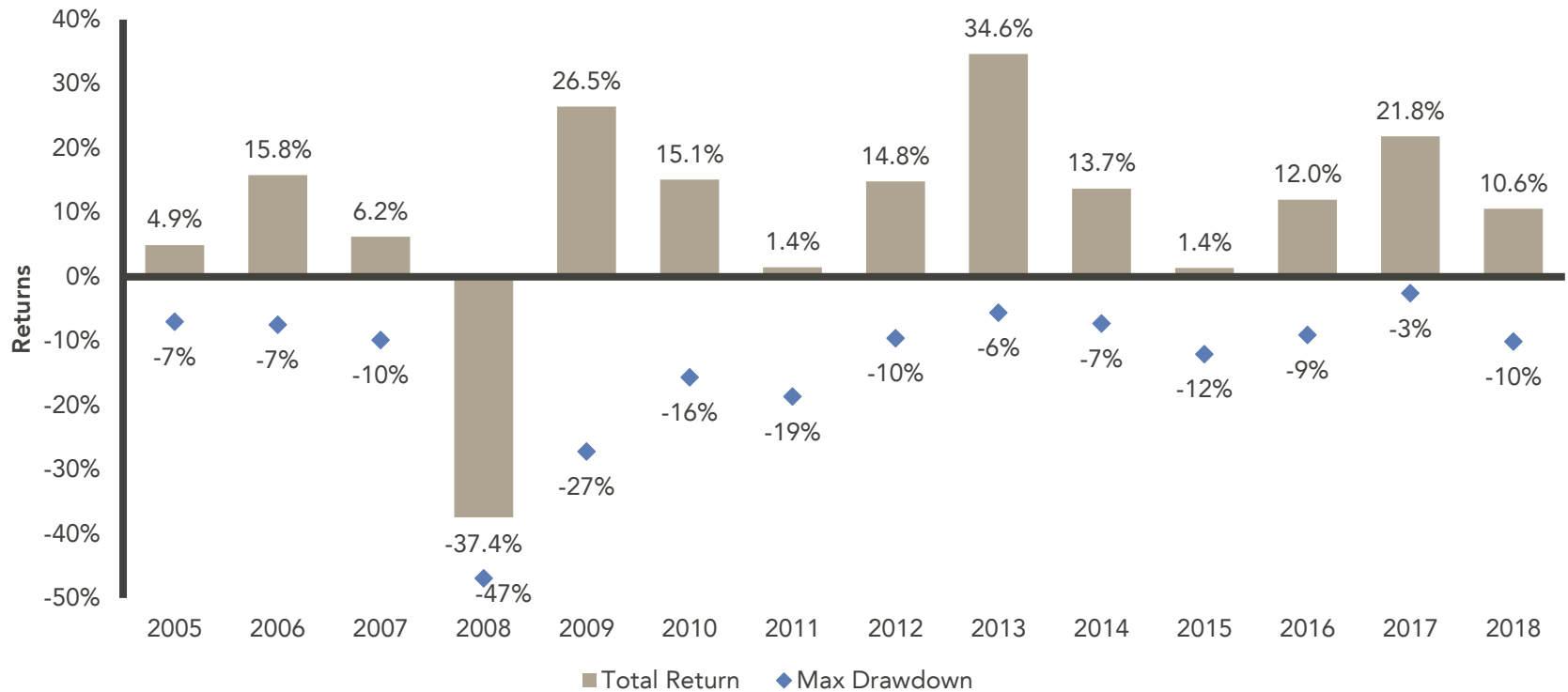
# Yield curve rises, still flat



Source: Federal Reserve as of September 30, 2018

# Negative returns are normal

## S&P 500 maximum market drawdown

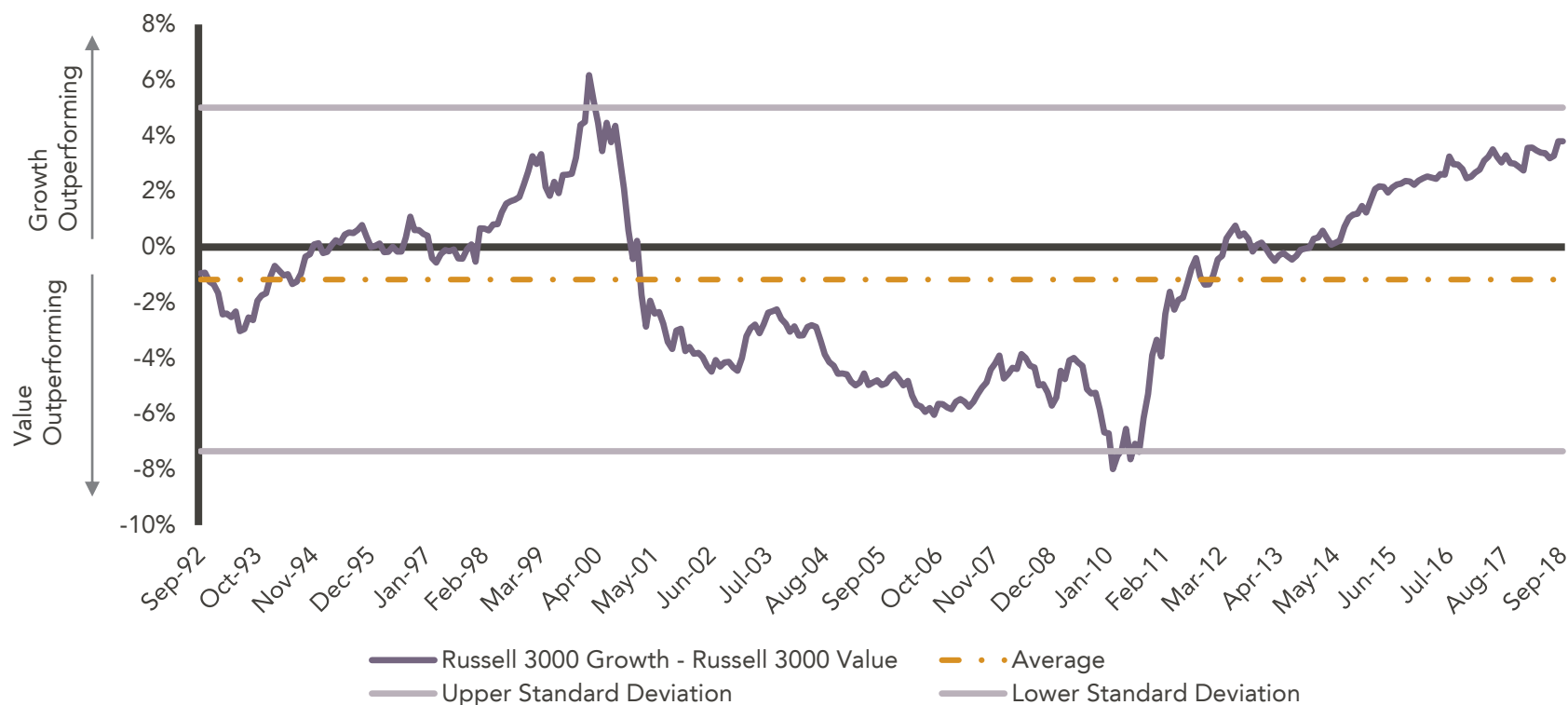


Source: Bloomberg as of September 30, 2018



# Is growth's outperformance peaking?

## Rolling 10-year trailing performance of growth minus value



Source: Evestment; as of September 30, 2018

# U.S. equity style index valuations

## Growth valuations exceed value

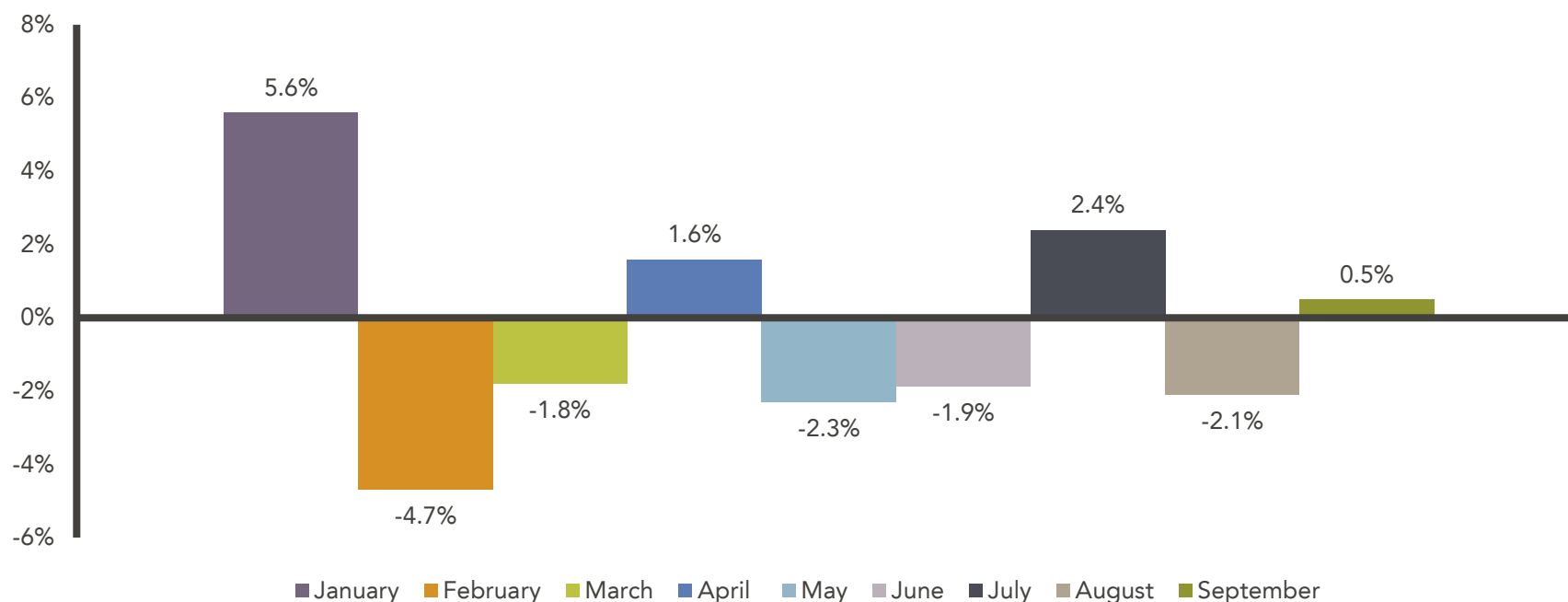
Valuation Metrics	Russell 1000 Value		Russell 1000 Growth		Russell Mid Cap Value		Russell Mid Cap Growth		Russell 2000 Value		Russell 2000 Growth	
	Current	Historical Percentile (%)	Current	Historical Percentile (%)	Current	Historical Percentile (%)	Current	Historical Percentile (%)	Current	Historical Percentile (%)	Current	Historical Percentile (%)
P/E	17.7	87	25.9	87	18.6	92	25.7	86	15.9	59	25.0	88
P/B	2.2	81	8.0	96	2.1	86	6.9	99	1.6	67	4.9	100
P/S	1.7	95	3.3	95	1.5	96	2.5	95	0.9	68	1.7	94
P/CF	10.7	68	18.9	92	10.1	88	19.0	90	11.4	76	35.4	95
EV/EBITDA	12.0	93	17.2	92	12.9	84	17.8	95	14.4	80	32.8	100
Average		85		93		89		93		70		95

Source: Bloomberg. P/E is adjusted for negative earnings, percentiles are based on data March 2000 – September 2018

# Returns have been more down than up

## Variability in this year's monthly returns

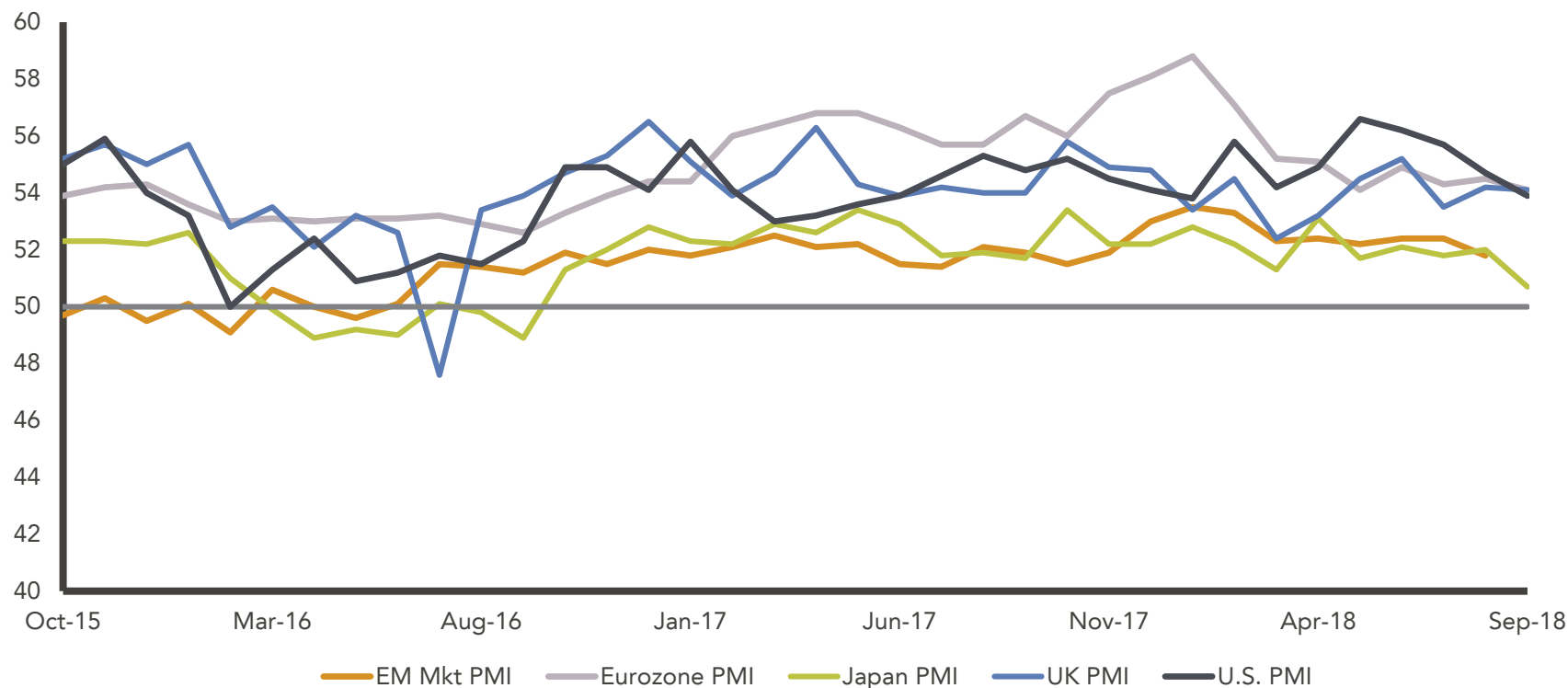
MSCI ACWI ex U.S.



Source: Bloomberg

# Global economic growth remains positive

## Eurozone PMIs cool off but remain in expansion territory



Source: Bloomberg

# Price declines lead to better valuations

## Non-U.S. developed large-cap is the least expensive

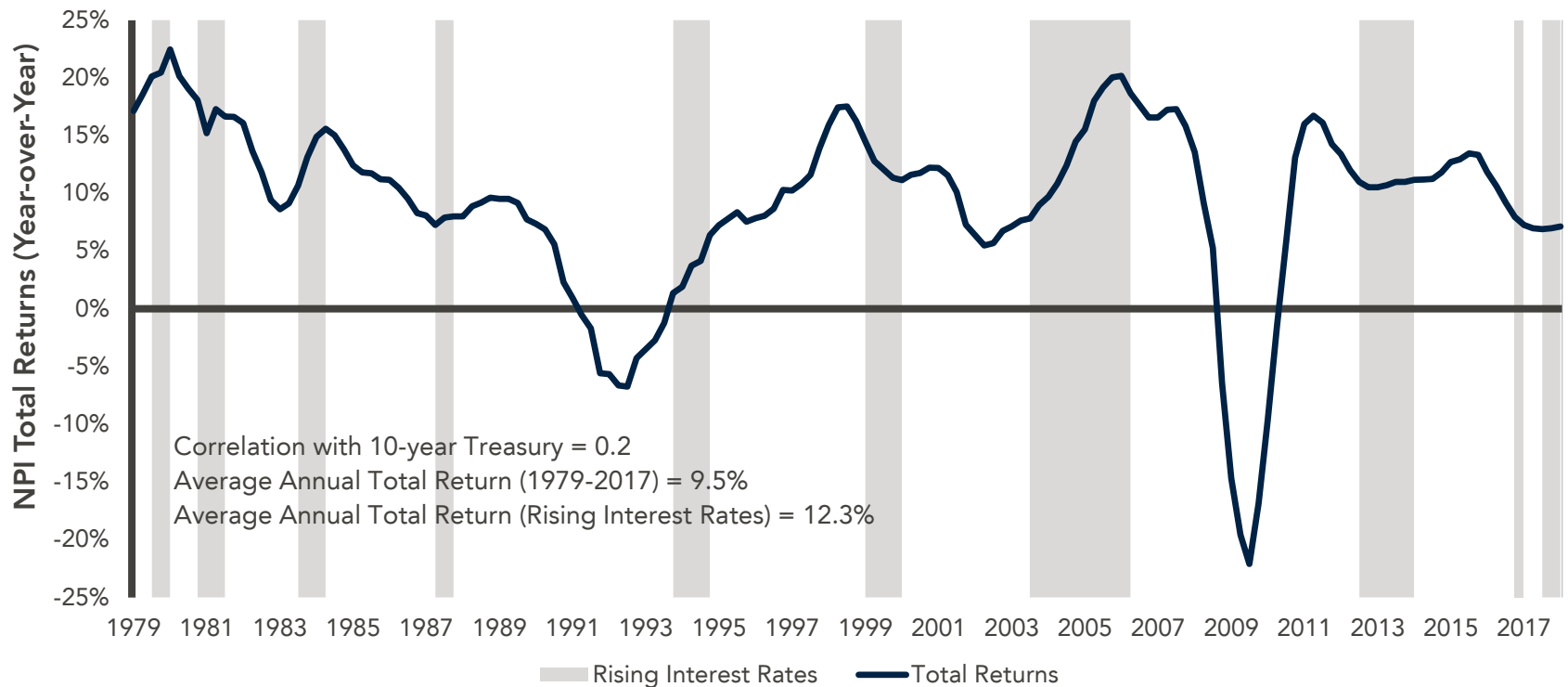
Valuation Metrics	S&P 500		MSCI EAFE		MSCI EM		MSCI EAFE SC	
	Current	Historical Percentile (%)	Current	Historical Percentile (%)	Current	Historical Percentile (%)	Current	Historical Percentile (%)
P/E	20.9	84	14.1	29	12.1	51	14.6	49
Forward P/E	18.1	89	14.3	47	12.0	48	17.0	55
P/B	3.5	90	1.7	43	1.6	47	1.6	72
P/S	2.3	100	1.2	77	1.2	57	0.9	93
P/CF	13.8	75	9.8	54	8.9	76	11.6	83
EV/EBITDA	13.8	97	9.4	36	8.3	73	10.5	37
Average		89		48		59		65

Source: Bloomberg through September 30, 2018; as of October 4, 2018.

P/E is adjusted for negative earnings; percentiles are based on data going back to 1999 except for FP/E which goes back to 2005.

# Rising rates and real estate

**Commercial real estate has historically displayed little correlation with interest rates**



Sources: NCREIF, Federal Reserve via DWS

Purpose:

# Guide institutional investment programs

## **Mission**

Enable institutions to become more effective investment stewards

## **Vision**

Leading investment consultant of risk-adjusted returns & client services

## **Principles**

- ✓ Real-world pragmatism
- ✓ Independent expertise
- ✓ Focused client service
- ✓ Careful research

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The sources of information used in this report are believed to be reliable. Marquette Associates, Inc. has not independently verified all of the information and its accuracy cannot be guaranteed. Opinions, estimates, projections and comments on financial market trends constitute our judgment and are subject to change without notice. References to specific securities are for illustrative purposes only and do not constitute recommendations. Past performance does not guarantee future results.





## Total Fund Composite

## Manager Status

Market Value: \$116.8 Million and 100.0% of Fund

Investment Manager	Asset Class	Status	Reason
BMO/TCH	Int. Govt. Fixed Income	In Compliance	---
PFM	Int. Govt. Fixed Income	In Compliance	---
City-Managed IMET	Cash & Equivalents	In Compliance	---
Concentration Account	Cash & Equivalents	In Compliance	---

### Investment Manager Evaluation Terminology

The following terminology has been developed by Marquette Associates to facilitate efficient communication among the Investment Manager, Investment Consultant, and the Plan Sponsor. Each term signifies a particular status with the Fund and any conditions that may require improvement. In each case, communication is made only after consultation with the Trustees and/or the Investment Committee of the Plan.

**In Compliance** – The investment manager states it is acting in accordance with the Investment Policy Guidelines.

**Alert** – The investment manager is notified of a problem in performance (usually related to a benchmark or volatility measure), a change in investment characteristics, an alteration in management style or key investment professionals, and/or any other irregularities.

**On Notice** – The investment manager is notified of continued concern with one or more Alert issues. Failure to improve upon stated issues within a specific time frame justifies termination.

**Termination** – The Trustees have decided to terminate the investment manager. The investment manager is notified and transition plans are in place.

## Total Fund Composite

## Market Values

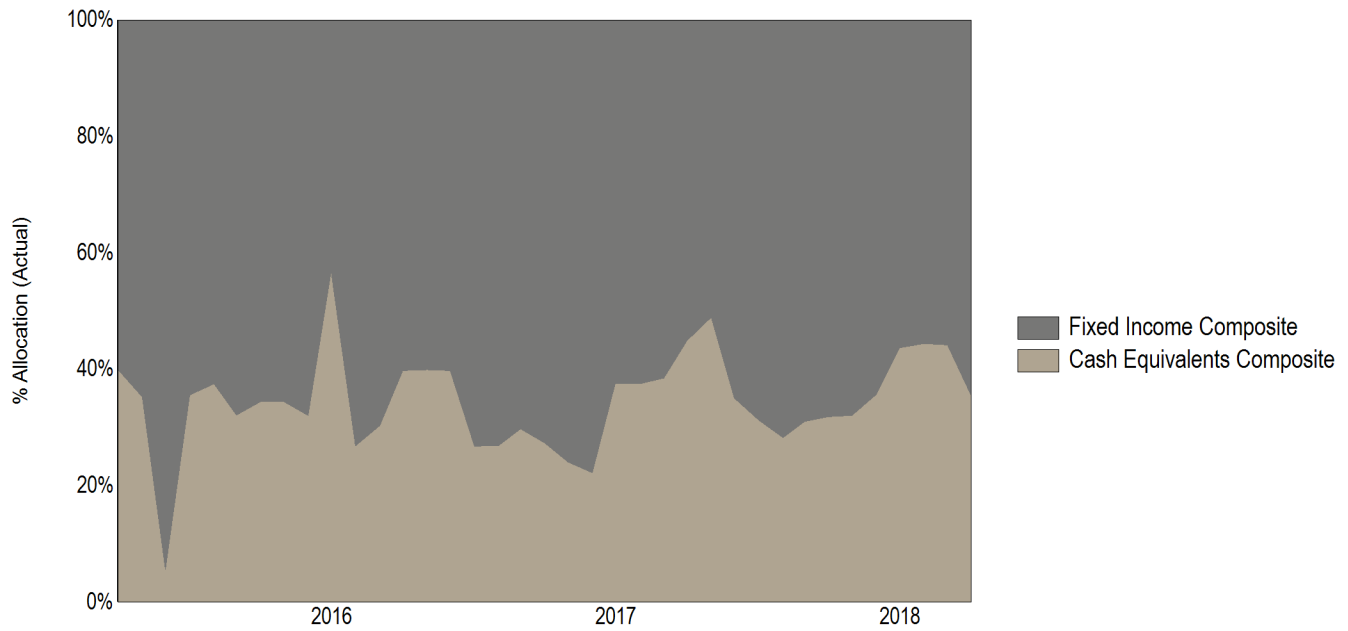
Market Value: \$116.8 Million and 100.0% of Fund

**Ending September 30, 2018**

	Asset Class	Market Value (\$)	3 Mo Net Cash Flows (\$)	% of Portfolio
<b>Total Fund Composite</b>		<b>116,756,353</b>	<b>11,515,121</b>	<b>100.0</b>
<b>Fixed Income Composite</b>		<b>75,262,954</b>	<b>15,989,844</b>	<b>64.5</b>
BMO/TCH	Int. Govt. Fixed Income	37,229,158	7,998,658	31.9
PFM	Int. Govt. Fixed Income	38,033,796	7,998,621	32.6
<b>Cash Equivalents Composite</b>		<b>41,493,399</b>	<b>-4,482,158</b>	<b>35.5</b>
City-Managed IMET	Cash & Equivalents	12,995	0	0.0
Concentration Account	Cash & Equivalents	41,480,404	-4,482,158	35.5

Market Value: \$116.8 Million and 100.0% of Fund

Historic Asset Allocation



## Total Fund Composite

## Market Value History

Market Value: \$116.8 Million and 100.0% of Fund

### Summary of Cash Flows

	Third Quarter	Year-To-Date	One Year	Three Years
<b>Beginning Market Value</b>	<b>\$105,129,523.07</b>	<b>\$86,716,430.09</b>	<b>\$95,700,982.05</b>	<b>\$80,112,434.76</b>
Contributions	\$128,767,102.08	\$151,442,849.53	\$165,951,998.25	\$415,929,222.93
Withdrawals	-\$117,251,981.37	-\$121,105,803.83	-\$144,502,855.92	-\$379,491,959.98
Net Cash Flow	\$11,515,120.71	\$30,337,045.70	\$21,449,142.33	\$36,437,262.95
Net Investment Change	\$111,708.81	-\$297,123.20	-\$393,771.79	\$206,654.88
<b>Ending Market Value</b>	<b>\$116,756,352.59</b>	<b>\$116,756,352.59</b>	<b>\$116,756,352.59</b>	<b>\$116,756,352.59</b>
Net Change	\$11,626,829.52	\$30,039,922.50	\$21,055,370.54	\$36,643,917.83

## Total Fund Composite

## Annualized Performance (Gross of Fees)

Market Value: \$116.8 Million and 100.0% of Fund

Ending September 30, 2018

	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
<b>Total Fund Composite</b>	<b>0.1</b>	<b>-0.4</b>	<b>-0.5</b>	<b>-0.3</b>	<b>0.4</b>	<b>0.8</b>	<b>0.9</b>	<b>0.9</b>	<b>2.3</b>
<i>Policy Benchmark</i>	<i>0.0</i>	<i>-0.5</i>	<i>-0.8</i>	<i>-0.6</i>	<i>0.3</i>	<i>0.9</i>	<i>0.9</i>	<i>0.8</i>	<i>1.9</i>
<b>Fixed Income Composite</b>	<b>0.1</b>	<b>-0.6</b>	<b>-0.7</b>	<b>-0.6</b>	<b>0.5</b>	<b>1.1</b>	<b>1.2</b>	<b>1.2</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	<i>-0.1</i>	<i>-0.8</i>	<i>-1.2</i>	<i>-0.9</i>	<i>0.2</i>	<i>0.9</i>	<i>0.9</i>	<i>0.9</i>	<i>2.2</i>
<b>Cash Equivalents Composite</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>--</b>
<i>91 Day T-Bills</i>	<i>0.5</i>	<i>1.3</i>	<i>1.6</i>	<i>1.2</i>	<i>0.9</i>	<i>0.6</i>	<i>0.5</i>	<i>0.4</i>	<i>0.3</i>

## Total Fund Composite

## Calendar Performance (Gross of Fees)

Market Value: \$116.8 Million and 100.0% of Fund

	Calendar Year								
	2017	2016	2015	2014	2013	2012	2011	2010	2009
<b>Total Fund Composite</b>	<b>1.2</b>	<b>0.7</b>	<b>0.9</b>	<b>2.2</b>	<b>-0.9</b>	<b>1.8</b>	<b>5.3</b>	<b>5.3</b>	<b>2.0</b>
<i>Policy Benchmark</i>	<i>1.1</i>	<i>0.9</i>	<i>1.0</i>	<i>2.1</i>	<i>-1.1</i>	<i>1.5</i>	<i>5.2</i>	<i>4.2</i>	<i>-0.2</i>
<b>Fixed Income Composite</b>	<b>1.6</b>	<b>1.3</b>	<b>1.2</b>	<b>2.9</b>	<b>-1.2</b>	<b>2.3</b>	<b>6.2</b>	<b>5.7</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	<i>1.1</i>	<i>1.1</i>	<i>1.2</i>	<i>2.5</i>	<i>-1.2</i>	<i>1.7</i>	<i>6.1</i>	<i>5.0</i>	<i>-0.3</i>
<b>Cash Equivalents Composite</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>--</b>
<i>91 Day T-Bills</i>	<i>0.9</i>	<i>0.3</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.1</i>	<i>0.0</i>	<i>0.1</i>	<i>0.1</i>

## Total Fund Composite

## Calendar Performance (Gross of Fees)

Market Value: \$116.8 Million and 100.0% of Fund

	Fiscal Year										
	YTD	2017	2016	5/1/15 - 12/31/15	Fiscal 2016	Fiscal 2015	Fiscal 2014	Fiscal 2013	Fiscal 2012	Fiscal 2011	Fiscal 2010
<b>Total Fund Composite</b>	<b>-0.4</b>	<b>1.2</b>	<b>0.7</b>	<b>0.0</b>	<b>1.6</b>	<b>2.1</b>	<b>-0.5</b>	<b>1.6</b>	<b>4.9</b>	<b>4.4</b>	<b>3.2</b>
<i>Policy Benchmark</i>	-0.5	1.1	0.9	0.0	2.0	2.3	-0.7	1.5	4.7	3.5	2.0
<b>Fixed Income Composite</b>	<b>-0.6</b>	<b>1.6</b>	<b>1.3</b>	<b>0.1</b>	<b>2.5</b>	<b>2.8</b>	<b>-0.7</b>	<b>2.1</b>	<b>5.8</b>	<b>4.7</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	-0.8	1.1	1.1	0.0	2.3	2.7	-0.8	1.8	5.6	4.1	2.3
<b>Cash Equivalents Composite</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>--</b>
<i>91 Day T-Bills</i>	1.3	0.9	0.3	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.1

Please note that the above table reflects a May 1 fiscal year for all but the first four columns, which reflect the newly implemented January 1 fiscal year.



## Investment Manager

## Annualized Performance (Gross of Fees)

Market Value: \$116.8 Million and 100.0% of Fund

Ending September 30, 2018

	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
<b>Total Fund Composite</b>	<b>0.1</b>	<b>-0.4</b>	<b>-0.5</b>	<b>-0.3</b>	<b>0.4</b>	<b>0.8</b>	<b>0.9</b>	<b>0.9</b>	<b>2.3</b>
<i>Policy Benchmark</i>	<i>0.0</i>	<i>-0.5</i>	<i>-0.8</i>	<i>-0.6</i>	<i>0.3</i>	<i>0.9</i>	<i>0.9</i>	<i>0.8</i>	<i>1.9</i>
<b>Fixed Income Composite</b>	<b>0.1</b>	<b>-0.6</b>	<b>-0.7</b>	<b>-0.6</b>	<b>0.5</b>	<b>1.1</b>	<b>1.2</b>	<b>1.2</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	<i>-0.1</i>	<i>-0.8</i>	<i>-1.2</i>	<i>-0.9</i>	<i>0.2</i>	<i>0.9</i>	<i>0.9</i>	<i>0.9</i>	<i>2.2</i>
BMO/TCH	0.1	-0.7	-0.8	-0.7	0.6	1.1	1.2	1.1	--
<i>BBgBarc US Govt Int TR</i>	<i>-0.1</i>	<i>-0.8</i>	<i>-1.2</i>	<i>-0.9</i>	<i>0.2</i>	<i>0.9</i>	<i>0.9</i>	<i>0.9</i>	<i>2.2</i>
PFM	0.2	-0.4	-0.7	--	--	--	--	--	--
<i>BBgBarc US Govt Int TR</i>	<i>-0.1</i>	<i>-0.8</i>	<i>-1.2</i>	<i>-0.9</i>	<i>0.2</i>	<i>0.9</i>	<i>0.9</i>	<i>0.9</i>	<i>2.2</i>
<b>Cash Equivalents Composite</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>--</b>
<i>91 Day T-Bills</i>	<i>0.5</i>	<i>1.3</i>	<i>1.6</i>	<i>1.2</i>	<i>0.9</i>	<i>0.6</i>	<i>0.5</i>	<i>0.4</i>	<i>0.3</i>
City-Managed IMET	0.5	1.3	1.6	1.2	1.0	0.8	0.7	0.6	--
<i>91 Day T-Bills</i>	<i>0.5</i>	<i>1.3</i>	<i>1.6</i>	<i>1.2</i>	<i>0.9</i>	<i>0.6</i>	<i>0.5</i>	<i>0.4</i>	<i>0.3</i>

## Investment Manager

## Calendar Performance (Gross of Fees)

Market Value: \$116.8 Million and 100.0% of Fund

	Calendar Year								
	2017	2016	2015	2014	2013	2012	2011	2010	2009
<b>Total Fund Composite</b>	<b>1.2</b>	<b>0.7</b>	<b>0.9</b>	<b>2.2</b>	<b>-0.9</b>	<b>1.8</b>	<b>5.3</b>	<b>5.3</b>	<b>2.0</b>
<i>Policy Benchmark</i>	<i>1.1</i>	<i>0.9</i>	<i>1.0</i>	<i>2.1</i>	<i>-1.1</i>	<i>1.5</i>	<i>5.2</i>	<i>4.2</i>	<i>-0.2</i>
<b>Fixed Income Composite</b>	<b>1.6</b>	<b>1.3</b>	<b>1.2</b>	<b>2.9</b>	<b>-1.2</b>	<b>2.3</b>	<b>6.2</b>	<b>5.7</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	<i>1.1</i>	<i>1.1</i>	<i>1.2</i>	<i>2.5</i>	<i>-1.2</i>	<i>1.7</i>	<i>6.1</i>	<i>5.0</i>	<i>-0.3</i>
<b>BMO/TCH</b>	<b>1.7</b>	<b>1.1</b>	<b>1.2</b>	<b>2.9</b>	<b>-1.5</b>	<b>2.2</b>	<b>6.3</b>	<b>5.3</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	<i>1.1</i>	<i>1.1</i>	<i>1.2</i>	<i>2.5</i>	<i>-1.2</i>	<i>1.7</i>	<i>6.1</i>	<i>5.0</i>	<i>-0.3</i>
<b>PFM</b>	<b>1.4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	<i>1.1</i>	<i>1.1</i>	<i>1.2</i>	<i>2.5</i>	<i>-1.2</i>	<i>1.7</i>	<i>6.1</i>	<i>5.0</i>	<i>-0.3</i>
<b>Cash Equivalents Composite</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>--</b>
<i>91 Day T-Bills</i>	<i>0.9</i>	<i>0.3</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.1</i>	<i>0.0</i>	<i>0.1</i>	<i>0.1</i>
<b>City-Managed IMET</b>	<b>1.0</b>	<b>0.5</b>	<b>0.3</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>91 Day T-Bills</i>	<i>0.9</i>	<i>0.3</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.1</i>	<i>0.0</i>	<i>0.1</i>	<i>0.1</i>

## Total Fund Composite

## Annualized Performance (Net of Fees)

Market Value: \$116.8 Million and 100.0% of Fund

Ending September 30, 2018

	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
<b>Total Fund Composite</b>	<b>0.1</b>	<b>-0.5</b>	<b>-0.6</b>	<b>-0.4</b>	<b>0.3</b>	<b>0.7</b>	<b>0.8</b>	<b>0.8</b>	<b>2.2</b>
<i>Policy Benchmark</i>	<i>0.0</i>	<i>-0.5</i>	<i>-0.8</i>	<i>-0.6</i>	<i>0.3</i>	<i>0.9</i>	<i>0.9</i>	<i>0.8</i>	<i>1.9</i>
<b>Fixed Income Composite</b>	<b>0.1</b>	<b>-0.7</b>	<b>-0.9</b>	<b>-0.8</b>	<b>0.4</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	<i>-0.1</i>	<i>-0.8</i>	<i>-1.2</i>	<i>-0.9</i>	<i>0.2</i>	<i>0.9</i>	<i>0.9</i>	<i>0.9</i>	<i>2.2</i>
<i>InvestorForce Public DB US Fix Inc Net Rank</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>
<b>Cash Equivalents Composite</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>--</b>
<i>91 Day T-Bills</i>	<i>0.5</i>	<i>1.3</i>	<i>1.6</i>	<i>1.2</i>	<i>0.9</i>	<i>0.6</i>	<i>0.5</i>	<i>0.4</i>	<i>0.3</i>

## Total Fund Composite

## Calendar Performance (Net of Fees)

Market Value: \$116.8 Million and 100.0% of Fund

	Calendar Year								
	2017	2016	2015	2014	2013	2012	2011	2010	2009
<b>Total Fund Composite</b>	<b>1.1</b>	<b>0.6</b>	<b>0.7</b>	<b>2.1</b>	<b>-1.0</b>	<b>1.7</b>	<b>5.2</b>	<b>5.2</b>	<b>1.9</b>
<i>Policy Benchmark</i>	1.1	0.9	1.0	2.1	-1.1	1.5	5.2	4.2	-0.2
<b>Fixed Income Composite</b>	<b>1.4</b>	<b>1.1</b>	<b>1.1</b>	<b>2.7</b>	<b>-1.4</b>	<b>2.2</b>	<b>6.1</b>	<b>5.5</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	1.1	1.1	1.2	2.5	-1.2	1.7	6.1	5.0	-0.3
<i>InvestorForce Public DB US Fix Inc Net Rank</i>	97	97	14	85	62	92	52	60	--
<b>Cash Equivalents Composite</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>--</b>
<i>91 Day T-Bills</i>	0.9	0.3	0.0	0.0	0.0	0.1	0.0	0.1	0.1

## Total Fund Composite

## Calendar Performance (Net of Fees)

Market Value: \$116.8 Million and 100.0% of Fund

### Fiscal Year

	YTD	2017	2016	5/1/15 - 12/31/15	Fiscal 2017	Fiscal 2016	Fiscal 2015	Fiscal 2014	Fiscal 2013	Fiscal 2012	Fiscal 2011	Fiscal 2010
<b>Total Fund Composite</b>	<b>-0.5</b>	<b>1.1</b>	<b>0.6</b>	<b>0.0</b>	<b>0.0</b>	<b>1.5</b>	<b>2.0</b>	<b>-0.6</b>	<b>1.5</b>	<b>4.8</b>	<b>4.2</b>	<b>3.0</b>
<i>Policy Benchmark</i>	-0.5	1.1	0.9	0.0	0.0	2.0	2.3	-0.7	1.5	4.7	3.5	2.0
<b>Fixed Income Composite</b>	<b>-0.7</b>	<b>1.4</b>	<b>1.1</b>	<b>0.0</b>	<b>-0.1</b>	<b>2.4</b>	<b>2.6</b>	<b>-0.8</b>	<b>1.9</b>	<b>5.7</b>	<b>4.5</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	-0.8	1.1	1.1	0.0	-0.1	2.3	2.7	-0.8	1.8	5.6	4.1	2.3
<b>Cash Equivalents Composite</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>--</b>
<i>91 Day T-Bills</i>	1.3	0.9	0.3	0.0	0.4	0.1	0.0	0.0	0.1	0.0	0.1	0.1

Please note that the above table reflects a May 1 fiscal year for all but the first four columns, which reflect the newly implemented January 1 fiscal year.

## Investment Manager

## Annualized Performance (Net of Fees)

Market Value: \$116.8 Million and 100.0% of Fund

Ending September 30, 2018

	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	7 Yrs	10 Yrs
<b>Total Fund Composite</b>	<b>0.1</b>	<b>-0.5</b>	<b>-0.6</b>	<b>-0.4</b>	<b>0.3</b>	<b>0.7</b>	<b>0.8</b>	<b>0.8</b>	<b>2.2</b>
<i>Policy Benchmark</i>	<i>0.0</i>	<i>-0.5</i>	<i>-0.8</i>	<i>-0.6</i>	<i>0.3</i>	<i>0.9</i>	<i>0.9</i>	<i>0.8</i>	<i>1.9</i>
<b>Fixed Income Composite</b>	<b>0.1</b>	<b>-0.7</b>	<b>-0.9</b>	<b>-0.8</b>	<b>0.4</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	<i>-0.1</i>	<i>-0.8</i>	<i>-1.2</i>	<i>-0.9</i>	<i>0.2</i>	<i>0.9</i>	<i>0.9</i>	<i>0.9</i>	<i>2.2</i>
<i>InvestorForce Public DB US Fix Inc Net Rank</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>
<b>BMO/TCH</b>	<b>0.0</b>	<b>-0.8</b>	<b>-1.0</b>	<b>-0.9</b>	<b>0.4</b>	<b>0.9</b>	<b>1.0</b>	<b>0.9</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	<i>-0.1</i>	<i>-0.8</i>	<i>-1.2</i>	<i>-0.9</i>	<i>0.2</i>	<i>0.9</i>	<i>0.9</i>	<i>0.9</i>	<i>2.2</i>
<i>eV US Government Fixed Inc Net Rank</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>
<b>PFM</b>	<b>0.1</b>	<b>-0.5</b>	<b>-0.8</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	<i>-0.1</i>	<i>-0.8</i>	<i>-1.2</i>	<i>-0.9</i>	<i>0.2</i>	<i>0.9</i>	<i>0.9</i>	<i>0.9</i>	<i>2.2</i>
<i>eV US Government Fixed Inc Net Rank</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>
<b>Cash Equivalents Composite</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>--</b>
<i>91 Day T-Bills</i>	<i>0.5</i>	<i>1.3</i>	<i>1.6</i>	<i>1.2</i>	<i>0.9</i>	<i>0.6</i>	<i>0.5</i>	<i>0.4</i>	<i>0.3</i>
<b>City-Managed IMET</b>	<b>0.5</b>	<b>1.3</b>	<b>1.6</b>	<b>1.2</b>	<b>1.0</b>	<b>0.8</b>	<b>0.7</b>	<b>0.6</b>	<b>--</b>
<i>91 Day T-Bills</i>	<i>0.5</i>	<i>1.3</i>	<i>1.6</i>	<i>1.2</i>	<i>0.9</i>	<i>0.6</i>	<i>0.5</i>	<i>0.4</i>	<i>0.3</i>

# Investment Manager

# Calendar Performance (Net of Fees)

Market Value: \$116.8 Million and 100.0% of Fund

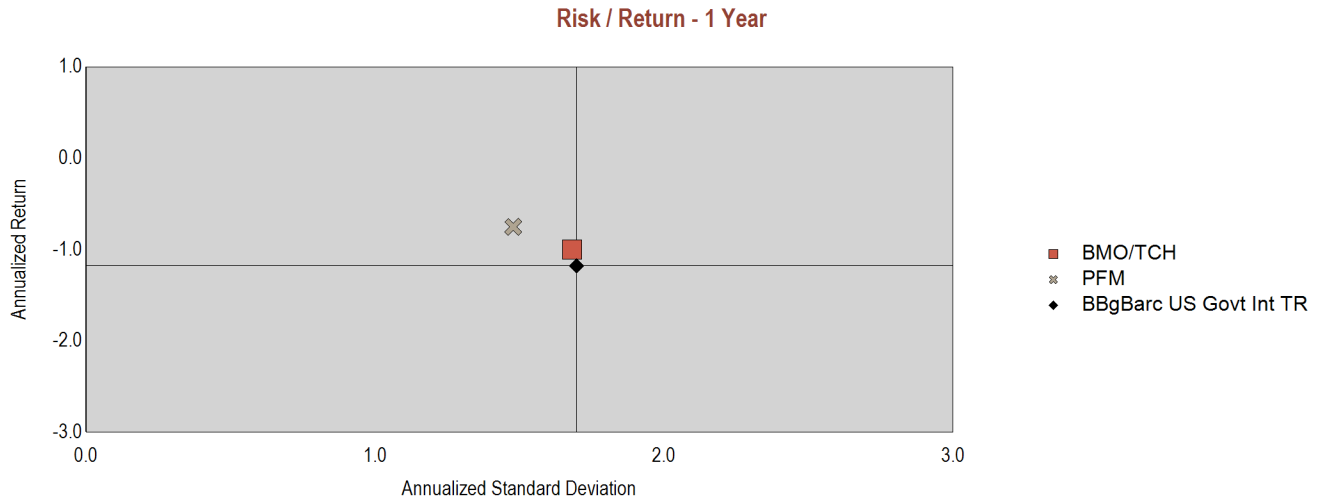
	Calendar Year								
	2017	2016	2015	2014	2013	2012	2011	2010	2009
<b>Total Fund Composite</b>	<b>1.1</b>	<b>0.6</b>	<b>0.7</b>	<b>2.1</b>	<b>-1.0</b>	<b>1.7</b>	<b>5.2</b>	<b>5.2</b>	<b>1.9</b>
<i>Policy Benchmark</i>	1.1	0.9	1.0	2.1	-1.1	1.5	5.2	4.2	-0.2
<b>Fixed Income Composite</b>	<b>1.4</b>	<b>1.1</b>	<b>1.1</b>	<b>2.7</b>	<b>-1.4</b>	<b>2.2</b>	<b>6.1</b>	<b>5.5</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	1.1	1.1	1.2	2.5	-1.2	1.7	6.1	5.0	-0.3
<i>InvestorForce Public DB US Fix Inc Net Rank</i>	97	97	14	85	62	92	52	60	--
<b>BMO/TCH</b>	<b>1.5</b>	<b>1.0</b>	<b>1.0</b>	<b>2.8</b>	<b>-1.7</b>	<b>2.1</b>	<b>6.1</b>	<b>5.2</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	1.1	1.1	1.2	2.5	-1.2	1.7	6.1	5.0	-0.3
<i>eV US Government Fixed Inc Net Rank</i>	68	77	26	58	65	64	39	42	--
<b>PFM</b>	<b>1.3</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>BBgBarc US Govt Int TR</i>	1.1	1.1	1.2	2.5	-1.2	1.7	6.1	5.0	-0.3
<i>eV US Government Fixed Inc Net Rank</i>	73	--	--	--	--	--	--	--	--
<b>Cash Equivalents Composite</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>--</b>
<i>91 Day T-Bills</i>	0.9	0.3	0.0	0.0	0.0	0.1	0.0	0.1	0.1
<b>City-Managed IMET</b>	<b>1.0</b>	<b>0.5</b>	<b>0.3</b>	<b>0.4</b>	<b>0.3</b>	<b>0.3</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>91 Day T-Bills</i>	0.9	0.3	0.0	0.0	0.0	0.1	0.0	0.1	0.1

# Fixed Income Composite

As of September 30, 2018

## Characteristics

Market Value: \$75.3 Million and 64.5% of Fund



### Characteristics

	Portfolio	Index
	Q3-18	Q3-18
Yield to Maturity	3.2%	2.9%
Avg. Eff. Maturity	4.1 yrs.	4.0 yrs.
Avg. Duration	3.7 yrs.	3.7 yrs.
Avg. Quality	AA	--
Region	Number Of Assets	
North America ex U.S.	3	
United States	199	
United Kingdom	4	
Emerging Markets	2	
Other	3	
<b>Total</b>	<b>211</b>	

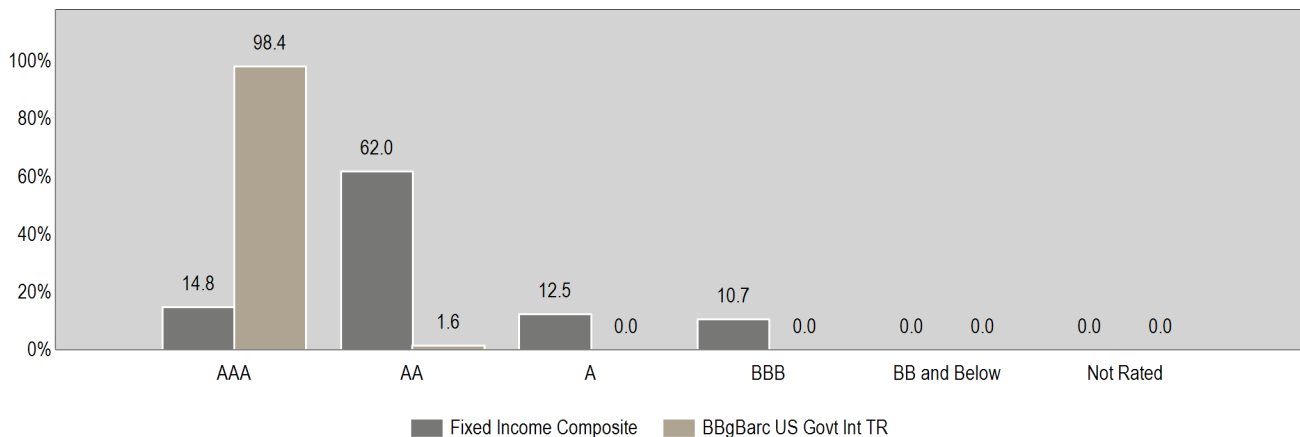
### Sector

	Portfolio	Index
	Q3-18	Q3-18
UST/Agency	43.8%	100.0%
Corporate	24.8%	--
MBS	23.7%	--
ABS	--	--
Foreign	7.7%	--
Muni	--	--
Other	0.0%	--

### Maturity

	Q3-18
<1 Year	5.4%
1-3 Years	35.6%
3-5 Years	33.0%
5-7 Years	14.6%
7-10 Years	11.3%
10-15 Years	0.0%
15-20 Years	0.1%
>20 Years	0.0%
Not Rated/Cash	0.0%

### Quality Distribution

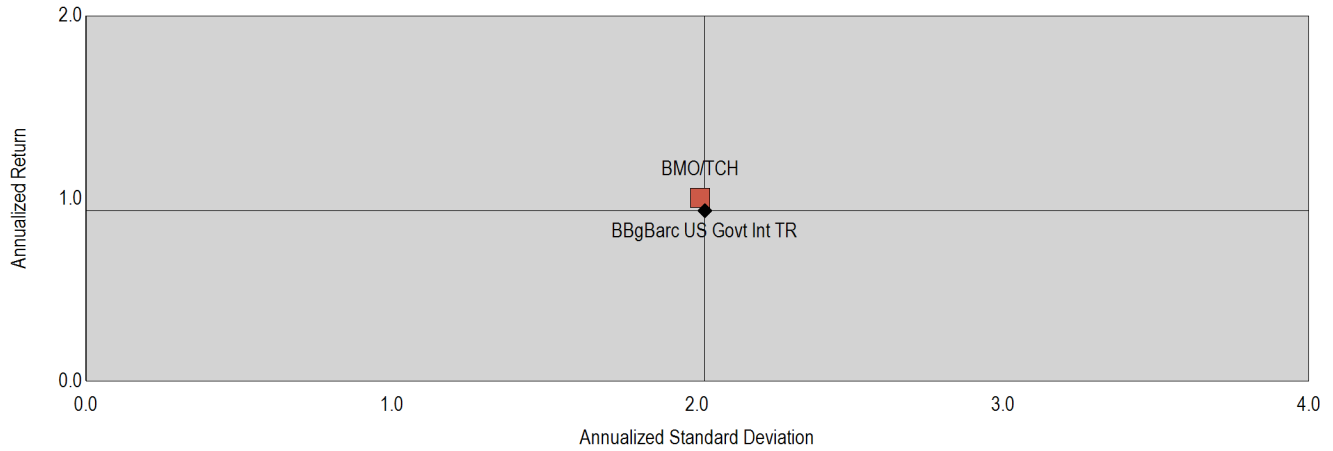




As of September 30, 2018

Market Value: \$37.2 Million and 31.9% of Fund

## Risk / Return - 5 Years



## Characteristics

	Portfolio	Index
	Q3-18	Q3-18
Yield to Maturity	3.1%	2.9%
Avg. Eff. Maturity	4.3 yrs.	4.0 yrs.
Avg. Duration	3.8 yrs.	3.7 yrs.
Avg. Quality	AA	--
Region	Number Of Assets	
United States	60	
United Kingdom	2	
Other	0	
<b>Total</b>	<b>62</b>	

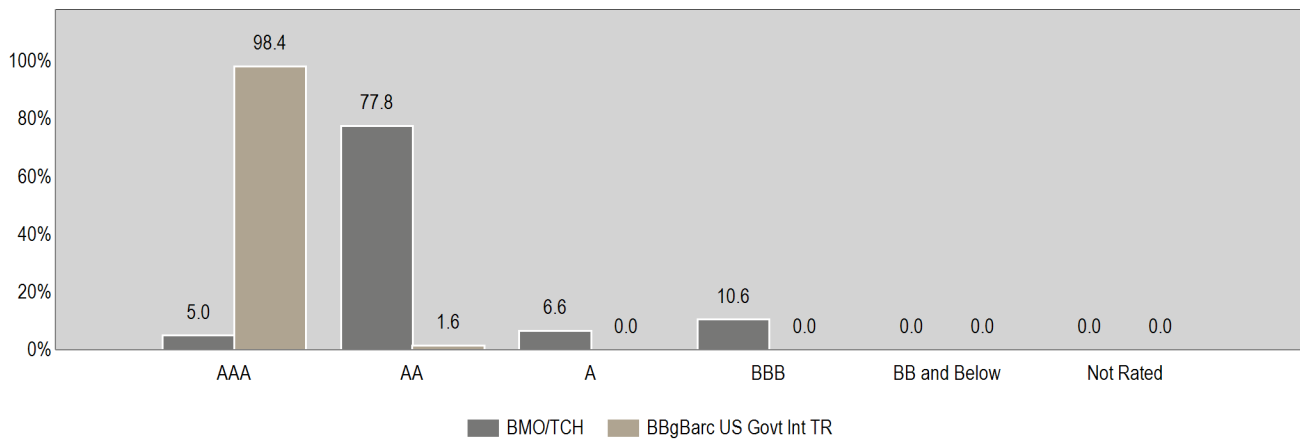
## Sector

	Portfolio	Index
	Q3-18	Q3-18
UST/Agency	58.8%	100.0%
Corporate	18.7%	--
MBS	21.8%	--
ABS	--	--
Foreign	0.7%	--
Muni	--	--
Other	0.0%	--

## Maturity

	Q3-18
<1 Year	8.6%
1-3 Years	39.0%
3-5 Years	21.0%
5-7 Years	8.5%
7-10 Years	22.9%
10-15 Years	0.0%
15-20 Years	0.0%
>20 Years	0.0%
Not Rated/Cash	0.0%

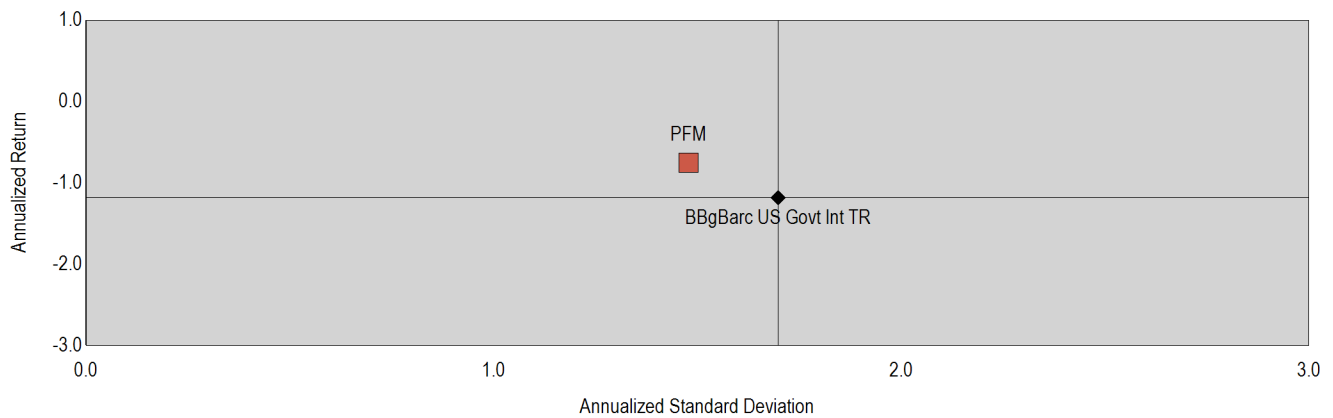
## Quality Distribution



As of September 30, 2018

Market Value: \$38.0 Million and 32.6% of Fund

## Risk / Return - 1 Year



## Characteristics

	Portfolio	Index
	Q3-18	Q3-18
Yield to Maturity	3.2%	2.9%
Avg. Eff. Maturity	3.8 yrs.	4.0 yrs.
Avg. Duration	3.5 yrs.	3.7 yrs.
Avg. Quality	AA	--

## Sector

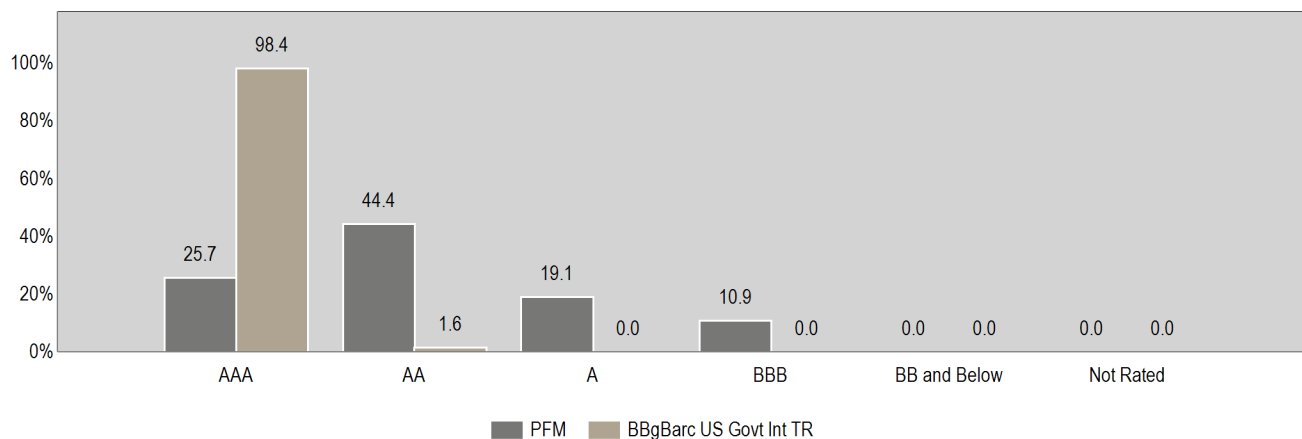
	Portfolio	Index
	Q3-18	Q3-18
UST/Agency	29.3%	100.0%
Corporate	30.6%	--
MBS	25.6%	--
ABS	--	--
Foreign	14.5%	--
Muni	--	--
Other	0.0%	--

## Maturity

	Q3-18
<1 Year	2.3%
1-3 Years	32.3%
3-5 Years	44.6%
5-7 Years	20.4%
7-10 Years	0.1%
10-15 Years	0.0%
15-20 Years	0.2%
>20 Years	0.0%
Not Rated/Cash	0.0%

Region	Number Of Assets
North America ex U.S.	3
United States	140
United Kingdom	2
Emerging Markets	2
Other	3
<b>Total</b>	<b>150</b>

## Quality Distribution



## Total Fund Composite

## Fee Schedule

Market Value: \$116.8 Million and 100.0% of Fund

Asset Class	Investment Manager	Fee Schedule	Expense Ratio & Estimated Annual Fee <sup>1</sup>	Industry Average <sup>2</sup>
Int. Govt. Fixed Income	BMO/TCH	0.15% on the Balance	0.15% \$55,844	0.25%
Int. Govt. Fixed Income	PFM	0.10% on the first \$25 million 0.08% on the next \$25 million 0.07% on the next \$50 million 0.06% on the balance	0.09% \$35,427	0.25%
<b>Total Investment Management Fees</b>			<b>0.08%</b> <b>\$91,271</b>	<b>0.16%</b>
Investment Consultant	Marquette Associates, Inc.	\$25,000 Annual Fee	0.02% \$25,000	N/A
<b>Total Fund</b>			<b>0.10%</b> <b>\$116,271</b>	

<sup>1</sup> Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

<sup>2</sup> Source: 2016 Marquette Associates Investment Management Fee Study.

# City of Naperville

## Q3 2018 Investment Review

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**Presented by:**

Meaghan Ryan, CFA

Vice President, Relationship Management

(312) 461-3633

# Overview

## Positioning and Rationale

### YIELD CURVE ANALYSIS

- The gap between the Fed and the Treasury market's view of future economic data narrowed somewhat during the 3<sup>rd</sup> quarter
- The Fed commentary exhibited further confidence in the US economy with the removal of the "accommodative" policy reference
- Measures of volatility have declined as financial markets have re-centered on the US economy as opposed global trade rhetoric
- The policy divergence between the Fed and ECB has widened further as the concerns over the Eurozone structure resurfaced in Italy
- Financial conditions which had shown signs of tighter policy, once again eased as U.S. economic data bolstered lending markets and general sentiment
- Duration construction: U.S. economic data, Fed vigilance and tightening labor market conditions suggest higher benchmark rates, though somewhat constrained by economic tensions and a slow follow through to real wages

### SECTOR OUTLOOK

- Investment Grade Credit: Subscription levels for primary issues remains robust throughout credit markets as incremental demand for U.S. credit continues to outstrip supply; The rise in absolute yields and the decline in volatility have replaced the global marginal buyer with domestic; Short to intermediate duration assets appear particularly attractive
- Securitized: Agency MBS spreads remain unremarkable in a broad context, but weathered concerns over extension risk and Fed hawkishness quite well; CMBS "dupers" still appear attractive relative to similarly-rated cross sector opportunities
- "Beta" Sectors: Highly selective approach to high yield opportunities, particularly following the relative performance of lower-quality securities; EMD sell-off has not been sufficiently broad to garner a structural opportunity

### QUALITY DECISIONS

- Overall, lower quality outperformed during 3Q 2018 as concerns over M&A supply and volatility have abated; accordingly, most dislocations narrowed significantly; however, headline-related opportunities continue to surface through markets

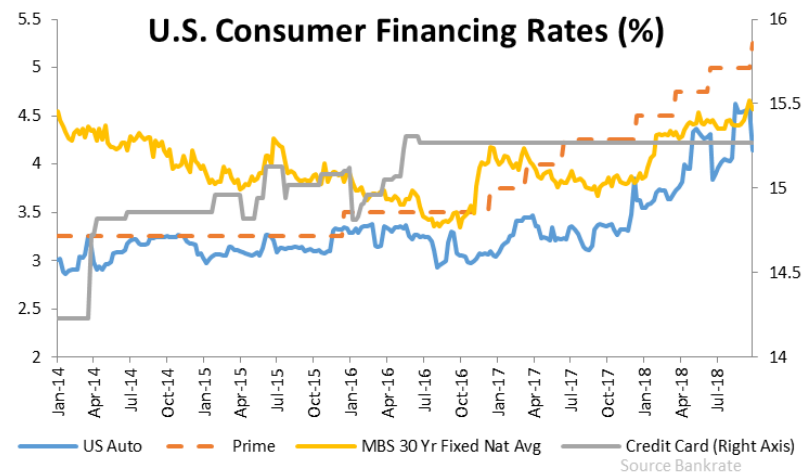
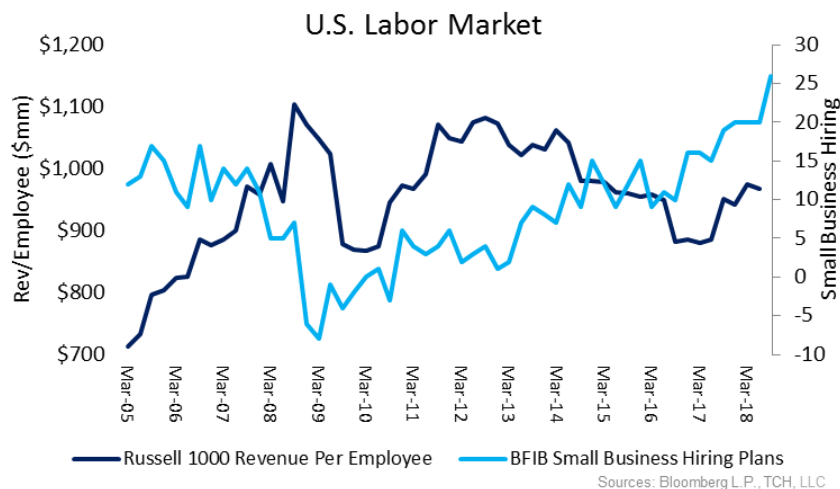
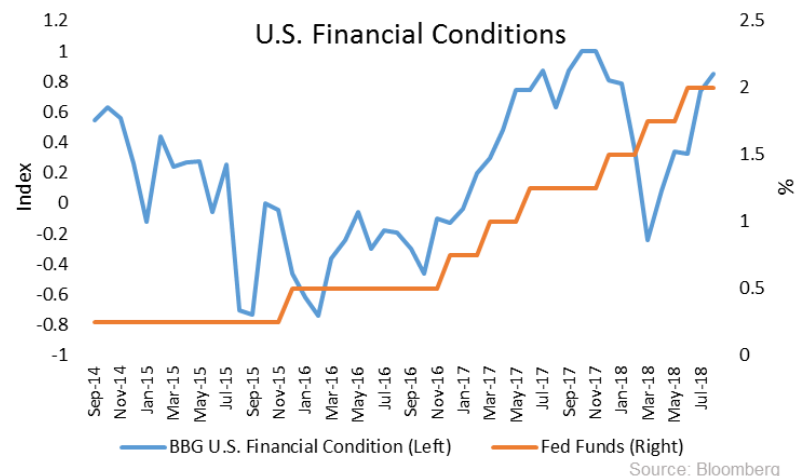
### SECURITY SELECTION

- Following the OAS rally, primary market concessions continue to underwhelm, opportunity remains in secondary markets
- Industrials- spats of volatility still lack differentiation, particularly when reacting to headlines; in cases where reactions exceed what is justified by fundamentals, significant relative value opportunities for nimble capital persist
- Financials- Financial sector operating metrics remains solid; however increases in volatility and LIBOR warrant monitoring; U.S. institutions will remain the relative "safe haven" globally

# U.S. Economic Outlook

## U.S. economic growth remains solid despite global trade talk

- While U.S. financial conditions had exhibited signs of tighter monetary policy, overall conditions have since eased as economic growth remains solid
- Small businesses continue to hire aggressively, driving the cost of labor acquisitions higher; however, until large companies begin to adjust wages beyond “cost-of-living”, real wage growth will continue to lag
- Higher consumer financing costs have been orderly as domestic consumption and consumer sentiment remain strong, with the latter reading at a five year high



# Global Economic Outlook

## The global “synchronized growth” story remains elusive

- The ECB policy of the “whole is greater than the sum” is being tested yet again as prominent Italian Eurozone skeptics express concerns over the country’s budget deficit and use of the common currency
- Economic data within China continues to show mixed signals as escalating trade tensions with the U.S. have battered local financial markets
- A confluence of monetary policy trade tensions, geo-political risks and negative sentiment have led to further declines in notable EM currency markets, exacerbating the debt burden for some

Italy 10 Yr Sov Yield (%)



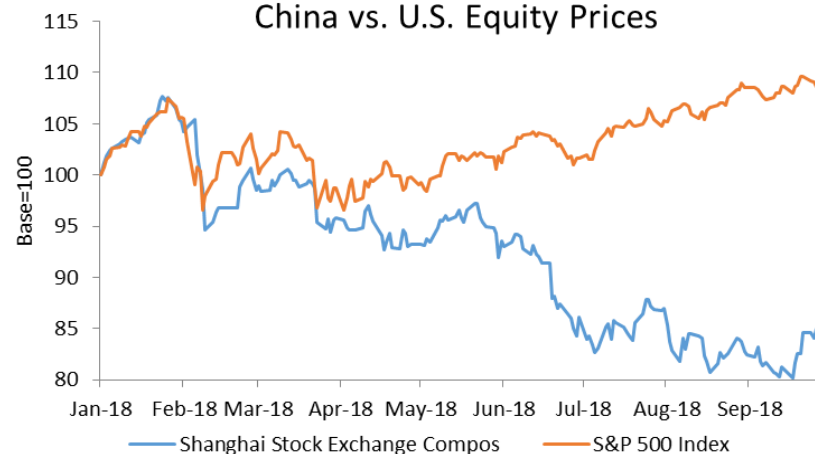
Source Bloomberg

BBG/JPM LatAm Currency Index



Source Bloomberg

China vs. U.S. Equity Prices

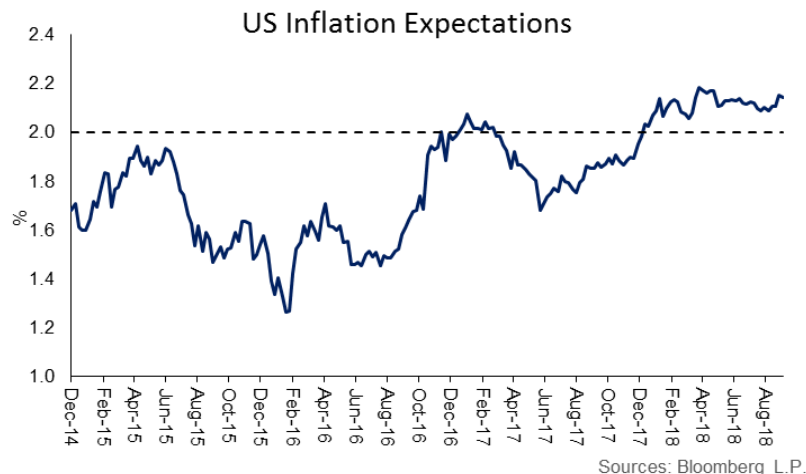
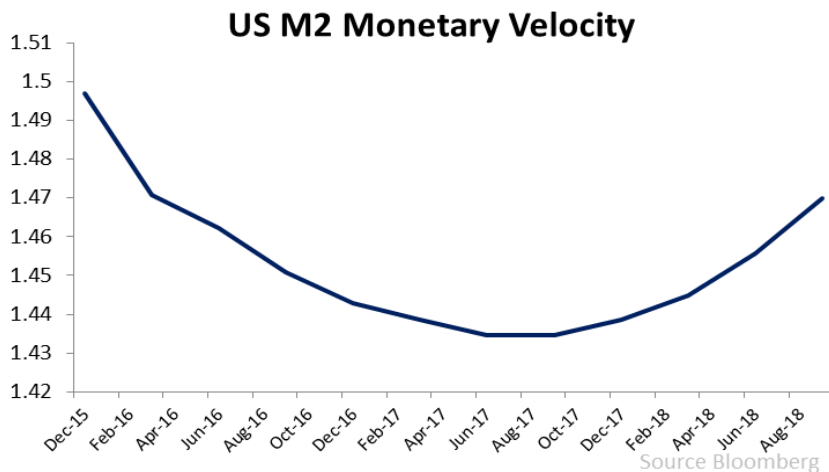
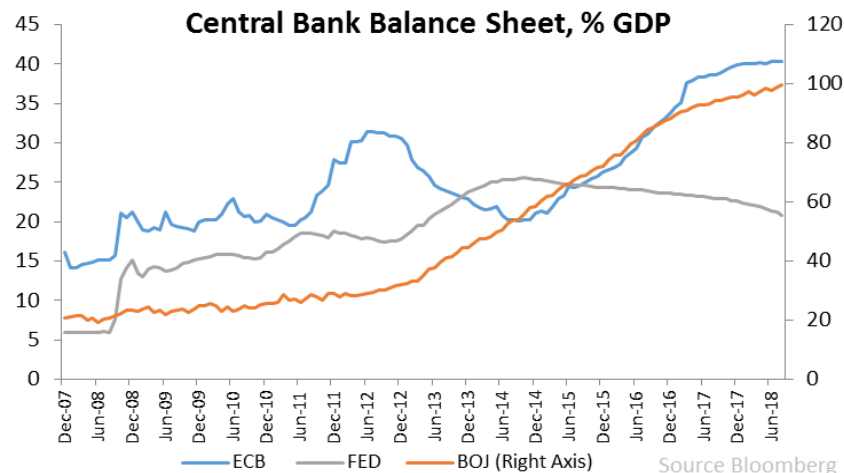


Source Bloomberg

# U.S. Interest Rate Outlook

## What's in a word? U.S. economy transitions away from “accommodative” policy

- The divergence amongst global central banks widened as the gap between U.S. benchmark yields and economic output narrowed
- Despite structural factors such as the new marginal consumer being more encumbered with debt than during any past period, monetary velocity has accelerated for the first time in five years
- Though inflation expectations have held above the 2% target, absent an acceleration in the Phillips Curve, a flatter U.S term structure will remain stubborn

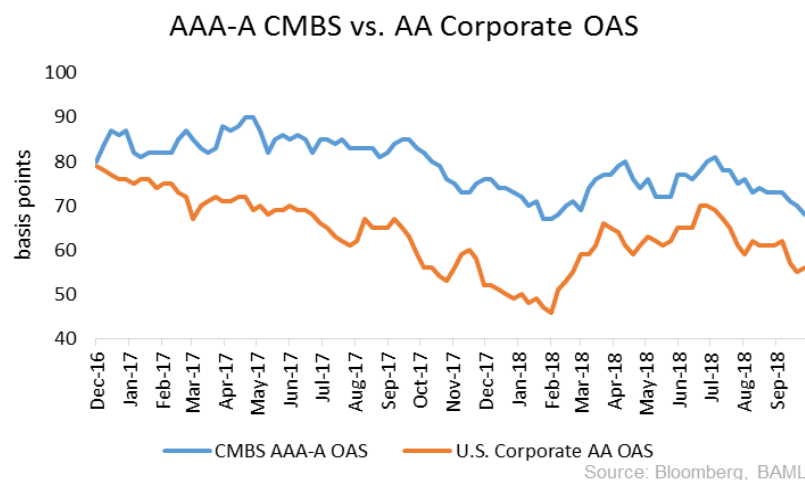
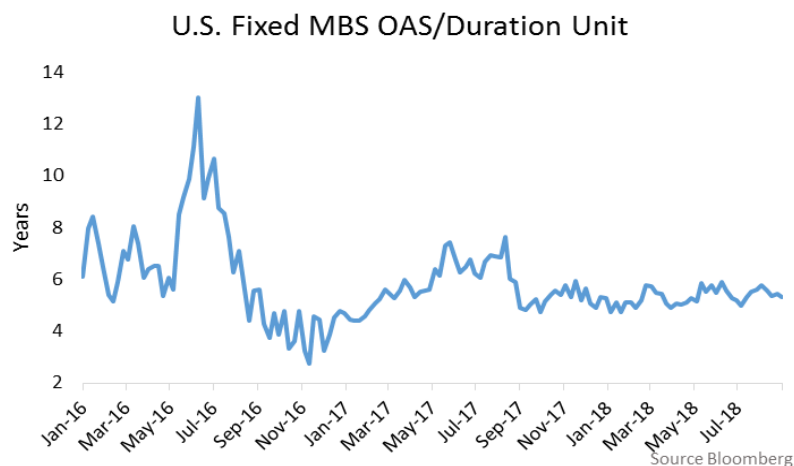
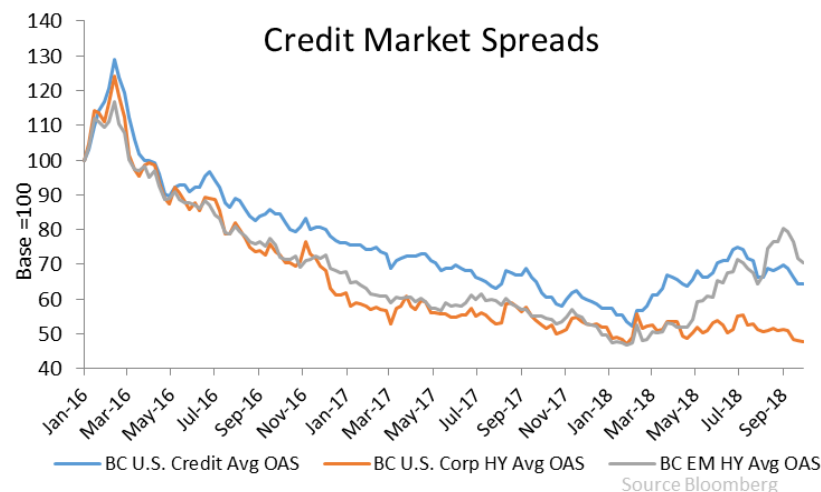




# Spread Sector Outlook

## U.S. spread sectors enter 4Q 2018 on firm footing across the quality spectrum

- Following strong performance during 3Q 2018, particularly for lower quality, the backdrop for U.S. credit markets remains favorable given continued strength in the domestic economy
- The notable underperformance of EMD may present a longer-term opportunity, but presently, the repricing has yet to be sufficiently dispersed across countries/issuers
- MBS spreads have performed well despite rising benchmark yields and a more hawkish Fed; high quality CMBS remains relatively attractive

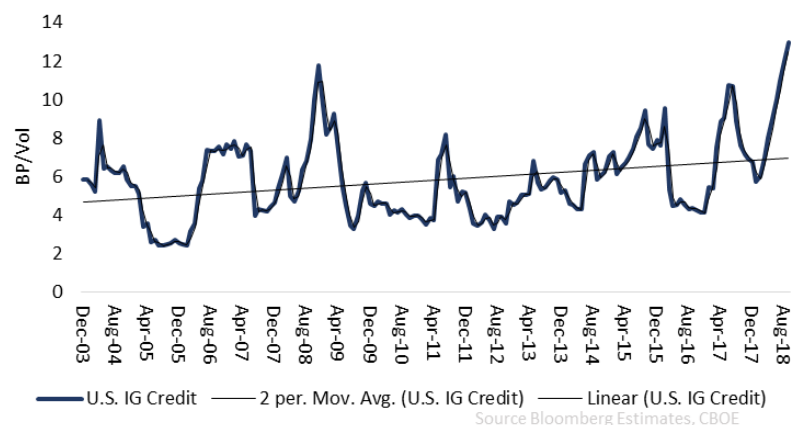


# Credit Market Outlook

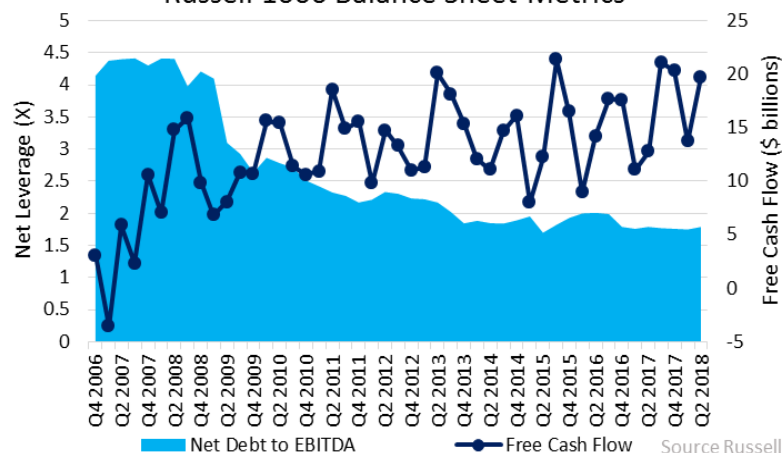
## Higher yields, solid data and low volatility: Demand for U.S. credit likely to persist

- U.S. investment grade corporate bonds have reached their highest absolute yields in over five years offering an attractive entry point, particularly when coupled with low, stable volatility environment
- Robust demand should persist through both primary and secondary markets as domestic participants have more than offset a decline in the global marginal buyer; Short to intermediate duration assets appear particularly attractive
- Overall, corporate balance sheets have been well-managed throughout the extended credit cycle

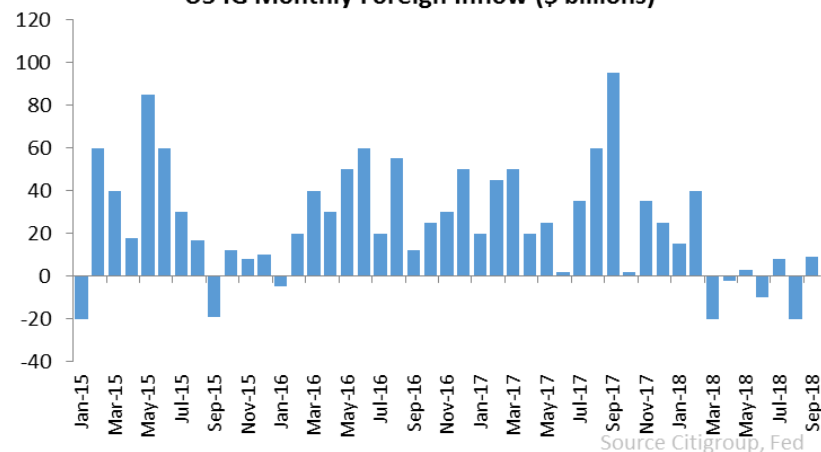
U.S. Investment Grade Credit OAS(bp)/Volatility



Russell 1000 Balance Sheet Metrics



US IG Monthly Foreign Inflow (\$ billions)



# City of Naperville: Q3 Activity

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Market Value Reconciliation: Q3 2018		
<b>Ending Market Value: June 30, 2018*</b>	<b>\$</b>	<b>29,187,482.77</b>
Contributions/Withdrawals	\$	8,000,000.00
Net Invested Funds	\$	37,187,482.77
Net Income	\$	173,919.40
Unrealized Gain/Loss	\$	(75,075.80)
Net Realized Gain/Loss	\$	(63,150.00)
<b>Ending Market Value: September 30, 2018*</b>	<b>\$</b>	<b>37,223,176.37</b>

*\* Market values include accrued income*

# Performance & Market Value as of September 30, 2018

	QTD	1 Year	3 Years	5 Years	Since Inception*
Portfolio (Gross)	0.12%	-0.79%	0.60%	1.19%	2.05%
Portfolio (Net)	0.09%	-0.94%	0.45%	1.04%	1.89%
<i>Barclays Govt Int</i>	-0.11%	-1.18%	0.19%	0.93%	1.78%

## Market Value (including accruals)

\$37,223,176

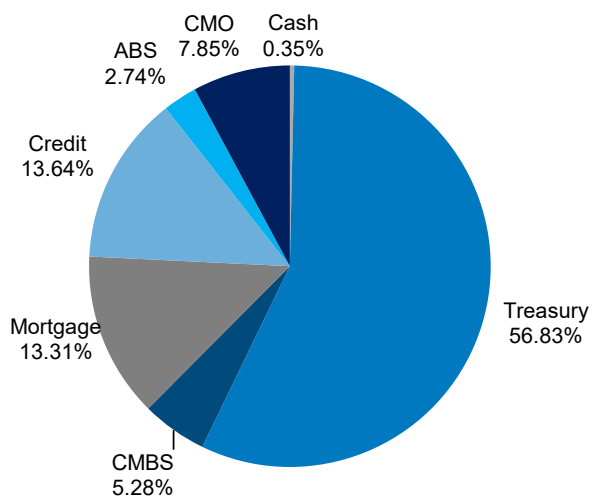
\* Inception Date: October 1, 2009

# Fixed Income Profile as of June 30, 2018

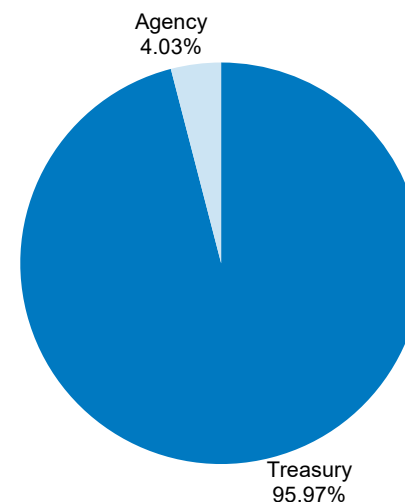
	Avg. Coupon	Yield to Maturity	Avg. Quality	Avg. Duration	Avg. Maturity
City of Naperville	2.49%	2.95%	Aa2	3.87 yrs	4.51 yrs
Barclays Intermediate Government	2.03%	2.66%	Aaa	3.77 yrs	4.05 yrs

## Market Value Diversification

**City of Naperville**



**Barclays Intermediate Government**



Source: BondEdge

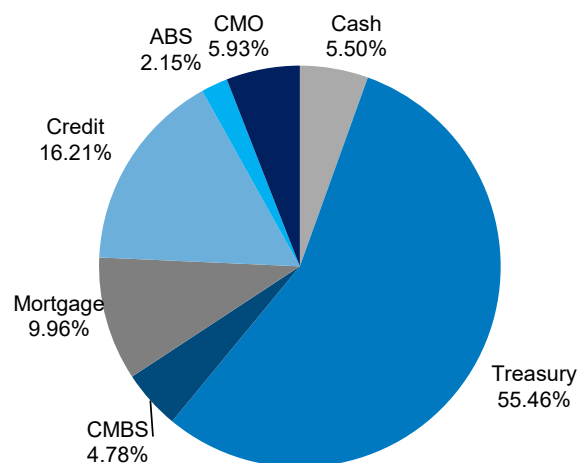
Note: Totals may not be exact due to rounding.

# Fixed Income Profile as of September 30, 2018

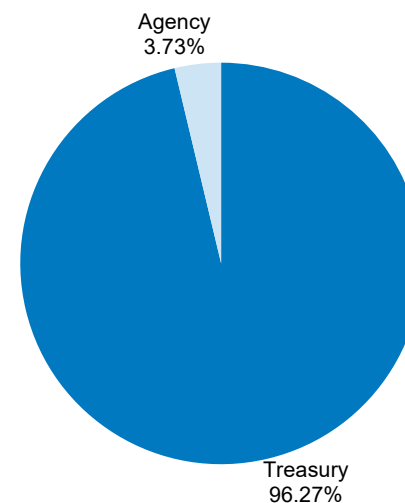
	Avg. Coupon	Yield to Maturity	Avg. Quality	Avg. Duration	Avg. Maturity
City of Naperville	2.42%	3.10%	Aa2	3.53 yrs	4.06 yrs
Barclays Intermediate Government	2.12%	2.90%	Aaa	3.74 yrs	4.03 yrs

## Market Value Diversification

**City of Naperville**



**Barclays Intermediate Government**



Source: BondEdge

Note: Totals may not be exact due to rounding.

# Mortgage Allocation as of September 30, 2018

Issuer	% Held	Type
FNMA 2010-025- ND	0.05	FIXED
FHLMC 4182- VB	1.70	FIXED
FNMA 2011-027- DB	2.68	FIXED
FHLMC K062- A2	1.34	FIXED
FHLMC K-066- A2	1.30	FIXED
FHLMC K-068- A2	1.31	FIXED
FNMA POOL - AP7831	1.69	FIXED
FHLMC GOLD POOL - G14713	1.12	FIXED
FHLMC 2973- EB	0.16	FIXED
FNMA 2012-021- PJ	1.04	FIXED
FNMA 2012-028- PT	0.31	FIXED
GNMA2 POOL - MA1996	0.20	FIXED
GNMA2 POOL - MA2149	0.42	FIXED
GNMA2 POOL - 626912	1.16	FIXED
FNMA POOL - AY6521	0.34	FIXED
FNMA POOL - AS5444	0.99	FIXED
FNMA POOL - AS6815	0.46	FIXED
FNMA POOL - MA2771	0.77	FIXED
FNMA POOL - MA2806	0.56	FIXED
FNMA POOL - AS8483	0.57	FIXED
FHLMC GOLD POOL - G08775	1.68	FIXED
CITIGROUP MTG 2018-B2- A4	0.68	FIXED
GNMA 2011-042- B	0.15	FLOAT
<b>Total</b>	<b>20.68%</b>	

Source: BondEdge

Note: Totals may not be exact due to rounding.

# Maturity Breakdown – Sector Type as of September 30, 2018

Maturity/Sector	Treasury	Financial	Industrial	MBS	CMBS	ABS	Cash	Total
<1.00	7.53	--	--	0.05	--	0.54	5.50	13.62
1.00 - 2.99	28.02	0.81	3.37	0.16	0.15	1.61	--	34.12
3.00 - 4.99	9.74	3.08	1.46	8.22	--	--	--	22.50
5.00 - 6.99	2.53	--	2.94	2.09	--	--	--	7.56
7.00 - 9.99	7.63	3.13	1.42	5.37	4.64	--	--	22.19
Total	55.46	7.03	9.19	15.90	4.78	2.15	5.50	100.00

Source: BondEdge

Note: Totals may not be exact due to rounding.



## Q3 Commentary

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Additional cash flows were received during the third quarter. These cash flows were deployed to increase the allocation to credit modestly (+2%), while reducing the relative allocation to securitized products (mortgage backed securities declined by 5%); these changes are a continuation of the incremental approach we have taken to implementing portfolio strategy in the context of recently broadened guidelines.

Changes to key portfolio metrics included reducing relative duration to modestly short of the benchmark – we expect to tactically manage duration in this environment. Portfolio yields increased from 2.96% to 3.10% reflecting higher Treasury yields, but tighter credit spreads.

*Source: BondEdge*

*Note: Totals may not be exact due to rounding.*

# Appendix

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# Holdings

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**PORTFOLIO APPRAISAL**  
**City of Naperville**  
**130**  
September 30, 2018

Quantity	Security	Unit Cost	Total Cost	Price	Market Value	Pct. Assets	Unit Income	Annual Income	Cur. Yield
<b>CORPORATE BONDS</b>									
300,000	CVS HEALTH CORP 3.125% Due 03-09-20	99.95	299,856	100.01	300,042	0.8	3.125	9,375	3.1
250,000	KELLOGG CO. 3.250% Due 05-14-21	99.91	249,780	99.52	248,806	0.7	3.250	8,125	3.3
250,000	CATERPILLAR FINANCIAL SERVICE 3.150% Due 09-07-21	99.92	249,808	99.88	249,706	0.7	3.150	7,875	3.2
250,000	AMERICAN EXPRESS CO. 2.500% Due 08-01-22	96.59	241,485	95.86	239,654	0.6	2.500	6,250	2.6
500,000	JP MORGAN CHASE & CO. 3.375% Due 05-01-23	98.06	490,285	98.16	490,801	1.3	3.375	16,875	3.4
300,000	ABBVIE, INC. 2.850% Due 05-14-23	97.10	291,294	96.29	288,855	0.8	2.850	8,550	3.0
400,000	MORGAN STANLEY 4.100% Due 05-22-23	100.67	402,660	100.62	402,476	1.1	4.100	16,400	4.1
400,000	FISERV INC 3.800% Due 10-01-23	99.95	399,816	99.98	399,901	1.1	3.800	15,200	3.8
100,000	ABBVIE, INC. 3.750% Due 11-14-23	99.87	99,872	99.61	99,611	0.3	3.750	3,750	3.8
300,000	ANHEUSER-BUSCH INBEV WOR 3.500% Due 01-12-24	99.51	298,521	98.96	296,877	0.8	3.500	10,500	3.5
300,000	ACTAVIS FUNDING SCS 3.800% Due 03-15-25	98.33	294,981	97.92	293,773	0.8	3.800	11,400	3.9
250,000	GE CAPITAL INTL FUNDING 3.373% Due 11-15-25	96.59	241,468	95.20	237,993	0.6	3.373	8,433	3.5
300,000	TIME WARNER, INC. 3.800% Due 02-15-27	96.88	290,643	95.66	286,968	0.8	3.800	11,400	4.0
250,000	KIMCO REALTY CORP. 3.800% Due 04-01-27	97.66	244,143	95.58	238,946	0.6	3.800	9,500	4.0
300,000	MID-AMERICA APARTMENTS 3.600% Due 06-01-27	97.56	292,674	95.28	285,834	0.8	3.600	10,800	3.8

# **PORTFOLIO APPRAISAL**

**City of Naperville**

**130**

September 30, 2018

Quantity	Security	Unit Cost	Total Cost	Price	Market Value	Pct. Assets	Unit Income	Annual Income	Cur. Yield
400,000	BANK OF AMERICA CORP. 3.824% Due 01-20-28	97.92	391,668	97.31	389,248	1.0	3.824	15,296	3.9
250,000	MPLX LP 4.000% Due 03-15-28 Accrued Interest	98.41	246,023	96.18	240,455	0.6	4.000	10,000	4.2
					40,547	0.1			
			5,024,975		5,030,494	13.5		179,729	3.6
<b>CORPORATE BONDS--FLOATING RATE</b>									
250,000	IBM CREDIT CORP 2.501% Due 02-05-21	100.07	250,185	100.17	250,431	0.7	2.501	6,251	2.5
300,000	LLOYDS BANK PLC 2.833% Due 05-07-21	100.00	300,000	100.35	301,045	0.8	2.833	8,499	2.8
200,000	GLAXOSMITHKLINE CAPITAL 2.669% Due 05-14-21	100.00	200,000	100.54	201,075	0.5	2.669	5,339	2.7
250,000	FORD MOTOR CREDIT CO. LLC 3.656% Due 03-28-22 Accrued Interest	101.42	253,560	99.87	249,670	0.7	3.656	9,140	3.7
					2,978	0.0			
			1,003,745		1,005,199	2.7		29,229	2.9
<b>U.S. GOVERNMENT AND AGENCY BONDS</b>									
1,300,000	U.S. TREASURY 3.750% Due 11-15-18	105.13	1,366,669	100.20	1,302,569	3.5	3.750	48,750	3.7
1,465,000	U.S. TREASURY 3.625% Due 08-15-19	105.48	1,545,353	100.84	1,477,246	4.0	3.625	53,106	3.6
2,200,000	U.S. TREASURY 1.375% Due 10-31-20	97.45	2,143,905	97.06	2,135,289	5.7	1.375	30,250	1.4
945,000	U.S. TREASURY 2.625% Due 11-15-20	95.92	906,400	99.54	940,644	2.5	2.625	24,806	2.6
750,000	U.S. TREASURY NOTES 2.000% Due 11-30-20	101.64	762,307	98.23	736,729	2.0	2.000	15,000	2.0
1,000,000	U.S. TREASURY 1.625% Due 11-30-20	99.90	999,027	97.45	974,492	2.6	1.625	16,250	1.7

# **PORTFOLIO APPRAISAL**

## **City of Naperville**

**130**

**September 30, 2018**

Quantity	Security	Unit Cost	Total Cost	Price	Market Value	Pct. Assets	Unit Income	Annual Income	Cur. Yield
2,300,000	U.S. TREASURY 1.375% Due 01-31-21	101.29	2,329,726	96.67	2,223,364	6.0	1.375	31,625	1.4
3,500,000	U.S. TREASURY 1.375% Due 05-31-21	99.19	3,471,765	96.17	3,366,017	9.0	1.375	48,125	1.4
3,850,000	U.S. TREASURY 1.500% Due 02-28-23	95.80	3,688,109	94.05	3,621,106	9.7	1.500	57,750	1.6
500,000	U.S. TREASURY 2.000% Due 02-15-25	99.98	499,902	94.18	470,899	1.3	2.000	10,000	2.1
500,000	U.S. TREASURY 2.000% Due 08-15-25	94.86	474,318	93.71	468,555	1.3	2.000	10,000	2.1
1,700,000	U.S. TREASURY 1.625% Due 02-15-26	101.07	1,718,202	90.75	1,542,684	4.1	1.625	27,625	1.8
500,000	U.S. TREASURY NOTES 2.875% Due 05-15-28 Accrued Interest	99.29	496,465	98.49	492,461	1.3	2.875	14,375	2.9
					94,629	0.3			
			20,402,148		19,846,682	53.3		387,663	2.0
<b>TREASURY INFLATION PROTECTED SECURITIES (TIPS)</b>									
521,625.00	TREASURY INFLATION PROTECTED SECURITIES (TIPS) 0.375% Due 01-15-27	98.81	515,431	95.46	497,928	1.3	0.375	1,956	0.4
301,182.00	TREASURY INFLATION PROTECTED SECURITIES (TIPS) 0.750% Due 07-15-28 Accrued Interest	100.11	301,501	98.39	296,319	0.8	0.750	2,259	0.8
					882	0.0			
			816,932		795,129	2.1		4,215	0.5
<b>MORTGAGE-BACKED SECURITIES</b>									
646,709.79	FNCI POOL #AP7831 2.500% Due 09-01-27	103.84	671,568	97.28	629,126	1.7	2.500	16,168	2.6
426,947.30	FGLMC POOL #G14713 2.500% Due 04-01-28	103.45	441,690	97.15	414,766	1.1	2.500	10,674	2.6

# **PORTFOLIO APPRAISAL**

**City of Naperville**

**130**

**September 30, 2018**

Quantity	Security	Unit Cost	Total Cost	Price	Market Value	Pct. Assets	Unit Income	Annual Income	Cur. Yield
72,569.87	G2SF POOL #MA1996 4.000% Due 06-20-44	106.05	76,958	102.50	74,382	0.2	4.000	2,903	3.9
151,455.32	G2SF POOL #MA2149 4.000% Due 08-20-44	106.90	161,903	102.50	155,243	0.4	4.000	6,058	3.9
444,532.98	GNSF POOL #626912 3.000% Due 02-20-45	103.09	458,286	97.04	431,357	1.2	3.000	13,336	3.1
128,530.69	FNCL POOL #AY6521 3.500% Due 04-01-45	104.05	133,732	98.57	126,698	0.3	3.500	4,499	3.6
381,964.38	FNCL POOL #AS4720 3.000% Due 07-01-45	99.44	379,816	96.00	366,667	1.0	3.000	11,459	3.1
176,776.90	FNCL POOL #AS6815 3.000% Due 03-01-46	101.91	180,147	95.82	169,391	0.5	3.000	5,303	3.1
300,333.34	FNCL POOL #MA2771 3.000% Due 10-01-46	104.20	312,945	95.79	287,677	0.8	3.000	9,010	3.1
216,422.52	FNCL POOL #MA2806 3.000% Due 11-01-46	100.58	217,674	95.78	207,292	0.6	3.000	6,493	3.1
222,902.45	FNCL POOL #AS8483 3.000% Due 12-01-46	99.84	222,537	95.77	213,476	0.6	3.000	6,687	3.1
616,948.81	FGLMC POOL #G08775 4.000% Due 08-01-47	104.89	647,121	101.09	623,661	1.7	4.000	24,678	4.0
	Accrued Interest				9,447	0.0			
			3,904,377		3,709,183	10.0		117,267	3.2
<b>COMMERCIAL MORTGAGE-BACKED SECURITIES</b>									
500,000.00	FHLMC MULTIFAMILY STRUCTURED PASSTHROUGH SERIES K062 CLASS A2 3.413% Due 12-25-26	103.00	514,989	99.32	496,575	1.3	3.413	17,065	3.4
500,000.00	FHLMC MULTIFAMILY STRUCTURED PASSTHROUGH SERIES K063 CLASS A2 3.117% Due 06-25-27	103.00	514,976	96.87	484,365	1.3	3.117	15,585	3.2

# PORTFOLIO APPRAISAL

City of Naperville

130

September 30, 2018

Quantity	Security	Unit Cost	Total Cost	Price	Market Value	Pct. Assets	Unit Income	Annual Income	Cur. Yield
500,000.00	FHLMC MULTIFAMILY STRUCTURED PASSTHROUGH SERIES K068 CLASS A2 3.244% Due 08-25-27 Accrued Interest	103.00	514,984	97.59	487,970	1.3	3.244	16,220	3.3
					3,937	0.0			
			1,544,948		1,472,847	4.0		48,870	3.3
<b>COMMERCIAL MORTGAGE-BACKED SECURITIES--FLOATING</b>									
54,326.29	GNR SERIES 2011-42 CLASS B 3.622% Due 07-16-47 Accrued Interest	101.24	55,001	99.71	54,167	0.1	3.622	1,968	3.6
					159	0.0			
			55,001		54,325	0.1		1,968	3.6
<b>ASSET-BACKED SECURITIES</b>									
200,000.00	HONDA AUTO RECEIVABLES OWNER TRUST SERIES 2018-2 CLASS A2 2.660% Due 12-18-20	100.00	200,000	99.92	199,848	0.5	2.660	5,320	2.7
300,000.00	ALLY AUTO RECEIVABLES TRUST SERIES 2018-3 CLASS A3 3.000% Due 01-17-23	99.99	299,979	99.82	299,448	0.8	3.000	9,000	3.0
300,000.00	CARMAX AUTO OWNER TRUST SERIES 2018-2 CLASS A3 2.980% Due 01-17-23 Accrued Interest	100.00	299,988	99.65	298,947	0.8	2.980	8,940	3.0
					900	0.0			
			799,967		799,143	2.1		23,260	2.9



**PORTFOLIO APPRAISAL**  
**City of Naperville**

**130**

September 30, 2018

Quantity	Security	Unit Cost	Total Cost	Price	Market Value	Pct. Assets	Unit Income	Annual Income	Cur. Yield
<b>CMO'S</b>									
17,071.99	FNMA REMIC TRUST 2010-25	107.25	18,310	99.99	17,070	0.0	3.500	598	3.5
631,125.44	3.500% Due 03-25-25 FGHL SERIES 4182 CLASS VB	104.80	661,400	100.05	631,466	1.7	3.500	22,089	3.5
1,000,000.00	3.500% Due 03-15-26 FNMA REMIC TRUST 2011-27	105.25	1,052,500	99.38	993,770	2.7	3.000	30,000	3.0
57,091.48	3.000% Due 04-25-26 FHLMC REMIC SERIES 2973	100.49	57,370	103.09	58,856	0.2	5.500	3,140	5.3
379,264.40	5.500% Due 04-15-35 FNR 2012-21 PJ 4	105.19	398,939	101.41	384,593	1.0	4.000	15,171	3.9
115,724.61	4.000% Due 03-25-41 FANNIE MAE SERIES 2012-28 CLASS PT	103.94	120,281	100.41	116,194	0.3	4.000	4,629	4.0
250,000.00	4.000% Due 03-25-42 CGCMT 2018-B2 A4	101.84	254,600	101.43	253,568	0.7	4.009	10,023	4.0
	4.009% Due 03-10-51 Accrued Interest				6,900	0.0			
			2,563,400		2,462,417	6.6		85,649	3.5
<b>CASH AND EQUIVALENTS</b>									
	MONEY-MARKET ACCRUAL		5,647		5,647	0.0	0.181	10	0.2
	MONEY-MARKET FUNDS		2,042,112		2,042,112	5.5	0.181	3,697	0.2
			2,047,758		2,047,758	5.5		3,707	0.2
<b>TOTAL PORTFOLIO</b>			<b>38,163,251</b>		<b>37,223,176</b>	<b>100.0</b>		<b>881,556</b>	<b>2.4</b>

# Disclosure

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# CITY OF NAPERVILLE

## Investment Performance Review For the Quarter Ended September 30, 2018

Client Management Team

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## Q3 2018 Commentary

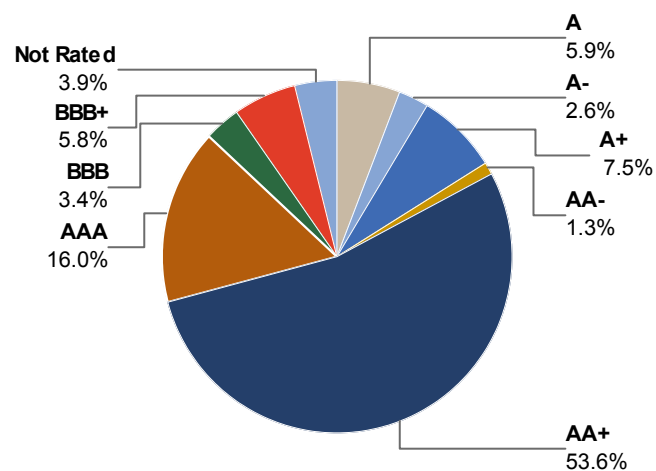
Our allocations to the corporate, agency CMBS and MBS sectors provided positive contributions to performance, as those sectors outperformed Treasuries on a duration-neutral basis by 86, 45 and 17 basis points, respectively, in the third quarter. In addition, the portfolio also benefitted from our supranational and agency allocations, as those sectors generated 9 and 7 basis points of excess returns, respectively. To a lesser extent, the portfolio benefitted from our modestly short duration position, as the yield on the 5-yr. Treasury note increased 21 basis points during the third quarter.

## Portfolio Statistics

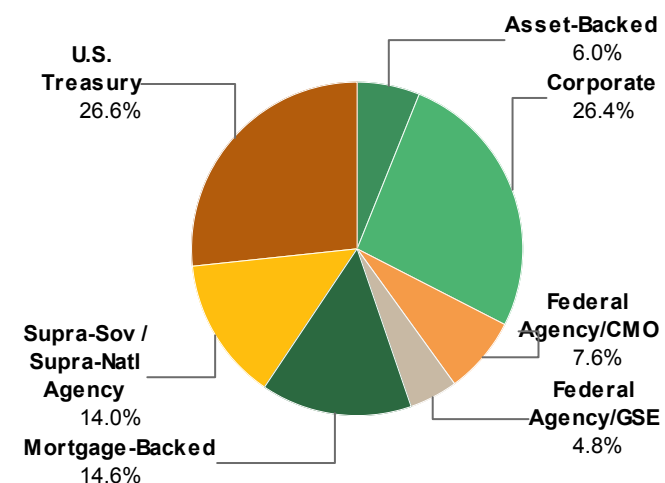
As of September 30, 2018

Par Value:	\$38,349,718
Total Market Value:	\$37,443,207
Security Market Value:	\$37,272,618
Accrued Interest:	\$170,590
Cash:	-
Amortized Cost:	\$38,063,556
Yield at Market:	3.22%
Yield at Cost:	2.69%
Effective Duration:	3.53 Years
Duration to Worst:	3.64 Years
Average Maturity:	6.20 Years
Average Credit: *	AA

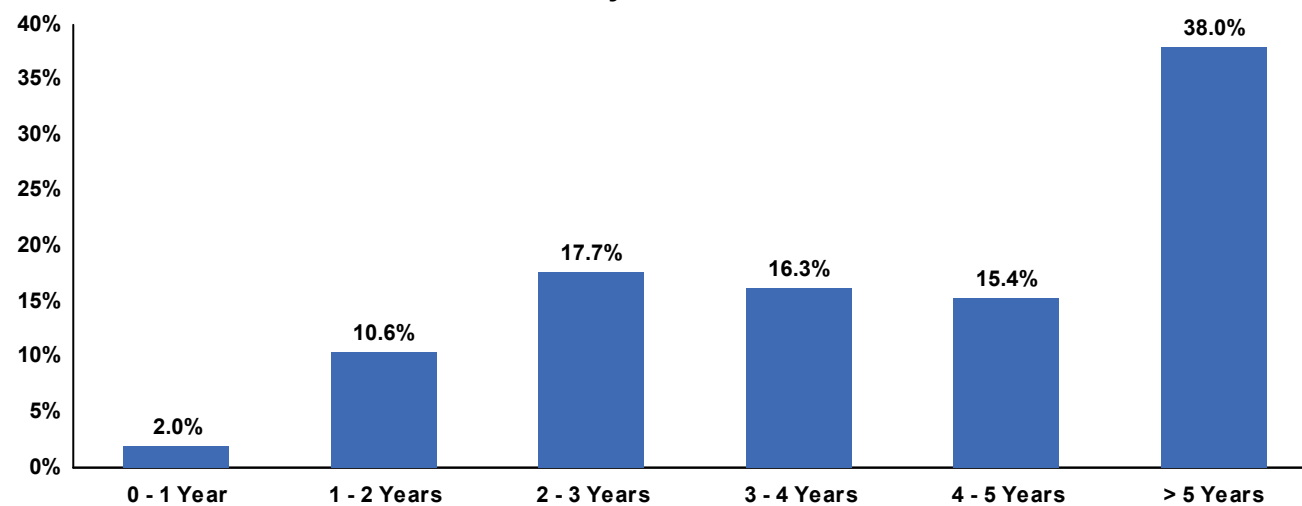
## Credit Quality (S&amp;P Ratings)



## Sector Allocation



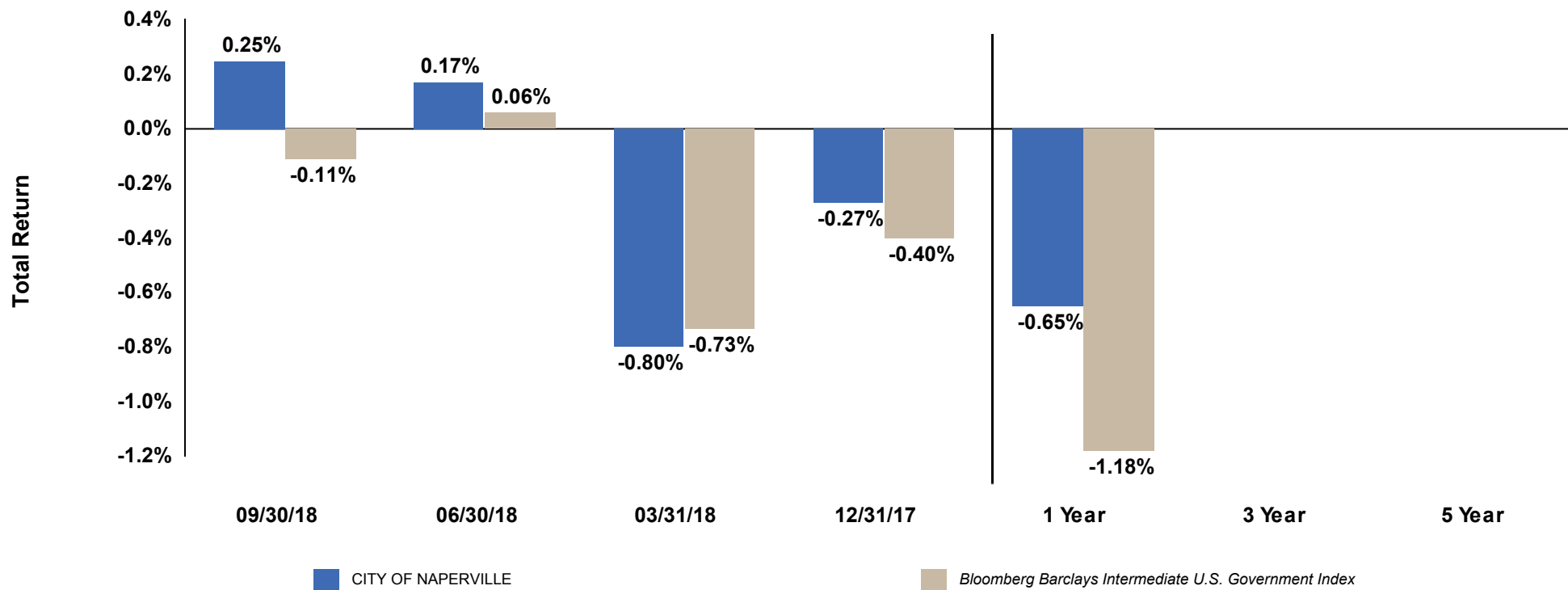
## Maturity Distribution



\* An average of each security's credit rating assigned a numeric value and adjusted for its relative weighting in the portfolio.

## Portfolio Performance (Total Return)

Portfolio/Benchmark	Effective Duration	Quarter Ended				1 Year	Annualized Return	
		09/30/18	06/30/18	03/31/18	12/31/17		3 Year	5 Year
CITY OF NAPERVILLE	3.53	0.25%	0.17%	-0.80%	-0.27%	-0.65%	-	-
<i>Bloomberg Barclays Intermediate U.S. Government Index</i>	3.67	-0.11%	0.06%	-0.73%	-0.40%	-1.18%	-	-
Difference		0.36%	0.11%	-0.07%	0.13%	0.53%	-	-



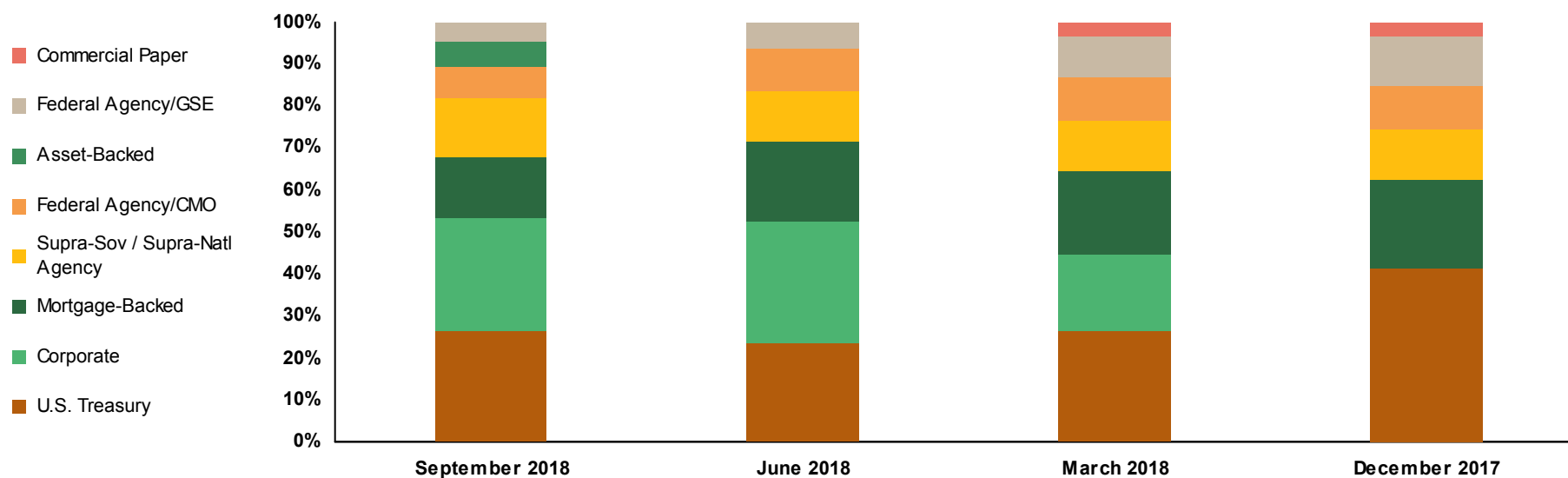
Portfolio performance is gross of fees unless otherwise indicated.

**Portfolio Earnings**  
**Quarter-Ended September 30, 2018**

	<b>Market Value Basis</b>	<b>Accrual (Amortized Cost) Basis</b>
<b>Beginning Value (06/30/2018)</b>	\$28,741,015.69	\$29,408,696.21
<b>Net Purchases/Sales</b>	\$8,647,747.10	\$8,647,747.10
<b>Change in Value</b>	(\$116,145.22)	\$7,112.36
<b>Ending Value (09/30/2018)</b>	\$37,272,617.57	\$38,063,555.67
<b>Interest Earned</b>	\$179,330.51	\$179,330.51
<b>Portfolio Earnings</b>	\$63,185.29	\$186,442.87

## Sector Allocation

Sector	September 30, 2018		June 30, 2018		March 31, 2018		December 31, 2017	
	MV (\$MM)	% of Total	MV (\$MM)	% of Total	MV (\$MM)	% of Total	MV (\$MM)	% of Total
U.S. Treasury	9.9	26.6%	6.8	23.7%	7.7	26.5%	12.3	41.4%
Corporate	9.9	26.4%	8.3	28.9%	5.3	18.1%	0.0	0.0%
Mortgage-Backed	5.4	14.6%	5.4	18.7%	5.7	19.7%	6.3	21.2%
Supra-Sov / Supra-Natl Agency	5.2	14.0%	3.5	12.2%	3.5	12.0%	3.6	11.9%
Federal Agency/CMO	2.8	7.6%	2.9	10.3%	3.0	10.4%	3.0	10.1%
Asset-Backed	2.2	6.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
Federal Agency/GSE	1.8	4.8%	1.8	6.2%	2.9	9.9%	3.6	12.1%
Commercial Paper	0.0	0.0%	0.0	0.0%	1.0	3.4%	1.0	3.3%
<b>Total</b>	<b>\$37.3</b>	<b>100.0%</b>	<b>\$28.7</b>	<b>100.0%</b>	<b>\$29.2</b>	<b>100.0%</b>	<b>\$29.8</b>	<b>100.0%</b>



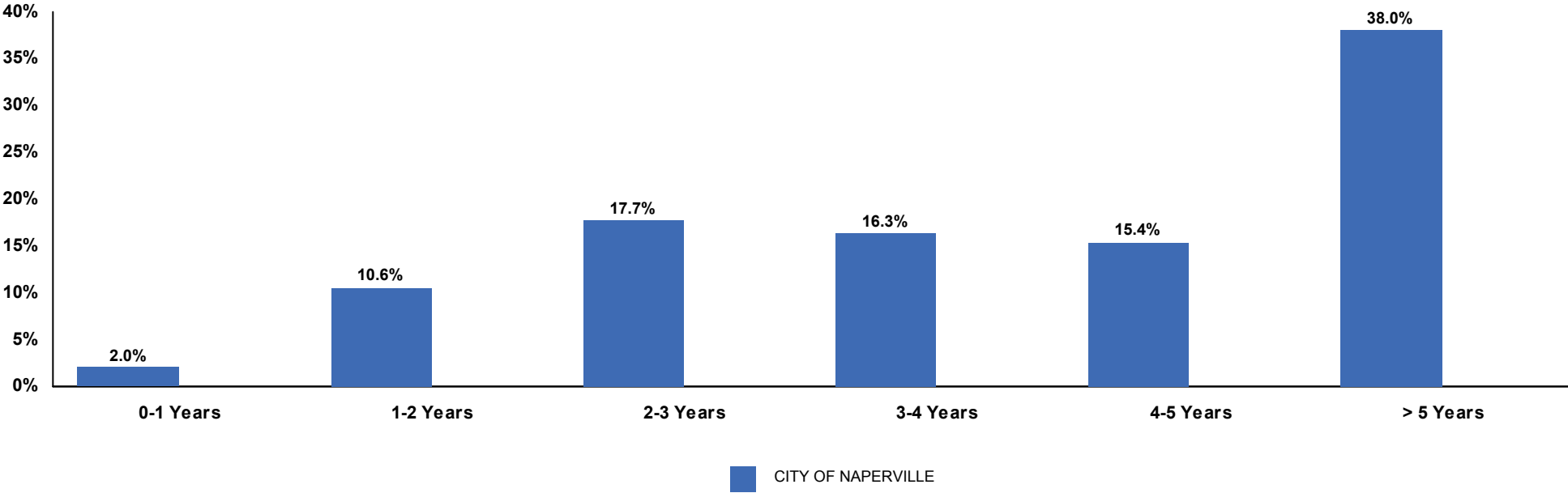
Detail may not add to total due to rounding.



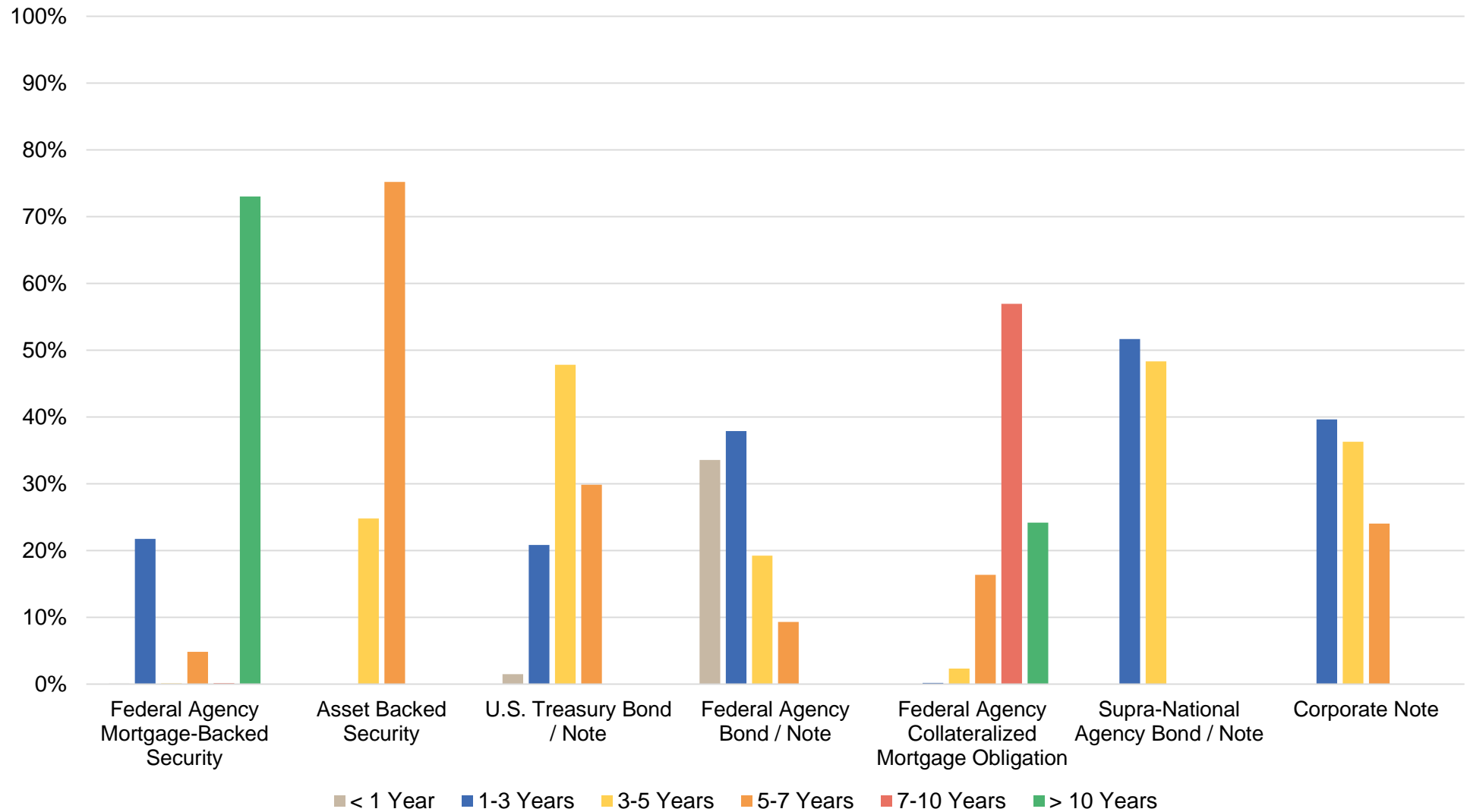
Maturity Distribution

As of September 30, 2018

Portfolio	Yield at Market	Average Maturity	0-1 Years	1-2 Years	2-3 Years	3-4 Years	4-5 Years	>5 Years
CITY OF NAPERVILLE	3.22%	6.20 yrs	2.0%	10.6%	17.7%	16.3%	15.4%	38.0%

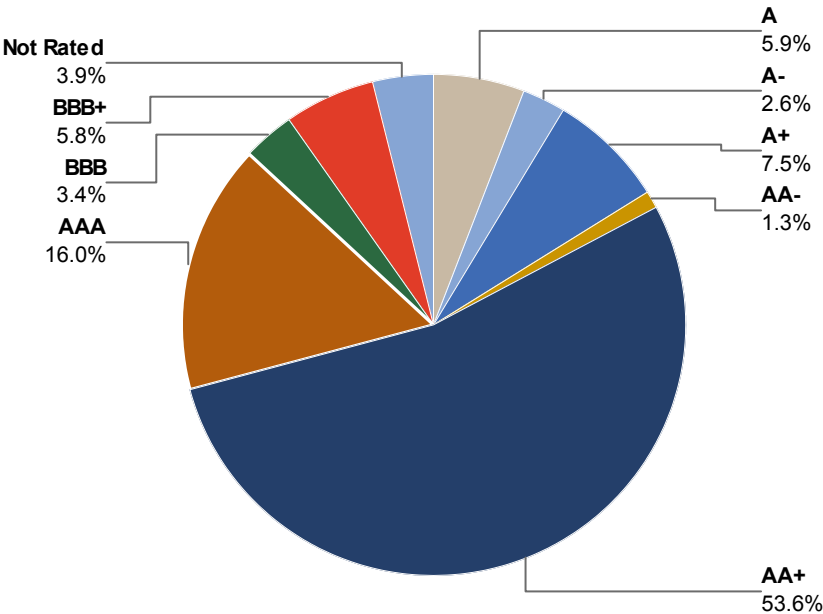


## Maturity Distribution By Sector



Credit Quality  
As of September 30, 2018

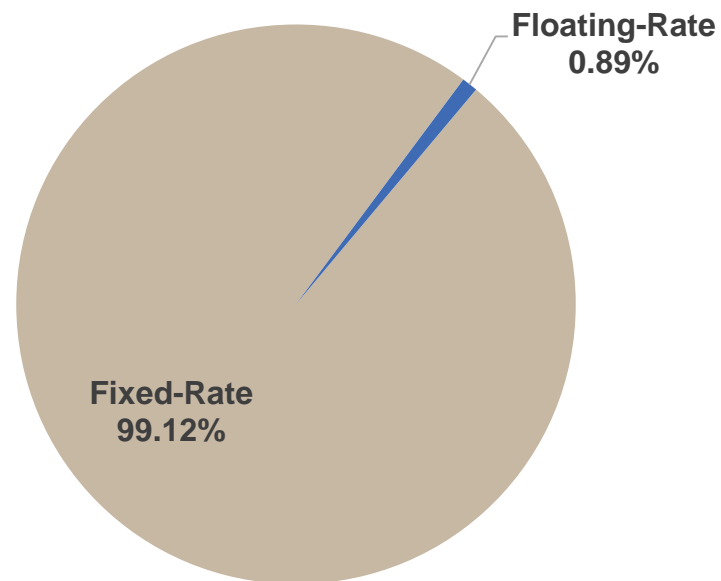
S&P Rating	Market Value (\$)	% of Portfolio
AA+	\$19,979,001	53.6%
AAA	\$5,980,213	16.0%
A+	\$2,801,189	7.5%
A	\$2,192,902	5.9%
BBB+	\$2,146,440	5.8%
Not Rated	\$1,463,260	3.9%
BBB	\$1,252,392	3.4%
A-	\$970,941	2.6%
AA-	\$486,280	1.3%
Totals	\$37,272,618	100.0%



Detail may not add to total due to rounding.

## Mortgage Sector Overview

Type	Market Value	%
Fixed-Rate	\$8,098,393	99.12%
Floating-Rate	\$72,055	0.89%
Total	\$8,170,448	100.00%



## Sector/Issuer Distribution

As of September 30, 2018

Sector / Issuer	Market Value (\$)	% of Sector	% of Total Portfolio
<b>Asset-Backed</b>			
CARMAX AUTO OWNER TRUST	180,227	8.1%	0.5%
CITIGROUP INC	299,055	13.5%	0.8%
CNH EQUIPMENT TRUST	724,797	32.7%	1.9%
FORD CREDIT AUTO LEASE TRUST	275,232	12.4%	0.7%
GM FINANCIAL AUTO LEASING TRUST	274,824	12.4%	0.7%
JOHN DEERE OWNER TRUST	164,177	7.4%	0.4%
WORLD OMNI AUTO REC TRUST	299,952	13.5%	0.8%
<b>Sector Total</b>	<b>2,218,264</b>	<b>100.0%</b>	<b>6.0%</b>
<b>Corporate</b>			
ABBVIE INC	273,931	2.8%	0.7%
AIR LEASE CORP	191,434	1.9%	0.5%
AMERICAN EXPRESS CO	298,485	3.0%	0.8%
AMERICAN INTERNATIONAL GROUP	208,410	2.1%	0.6%
AMGEN INC	201,040	2.0%	0.5%
AT&T	197,327	2.0%	0.5%
BANCO SANTANDER SA	298,824	3.0%	0.8%
BANK OF AMERICA CO	296,556	3.0%	0.8%
BANK OF MONTREAL	652,385	6.6%	1.8%
BANK OF NOVA SCOTIA	646,733	6.6%	1.7%

Sector / Issuer	Market Value (\$)	% of Sector	% of Total Portfolio
BP PLC	200,443	2.0%	0.5%
CANADIAN IMPERIAL BANK OF COMMERCE	645,947	6.6%	1.7%
CATERPILLAR INC	297,875	3.0%	0.8%
CHARLES SCHWAB	175,022	1.8%	0.5%
CITIGROUP INC	300,624	3.1%	0.8%
CVS HEALTH CORP	198,953	2.0%	0.5%
DEERE & COMPANY	297,646	3.0%	0.8%
FORD MOTOR COMPANY	193,273	2.0%	0.5%
GENERAL MOTORS CORP	196,702	2.0%	0.5%
GOLDMAN SACHS GROUP INC	275,907	2.8%	0.7%
HARTFORD FINL SVCS GRP	209,754	2.1%	0.6%
HP ENTERPRISE CO	274,703	2.8%	0.7%
JP MORGAN CHASE & CO	272,376	2.8%	0.7%
LLOYDS BANKING GROUP PLC	358,605	3.6%	1.0%
MCDONALD'S CORPORATION	109,065	1.1%	0.3%
MORGAN STANLEY	273,750	2.8%	0.7%
NATIONAL RURAL UTILITIES CO FINANCE CORP	198,608	2.0%	0.5%
PRUDENTIAL FINANCIAL INC	274,956	2.8%	0.7%
THE BANK OF NEW YORK MELLON CORPORATION	448,931	4.6%	1.2%
TORONTO-DOMINION BANK	486,280	4.9%	1.3%
UNILEVER PLC	297,109	3.0%	0.8%
UNION PACIFIC CORP	200,011	2.0%	0.5%
UNITEDHEALTH GROUP INC	200,410	2.0%	0.5%
VERIZON COMMUNICATIONS	198,069	2.0%	0.5%

Sector / Issuer	Market Value (\$)	% of Sector	% of Total Portfolio
<b>Sector Total</b>	<b>9,850,144</b>	<b>100.0%</b>	<b>26.4%</b>
<b>Federal Agency/CMO</b>			
FANNIE MAE	1,863,752	66.0%	5.0%
FREDDIE MAC	599,999	21.3%	1.6%
GOVERNMENT NATIONAL MORTGAGE ASSOCIATION	359,603	12.7%	1.0%
<b>Sector Total</b>	<b>2,823,354</b>	<b>100.0%</b>	<b>7.6%</b>
<b>Federal Agency/GSE</b>			
FANNIE MAE	164,298	9.2%	0.4%
FEDERAL FARM CREDIT BANKS	197,531	11.1%	0.5%
FEDERAL HOME LOAN BANKS	1,122,875	62.9%	3.0%
FREDDIE MAC	301,821	16.9%	0.8%
<b>Sector Total</b>	<b>1,786,525</b>	<b>100.0%</b>	<b>4.8%</b>
<b>Mortgage-Backed</b>			
FANNIE MAE	4,317,304	79.3%	11.6%
FREDDIE MAC	1,000,742	18.4%	2.7%
GOVERNMENT NATIONAL MORTGAGE ASSOCIATION	124,210	2.3%	0.3%
<b>Sector Total</b>	<b>5,442,256</b>	<b>100.0%</b>	<b>14.6%</b>
<b>Supra-Sov / Supra-Natl Agency</b>			
AFRICAN DEVELOPMENT BANK	1,868,383	35.8%	5.0%
ASIAN DEVELOPMENT BANK	1,164,510	22.3%	3.1%

Sector / Issuer	Market Value (\$)	% of Sector	% of Total Portfolio
INTER-AMERICAN DEVELOPMENT BANK	1,705,450	32.6%	4.6%
INTL BANK OF RECONSTRUCTION AND DEV	486,867	9.3%	1.3%
<b>Sector Total</b>	<b>5,225,209</b>	<b>100.0%</b>	<b>14.0%</b>
<b>U.S. Treasury</b>			
UNITED STATES TREASURY	9,926,865	100.0%	26.6%
<b>Sector Total</b>	<b>9,926,865</b>	<b>100.0%</b>	<b>26.6%</b>
<b>Portfolio Total</b>	<b>37,272,618</b>	<b>100.0%</b>	<b>100.0%</b>



## Managed Account Detail of Securities Held

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
<b>U.S. Treasury Bond / Note</b>											
US TREASURY NOTES DTD 04/15/2016 0.875% 04/15/2019	912828Q52	150,000.00	AA+	Aaa	7/13/2016	7/13/2016	150,486.33	0.76	606.05	150,095.80	148,757.85
US TREASURY NOTES DTD 01/31/2013 1.375% 01/31/2020	912828UL2	250,000.00	AA+	Aaa	1/7/2016	1/7/2016	248,798.83	1.50	579.14	249,598.89	245,595.75
US TREASURY STRIPS DTD 02/15/1990 0.000% 02/15/2020	912833KY5	300,000.00	AA+	Aaa	7/12/2016	7/12/2016	290,349.00	0.91	0.00	296,277.10	289,035.90
US TREASURY STRIPS DTD 08/15/1990 0.000% 08/15/2020	912833LA6	400,000.00	AA+	Aaa	8/17/2011	8/17/2011	328,560.00	2.20	0.00	383,949.36	379,395.20
US TREASURY STRIPS DTD 08/15/1990 0.000% 08/15/2020	912833LA6	400,000.00	AA+	Aaa	9/3/2014	9/3/2014	355,416.00	2.00	0.00	385,394.74	379,395.20
US TREASURY STRIPS DTD 08/15/1990 0.000% 08/15/2020	912833LA6	100,000.00	AA+	Aaa	9/15/2011	9/15/2011	83,106.00	2.09	0.00	96,188.48	94,848.80
US TREASURY STRIPS DTD 08/15/1990 0.000% 08/15/2020	912833LA6	100,000.00	AA+	Aaa	10/14/2011	10/14/2011	81,996.00	2.26	0.00	95,881.60	94,848.80
US TSY INFL IX BONDS DTD 01/31/2011 1.125% 01/15/2021	912828PP9	385,052.50	AA+	Aaa	11/17/2011	11/17/2011	480,258.97	0.12	1,057.73	453,751.11	446,232.53
US TREASURY STRIPS DTD 05/15/1991 0.000% 05/15/2021	912833LD0	150,000.00	AA+	Aaa	11/29/2016	11/30/2016	138,060.00	1.87	0.00	142,857.90	139,051.65
US TREASURY NOTES DTD 05/01/2017 1.875% 04/30/2022	912828X47	2,500,000.00	AA+	Aaa	9/13/2018	9/14/2018	2,417,382.81	2.84	19,616.17	2,418,394.78	2,412,207.50
US TREASURY STRIPS (I) DTD 11/16/1992 0.000% 11/15/2022	912833LK4	650,000.00	AA+	Aaa	7/12/2016	7/12/2016	598,360.51	1.31	0.00	615,952.35	575,240.25
US TREASURY STRIPS DTD 02/15/1993 0.000% 02/15/2023	912833LL2	850,000.00	AA+	Aaa	7/12/2016	7/12/2016	778,209.00	1.34	0.00	801,689.19	746,312.75
US TREASURY STRIPS DTD 08/15/1994 0.000% 05/15/2023	912833LN8	50,000.00	AA+	Aaa	6/16/2014	6/16/2014	39,542.00	2.65	0.00	44,270.97	43,553.65
US TREASURY STRIPS DTD 08/15/1994 0.000% 05/15/2023	912833LN8	150,000.00	AA+	Aaa	5/20/2014	5/20/2014	119,065.50	2.59	0.00	133,198.05	130,660.95
US TREASURY STRIPS DTD 08/15/1994 0.000% 05/15/2023	912833LN8	200,000.00	AA+	Aaa	5/29/2014	5/29/2014	160,400.00	2.48	0.00	178,486.87	174,214.60

## Managed Account Detail of Securities Held

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
<b>U.S. Treasury Bond / Note</b>											
US TREASURY STRIPS DTD 08/15/1994 0.000% 05/15/2023	912833LN8	100,000.00	AA+	Aaa	6/11/2014	6/11/2014	78,826.00	2.68	0.00	88,408.62	87,107.30
US TREASURY STRIPS DTD 08/15/1994 0.000% 05/15/2023	912833LN8	500,000.00	AA+	Aaa	6/12/2014	6/12/2014	393,915.00	2.69	0.00	441,901.61	435,536.50
US TREASURY N/B NOTES DTD 05/31/2016 1.625% 05/31/2023	912828R69	150,000.00	AA+	Aaa	11/21/2017	11/22/2017	145,763.68	2.17	819.16	146,389.86	141,427.80
US TREASURY N/B NOTES DTD 05/01/2017 2.000% 04/30/2024	912828X70	750,000.00	AA+	Aaa	9/13/2018	9/14/2018	715,722.66	2.89	6,277.17	715,986.05	712,558.50
US TREASURY STRIPS DTD 08/15/1994 0.000% 11/15/2024	912833LT5	250,000.00	AA+	Aaa	12/3/2015	12/3/2015	201,375.00	2.43	0.00	215,619.35	207,961.00
US TREASURY STRIPS DTD 08/15/1994 0.000% 11/15/2024	912833LT5	250,000.00	AA+	Aaa	12/9/2015	12/9/2015	203,357.50	2.32	0.00	217,012.51	207,961.00
US TREASURY STRIPS DTD 08/15/1994 0.000% 11/15/2024	912833LT5	500,000.00	AA+	Aaa	11/23/2015	11/23/2015	404,520.00	2.37	0.00	432,726.02	415,922.00
US TREASURY STRIPS DTD 08/15/1995 0.000% 08/15/2025	912833LW8	250,000.00	AA+	Aaa	4/4/2016	4/4/2016	209,415.00	1.90	0.00	219,526.75	202,720.00
US TREASURY STRIPS DTD 08/15/1995 0.000% 08/15/2025	912833LW8	250,000.00	AA+	Aaa	7/6/2016	7/6/2016	218,980.00	1.46	0.00	226,222.90	202,720.00
US TREASURY STRIPS DTD 08/15/1995 0.000% 08/15/2025	912833LW8	1,000,000.00	AA+	Aaa	7/12/2016	7/12/2016	867,730.00	1.57	0.00	898,327.25	810,880.00
US TREASURY STRIPS DTD 08/15/1995 0.000% 08/15/2025	912833LW8	250,000.00	AA+	Aaa	8/31/2016	8/31/2016	216,430.00	1.62	0.00	223,815.48	202,720.00
<b>Security Type Sub-Total</b>		<b>10,885,052.50</b>					<b>9,926,025.79</b>	<b>2.07</b>	<b>28,955.42</b>	<b>10,271,923.59</b>	<b>9,926,865.48</b>
<b>Supra-National Agency Bond / Note</b>											
AFRICAN DEVELOPMENT BANK NOTE DTD 03/16/2017 1.875% 03/16/2020	00828ECA5	650,000.00	AAA	Aaa	3/8/2017	3/16/2017	649,038.00	1.93	507.81	649,525.51	640,731.00
ASIAN DEVELOPMENT BANK NOTE DTD 05/05/2017 1.625% 05/05/2020	045167DZ3	350,000.00	AAA	Aaa	4/26/2017	5/5/2017	349,216.00	1.70	2,306.60	349,578.44	343,181.30

## Managed Account Detail of Securities Held

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
<b>Supra-National Agency Bond / Note</b>											
INTL BANK OF RECONSTRUCTION AND DEV NOTE DTD 09/19/2017 1.561% 09/12/2020	45905UP32	500,000.00	AAA	Aaa	9/12/2017	9/19/2017	498,800.00	1.64	411.93	499,209.10	486,866.50
INTER-AMERICAN DEVELOPMENT BANK DTD 11/08/2013 2.125% 11/09/2020	4581X0CD8	250,000.00	AAA	Aaa	10/2/2017	10/10/2017	252,317.28	1.81	2,095.49	251,598.59	245,906.25
INTER-AMERICAN DEVELOPMENT BANK DTD 11/08/2013 2.125% 11/09/2020	4581X0CD8	1,000,000.00	AAA	Aaa	9/21/2018	9/25/2018	983,680.00	2.92	8,381.94	983,806.32	983,625.00
ASIAN DEVELOPMENT BANK NOTE DTD 02/16/2017 2.000% 02/16/2022	045167DX8	850,000.00	AAA	Aaa	2/9/2017	2/16/2017	845,189.00	2.12	2,125.00	846,697.76	821,328.65
INTER-AMERICAN DEVEL BANK DTD 09/14/2017 1.750% 09/14/2022	4581X0CZ9	500,000.00	AAA	Aaa	9/7/2017	9/14/2017	498,240.00	1.82	413.19	498,595.58	475,919.00
AFRICAN DEVELOPMENT BANK NOTE DTD 11/16/2017 2.125% 11/16/2022	00828ECW7	500,000.00	AAA	Aaa	11/9/2017	11/16/2017	498,725.00	2.18	3,984.38	498,938.40	481,923.00
AFRICAN DEVELOPMENT BANK BOND DTD 09/20/2018 3.000% 09/20/2023	00828EDC0	750,000.00	AAA	Aaa	9/14/2018	9/20/2018	748,582.50	3.04	687.50	748,590.59	745,728.75
<b>Security Type Sub-Total</b>		<b>5,350,000.00</b>					<b>5,323,787.78</b>	<b>2.27</b>	<b>20,913.84</b>	<b>5,326,540.29</b>	<b>5,225,209.45</b>
<b>Federal Agency Mortgage-Backed Security</b>											
FNMA POOL #725432 DTD 04/01/2004 7.000% 11/01/2018	31402C4R0	2.01	AA+	Aaa	10/25/2006	10/25/2006	2.01	6.91	0.01	2.01	2.01
FNMA POOL #740462 DTD 10/01/2003 5.000% 11/01/2018	31402WTT5	31.21	AA+	Aaa	3/23/2004	3/23/2004	31.21	4.95	0.13	31.21	31.36
FNMA POOL #116612 DTD 03/01/1991 3.625% 03/01/2019	31364TN56	39.93	AA+	Aaa	1/2/1997	1/2/1997	39.93	2.26	0.12	39.93	39.95
FNMA POOL #742078 DTD 03/01/2004 4.500% 03/01/2019	31402YM35	1,740.51	AA+	Aaa	3/24/2004	3/24/2004	1,740.51	4.46	6.53	1,740.51	1,762.75
FHLMC POOL #B14961 DTD 06/01/2004 4.500% 06/01/2019	312967QN5	2,304.62	AA+	Aaa	10/14/2004	10/14/2004	2,593.44	2.72	8.64	2,322.08	2,333.31

## Managed Account Detail of Securities Held

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
<b>Federal Agency Mortgage-Backed Security</b>											
FNMA POOL #AM1719 DTD 12/01/2012 1.470% 12/01/2019	3138L14D8	348,310.84	AA+	Aaa	11/15/2012	12/1/2012	349,970.41	1.31	426.68	348,310.84	341,730.38
FHLMC SERIES 77 H DTD 08/15/1989 8.500% 09/15/2020	31340YM30	18.50	AA+	Aaa	9/11/2002	9/11/2002	18.50	8.40	0.07	18.50	18.59
FHLMC POOL #G11884 DTD 01/01/2006 5.500% 12/01/2020	31336WCU1	18,907.11	AA+	Aaa	2/17/2016	2/17/2016	20,082.43	2.86	86.66	19,479.70	19,251.87
FNMA POOL #467390 DTD 03/01/2011 4.160% 03/01/2021	31381QF76	438,461.26	AA+	Aaa	8/11/2011	8/11/2011	471,441.05	2.53	1,520.00	444,881.16	447,088.91
FNMA POOL #468651 DTD 07/01/2011 3.990% 07/01/2021	31381RTG9	368,262.36	AA+	Aaa	8/11/2011	8/11/2011	391,929.93	2.63	1,224.47	373,286.20	374,739.08
FNMA POOL #555791 DTD 09/01/2003 6.500% 12/01/2022	31385XNG8	6,163.51	AA+	Aaa	9/8/2003	9/8/2003	6,532.85	5.70	33.39	6,295.41	6,757.30
FNMA POOL #AM4716 DTD 12/01/2013 3.380% 12/01/2023	3138L5G20	197,662.51	AA+	Aaa	10/6/2014	10/6/2014	205,754.31	2.43	556.75	201,919.02	197,649.69
GNMA SERIES #783490 DTD 12/01/2011 6.000% 02/01/2024	36241L2X3	39,215.86	AA+	Aaa	5/26/2016	5/26/2016	43,010.72	3.41	196.08	42,147.36	40,517.66
GNMA SERIES #378308 DTD 01/01/1995 5.500% 04/01/2024	36204SGR1	13,953.88	AA+	Aaa	2/28/2000	2/28/2000	13,953.88	5.48	63.96	13,953.88	14,961.50
GNMA POOL #8528 DTD 10/01/1994 3.125% 10/01/2024	36202KPM1	3,499.80	AA+	Aaa	1/2/1997	1/2/1997	3,615.32	1.74	9.11	3,526.45	3,579.03
FNMA POOL #568243 DTD 12/01/2000 9.500% 11/01/2024	31386NHU5	5,198.29	AA+	Aaa	1/2/2001	1/2/2001	5,706.00	8.27	41.15	5,399.31	5,232.02
FNMA POOL #543110 DTD 06/01/2000 9.500% 04/01/2025	31385FKX3	1,526.30	AA+	Aaa	6/13/2000	6/13/2000	1,793.42	7.50	12.08	1,625.28	1,534.26
GNMA POOL #2022 DTD 06/01/1995 9.000% 06/01/2025	36202CG72	771.50	AA+	Aaa	1/2/1997	1/2/1997	771.50	8.95	5.79	771.50	827.42
GNMA POOL #2285 DTD 09/01/1996 8.000% 09/01/2026	36202CRE5	2,049.89	AA+	Aaa	1/2/1997	1/2/1997	2,202.19	7.22	13.67	2,145.82	2,327.77
GNMA POOL #2324 DTD 11/01/1996 8.000% 11/01/2026	36202CSM6	2,475.82	AA+	Aaa	1/2/1997	1/2/1997	2,672.60	7.17	16.51	2,599.89	2,760.28

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<b>Federal Agency Mortgage-Backed Security</b>											
GNMA POOL #2549 DTD 02/01/1998 7.500% 02/01/2028	36202CZN6	1,219.13	AA+	Aaa	2/1/1998	2/1/1998	1,321.32	6.66	7.62	1,288.47	1,325.06
GNMA POOL #2647 DTD 09/01/1998 8.000% 09/01/2028	36202C5G4	2,501.96	AA+	Aaa	9/1/1998	9/1/1998	2,501.96	7.96	16.68	2,501.96	2,564.47
GNMA POOL #486631 DTD 10/01/1998 6.500% 10/01/2028	36210ASU2	6,208.40	AA+	Aaa	1/31/2000	1/31/2000	6,208.40	6.48	33.63	6,208.40	6,811.29
FNMA POOL #755973 DTD 12/01/2003 8.000% 11/01/2028	31403R2E7	16,555.06	AA+	Aaa	1/7/2004	1/7/2004	16,216.50	8.18	110.37	16,280.53	18,493.53
FNMA POOL #252211 DTD 12/01/1998 6.000% 01/01/2029	31371HDQ8	3,531.46	AA+	Aaa	5/16/2000	5/16/2000	3,531.46	5.96	17.66	3,531.46	3,884.28
FANNIE MAE POOL AS2235 DTD 03/01/2014 3.500% 04/25/2029	3138WBPV1	598,017.52	AA+	Aaa	11/20/2017	11/22/2017	621,003.81	2.38	1,744.22	620,172.04	602,118.06
GNMA SERIES #783964 DTD 02/01/2015 4.000% 01/01/2030	3622A2MM1	47,400.28	AA+	Aaa	1/20/2016	1/20/2016	51,602.69	2.66	158.00	50,974.56	48,535.50
FNMA POOL #598451 DTD 07/01/2001 8.000% 06/01/2030	31387YZQ9	3,181.49	AA+	Aaa	7/11/2001	7/11/2001	3,499.76	6.96	21.21	3,410.96	3,334.39
FNMA SERIES 2011-69 CB DTD 06/01/2011 3.500% 07/01/2030	3136A0BE6	124,796.42	AA+	Aaa	7/18/2016	7/18/2016	129,829.25	2.86	363.99	129,503.54	125,327.32
FNMA POOL #AL3209 DTD 03/01/2013 4.500% 09/01/2031	3138EKR72	140,684.92	AA+	Aaa	7/13/2016	7/13/2016	156,399.61	2.93	527.57	155,367.63	146,941.20
FHLMC POOL #G30628 DTD 02/01/2013 4.000% 10/01/2032	3128CUVV5	36,708.57	AA+	Aaa	2/8/2016	2/8/2016	39,930.06	2.87	122.36	39,740.82	37,630.42
FNMA POOL #254693 DTD 03/01/2003 5.500% 04/01/2033	31371K3A7	12,546.06	AA+	Aaa	11/3/2005	11/3/2005	11,983.79	5.91	57.50	12,012.37	13,535.31
FHLMC POOL #V70026 DTD 05/01/2013 3.500% 05/01/2033	3132KSA38	30,892.58	AA+	Aaa	4/27/2016	4/27/2016	32,696.48	2.75	90.10	32,602.34	31,035.58
FNMA POOL #770377 DTD 03/01/2004 3.735% 04/01/2034	31404J2J3	31,442.72	AA+	Aaa	10/11/2006	10/11/2006	30,105.50	2.90	97.87	30,661.17	32,562.02
FNMA SERIES 2005-68 PG DTD 07/01/2005 5.500% 08/01/2035	31394E7B8	48,927.86	AA+	Aaa	8/17/2005	8/17/2005	51,062.81	5.09	224.25	50,638.70	51,954.26

## Managed Account Detail of Securities Held

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<b>Federal Agency Mortgage-Backed Security</b>											
FNMA POOL #888481 DTD 06/01/2007 5.500% 12/01/2035	31410GCS0	50,311.71	AA+	Aaa	9/27/2010	9/27/2010	53,853.64	4.78	230.60	53,759.70	54,344.75
FHLMC POOL #H00105 DTD 12/01/2005 5.500% 12/01/2035	3128MSDJ6	85,343.38	AA+	Aaa	9/2/2011	9/2/2011	92,412.99	4.66	391.16	92,257.29	88,900.85
FNMA POOL #849215 DTD 01/01/2006 6.500% 01/01/2036	31408EN81	8,981.62	AA+	Aaa	10/24/2006	10/24/2006	9,864.49	5.57	48.65	9,690.70	9,456.92
FNMA POOL #888209 DTD 02/01/2007 5.500% 05/01/2036	31410FYE9	67,115.79	AA+	Aaa	8/9/2011	8/9/2011	73,908.75	4.49	307.61	73,691.19	72,775.37
FNMA POOL #886320 DTD 07/01/2006 6.500% 07/01/2036	31410DVM9	6,436.89	AA+	Aaa	10/24/2006	10/24/2006	6,436.89	6.46	34.87	6,436.89	6,656.88
FNMA POOL #898179 DTD 09/01/2006 3.478% 09/01/2036	31410U2L5	36,332.55	AA+	Aaa	7/17/2009	7/17/2009	39,285.82	1.62	105.30	38,846.12	37,237.47
FHLMC POOL #1B7163 DTD 10/01/2006 3.815% 10/01/2036	3128QPK35	1,566.98	AA+	Aaa	10/19/2006	10/19/2006	1,594.32	5.73	10.01	1,566.98	1,591.83
FHLMC POOL #C02641 DTD 10/01/2006 7.000% 10/01/2036	31292J5A4	7,065.33	AA+	Aaa	10/30/2006	10/30/2006	7,065.33	6.97	41.21	7,065.33	7,758.96
FHLMC POOL #C02660 DTD 11/01/2006 6.500% 11/01/2036	31292J5V8	14,573.18	AA+	Aaa	11/14/2006	11/14/2006	16,086.30	5.56	78.94	15,767.66	16,281.52
FNMA POOL #960150 DTD 11/01/2007 6.000% 11/01/2037	31414AEX6	38,270.83	AA+	Aaa	9/20/2011	9/20/2011	42,624.15	4.90	191.35	42,578.49	41,921.56
FNMA SERIES 2011-104 KH DTD 09/01/2011 2.000% 03/01/2039	3136A1DD4	112,672.83	AA+	Aaa	7/12/2016	7/12/2016	114,122.31	1.87	187.79	114,112.45	110,347.30
FHLMC SERIES 3804 PW DTD 02/01/2011 4.500% 03/01/2040	3137A7F39	140,500.00	AA+	Aaa	9/21/2015	9/21/2015	151,608.28	3.74	526.88	151,508.46	143,565.75
FHLMC SERIES 4011 DB DTD 03/01/2012 4.000% 09/01/2041	3137AMXK8	76,938.55	AA+	Aaa	7/15/2016	7/15/2016	85,401.85	3.02	256.46	85,304.74	76,518.18
FNMA SERIES 2012-57 JW DTD 05/01/2012 4.500% 10/01/2041	3136A6HC1	111,269.07	AA+	Aaa	7/22/2016	7/22/2016	120,359.25	3.73	417.26	120,348.40	114,090.43
FNMA POOL #AL1107 DTD 11/01/2011 4.500% 11/01/2041	3138EHGR7	132,734.33	AA+	Aaa	7/14/2016	7/14/2016	145,535.06	3.60	497.75	145,471.42	137,946.12

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<b>Federal Agency Mortgage-Backed Security</b>											
FNMA POOL #AK9382 DTD 04/01/2012 4.000% 04/01/2042	3138EEM89	106,017.93	AA+	Aaa	8/8/2016	8/8/2016	114,958.47	3.24	353.39	114,883.31	107,919.57
FNMA POOL #MA1125 DTD 06/01/2012 4.000% 07/01/2042	31418AHB7	144,831.76	AA+	Aaa	7/12/2016	7/12/2016	158,290.97	3.17	482.77	158,096.83	146,847.03
FNMA POOL #MA1213 DTD 09/01/2012 3.500% 10/01/2042	31418AK31	28,186.63	AA+	Aaa	6/21/2016	6/21/2016	29,972.27	2.94	82.21	29,944.58	27,815.91
FNMA POOL #AP8813 DTD 11/01/2012 3.500% 11/01/2042	3138MCYK4	17,322.88	AA+	Aaa	7/8/2016	7/8/2016	18,558.26	2.88	50.53	18,535.43	17,095.03
FHLMC SERIES G07289 DTD 02/01/2013 3.000% 11/01/2042	3128M9NE8	52,099.03	AA+	Aaa	6/9/2016	6/9/2016	54,186.17	2.65	130.25	54,133.72	50,268.85
FNMA SERIES 2015-72 PC DTD 09/01/2015 3.000% 10/01/2043	3136AQAP5	109,210.30	AA+	Aaa	7/12/2016	7/12/2016	113,175.61	2.68	273.03	112,896.79	108,826.45
FNMA POOL #AL6167 DTD 12/01/2014 3.500% 01/01/2044	3138ENZ93	48,526.54	AA+	Aaa	7/18/2016	7/18/2016	51,578.86	2.96	141.54	51,500.55	47,888.25
FANNIE MAE POOL AS5675 DTD 07/01/2015 4.500% 08/25/2045	3138WFJV9	498,554.58	AA+	Aaa	11/20/2017	11/22/2017	537,426.24	2.71	1,869.58	537,426.26	516,444.28
FNMA POOL #AL9274 DTD 10/01/2016 4.000% 09/01/2046	3138ERJU5	379,902.58	AA+	Aaa	11/29/2016	11/30/2016	403,438.73	3.49	1,266.34	400,591.60	384,973.02
FG Q55747 DTD 04/01/2018 5.000% 05/01/2048	3132XYL54	497,075.11	AA+	Aaa	9/20/2018	9/25/2018	527,054.95	3.83	2,071.15	527,054.95	525,586.17
<b>Security Type Sub-Total</b>		<b>5,327,050.52</b>					<b>5,650,555.57</b>	<b>3.02</b>	<b>17,861.46</b>	<b>5,588,860.85</b>	<b>5,442,256.28</b>
<b>Federal Agency Collateralized Mortgage Obligation</b>											
FNMA SERIES 1990-8 G DTD 01/01/1990 6.000% 01/01/2020	313603RN4	875.28	AA+	Aaa	2/28/2000	2/28/2000	875.28	5.95	4.38	875.28	882.56
FNMA SERIES 1190-106 J DTD 09/01/1990 8.500% 09/01/2020	31358E7X4	3,814.44	AA+	Aaa	7/18/2002	7/18/2002	4,633.02	5.73	27.02	4,021.81	3,949.96
FNMA SERIES G92-12 B DTD 02/01/1992 7.700% 02/01/2022	31358LTT3	118.72	AA+	Aaa	2/1/1992	2/1/1992	118.72	7.65	0.76	118.72	119.78

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<b>Federal Agency Collateralized Mortgage Obligation</b>											
FNMA SERIES 1993-25 J DTD 03/01/1993 7.500% 03/01/2023	31358TWE5	6,683.88	AA+	Aaa	9/9/2003	9/9/2003	7,568.58	5.83	41.77	7,156.42	7,085.31
FHLMC SERIES 2595 CD DTD 04/01/2003 5.000% 04/01/2023	31393PCJ1	57,014.14	AA+	Aaa	9/17/2015	9/17/2015	62,305.50	2.51	237.56	60,483.39	58,695.01
FHLMC SERIES 1671 L DTD 02/01/1994 7.000% 02/01/2024	3133T36F0	4,013.10	AA+	Aaa	12/14/2000	12/14/2000	4,044.43	6.88	23.41	4,027.56	4,459.11
FHLMC MULTIFAMILY STRUCTURED P POOL DTD 12/01/2017 2.951% 02/25/2024	3137FCM35	294,570.35	AA+	Aaa	12/15/2017	12/22/2017	300,451.45	2.24	724.40	299,720.93	292,400.60
FHLMC SERIES 1694 PK DTD 03/01/1994 6.500% 03/01/2024	3133T4NE2	14,792.34	AA+	Aaa	7/7/2004	7/7/2004	14,792.34	6.47	80.13	14,792.34	15,543.29
FHLMC MULTIFAMILY STRUCTURED P POOL DTD 03/01/2018 3.452% 09/24/2024	3137FEU99	148,356.49	AA+	Aaa	2/28/2018	3/13/2018	151,319.47	2.76	426.77	151,067.78	149,542.07
FNMA SERIES 2016-M12 A1 DTD 11/01/2016 2.132% 09/01/2026	3136AUKW0	463,964.04	AA+	Aaa	11/3/2016	11/30/2016	468,581.33	1.90	824.31	467,612.06	437,256.51
FNA 2016-M13 A1 DTD 12/01/2016 2.560% 09/25/2026	3136AUZB0	551,196.43	AA+	Aaa	12/7/2016	12/29/2016	551,530.55	2.43	1,175.77	551,336.73	534,034.54
FNA 2017-M8 A1 DTD 07/01/2017 2.654% 12/25/2026	3136AWZ91	215,964.59	AA+	Aaa	7/12/2017	7/28/2017	218,116.61	2.40	477.64	217,831.18	210,849.99
FANNIEMAE-ACES POOL DTD 06/01/2017 2.595% 12/25/2026	3136AV7F0	239,073.16	AA+	Aaa	6/9/2017	6/30/2017	241,461.97	2.34	517.00	241,127.84	232,324.12
FNA 2017-M15 ATS1 DTD 12/01/2017 2.987% 11/25/2027	3136AY6T5	198,407.22	AA+	Aaa	11/30/2017	12/29/2017	201,382.95	2.63	493.87	201,161.02	193,613.94
FNMA SERIES 2011-40 CA DTD 04/01/2011 3.500% 12/01/2028	31397SWX8	61,983.22	AA+	Aaa	7/12/2016	7/12/2016	63,428.90	3.07	180.78	63,295.61	62,058.88
FNMA POOL #650236 DTD 12/01/2002 5.000% 12/01/2032	31390MLR3	657.74	AA+	Aaa	7/19/2005	7/19/2005	657.74	4.97	2.74	657.74	665.13
FNMA SERIES 2009-57 TP DTD 07/01/2009 4.500% 02/01/2037	31396QSZ3	66,432.74	AA+	Aaa	6/3/2016	6/3/2016	72,006.34	3.57	249.12	71,957.90	67,631.22



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<b>Federal Agency Collateralized Mortgage Obligation</b>											
FNMA SERIES 2009-92 AD DTD 10/01/2009 6.000% 11/01/2039	31398FVM0	106,426.16	AA+	Aaa	8/9/2011	8/9/2011	118,162.29	4.98	532.13	117,878.12	113,280.36
GNMA SERIES 2010-158 CT DTD 12/01/2010 4.500% 12/01/2040	38377RFR1	124,898.45	AA+	Aaa	7/12/2016	7/12/2016	136,886.09	3.59	468.37	136,791.62	131,269.01
FHLMC SERIES T-54 2A DTD 02/01/2003 6.500% 02/01/2043	31393LFK4	70,847.77	AA+	Aaa	2/1/2003	2/1/2003	78,475.44	5.66	383.76	76,363.27	79,359.14
GNR SERIES 2017-149 JA DTD 10/01/2017 2.500% 03/20/2046	38380HQL9	237,524.64	AA+	Aaa	11/6/2017	11/9/2017	237,320.51	2.49	494.84	237,320.52	228,333.79
<b>Security Type Sub-Total</b>		<b>2,867,614.90</b>					<b>2,934,119.51</b>	<b>2.69</b>	<b>7,366.53</b>	<b>2,925,597.84</b>	<b>2,823,354.32</b>
<b>Federal Agency Bond / Note</b>											
FEDERAL HOME LOAN BANK AGENCY NOTES DTD 05/12/2017 1.375% 05/28/2019	3130ABF92	300,000.00	AA+	Aaa	5/11/2017	5/12/2017	299,433.00	1.47	1,409.38	299,815.48	297,789.00
FREDDIE MAC NOTES DTD 07/19/2017 1.375% 08/15/2019	3137EAEH8	305,000.00	AA+	Aaa	7/18/2017	7/19/2017	304,551.65	1.45	535.87	304,809.33	301,820.68
FEDERAL HOME LOAN BANK NOTES DTD 10/13/2017 1.500% 10/21/2019	3130ACM92	450,000.00	AA+	Aaa	10/12/2017	10/13/2017	449,203.50	1.59	3,000.00	449,580.84	444,577.05
FHLB TAP BONDS DTD 11/09/2005 5.250% 12/11/2020	3133XDVS7	65,000.00	AA+	Aaa	7/12/2016	7/12/2016	76,428.95	1.15	1,042.71	70,754.04	68,255.72
FNMA (EX-CALLABLE) NOTES DTD 11/07/2012 1.600% 05/07/2021	3136G02F7	170,000.00	AA+	Aaa	7/12/2016	7/12/2016	172,896.80	1.23	1,088.00	171,584.48	164,298.03
FHLB NOTES DTD 08/10/2015 2.250% 09/09/2022	3130A6AP2	150,000.00	AA+	Aaa	9/28/2015	9/28/2015	151,782.00	2.07	206.25	151,041.87	145,990.05
FFCB NOTES DTD 06/26/2013 2.750% 06/26/2023	3133ECSY1	200,000.00	AA+	Aaa	9/28/2015	9/28/2015	207,530.00	2.22	1,451.39	204,758.43	197,530.60
FHLB NOTES DTD 05/08/2014 2.875% 06/14/2024	3130A1XJ2	60,000.00	AA+	Aaa	7/15/2016	7/15/2016	65,133.00	1.71	512.71	63,768.01	59,471.76
FHLB NOTES DTD 10/13/2009 4.375% 09/13/2024	3133XVDG3	100,000.00	AA+	Aaa	6/2/2016	6/2/2016	118,158.00	1.99	218.75	113,345.64	106,791.70

## Managed Account Detail of Securities Held

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
<b>Security Type Sub-Total</b>		<b>1,800,000.00</b>					<b>1,845,116.90</b>	<b>1.63</b>	<b>9,465.06</b>	<b>1,829,458.12</b>	<b>1,786,524.59</b>
<b>Corporate Note</b>											
AT&T CORPORATE (CALLABLE) NOTES DTD 05/04/2015 2.450% 06/30/2020	00206RCL4	200,000.00	BBB	Baa2	3/5/2018	3/7/2018	198,076.00	2.88	1,238.61	198,539.32	197,327.00
JOHN DEERE CAPITAL CORP NOTES DTD 03/13/2018 2.875% 03/12/2021	24422EUD9	300,000.00	A	A2	3/8/2018	3/13/2018	299,796.00	2.90	455.21	299,832.01	297,646.20
NATIONAL RURAL UTIL COOP DTD 02/26/2018 2.900% 03/15/2021	63743HER9	200,000.00	A	A2	4/12/2018	4/19/2018	199,154.00	3.05	257.78	199,286.33	198,608.00
CATERPILLAR FINANCIAL SERVICES CORP NOTE DTD 03/15/2018 2.900% 03/15/2021	14913Q2G3	300,000.00	A	A3	3/12/2018	3/15/2018	299,838.00	2.92	386.67	299,866.38	297,874.80
UNILEVER CAPITAL CORP NOTES DTD 03/22/2018 2.750% 03/22/2021	904764AZ0	300,000.00	A+	A1	3/19/2018	3/22/2018	298,467.00	2.93	206.25	298,725.80	297,109.20
TORONTO DOMINION CORP NOTE DTD 04/07/2016 2.125% 04/07/2021	89114QBG2	500,000.00	AA-	Aa1	3/9/2018	3/13/2018	487,510.00	2.98	5,135.42	489,671.65	486,279.50
BANK OF MONTREAL CHICAGO CORP NOTES DTD 04/13/2018 3.100% 04/13/2021	06367T4W7	280,000.00	A+	Aa2	4/10/2018	4/13/2018	279,672.40	3.14	4,050.67	279,721.39	278,882.24
BANK OF MONTREAL CHICAGO CORP NOTES DTD 04/13/2018 3.100% 04/13/2021	06367T4W7	375,000.00	A+	Aa2	9/19/2018	9/21/2018	373,815.00	3.23	5,425.00	373,829.57	373,503.00
LLOYDS BANK PLC DTD 05/08/2018 3.300% 05/07/2021	53944VAP4	360,000.00	A+	Aa3	5/1/2018	5/8/2018	359,560.80	3.34	4,719.00	359,616.44	358,605.36
CHARLES SCHWAB CORP NOTES DTD 05/22/2018 3.250% 05/21/2021	808513AW5	175,000.00	A	A2	5/17/2018	5/22/2018	174,994.75	3.25	2,038.02	174,995.28	175,021.70
SANTANDER UK PLC CORP NOTES DTD 06/01/2018 3.400% 06/01/2021	80283LAT0	300,000.00	A	Aa3	5/23/2018	6/1/2018	299,439.00	3.47	3,400.00	299,498.69	298,824.30
HP ENTERPRISE CO DTD 09/19/2018 3.500% 10/05/2021	42824CBC2	275,000.00	BBB	Baa2	9/13/2018	9/19/2018	275,052.25	3.49	320.83	275,051.90	274,703.28

## Managed Account Detail of Securities Held

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
<b>Corporate Note</b>											
VERIZON COMMUNICATIONS CORP NOTES DTD 03/16/2017 3.125% 03/16/2022	92343VDW1	200,000.00	BBB+	Baa1	3/5/2018	3/7/2018	198,622.00	3.31	260.42	198,806.33	198,069.40
FORD MOTOR CREDIT CO LLC (CALLABLE) NOTE DTD 03/31/2017 3.339% 03/28/2022	345397YL1	200,000.00	BBB	Baa3	3/5/2018	3/7/2018	196,796.00	3.77	55.65	197,217.61	193,272.60
GENERAL MOTORS FINL CO CORP NOTES DTD 04/10/2015 3.450% 04/10/2022	37045XAW6	200,000.00	BBB	Baa3	3/5/2018	3/7/2018	198,774.00	3.61	3,277.50	198,937.36	196,702.20
HARTFORD FINL SVCS GRP CORP NOTES DTD 04/05/2012 5.125% 04/15/2022	416518AB4	200,000.00	BBB+	Baa1	3/13/2018	3/15/2018	213,832.00	3.30	4,726.39	212,096.94	209,753.80
AMGEN INC CORP (CALLABLE) NOTES DTD 05/15/2012 3.625% 05/15/2022	031162BN9	200,000.00	A	Baa1	3/9/2018	3/13/2018	202,388.00	3.32	2,738.89	202,077.68	201,040.40
AMERICAN INTL GROUP CORP NOTES DTD 05/24/2012 4.875% 06/01/2022	026874CU9	200,000.00	BBB+	Baa1	3/5/2018	3/7/2018	211,514.00	3.40	3,250.00	210,072.93	208,409.60
AIR LEASE CORP (CALLABLE) NOTES DTD 06/12/2017 2.625% 07/01/2022	00912XAW4	200,000.00	BBB	NR	3/5/2018	3/7/2018	193,446.00	3.45	1,312.50	194,258.33	191,434.20
CVS HEALTH CORP NOTES DTD 03/09/2018 3.700% 03/09/2023	126650CV0	200,000.00	BBB	Baa1	3/6/2018	3/9/2018	198,208.00	3.90	452.22	198,392.48	198,953.20
MCDONALD'S CORP DTD 03/16/2018 3.350% 04/01/2023	58013MFE9	110,000.00	BBB+	Baa1	3/14/2018	3/16/2018	109,958.20	3.36	1,996.04	109,963.59	109,065.22
BANK OF NY MELLON CORP DTD 04/30/2018 3.500% 04/28/2023	06406RAG2	450,000.00	A	A1	4/23/2018	4/30/2018	449,509.50	3.52	6,606.25	449,546.96	448,930.80
UNITEDHEALTH GROUP INC CORP NOTES DTD 06/19/2018 3.500% 06/15/2023	91324PDJ8	200,000.00	A+	A3	6/14/2018	6/19/2018	199,900.00	3.51	1,983.33	199,904.90	200,409.80
AMERICAN EXPRESS CREDIT CORP NOTES DTD 08/03/2018 3.700% 08/03/2023	025816BW8	300,000.00	BBB+	A3	7/31/2018	8/3/2018	299,688.00	3.72	1,788.33	299,697.24	298,485.00

## Managed Account Detail of Securities Held

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
<b>Corporate Note</b>											
CANADIAN IMPERIAL BANK DTD 09/13/2018 3.500% 09/13/2023	13607RAD2	250,000.00	A+	Aa2	9/13/2018	9/17/2018	249,082.50	3.58	437.50	249,089.16	248,441.00
CANADIAN IMPERIAL BANK DTD 09/13/2018 3.500% 09/13/2023	13607RAD2	400,000.00	A+	Aa2	9/6/2018	9/13/2018	399,308.00	3.54	700.00	399,314.39	397,505.60
ABBVIE INC DTD 09/18/2018 3.750% 11/14/2023	00287YBC2	275,000.00	A-	Baa2	9/13/2018	9/18/2018	274,648.00	3.78	372.40	274,651.20	273,930.53
GOLDMAN SACHS CORP NOTES DTD 03/03/2014 4.000% 03/03/2024	38141GVM3	275,000.00	BBB+	A3	3/6/2018	3/8/2018	280,117.75	3.65	855.56	279,682.31	275,906.95
BANK OF AMERICA CORP NOTE DTD 03/05/2018 3.550% 03/05/2024	06051GHF9	300,000.00	A-	A3	3/6/2018	3/8/2018	300,081.00	3.54	769.17	300,074.78	296,555.70
MORGAN STANLEY CORP NOTES DTD 04/28/2014 3.875% 04/29/2024	61746BDQ6	275,000.00	BBB+	A3	3/6/2018	3/8/2018	278,049.75	3.67	4,499.31	277,806.04	273,750.40
PRUDENTIAL FUNDING LLC CORP NOTES DTD 05/15/2014 3.500% 05/15/2024	74432QBZ7	275,000.00	A	Baa1	3/7/2018	3/9/2018	276,025.75	3.43	3,636.11	275,949.92	274,955.73
CITIGROUP INC DTD 05/22/2018 4.044% 06/01/2024	172967LZ2	300,000.00	BBB+	Baa1	5/15/2018	5/22/2018	300,000.00	4.04	4,347.30	300,000.00	300,623.70
JPMORGAN CHASE & CO BONDS DTD 09/10/2014 3.875% 09/10/2024	46625HJY7	275,000.00	BBB+	Baa1	3/6/2018	3/8/2018	276,966.25	3.75	621.61	276,814.37	272,375.68
UNION PACIFIC CORP CORP NOTES DTD 06/08/2018 3.750% 07/15/2025	907818ES3	200,000.00	A-	Baa1	6/5/2018	6/8/2018	199,992.00	3.75	1,583.33	199,992.00	200,011.20
BP CAP MARKETS AMERICA DTD 09/21/2018 3.796% 09/21/2025	10373QAB6	200,000.00	A-	A1	9/18/2018	9/21/2018	200,000.00	3.80	210.89	200,000.00	200,443.40
<b>Security Type Sub-Total</b>		<b>9,250,000.00</b>					<b>9,252,281.90</b>	<b>3.42</b>	<b>74,114.16</b>	<b>9,252,981.28</b>	<b>9,203,410.69</b>
<b>Bank Note</b>											
BANK OF NOVA SCOTIA BANK NOTE DTD 04/20/2018 3.125% 04/20/2021	064159LG9	150,000.00	A+	Aa2	9/13/2018	9/17/2018	149,224.50	3.33	2,096.35	149,236.85	149,246.10
BANK OF NOVA SCOTIA BANK NOTE DTD 04/20/2018 3.125% 04/20/2021	064159LG9	500,000.00	A+	Aa2	4/17/2018	4/20/2018	499,050.00	3.19	6,987.85	499,186.08	497,487.00

## Managed Account Detail of Securities Held

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
<b>Security Type Sub-Total</b>		<b>650,000.00</b>					<b>648,274.50</b>	<b>3.22</b>	<b>9,084.20</b>	<b>648,422.93</b>	<b>646,733.10</b>
<b>Asset-Backed Security / Collateralized Mortgage Obligation</b>											
FORD CREDIT AUTO LEASE TRUST DTD 09/21/2018 3.300% 02/15/2022	34531LAE0	275,000.00	NR	Aaa	9/18/2018	9/21/2018	274,986.53	3.30	252.08	274,986.67	275,231.83
GMALT 2018-3 A4 DTD 09/26/2018 3.300% 07/20/2022	36256GAE9	275,000.00	AAA	Aaa	9/18/2018	9/26/2018	274,964.97	3.31	126.04	274,965.09	274,823.73
CARMAX AUTO OWNER TRUST DTD 07/25/2018 3.270% 03/15/2024	14313FAE9	180,000.00	AAA	NR	7/18/2018	7/25/2018	179,983.35	3.51	261.60	179,983.94	180,227.25
CNH 2018-B A4 DTD 09/26/2018 3.370% 05/15/2024	12596EAD6	725,000.00	NR	Aaa	9/18/2018	9/26/2018	724,942.51	3.37	339.34	724,942.59	724,797.00
WORLD OMNI AUTO RECEIVABLES TR DTD 08/01/2018 3.270% 09/15/2024	98163EAE6	300,000.00	AAA	NR	7/24/2018	8/1/2018	299,981.34	3.27	436.00	299,982.20	299,952.24
CCCIT 2018-A6 A6 DTD 08/17/2018 3.210% 12/09/2024	17305EGR0	300,000.00	NR	Aaa	8/10/2018	8/17/2018	299,949.18	3.21	1,177.00	299,953.04	299,055.06
JDOT 2018-B A4 DTD 07/25/2018 3.230% 06/15/2025	47788EAD0	165,000.00	NR	Aaa	7/18/2018	7/25/2018	164,955.68	3.24	236.87	164,957.24	164,176.55
<b>Security Type Sub-Total</b>		<b>2,220,000.00</b>					<b>2,219,763.56</b>	<b>3.32</b>	<b>2,828.93</b>	<b>2,219,770.77</b>	<b>2,218,263.66</b>
<b>Managed Account Sub Total</b>		<b>38,349,717.92</b>					<b>37,799,925.51</b>	<b>2.69</b>	<b>170,589.60</b>	<b>38,063,555.67</b>	<b>37,272,617.57</b>
<b>Securities Sub-Total</b>		<b>\$38,349,717.92</b>					<b>\$37,799,925.51</b>	<b>2.69%</b>	<b>\$170,589.60</b>	<b>\$38,063,555.67</b>	<b>\$37,272,617.57</b>
<b>Accrued Interest</b>											<b>\$170,589.60</b>
<b>Total Investments</b>											<b>\$37,443,207.17</b>

Bolded items are forward settling trades.

**IMPORTANT DISCLOSURES**

This material is based on information obtained from sources generally believed to be reliable and available to the public; however, PFM Asset Management LLC cannot guarantee its accuracy, completeness or suitability. This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation. All statements as to what will or may happen under certain circumstances are based on assumptions, some, but not all of which, are noted in the presentation. Assumptions may or may not be proven correct as actual events occur, and results may depend on events outside of your or our control. Changes in assumptions may have a material effect on results. Past performance does not necessarily reflect and is not a guaranty of future results. The information contained in this presentation is not an offer to purchase or sell any securities.

- Market values that include accrued interest are derived from closing bid prices as of the last business day of the month as supplied by Interactive Data, Bloomberg, or Telerate. Where prices are not available from generally recognized sources, the securities are priced using a yield based matrix system to arrive at an estimated market value.
- In accordance with generally accepted accounting principles, information is presented on a trade date basis; forward settling purchases are included in the monthly balances, and forward settling sales are excluded.
- Performance is presented in accordance with the CFA Institute's Global Investment Performance Standards (GIPS). Unless otherwise noted, performance is shown gross of fees. Quarterly returns are presented on an unannualized basis. Returns for periods greater than one year are presented on an annualized basis. Past performance is not indicative of future returns.
- Bank of America/Merrill Lynch Indices provided by Bloomberg Financial Markets.
- Money market fund/cash balances are included in performance and duration computations.
- Standard & Poor's is the source of the credit ratings. Distribution of credit rating is exclusive of money market fund/LGIP holdings.
- Callable securities in the portfolio are included in the maturity distribution analysis to their stated maturity date, although, they may be called prior to maturity.
- MBS maturities are represented by expected average life.

## GLOSSARY

- **ACCRUED INTEREST:** Interest that is due on a bond or other fixed income security since the last interest payment was made.
- **AGENCIES:** Federal agency securities and/or Government-sponsored enterprises.
- **AMORTIZED COST:** The original cost of the principal of the security is adjusted for the amount of the periodic reduction of any discount or premium from the purchase date until the date of the report. Discount or premium with respect to short-term securities (those with less than one year to maturity at time of issuance) is amortized on a straight line basis. Such discount or premium with respect to longer-term securities is amortized using the constant yield basis.
- **BANKERS' ACCEPTANCE:** A draft or bill or exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill as well as the insurer.
- **COMMERCIAL PAPER:** An unsecured obligation issued by a corporation or bank to finance its short-term credit needs, such as accounts receivable and inventory.
- **CONTRIBUTION TO DURATION:** Represents each sector or maturity range's relative contribution to the overall duration of the portfolio measured as a percentage weighting. Since duration is a key measure of interest rate sensitivity, the contribution to duration measures the relative amount or contribution of that sector or maturity range to the total rate sensitivity of the portfolio.
- **DURATION TO WORST:** A measure of the sensitivity of a security's price to a change in interest rates, stated in years, computed from cash flows to the maturity date or to the put date, whichever results in the highest yield to the investor.
- **EFFECTIVE DURATION:** A measure of the sensitivity of a security's price to a change in interest rates, stated in years.
- **EFFECTIVE YIELD:** The total yield an investor receives in relation to the nominal yield or coupon of a bond. Effective yield takes into account the power of compounding on investment returns, while nominal yield does not.
- **FDIC:** Federal Deposit Insurance Corporation. A federal agency that insures bank deposits to a specified amount.
- **INTEREST RATE:** Interest per year divided by principal amount and expressed as a percentage.
- **MARKET VALUE:** The value that would be received or paid for an investment in an orderly transaction between market participants at the measurement date.
- **MATURITY:** The date upon which the principal or stated value of an investment becomes due and payable.
- **NEGOTIABLE CERTIFICATES OF DEPOSIT:** A CD with a very large denomination, usually \$1 million or more, that can be traded in secondary markets.
- **PAR VALUE:** The nominal dollar face amount of a security.

## GLOSSARY

- **PASS THROUGH SECURITY:** A security representing pooled debt obligations that passes income from debtors to its shareholders. The most common type is the mortgage-backed security.
- **REPURCHASE AGREEMENTS:** A holder of securities sells these securities to an investor with an agreement to repurchase them at a fixed price on a fixed date.
- **SETTLE DATE:** The date on which the transaction is settled and monies/securities are exchanged. If the settle date of the transaction (i.e., coupon payments and maturity proceeds) occurs on a non-business day, the funds are exchanged on the next business day.
- **TRADE DATE:** The date on which the transaction occurred; however, the final consummation of the security transaction and payment has not yet taken place.
- **UNSETTLED TRADE:** A trade which has been executed; however, the final consummation of the security transaction and payment has not yet taken place.
- **U.S. TREASURY:** The department of the U.S. government that issues Treasury securities.
- **YIELD:** The rate of return based on the current market value, the annual interest receipts, maturity value, and the time period remaining until maturity, stated as a percentage on an annualized basis.
- **YTM AT COST:** The yield to maturity at cost is the expected rate of return based on the original cost, the annual interest receipts, maturity value, and the time period from purchase date to maturity, stated as a percentage on an annualized basis.
- **YTM AT MARKET:** The yield to maturity at market is the rate of return based on the current market value, the annual interest receipts, maturity value, and the time period remaining until maturity, stated as a percentage on an annualized basis.