Employee Pension Board of Trustees
Pension Board Meeting Agenda
October 23, 2018
5:30 PM
Administrative Conference Room
300 N. New Ballas Road

Call to Order

Approve Agenda

Approve Minutes

Approval of July 24, 2018 Employee Pension Board of Trustees Pension Board Meeting Minutes

Reports

Commerce Report

Fiduciary Advisors Report

New Business

Acturial Report

Actuarial Valuation as of July 1, 2018

Old Business

Follow up of the Investment Policy

Follow Up of the Investment Policy

Lagers Update

Retirements

Information

Invoices Paid Since Last Meeting

Invoices Paid Since July 24, 2018

Adjournment

Employee Pension Board of Trustees
Pension Board Meeting Minutes
July 24, 2018
5:30 PM
Administrative Conference Room
300 N. New Ballas Road

Call to Order

Steve Unser	Employee Rep	
Ellen Lawrence	Council	
Larry Potashnick	Fin Comm Rep	
Kelly Sullivan	Chair	
Jon McIntosh	Employee Rep	(Absent)
David Caldwell	Vice-Chair	
Michael Karasick	Board Member	
Lori Obermoeller	Director of Finance	
Debbie Loso	Assistant	
Christy Williams	Accounts Payable	
Todd Grizzle	Investment Consultant	

Approve Agenda

Approval of Agenda

RESULT:	**APPROVED [UNANIMOUS]**
MOVER:	Larry Potashnick, Fin Comm Rep
SECONDER:	Steve Unser, Employee Rep
AYES:	Unser, Lawrence, Potashnick, Sullivan, Caldwell, Karasick
ABSENT:	McIntosh

Approve Minutes

Approval of May 10, 2018 Employee Pension Board of Trustees Pension Board Meeting Minutes

Approval of May 10, 2018 Employee Pension Board of Trustees Pension Board Meeting Minutes. Mr. McIntosh submitted a name change from Joel Snider to Joel Snead. Approved by all. Mr. Potashnick moved to approve the minutes with above changes and Ms. Lawrence made a motion to second for approval. All others agreed.

RESULT:	**APPROVED [UNANIMOUS]**
MOVER:	Larry Potashnick, Fin Comm Rep
SECONDER:	Ellen Lawrence, Council
AYES:	Unser, Lawrence, Potashnick, Sullivan, Caldwell, Karasick
ABSENT:	McIntosh

Reports

Fiduciary Advisors 4th Quarter Report

Todd Gizzle, CFA - Investment Consultant with Fiduciary Advisors Inc. discussed the 4th Quarter Report with the Board.
Mr.Grizzle stated on the fixed income, the intermediate term is down 1.6% YTD. Mr. Potashnick asked if Mr. Grizzle could show 10 year and 15 year columns for the next review.
Mr. Caldwell asked how often the City contributions are made. Ms. Obermoeller stated contributions last fiscal year were made in the 1st quarter. Mr. Caldwell said he thought we were doing monthly contributions and wanted to know who decided to do a onetime per year contribution. Ms. Obermoeller said that contributions have not been monthly in quite some time and last fiscal year the City paid the 1st quarter and then paid the remaining balance after the Actuary Report reflected the amount to be paid. Ms. Obermoeller was the one that recommended the City to pay up front since the City pays interest on City money and this was approved by the City Council. Ms. Obermoeller stated that the change was also presented to the Board prior to taking it to the Council for approval.
Mr. Caldwell is not happy that we are not making monthly contributions, since it was reported to the Board that contributions were being made monthly. Mr. Caldwell does not recall any discussion to change from monthly contributions to paying the contribution up front.
Mr. Caldwell stated the City does not get the dollar averaging benefit of market fluctuations and stated from a Pension Fund point of view it is better to do a steady investment every month.
Ms. Lawrence inquired about the amount of savings paying up front has saved the City. Ms. Obermoeller stated paying up front saved the City between $50,000.00 to $70,000.00 and the Actuary report comes out in October.
Mr. Karasick stated that the City had to pay 7% on the amounts not paid in and Ms. Obermoeller agreed.
Mr. Caldwell wanted to know if the interest is paid on the December contribution. Ms. Obermoeller stated yes, it is paid up through the date from whatever date we made the last payment. The last payment was made in August, therefore, we will only have interest from August to December.
Mr. Caldwell wants to review the determination of paying the interest. Mr. Caldwell wants to know if the fund is getting what is due at 7% interest. The calculation was unclear to Mr. Caldwell.
Ms. Obermoeller said that she would send out the spreadsheet for everyone to see.
Mr. Caldwell also stated that if we were to pay on the entire 10 year amount, and that if you knew your minimum contribution would be the 10 year amount, then you could do that whole amount up front and then be done for the year without any calculations whatsoever. Mr. Caldwell stated that the actuarial amount is the same every year on the 10 year amortization.
Mr. Karasick stated that as long as 7% is paid on the non-contributed amount, the City is doing what they are contracted to do. The interest is now calculated at 6 3/4% instead of 7% starting July 1st.

Investment Policy Statement

Investment Policy Statement for the Retirement Plan for Employees of the City of Creve Coeur
Pages 2 and 5 have been changed and updated, Page 2, Strategic Allocations was modified and Page 5, Commodities was changed.

Mr. Grizzle said he is not expecting a signature today for the changes in the document.

Mr. Karasick wants to have time to review the document then to talk about the document in detail.

Mr. Sullivan requested sending a copy with track changes on it. Mr. Grizzle will have to see if the track changes are on the document or not.

Mr. Grizzle was asked to report on Lagers vs Creve Coeur. They are very different.

Ms. Lawrence wants to see the 20 year number. Mr. Grizzle said their quarterly reports will go out to 20 years, but the annual report will only go to 15 years. He also stated that the information is on their website.

Mr Grizzle said the one year number is very different, and that their policy bench mark for the 1st year is only 9.27 so there is a lot of excess return during the 1 year period.

Mr. Caldwell wants to see the one year numbers from Lagers. Mr. Grizzle does not have access to that at this time he can only get FY14.

Mr. Potashnick said to request the 1 year numbers form Lagers.

Mr. Potashnick asked about a liaison between Creve Coeur and Lagers. The liaison would be better suited to request information from Lagers.

Mr. Caldwell understood this was a legal plan separate from other Cities and other Groups. Ms. Obermoeller stated this is pooled together with other Cities, and the Creve Coeur plan does not have a Board of Trustees. Lagers does have a Board of Trustees and they do all of the investing. The City of Creve Coeur pays Lagers once a month based on payroll salaries.

New Business

Discussion of Minimum Contribution to be a 10 year Amortization not to be reduced by other factors.

Mr. Karasick stated that should we end up with a surplus, that surplus should not be used to reduce the 10 year fixed payment.

Ms. Lawrence thought we decided that anything that happened with the surplus money was outside of the 10 year fixed.

Mr. Caldwell said "that is the concept but he believed when Conduit/Buck produced the actuarial report it was a very small amount and they added the two together and it resulted in a very small contribution slightly less than the 10 year".

Mr. Karasick wanted to know what he wants if there is an excess? Do you want it to stay in the plan and not be used to offset additional values?

Mr. Caldwell stated that a 10 year would be the minimum contribution.

Mr. Caldwell stated at the time when the City reviewed the Policy, the 15 year number would always be an additional contribution.

Mr. Potashnick stated that the normal contribution has 3 components; the 10 year fixed, the normal contribution and the plus or minus from the 15 year rolling amortization, which he guesses the City could use as a reduction from the normal.

Mr. Karasick agreed, however, he wants to know what the policy is. He asked what would be the position if there was an excess on the 15 year that could reduce the minimum, would the City take that?

Mr. Potashnick stated he doesn't know and this is something that has never been thought through.

Mr. Sullivan does not know if there is an excess on the 15 year would the City take that?

If the plan returns 7% and if the City puts in the 10 year fixed amortization, then in 10 years the plan will be 100% funded. If we build up a surplus instead of a liability at the 15 year amortization, in 10 years we would be at 105 %. We are on our third year of the 10 year amortization.

Mr. Sullivan asked if the10 year minimum funding is this the City position now?

Mr. Caldwell states that they have looked at the actuary report from last year and they netted the two numbers for the contribution.

Mr. Sullivan are we making a motion or just think about it. Mr. Caldwell said no. He suggest that we just write a letter stating what we did instead of having to make a motion to go to the City Council. He thinks the city should fully fund the 10 year number with no reduction until it is totally funded.

Ms. Lawrence said that the City did the 10 year fixed and we dropped the rate to 6.75% which is going to cost a lot more, so she thinks that if we have a couple of really good years and we can self fund, then we should do that. Mr. Caldwell said Ms. Lawrence is speaking for the City and not the Pension Plan.

Per Mr. Caldwell, you can reduce the normal amount, but you can't reduce the normal to a negative number so the 10 year is always the minimum that the City pays.

Mr. Sullivan believes the Boards' position was that the normal contribution could never go negative, even though it was never stated in the policy.

Ms. Lawrence stated keep in mind that no matter what we do, the people in this plan will always get more than what the people are getting in the new plan and no matter what we do, there is an issue of fairness.

Mr. Karasick stated that we need to have a conversation with the actuary so they know that the Board wants the recommended contribution to be the minimum of the 10 year but never be reduced by the 15 year until the 10 year cycle is over. The City doesn't have to do it, but at least the Council will have the number. Ms. Obermoeller asked if she needs to relay this to Milliman so they know to have it in their report, but the Board decided to wait and get the report and see what the number is and then they can decide what to do.

Ms. Obermoeller asked if she should make the quarterly payment.

Mr. Caldwell moved to pay $927,000.00 at this time which is the 10 year minimum.

Mr. Karasick said he moved to pay the quarterly payment now and then when the actuary report comes you pay again then.

Ms. Lawrence second the motion.

RESULT:	**APPROVED [UNANIMOUS]**
MOVER:	Michael Karasick, Board Member
SECONDER:	Ellen Lawrence, Council
AYES:	Unser, Lawrence, Potashnick, Sullivan, Caldwell, Karasick
ABSENT:	McIntosh

Discussion of Citizen Guide to Boards, Committees & Commissions

Ms. Obermoeller included in the packet a list of all the Committees and their Duties, explaining what the Board positions are and what the duties are.

Page 16 / Packet page 21
Is the Employee Pension Fund Board of Trustees description giving duties of the plan and letting everyone know what the function of the Board is.

Mr. Caldwell states we are not a Committee we are a Board. Ms. Obermoeller and Ms. Lawrence confirmed that we are a Board.

Ms. Obermoeller asked if anyone had any questions regarding the duties of the Board.

Mr. Potashnick asked about line 5 Duties and Responsibilities of the Board Governed by the Pension Plan Document. He has not seen the Pension Plan Document yet.

Ms. Obermoeller said that the Pension Plan Document can be given to anyone that wants it.

Mr. Potashnick asked Mr. Karasick if this helped him to understand more of what the Board does. Mr. Karasick said yes.

Mr. Karasick stated the document does not stipulate that we can hire someone as a Fiduciary to manage the money. Mr. Karasick stated that we are the ones that are the fiduciary's and liable by the Plan Document. Normally you will see under such powers that you have the power to appoint somebody like a fiduciary advisor to take the roll to make decisions, we do not have that, we the Board are technically making those decisions. They are not acting as a fiduciary.

Mr. Caldwell said that this document is not the actual plan. This is very unsettling to him, the Pension Plan Document does not say anything about investing or investment policies, he stated we the Board spend less than 10% of the time on this.

The City Council is NOT the Fiduciary for the Board he stated that he asked City Council at a meeting. We (the Board) are the fiduciary's, since we are approving our strategy and then telling them to implement it. He thinks we should have the power to appoint someone to make the fiduciary decisions.

Mr. Caldwell asked if the City Council is a fiduciary to the Pension Committee.

Mr. Karasick stated that only one member of the City Council is on this Board.

Mr. Karasick stated that our Investment Policy is possibly not in compliance with the Pension Plan Document.

Ms. Lawrence suggests that if we want to make any changes we should be able to go to Debbie and let her know. Mr. Lawrence said that the Council would have to approve any changes.

Mr. Caldwelll said the documents should reflect more of what we do.

Mr. Karasick said he will review the Pension Plan Document. Ms. Obermoeller will send the Pension Plan Document to him electronically. He will compare the two Plans and report the differences to the Board.

Mr. Karasick stated that he will have them change the Discretionary Investment Management Section of this because they don't do this. They don't take discretion and they are not the fiduciary. He will have them reword the this section with the proper terminology. He is going to have them reword page 4.

Mr. Karasick has asked that we do not sign this document yet.

RESULT:	**APPROVED [UNANIMOUS]**
MOVER:	Larry Potashnick, Fin Comm Rep
SECONDER:	Ellen Lawrence, Council
AYES:	Unser, Lawrence, Potashnick, Sullivan, Caldwell, Karasick
ABSENT:	McIntosh

RFP for Actuary Services

Ms. Obermoeller sent RFPs to five companies, only two companies responded.
1. Milliman (fees page 16)
2. Conduit/Buck (fees page 18)

Conduit/Buck is substantially higher than Milliman. Some of the contributing factors to Conduit/Buck being higher is from the GASB75 requirement that is required every other year. Conduit/Buck priced it every year. Ms. Obermoeller sent an email to Wendy to see if there was an error in the fees, Wendy said there was no error, that they still have to keep up with the numbers. Conduit/Buck is charging us every year even though it should be every other year. The fee differences are $40,000 over 5 years.
Ms. Lawrence asked what the City has been charged and for how many hours by Conduit/Buck in the past.

Ms. Obermoeller stated Conduit/Buck has very little consulting fees; the only thing the City pays is the calculation on an employee that is retiring which a $200.00 flat fee; there was one email to Wendy regarding hourly fee charges and smoothing inquiry for $400.00; the rest is the employee benefit statements which are mailed once a year and cost $700.00. We have not been billed for anything else except the actuarial fees.
Ms. Lawrence asked if we got any references from Milliman. Ms. Obermoeller checked references with different Cities that use Milliman and the remarks received were that Milliman is a really good company, however, they are slow.
Ms. Lawrence stated the City needs to be cautious with its finances so how can we recommend staying with Conduit/Buck. Ms. Obermoeller agreed and stated that she hates to make a change when we might be going to Lagers.
Ms. Lawrence asked if there are any negations with Conduit/Buck on the GASB75 requirements; she thinks their cost is way out of line. Ms. Obermoeller did ask them about GASB75 fees but they said they are current.
Mr. Sullivan asked if it is appropriate or inappropriate for us to go back with a counter proposal. Ms. Obermoeller responded with it being inappropriate.
Mr. Sullivan asked if we can we put metrics in there if we accept their proposal that field work begins on specified dates? Ms. Obermoeller stated that she put that request it in the RFP.
Mr. Caldwell questioned the annual cost. The cost would be $20,200.00 for Conduit/Buck vs the annual cost of $10,500.00 for the first year and $14,600.00 for the second year from Milliman.
If they are late will that slow Creve Coeur down with audit? GASB75 is the only thing required for the audit.
Ms. Lawrence said the City cannot afford to pay double we need to accept the lower bid.
Mr Potashnick made motion to accept Milliman; Mr. Caldwell second that motion.
Mr. Karasick stated this would be a 6 year contract. Ms. Obermoeller stated that we can cancel at any time. Ms. Obermoeller stated that it may be slow this first year.
Conduit is doing GASB75 this year; Milliman doesn't have to do it next year. Milliman will do if for FY19/20.

RESULT:	**APPROVED [UNANIMOUS]**
MOVER:	Larry Potashnick, Fin Comm Rep
SECONDER:	David Caldwell, Vice-Chair
AYES:	Unser, Lawrence, Potashnick, Sullivan, Caldwell, Karasick
ABSENT:	McIntosh

Commerce

Mr. Potashnick brought up that there is an article about public pension plans lowering the target of their returns if anyone would like to read the article.

Mr. Potashnick receives the quarterly statements from Commerece and stated that anyone who wants to be on the mailing list may do so at anytime.

Ms. Obermoeller stated she has received two statements back in the mail. Ms. Obermoeller said that she has contacted all of the resources the retirees have provided and is unable to make contact with anyone to find out where she needs to send the statements. She also stated that money will go back to the City.

Potashnick stated that eventually the money will go to the state and there is nothing more we can do if no one contacts us back.

Mr. Sullivan told Ms. Obermoeller she can give the return statements to him and he will try to locate the retirees.

Mr. Potashnick and Mr. Unser made motion to adjourn the meeting.

Old Business

LAGERS Update

Ms. Obermoeller stated no update for Lagers at this time.

Retirements

Information

Invoices Paid Since Last Meeting

Adjournment

Mr. Potashnick motioned to adjourn the meeting at 7:20PM. Mr. Unser second the motion.

Employee Pension Board of Trustees
City of Creve Coeur
Creve Coeur, MO 63141

Meeting: 10/23/18 05:30 PM
Department: Employee Pension Board of Trustees
Category: Report
Prepared By: Christy Williams
Department Head: Christy Williams

SCHEDULED

STAFF REPORT

Commerce Report

CITY OF CREVE COEUR PENSION (FIXED INCOME)

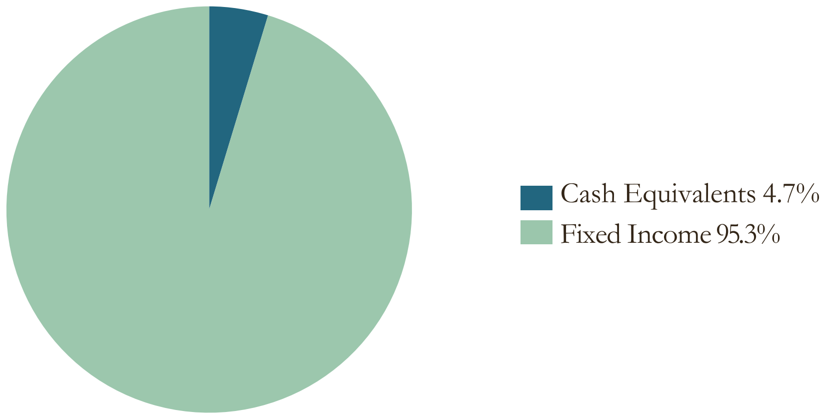
October 23, 2018

TABLE OF CONTENTS

ASSET ALLOCATION SUMMARY

as of September 30, 2018

Actual Allocation



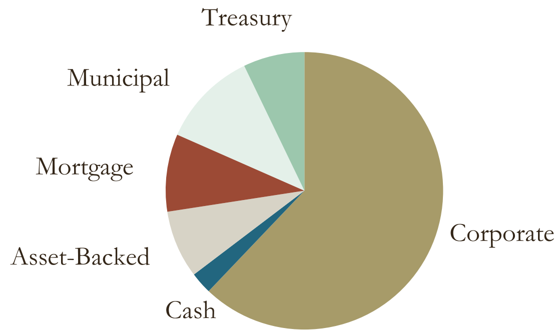
	% of Portfolio	Market Value	Total Cost	Est. Annual Income	Yield
Cash Equivalents	4.68%	$329,376	$329,376	$8,259	2.51%
Equity Investments	0.00%	$0	$0	$0	0.00%
Fixed Income Investments	95.32%	$6,705,363	$6,877,119	$233,071	3.55%
Domestic	95.32%	$6,705,363	$6,877,119	$233,071	3.55%
Alternative Investments	0.00%	$0	$0	$0	0.00%
GRAND TOTAL	100.00%	$7,034,739	$7,206,495	$241,330	3.50%

**Market Values reflected do not include accrued income.*

PORTFOLIO VS. BENCHMARK COMPARISON

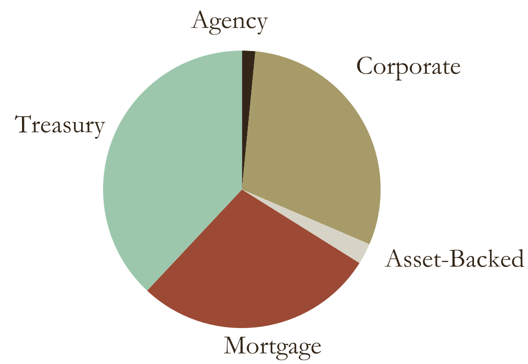
as of September 30, 2018

City of Creve Coeur (MV: $6.9MM)



Asset Class	%
Treasury	7.16
Agency	0.00
Corporate	62.10
Asset-Backed	7.88
Mortgage	9.05
Municipal	11.23
Cash	2.58
Total	**100.00**

BBG Barclays Aggregate



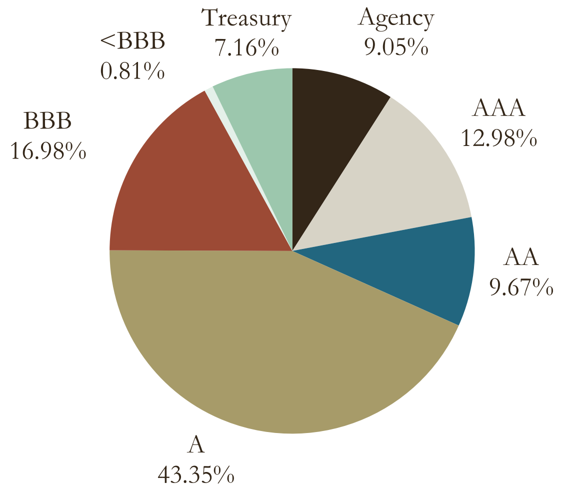
Asset Class	%
Treasury	38.04
Agency	1.54
Corporate	29.93
Asset-Backed	2.43
Mortgage	28.06
Total	**100.00**

City of Creve Coeur		BBG Barclays Aggregate
3.56%	YTM	3.46%
7.62	Maturity (yrs)	8.42
5.76	Duration (yrs)	6.03
A+	Quality	AA

BOND PORTFOLIO CHARACTERISTICS

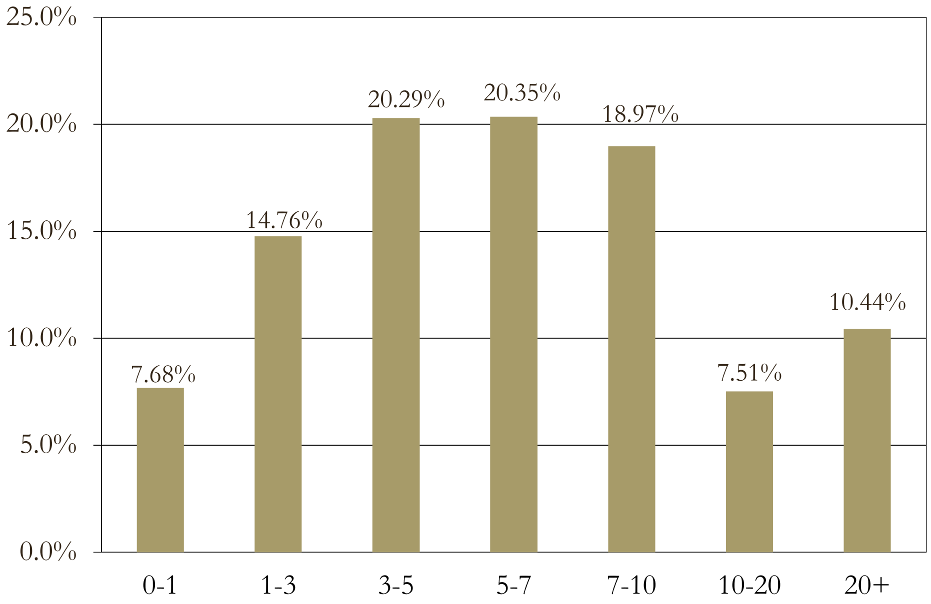
as of September 30, 2018

Quality



Average Quality = A+

Effective Maturity Schedule

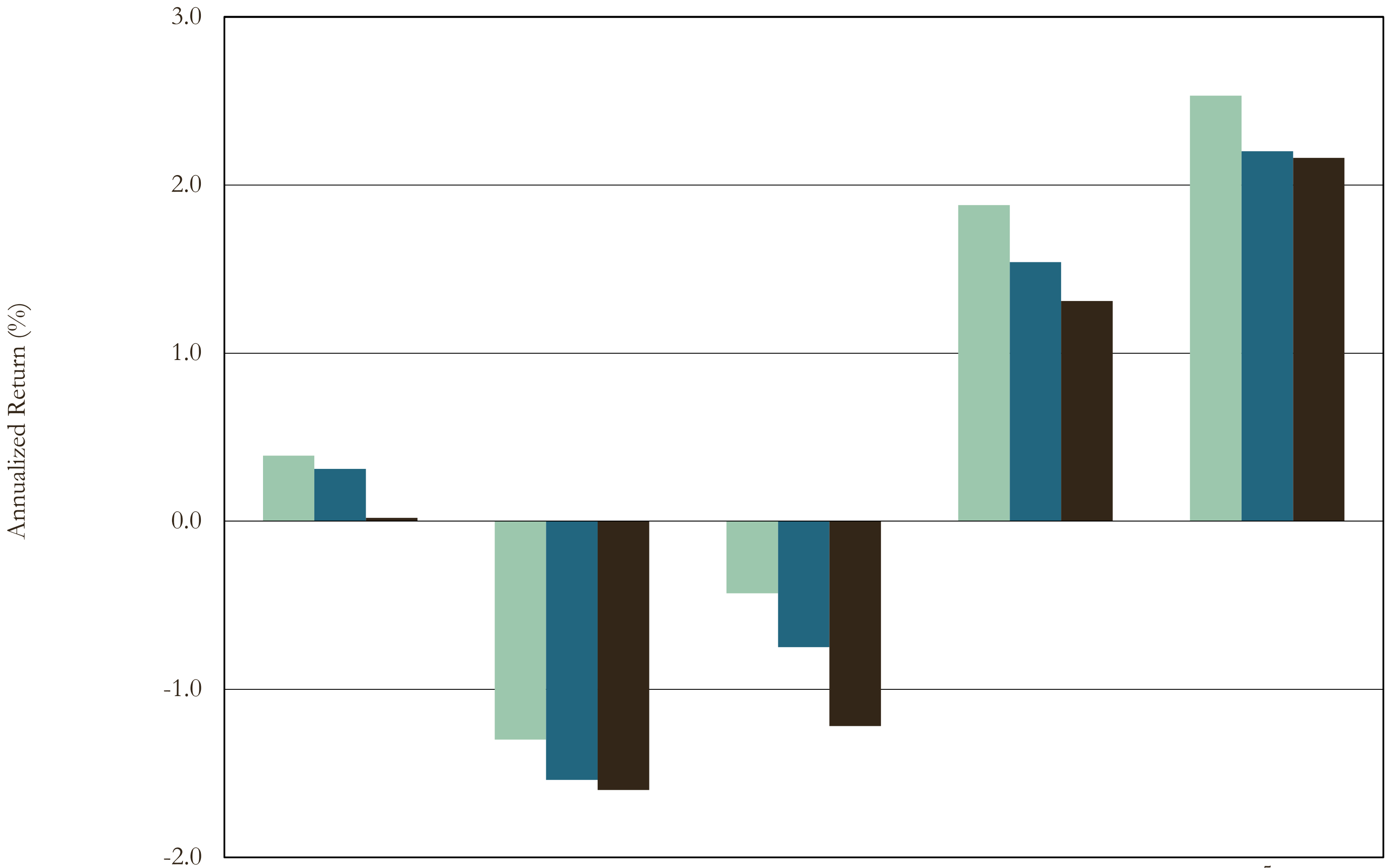


Average Life = 7.62 years

Attachment: Commerce Report (Commerce Report)

FIXED INCOME PERFORMANCE COMPARISON

as of September 30, 2018

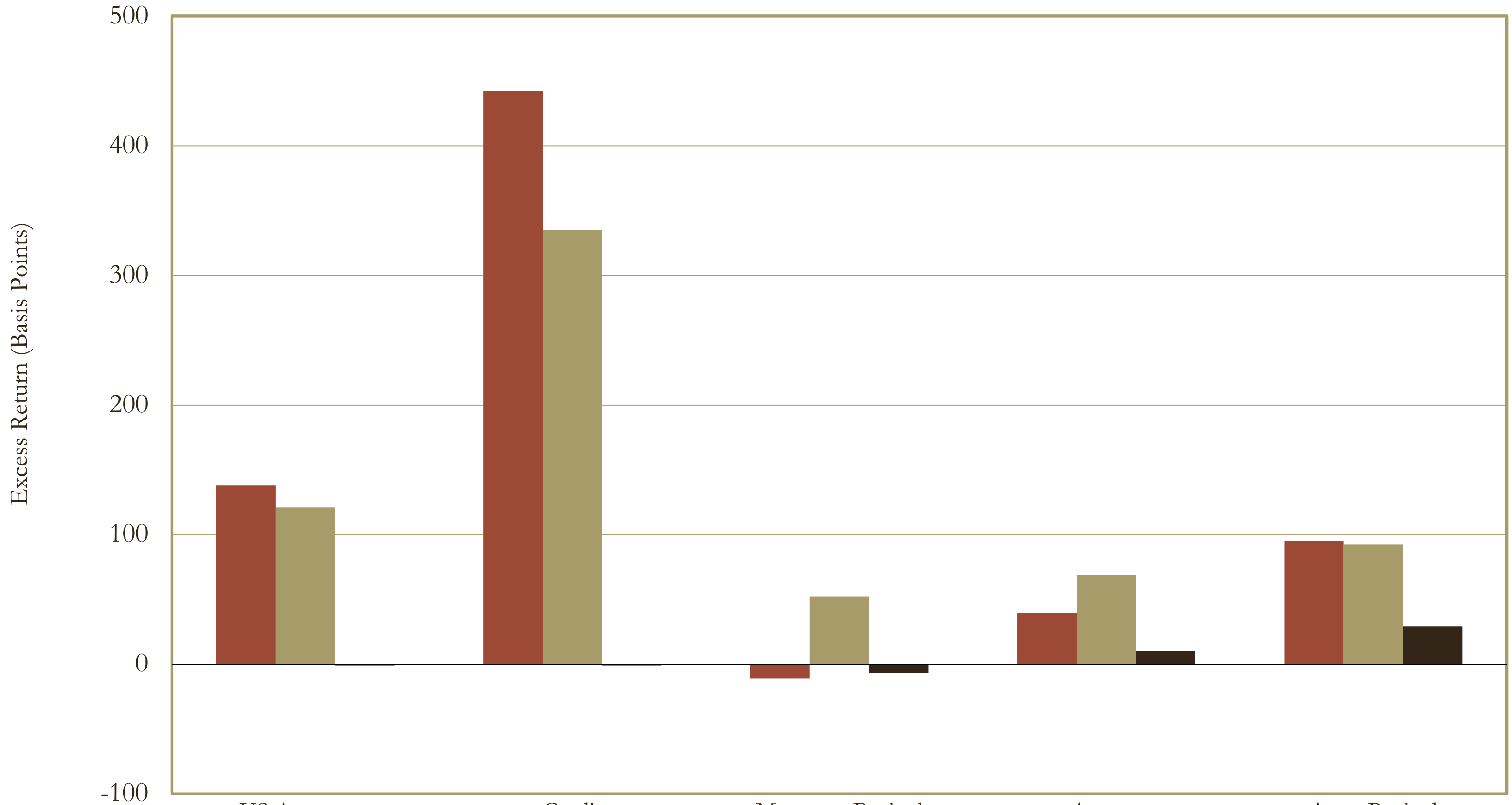


	Quarter	YTD	1 Year	3 Year*	5 Year/Inception* (9/30/13)
City of Creve Coeur (Gross of Fees)	0.39	-1.30	-0.43	1.88	2.53
City of Creve Coeur (Net of Fees)	0.31	-1.54	-0.75	1.54	2.20
BBG Barclays Aggregate	0.02	-1.60	-1.22	1.31	2.16

*Returns for periods greater than one year are annualized, performance is gross of fees

DURATION-ADJUSTED EXCESS RETURNS*

as of 9/30/18

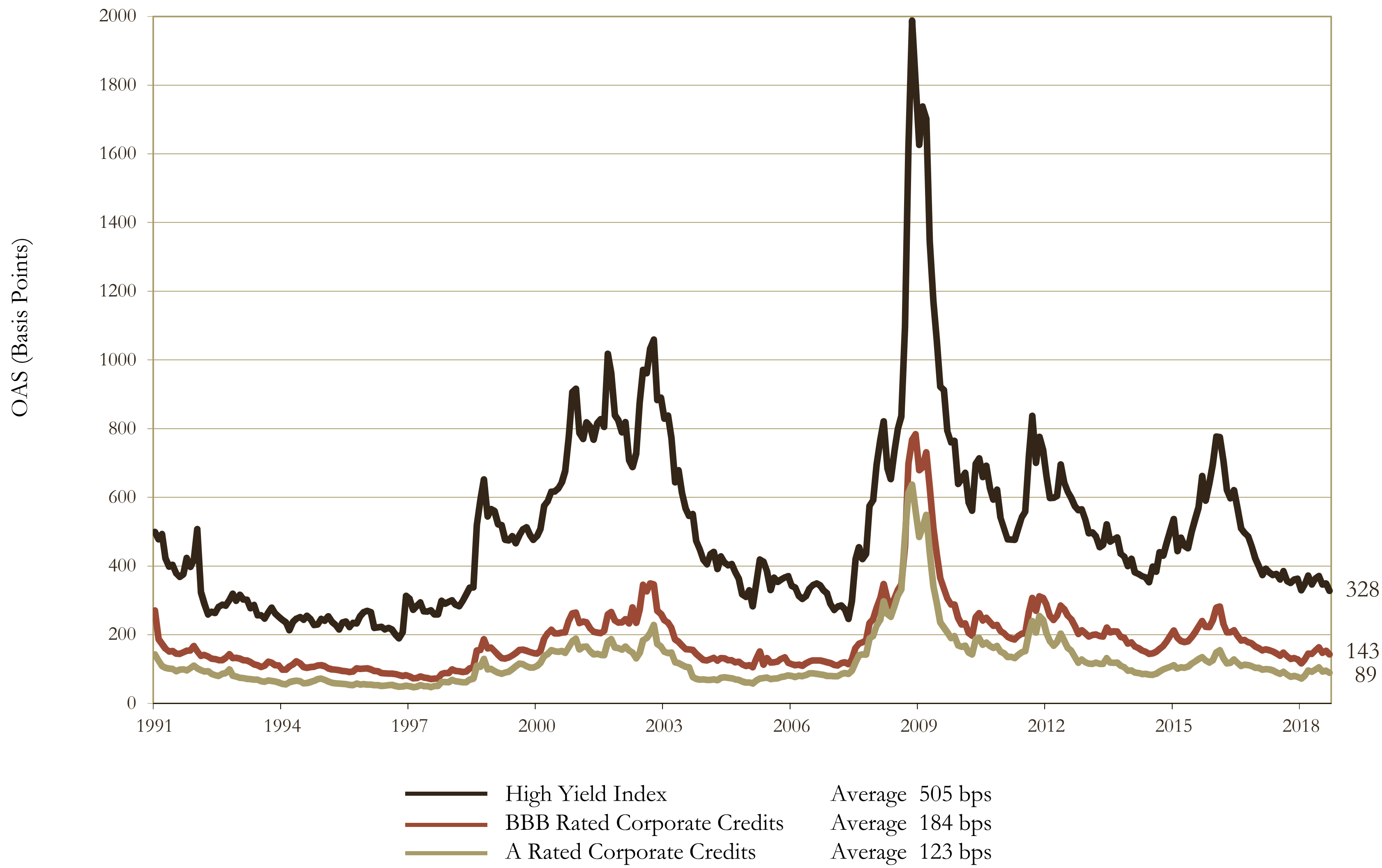


	US Aggregate	Credit	Mortgage Backed	Agency	Asset Backed
2016	138	442	-11	39	95
2017	121	335	52	69	92
YTD 2018	-1	-1	-7	10	29

**versus U.S. Treasuries*

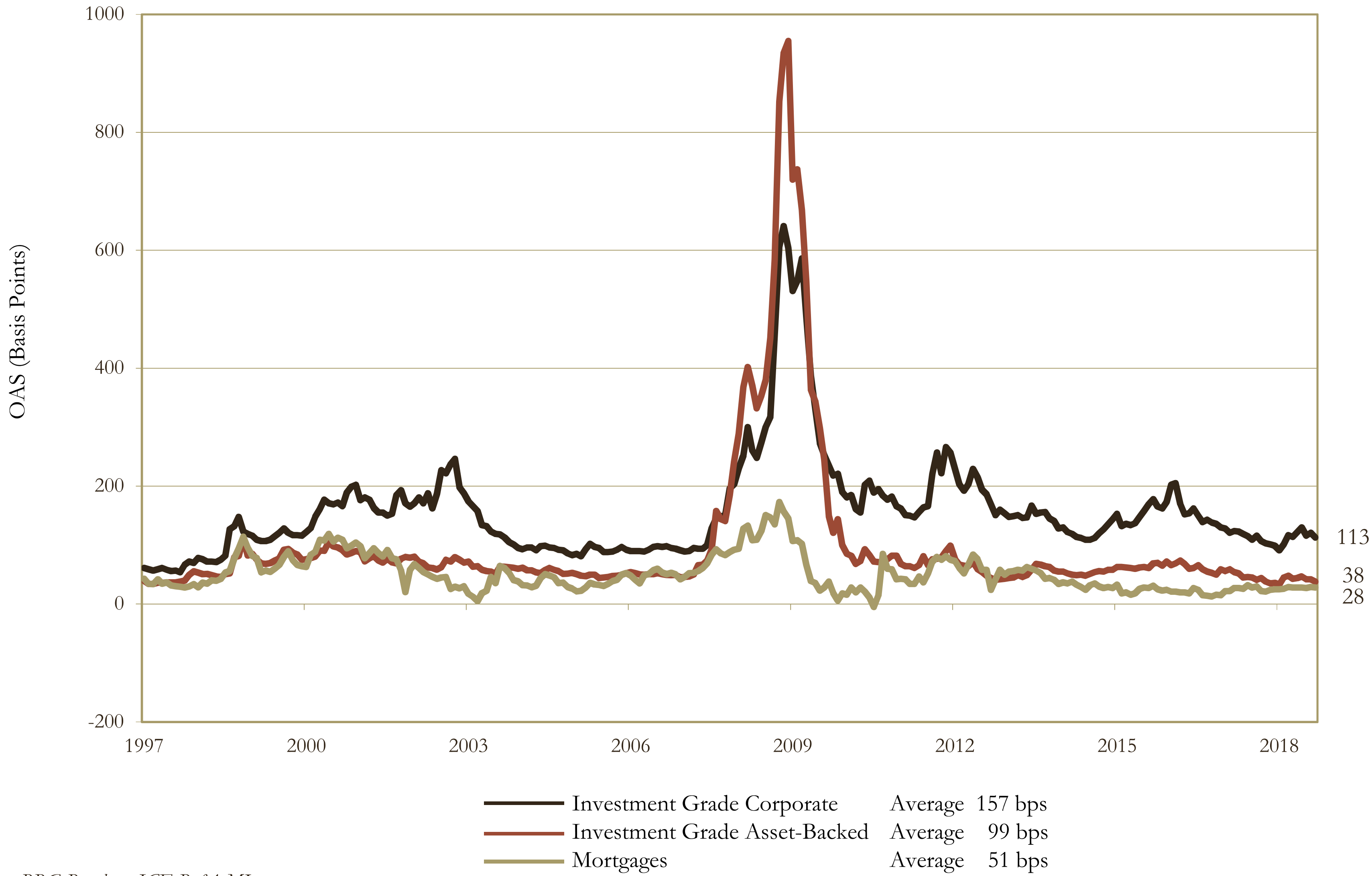
Source: BBG Barclays

CORPORATE CREDIT SPREADS – *1/31/91 through 9/30/18*



Source: BBG Barclays, ICE BofA ML

SECTOR CREDIT SPREADS – *1/31/97 through 9/30/18*



Source: BBG Barclays, ICE BofA ML

BOND MARKET TOTAL RETURNS

Market	2016	2017	2018 1Q	2018 2Q	2017 3Q	YTD	Sept.
Master Index	2.62%	3.63%	-1.47%	-0.15%	0.00%	-1.62%	-0.65%
Corporate	5.96%	6.48%	-2.20%	-0.94%	0.96%	-2.19%	-0.33%
Treasuries	1.14%	2.44%	-1.21%	0.11%	-0.66%	-1.75%	-0.98%
Agencies	1.50%	2.15%	-0.54%	-0.02%	-0.01%	-0.57%	-0.41%
Mortgages	1.67%	2.45%	-1.21%	0.31%	-0.12%	-1.02%	-0.59%
Asset-Backed	1.97%	2.33%	0.16%	0.52%	0.58%	1.26%	0.07%
High-Yield	17.49%	7.48%	-0.94%	1.00%	2.44%	2.50%	0.58%
Municipal	0.44%	5.42%	-1.15%	0.89%	-0.25%	-0.51%	-0.64%
2yr Treasury	0.66%	0.19%	-0.14%	0.18%	0.15%	-0.18%	-0.12%
10 Yr Treasury	-0.16%	2.07%	-2.39%	-0.30%	-1.10%	-3.75%	-1.49%
30yr Treasury	0.89%	9.04%	-3.89%	0.51%	-3.27%	-6.55%	-3.34%
TIPS	4.85%	3.01%	-0.79%	0.77%	-0.82%	-0.84%	-0.02%

Source: BBG Barclays, ICE BofA ML

Attachment: Commerce Report (Commerce Report)

ECONOMIC OUTLOOK

- Q2 GDP growth came in strong at 4.2%, the highest rate in 4 years. Economic growth accelerated relative to Q1 (2.2%), and is accounted for by an acceleration in final sales and a large increase in net exports. This momentum is expected to continue, with GDP growth in the 3% range expected for Q3 and Q4.

- As expected, the Federal Reserve raised the overnight federal funds target rate by 25 bps to a range of 2.00%-2.25% at their September 26th meeting. The assessment of economic conditions has been positive, seeing solid growth and additional strengthening in the labor market. Inflation continues to hover around the Fed's objective of 2%. The Fed is forecasting one additional rate hike this year, and three more in 2019.

- September nonfarm payroll employment gained 134,000 jobs for the month, and has averaged 190,000 per month over the past three months, while unemployment fell all the way to 3.7% (the lowest in nearly half a century). Americans saw continued wage gains, as the labor market is tightening rapidly.

- Corporate credit spreads (borrowing rates relative to U.S. Treasury rates) are still thin, but have widened year-to-date on supply/demand technicals and trade tensions. Steady growth in revenues, earnings, and cash flows, as well as favorable credit conditions, should support corporate bond valuations in 2018.

- Bond yields have risen so far in 2018, on a more hawkish tone from the Fed, signs of improvement in the global economy, and some signs of moderate inflation. As a result of this rise in interest rates, most investment grade bond market sectors have posted negative returns so far this year.

- Broadly speaking, solid financial conditions are still intact. Fundamentals of employment, wages, spending and wealth should continue to support sustained growth moving through 2018 and into 2019.

City of Creve Coeur Retirement
Analysis of Sector Limitations
September 30, 2018

Sector Type	Normal Unit Commitment (% Portfolio)	Max Exposure Per Credit (% Portfolio)	Max Sector Exposure (% Portfolio)	Current (% Portfolio)
U.S. Treasury Securities	**Unlimited**	**Unlimited**	**Unlimited**	7.2%
Federal Agency Securities	**Unlimited**	**Unlimited**	**Unlimited**	0.0%
Agency Passthroughs/CMOs/Other MBS	**2%**	**5%**	**60%**	9.0%
Asset Backed Securities	**2%**	**5%**	**25%**	7.9%
Corporate Securities	**2%**	**5%**	**75%**	62.1%
Municipal Securities	**2%**	**5%**	**20%**	11.2%
Cash & Equivalents	**2%**	**10%**	**10%**	2.6%

Additional Constraints	Constraint	Current
Average Credit Quality	>=A-	A+
Duration	±30% of index	-4.4%
BBB Credits	<=20%	17.0%
144A Issues	<=10%	0.0%
Below Investment Grade**	<=5%	0.8%

* Index = BBG Barclays Aggregate

** No below investment grade security may be purchased. Securities downgraded to below the BBB range (up to 5% of the portfolio value) may be held at the manager's discretion - amounts over 5% must be sold within 90 days.

Attachment: Commerce Report (Commerce Report)

Portfolio Position Report

Portfolio: CITY OF CREVE C 8016
Pricing Date: 09/28/2018
Representative:

Currency: USD

Sector 1	CUSIP9	Par (000)	Mkt Val (000)	% Held (MV)	Issuer Name	Coupon	Maturity	Quality	Mdys	S&P	YTM	Avg Life	Eff Dur	Conv (Par)	OAS
CASH		**179**	**179**	**2.579**		**2.150**	**0.082**	**Aaa**	**Aaa**	**AAA**	**2.150**	**0.083**	**0.082**	**0.001**	**0**
	000000CM9	179	179	2.579	CASH & EQUIVALENTS	2.150	10/28/2018	Aaa	Aaa	AAA	2.150	0.083	0.082	0.001	0
TSY		**530**	**497**	**7.162**		**1.991**	**10.667**	**Aa1**	**Aaa**	**AA+**	**3.039**	**10.682**	**8.575**	**0.619**	**0**
	9128282D1	150	139	2.008	UNITED STATES TREAS NTS	1.375	08/31/2023	Aa1	TSY	TSY	2.952	4.917	4.711	0.127	-1
	912828V80	100	97	1.395	UNITED STATES TREAS NTS	2.250	01/31/2024	Aa1	TSY	TSY	2.972	5.333	4.982	0.143	-1
	912828P46	150	136	1.965	UNITED STATES TREAS NTS	1.625	02/15/2026	Aa1	TSY	TSY	3.034	7.417	6.873	0.264	1
	912810QX9	70	65	0.937	UNITED STATES TREAS BDS	2.750	08/15/2042	Aa1	TSY	TSY	3.195	23.917	17.314	1.851	1
	912810RH3	60	59	0.857	UNITED STATES TREAS BDS	3.125	08/15/2044	Aa1	TSY	TSY	3.196	25.917	17.825	2.014	1
OGVT		**720**	**717**	**10.324**		**3.062**	**5.122**	**Aa2**	**Aa2**	**AA**	**3.496**	**4.369**	**4.096**	**0.029**	**52**
	172253DX1	60	60	0.860	CINCINNATI OHIO CITY SCH DI	2.050	12/15/2019	Aa3	Aa3	N/A	2.976	1.250	1.180	0.010	28
	914729SH2	75	74	1.069	UNIVERSITY NORTH TEX UNIV R	2.303	04/15/2021	Aa2	Aa2	N/A	3.157	2.583	2.426	0.037	31
	613741EY9	55	56	0.803	MONTGOMERY CNTY VA ECONOMI(	3.350	06/01/2021	Aa3	Aa2	AA-	3.236	2.667	2.518	0.041	38
	8827237K9	60	59	0.857	TEXAS ST GO AND REF BDS 201	2.315	10/01/2021	Aaa	Aaa	AAA	3.021	3.000	2.853	0.052	14
	45462TFP2	75	73	1.045	INDIANA BD BK REV TAXABLE B	2.263	02/01/2022	Aa1	N/A	AA+	3.419	3.333	3.181	0.062	52
	696543MZ7	55	57	0.818	PALM BEACH CNTY FLA PUB IMP	4.000	11/01/2025	Aa1	Aa1	AAA	3.730	5.083	5.122	-0.174	60
	64972C3H4	75	75	1.087	NEW YORK N Y CITY HSG DEV C	3.467	11/01/2023	Aa2	Aa2	AA+	3.534	5.083	4.601	0.126	57
	60374Y8A8	50	52	0.756	MINNEAPOLIS MINN TAXABLE GO	4.379	03/01/2034	Aa1	Aa1	AAA	3.933	5.417	6.030	-0.609	36
	033167CH8	75	74	1.060	ANCHORAGE ALASKA CTFS PARTN	3.058	07/01/2024	Aa1	N/A	AA+	3.571	5.750	5.202	0.158	59
	20772KEV7	65	64	0.928	CONNECTICUT ST TAXABLE GO B	3.693	09/15/2024	A2	A1	A	3.900	6.000	5.312	0.165	91
	45506DK53	75	72	1.041	INDIANA ST FIN AUTH REV TAX	3.300	02/01/2026	A3	N/A	A-	3.963	7.333	6.426	0.240	95
IND		**2,301**	**2,402**	**34.603**		**4.100**	**8.919**	**A3**	**A2**	**A**	**3.874**	**8.899**	**6.517**	**0.358**	**88**
	053611AF6	30	31	0.453	AVERY DENNISON CORP	5.375	04/15/2020	Baa2	Baa2	BBB	3.721	1.583	1.444	0.014	97
	25243YAP4	50	52	0.749	DIAGEO CAP PLC	4.828	07/15/2020	A3	A3	A-	3.124	1.833	1.701	0.019	34
	046353AK4	60	60	0.859	ASTRAZENECA PLC	2.375	11/16/2020	Baa1	A3	BBB+	3.121	2.167	2.046	0.027	29
	494550BT2	30	30	0.435	KINDER MORGAN ENERGY PARTNE	3.500	03/01/2021	Baa3	Baa3	BBB-	3.375	2.250	2.221	-0.010	52
	695156AS8	40	40	0.569	PACKAGING CORP AMER	2.450	12/15/2020	Baa2	Baa2	BBB	3.367	2.250	2.098	0.008	53
	440452AE0	55	57	0.824	HORMEL FOODS CORP	4.125	04/15/2021	A2	A1	A	3.266	2.333	2.181	-0.001	34
	63946BAE0	55	58	0.829	NBCUNIVERSAL MEDIA LLC	4.375	04/01/2021	A3	A3	A-	3.348	2.500	2.319	0.035	50
	458140AJ9	55	56	0.809	INTEL CORP	3.300	10/01/2021	A1	A1	A+	3.115	3.000	2.807	0.051	23
	009158AR7	55	55	0.797	AIR PRODS & CHEMS INC	3.000	11/03/2021	A2	A2	A	3.203	3.083	2.908	0.054	32
	00037BAB8	70	69	1.001	ABB FIN USA INC	2.875	05/08/2022	A2	A2	A	3.425	3.583	3.365	0.070	52
	893526DM2	70	67	0.972	TRANSCANADA CORP	2.500	08/01/2022	Baa1	A3	BBB+	3.634	3.833	3.613	0.079	72
	02665WCA7	75	73	1.058	AMERICAN HONDA FIN CORP MTN	2.600	11/16/2022	A2	A2	A+	3.393	4.167	3.851	0.089	46
	92826CAC6	55	54	0.783	VISA INC	2.800	12/14/2022	A1	A1	A+	3.308	4.250	3.878	0.066	37
	58013MFE9	40	40	0.582	MCDONALDS CORP MED TERM NT E	3.350	04/01/2023	Baa1	Baa1	BBB+	3.556	4.500	4.060	0.086	61
	89153UAF8	60	58	0.841	TOTAL CAP CDA LTD	2.750	07/15/2023	A1	Aa3	A+	3.489	4.833	4.431	0.116	53
	44266RAC1	55	56	0.800	HOWARD HUGHES MED INST	3.500	09/01/2023	Aaa	Aaa	AAA	3.350	4.917	4.496	0.119	39
	61945CAC7	25	26	0.370	MOSAIC CO NEW	4.250	11/15/2023	Baa3	Baa3	BBB-	4.025	4.917	4.416	0.074	104
	90131HAA3	30	31	0.449	21ST CENTY FOX AMER INC	4.000	10/01/2023	Baa1	Baa1	BBB+	3.599	5.000	4.439	0.119	64
	546268AG8	45	53	0.765	LOUISIANA LD & EXPL CO	7.650	12/01/2023	A3	A3	A-	4.267	5.167	4.265	0.114	131
	84756NAD1	30	31	0.447	SPECTRA ENERGY PARTNERS LP	4.750	03/15/2024	Baa2	Baa2	BBB+	4.062	5.250	4.658	0.095	106

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Portfolio Position Report

Portfolio: CITY OF CREVE C 8016 **Currency: USD**
Pricing Date: 09/28/2018
Representative:

Sector 1	CUSIP9	Par (000)	Mkt Val (000)	% Held (MV)	Issuer Name	Coupon	Maturity	Quality	Mdys	S&P	YTM	Avg Life	Eff Dur	Conv (Par)	OAS
	37045XBW5	35	35	0.499	GENERAL MTRS FINL CO INC	3.950	04/13/2024	Baa3	Baa3	BBB	4.515	5.583	4.802	0.117	154
	548661DD6	55	54	0.776	LOWES COS INC	3.125	09/15/2024	A3	A3	A-	3.536	6.000	5.336	0.129	54
	911312BL9	100	97	1.397	UNITED PARCEL SERVICE INC	2.800	11/15/2024	A1	A1	A+	3.537	6.167	5.499	0.158	54
	05329WAN2	35	34	0.484	AUTONATION INC	3.500	11/15/2024	Baa3	Baa3	BBB-	4.488	6.167	5.359	0.157	150
	68389XBS3	70	68	0.985	ORACLE CORP	2.950	11/15/2024	A1	A1	AA-	3.576	6.167	5.470	0.154	58
	74005PBN3	70	67	0.958	PRAXAIR INC	2.650	02/05/2025	A2	A2	A	3.602	6.333	5.738	0.168	60
	74834LAX8	40	39	0.566	QUEST DIAGNOSTICS INC	3.500	03/30/2025	Baa2	Baa2	BBB+	4.133	6.500	5.609	0.158	113
	718337AC2	30	37	0.534	PHILIPS ELECTRS N V	7.750	05/15/2025	Baa1	Baa1	BBB+	4.161	6.667	5.226	0.172	117
	920355AK0	30	30	0.431	VALSPAR CORP	3.950	01/15/2026	Baa2	NR	BBB	4.109	7.333	6.176	0.191	109
	452308AX7	60	56	0.808	ILLINOIS TOOL WKS INC	2.650	11/15/2026	A2	A2	A+	3.731	8.167	7.120	0.273	70
	05565QDN5	100	96	1.379	BP CAP MKTS P L C	3.279	09/19/2027	A3	A1	A-	3.856	9.000	7.642	0.311	81
	801060AD6	100	100	1.442	SANOFI-AVENTIS	3.625	06/19/2028	A1	A1	AA	3.738	9.750	7.999	0.347	68
	28176EAD0	40	40	0.583	EDWARDS LIFESCIENCES CORP	4.300	06/15/2028	Baa3	Baa2	BBB-	4.306	9.750	7.729	0.331	125
	925524AH3	25	32	0.455	VIACOM INC	7.875	07/30/2030	Baa2	Baa2	BBB	5.046	11.833	8.114	0.427	199
	001957BD0	50	66	0.953	AT&T CORP	8.250	11/15/2031	Baa2	Baa1	BBB	5.157	13.167	8.506	0.485	209
	097023AG0	36	52	0.752	BOEING CO	8.625	11/15/2031	A2	A2	A	4.399	13.167	8.619	0.494	133
	91913YAE0	25	33	0.471	VALERO ENERGY CORP NEW	7.500	04/15/2032	Baa2	Baa2	BBB	4.740	13.583	8.923	0.529	167
	549271AF1	45	59	0.847	LUBRIZOL CORP	6.500	10/01/2034	Aa2	Aa2	AA	4.142	16.000	10.494	0.730	104
	898384AQ5	60	62	0.892	TRUSTEES UNION COLLEGE	4.877	07/01/2035	A1	A1	N/A	4.700	16.750	11.393	0.839	159
	902133AG2	25	34	0.491	TYCO ELECTRONICS GROUP S A	7.125	10/01/2037	Baa1	Baa1	A-	4.534	19.000	11.360	0.893	141
	136375BQ4	50	64	0.928	CANADIAN NATL RY CO	6.375	11/15/2037	A2	A2	A	4.322	19.167	11.857	0.952	119
	12189LAG6	40	44	0.634	BURLINGTON NORTHN SANTA FE C	4.950	09/15/2041	A3	A3	A+	4.268	22.500	14.134	1.314	110
	038222AG0	40	48	0.691	APPLIED MATLS INC	5.850	06/15/2041	A3	A3	A-	4.552	22.750	13.320	1.230	140
	13645RAQ7	25	29	0.421	CANADIAN PAC RY CO NEW	5.750	01/15/2042	Baa1	Baa1	BBB+	4.640	23.333	13.556	1.276	149
	035242AB2	55	50	0.718	ANHEUSER BUSCH INBEV FIN INC	4.000	01/17/2043	A3	A3	A-	4.710	24.333	14.957	1.515	154
	655844BQ0	35	36	0.512	NORFOLK SOUTHERN CORP	4.450	06/15/2045	Baa1	Baa1	BBB+	4.431	26.250	15.499	1.647	125
	384802AB0	40	42	0.607	GRAINGER W W INC	4.600	06/15/2045	A3	A3	A+	4.341	26.250	15.466	1.640	116
FIN		**1,430**	**1,425**	**20.526**		**3.530**	**7.989**	**A3**	**A3**	**A-**	**3.524**	**7.946**	**6.035**	**0.330**	**-52**
	637417AD8	30	32	0.460	NATIONAL RETAIL PPTYS INC	5.500	10/19/2018	Baa1	Baa1	BBB+	-10.000	0.083	0.082	0.001	-6,000
	61761JB32	60	60	0.864	MORGAN STANLEY	2.800	06/16/2020	Baa1	A3	BBB+	3.272	1.750	1.649	0.018	50
	264411AD1	30	30	0.438	DUKE REALTY CORP	3.875	02/15/2021	Baa1	Baa1	BBB+	3.479	2.250	2.163	-0.013	61
	94974BFR6	70	70	1.006	WELLS FARGO CO MTN BE	3.000	01/22/2021	A3	A2	A-	3.377	2.333	2.210	0.031	54
	00912XAM6	30	31	0.443	AIR LEASE CORP	3.875	04/01/2021	Baa2	N/A	BBB	3.641	2.417	2.292	0.013	79
	0258M0EB1	75	74	1.063	AMERICAN EXPRESS CR CORP MTN	2.250	05/05/2021	A3	A2	A-	3.269	2.583	2.474	0.033	41
	06051GGK9	45	44	0.638	BANK AMER CORP FXFLT	2.881	04/24/2022	A3	A3	A-	3.714	3.583	3.320	0.068	81
	064159KD7	70	67	0.971	BANK OF NOVA SCOTIA	2.450	09/19/2022	A1	Aa2	A+	3.463	4.000	3.752	0.084	54
	12572QAE5	30	30	0.427	CME GROUP INC	3.000	09/15/2022	Aa3	Aa3	AA-	3.380	4.000	3.709	0.083	46
	828807DD6	75	73	1.051	SIMON PPTY GROUP LP	2.750	06/01/2023	A2	A2	A	3.597	4.667	4.277	0.085	64
	001055AL6	70	71	1.021	AFLAC INC	3.625	06/15/2023	A3	A3	A-	3.574	4.750	4.267	0.109	62
	59523UAA5	25	26	0.371	MID-AMERICA APTS LP	4.300	10/15/2023	Baa1	Baa1	BBB+	4.046	4.833	4.327	0.070	107
	313747AU1	55	56	0.800	FEDERAL REALTY INVT TR	3.950	01/15/2024	A3	A3	A-	3.900	5.083	4.624	0.084	92

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Portfolio Position Report

Portfolio: CITY OF CREVE C 8016 | **Currency: USD**
Pricing Date: 09/28/2018
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Sector 1	CUSIP9	Par (000)	Mkt Val (000)	% Held (MV)	Issuer Name	Coupon	Maturity	Quality	Mdys	S&P	YTM	Avg Life	Eff Dur	Conv (Par)	OAS
	42217KBC9	25	26	0.369	HEALTH CARE REIT INC	4.500	01/15/2024	Baa1	Baa1	BBB+	4.142	5.083	4.540	0.082	115
	929089AD2	35	33	0.479	VOYA FINL INC	3.125	07/15/2024	Baa2	Baa2	BBB	4.235	5.833	5.187	0.145	125
	38141GWQ3	50	49	0.700	GOLDMAN SACHS GROUP IN FXFLT	3.272	09/29/2024	Baa1	A3	BBB+	4.116	6.000	5.303	0.166	113
	14040HBT1	35	34	0.487	CAPITAL ONE FINL CORP	3.300	10/30/2024	Baa2	Baa1	BBB	4.201	6.083	5.367	0.162	121
	69349LAQ1	55	57	0.820	PNC BK N A PITTSBURGH PA	4.200	11/01/2025	A3	A3	A-	3.912	7.000	5.986	0.202	90
	665859AP9	55	57	0.818	NORTHERN TR CORP	3.950	10/30/2025	A2	A2	A	3.695	7.083	6.072	0.219	68
	59156RBQ0	55	56	0.800	METLIFE INC	3.600	11/13/2025	A3	A3	A-	3.665	7.167	6.091	0.183	64
	426767AA7	60	59	0.845	HENRY J KAISER FAMILY FNDTN	3.356	12/01/2025	Aaa	N/A	AAA	3.897	7.167	6.253	0.229	88
	91159HHM5	70	67	0.967	U S BANCORP MTNS BK ENT	3.100	04/27/2026	A3	A1	A-	3.937	7.583	6.577	0.245	92
	756109AS3	30	28	0.401	REALTY INCOME CORP	3.000	01/15/2027	A3	A3	A-	4.127	8.333	7.168	0.279	110
	74340XBH3	70	70	1.014	PROLOGIS	3.875	09/15/2028	A3	A3	A-	3.829	9.750	8.152	0.361	77
	172967KU4	30	29	0.421	CITIGROUP INC	4.125	07/25/2028	Baa3	Baa3	BBB	4.556	9.833	7.936	0.375	151
	46625HHV5	55	64	0.925	JPMORGAN CHASE & CO	5.500	10/15/2040	A3	A3	A-	4.476	22.083	13.205	1.202	133
	026874DA2	30	29	0.412	AMERICAN INTL GROUP INC	4.500	07/16/2044	Baa1	Baa1	BBB+	4.885	25.833	14.824	1.515	171
	743315AQ6	55	50	0.718	PROGRESSIVE CORP OHIO	3.700	01/26/2045	A2	A2	A	4.346	26.333	16.263	1.783	117
	89417EAK5	55	55	0.799	TRAVELERS COMPANIES INC	4.300	08/25/2045	A2	A2	A	4.272	26.417	15.966	1.721	109
UTIL		**475**	**484**	**6.972**		**3.558**	**12.939**	**A1**	**Aa3**	**A+**	**3.864**	**12.828**	**8.489**	**0.649**	**83**
	637432MU6	70	70	1.002	NATIONAL RURAL UTILS COOP FI	2.350	06/15/2020	A2	A1	A	3.118	1.750	1.647	0.012	34
	26444GAB9	60	57	0.826	DUKE ENERGY FLA PROJ FIN LL	1.731	09/01/2024	Aaa	Aaa	AAA	3.339	3.000	2.879	0.059	45
	68233JAZ7	75	73	1.053	ONCOR ELEC DELIVERY CO LLC	2.950	04/01/2025	A2	A2	A+	3.644	6.500	5.735	0.164	64
	341081FM4	75	74	1.060	FLORIDA PWR & LT CO	3.125	12/01/2025	A2	Aa2	A	3.592	7.167	6.195	0.158	57
	665772CB3	45	57	0.819	NORTHN STS PWR CO MINN	6.250	06/01/2036	A2	Aa3	A	4.271	17.667	11.354	0.858	115
	842400FZ1	50	53	0.764	SOUTHERN CALIF EDISON CO	4.650	10/01/2043	A2	A1	A	4.395	24.500	14.682	1.472	122
	595620AL9	50	54	0.781	MIDAMERICAN ENERGY CO	4.800	09/15/2043	A1	Aa2	A+	4.259	24.500	14.968	1.497	108
	89566EAK4	50	46	0.666	TRI-STATE GENERATION &TRANSM	4.250	06/01/2046	A3	A3	A	4.841	27.667	15.519	1.691	166
PASS		**242**	**241**	**3.470**		**3.436**	**6.002**	**Aa1**	**Aaa**	**AA+**	**3.490**	**6.002**	**4.418**	**-0.364**	**39**
	31402RGM5	4	4	0.060	FNMA POOL - 735604	5.000	06/01/2020	Aa1	AGY	AGY	-0.495	0.583	0.587	0.004	-304
	3138X6NG6	33	32	0.460	FNMA POOL - AU6690	2.500	09/01/2028	Aa1	AGY	AGY	3.457	3.833	3.519	0.032	50
	3138EPA46	29	28	0.408	FNMA POOL - AL6326	2.500	01/01/2030	Aa1	AGY	AGY	3.204	3.917	3.585	0.003	24
	3140Q87E9	69	72	1.034	FNMA POOL - CA1792	4.500	03/01/2038	Aa1	AGY	AGY	3.681	5.500	3.017	-0.874	49
	3132J7YK2	57	55	0.795	FHLMC GOLD POOL - Q16613	3.000	03/01/2043	Aa1	AGY	AGY	3.541	7.667	6.146	-0.068	43
	3138WD2G5	50	50	0.714	FNMA POOL - AS4374	3.500	02/01/2045	Aa1	AGY	AGY	3.675	7.917	5.898	-0.451	51
CMO		**397**	**387**	**5.582**		**3.050**	**6.381**	**Aa1**	**Aaa**	**AA+**	**3.619**	**6.381**	**5.218**	**-0.751**	**43**
	3136AY3N1	94	93	1.339	FNMA 2017-099- PA	3.000	10/25/2042	Aa1	AGY	AGY	3.354	3.667	3.479	-0.601	25
	3136AMQD4	40	38	0.548	FNMA 2015-002- PA	2.250	03/25/2044	Aa1	AGY	AGY	3.523	4.500	5.103	-0.480	33
	3137B6B34	22	21	0.308	FHLMC 4272- DG	3.000	04/15/2043	Aa1	AGY	AGY	3.722	4.833	4.546	-0.748	54
	3136A9KS6	55	50	0.720	FNMA 2012-114- ND	2.000	10/25/2041	Aa1	AGY	AGY	3.850	5.917	6.052	-0.116	69
	3136AQ5Y2	46	44	0.640	FNMA 2016-009- D	3.000	03/25/2046	Aa1	AGY	AGY	3.587	7.417	6.293	-0.169	41
	3136B0PC4	70	70	1.005	FNMA 2017-110- A	3.500	03/25/2038	Aa1	AGY	AGY	3.584	8.167	5.621	-1.043	34
	3137FHKZ5	70	71	1.022	FHLMC 4823- VE	4.000	01/15/2036	Aa1	AGY	AGY	3.878	9.333	6.105	-1.620	60
ABS		**57**	**56**	**0.810**		**2.978**	**5.188**	**N/A**	**N/A**	**N/A**	**3.172**	**5.188**	**2.951**	**0.032**	**55**

a

Portfolio Position Report

Portfolio: CITY OF CREVE C 8016
Pricing Date: 09/28/2018
Representative:

Currency: USD

Sector 1	CUSIP9	Par (000)	Mkt Val (000)	% Held (MV)	Issuer Name	Coupon	Maturity	Quality	Mdys	S&P	YTM	Avg Life	Eff Dur	Conv (Par)	OAS
	45254NQR1	21	21	0.299	IMPAC CMB TR 2005-006- 2A2	3.016	10/25/2035	N/A	N/A	NR	3.325	5.083	0.020	0.055	69
	45254NLP0	36	35	0.511	IMPAC SEC 2004-010- 4A1(U)	2.956	03/25/2035	N/A	N/A	NR	3.082	5.250	4.669	0.019	47
CMBS		**490**	**491**	**7.069**		**3.008**	**0.854**	**Aaa**	**Aaa**	**AAA**	**2.931**	**0.854**	**0.865**	**0.009**	**21**
	92938GAB4	6	6	0.087	WFRBS CMBS 2013-C17- A2	2.921	12/17/2046	Aaa	Aaa	N/A	2.751	0.167	0.169	0.002	-28
	36252RAF6	3	3	0.043	GS MTG SEC 2014-GC18- A2	2.924	01/10/2047	Aaa	Aaa	N/A	2.679	0.167	0.180	0.002	-4
	17321RAB2	32	32	0.462	CITIGROUP 2013-GC17- A2	2.962	11/10/2046	Aaa	Aaa	N/A	2.744	0.167	0.159	0.001	-5
	92938JAB8	23	23	0.332	WFRBS CMBS 2013-UBS1- A2	2.927	03/15/2046	Aaa	Aaa	AAA	2.659	0.167	0.233	0.002	-13
	12626LAB8	50	50	0.722	COMM 2013-CCRE11- A2	3.047	08/10/2050	Aaa	Aaa	N/A	2.765	0.333	0.393	0.004	22
	12591TAB2	55	55	0.794	COMM 2014-LC15- A2	2.840	04/12/2047	Aaa	Aaa	N/A	2.786	0.417	0.462	0.005	28
	12591RAX8	42	42	0.606	COMM 2014-CCRE15- A2	2.928	02/10/2047	Aaa	Aaa	N/A	2.793	0.417	0.423	0.005	18
	12591QAM4	54	54	0.780	COMM MTG TR 2014-UBS4- A2	2.963	08/12/2047	Aaa	Aaa	N/A	2.857	0.667	0.719	0.006	22
	61763XAB2	52	52	0.751	MS BOA ML 2014-C18- A2	3.194	10/15/2047	Aaa	Aaa	N/A	2.994	0.917	0.946	0.007	21
	46643TAZ5	53	53	0.764	JPMBB 2014-C26- A2	3.019	01/17/2048	Aaa	Aaa	N/A	3.045	1.083	1.104	0.009	24
	12593FBA1	60	60	0.864	COMM MTG TR 2015-LC21- A2	2.976	07/10/2048	Aaa	Aaa	N/A	3.143	1.583	1.511	0.015	34
	12635RAV0	60	60	0.864	CSAIL 2015-C4- A2	3.157	11/15/2048	Aaa	Aaa	N/A	3.233	1.917	1.867	0.022	35
MUNI		**70**	**63**	**0.903**		**2.750**	**14.682**	**Aa3**	**Aa3**	**AA**	**3.762**	**14.667**	**11.938**	**0.723**	**83**
	76804ADA0	70	63	0.903	RIVER CITY INC KY PKG AUTH	2.750	12/01/2033	Aa3	Aa3	AA	3.762	14.667	11.938	0.723	83
Total:		**6,891**	**6,942**	**100.000**		**3.439**	**7.722**	**A1**	**A1**	**A+**	**3.557**	**7.622**	**5.762**	**0.237**	**37**

Attachment: Commerce Report (Commerce Report)

Portfolio Holdings - As of September 30, 2018

	Ticker	% of Portfolio	Quantity	Price	Market Value	Unit Cost	Total Cost	Est. Ann. Income	Yi
Cash Equivalents									
Cash Equivalents									
CASH SETTLED PENDING FROM TRADES		-1.02%	-71,627	1.00	-$71,627	0.00	-$71,627	$0	0.0
FINANCIAL SQUARE TR GOVERNMENT INSTITUTIONAL CLASS FD #465	FGTXX	5.70%	401,004	1.00	$401,004	1.00	$401,004	$8,259	2.0
Total for Cash Equivalents		**4.68%**			**$329,376**		**$329,376**	**$8,259**	**2.5**
TOTAL FOR CASH EQUIVALENTS		**4.68%**			**$329,376**		**$329,376**	**$8,259**	**2.51**
Fixed Income Investments									
Asset Backed Securities									
WFRBS 2013-UBS1 CL A2 2.927% 3/15/46		0.32%	22,590	99.94	$22,577	103.00	$23,268	$661	2.9
COMM 2013-CR11 CL A2 3.047% 10/10/46		0.71%	50,000	100.03	$50,016	103.00	$51,498	$1,524	3.0
CGCMT 2013-GC17 A2 2.962% 11/10/46		0.45%	31,670	99.96	$31,657	103.00	$32,620	$938	2.9
WFRBS 2013-C17 CL A2 2.921% 12/15/46		0.09%	6,222	99.93	$6,218	103.00	$6,409	$182	2.9
GSMS 2014-GC18 CL A2 2.924% 1/10/47		0.05%	3,208	99.97	$3,206	103.00	$3,304	$94	2.9
COMM 2014-CR15 CL A2 2.928% 2/10/47		0.60%	42,316	99.99	$42,311	103.00	$43,585	$1,239	2.9
COMM 2014-LC15 CL A2 2.84% 4/10/47		0.78%	55,000	99.98	$54,986	103.00	$56,649	$1,562	2.8
COMM 2014-UBS4 CL A2 2.963% 8/10/47		0.76%	53,780	100.03	$53,795	103.00	$55,391	$1,593	2.9
MSBAM 2014-C18 CL A2 3.194% 10/15/47		0.74%	52,294	100.08	$52,334	103.00	$53,861	$1,670	3.2
JPMBB 2014-C26 CL A2 3.0185% 1/15/48		0.75%	52,688	99.89	$52,631	103.00	$54,269	$1,590	3.0
COMM 2015-LC21 CL A2 2.976% 7/10/48		0.85%	60,000	99.70	$59,823	103.00	$61,798	$1,786	3.0
CSAIL 2015-C4 CL A2 3.1567% 11/11/48		0.85%	60,000	99.78	$59,865	103.00	$61,800	$1,894	2.5
Total for Asset Backed Securities		**6.96%**			**$489,419**		**$504,451**	**$14,733**	**2.9**
Credit									
AVERY DENNISON NT 5.375% 4/15/20		0.44%	30,000	102.46	$30,739	108.99	$32,696	$1,613	3.7
NATIONAL RURAL UTIL NT 2.35% 6/15/20		0.98%	70,000	98.73	$69,108	98.48	$68,938	$1,645	3.1
MORGAN STANLEY NT 2.8% 6/16/20		0.85%	60,000	99.22	$59,529	99.88	$59,928	$1,680	3.2

Bond Yield is Market Yi

Portfolio Holdings - As of September 30, 2018

	Ticker	% of Portfolio	Quantity	Price	Market Value	Unit Cost	Total Cost	Est. Ann. Income	Yi
DIAGEO CAPITAL PLC NT 4.828% 7/15/20		0.73%	50,000	102.95	$51,476	111.54	$55,771	$2,414	3.12
ASTRAZENECA NT 2.375% 11/16/20		0.84%	60,000	98.47	$59,083	102.39	$61,436	$1,425	3.12
PACKAGING NT 2.45% 12/15/20		0.56%	40,000	98.06	$39,222	99.89	$39,957	$980	3.37
WELLS FARGO CO NT 3% 1/22/21		0.99%	70,000	99.16	$69,415	99.83	$69,882	$2,100	3.38
DUKE REALTY NT 3.875% 2/15/21		0.43%	30,000	100.89	$30,268	99.75	$29,924	$1,163	3.45
KINDER MORGAN NT 3.5% 3/1/21		0.43%	30,000	100.29	$30,086	99.49	$29,848	$1,050	3.37
AIR LEASE CORP NT 3.875% 4/1/21		0.43%	30,000	100.56	$30,167	99.80	$29,941	$1,163	3.63
NBCUNIVERSAL MEDIA NT 4.375% 4/1/21		0.80%	55,000	102.45	$56,349	111.69	$61,427	$2,406	3.35
HORMEL FOODS CORP NT 4.125% 4/15/21		0.80%	55,000	102.08	$56,146	108.85	$59,869	$2,269	3.27
AMERICAN EXPRESS NT 2.25% 5/5/21		1.04%	75,000	97.48	$73,106	100.10	$75,072	$1,688	3.27
NATL RETAIL PPTY NT 5.5% 7/15/21		0.45%	30,000	105.41	$31,623	113.38	$34,015	$1,650	3.27
INTEL CORP NT 3.3% 10/1/21		0.79%	55,000	100.53	$55,290	101.97	$56,082	$1,815	3.12
AIR PROD & CHEMICALS NT 3% 11/3/21		0.78%	55,000	99.40	$54,672	100.08	$55,044	$1,650	3.20
ABB FINANCE USA NT 2.875% 5/8/22		0.98%	70,000	98.14	$68,701	102.85	$71,995	$2,013	3.43
TRANSCANADA PIPE NT 2.5% 8/1/22		0.95%	70,000	95.97	$67,176	100.38	$70,266	$1,750	3.63
DUKE ENERGY FL NT 1.731% 9/1/22		0.82%	60,000	96.70	$58,020	100.00	$59,999	$1,039	2.62
CME GROUP INC NT 3% 9/15/22		0.42%	30,000	98.60	$29,580	98.95	$29,684	$900	3.38
BANK OF NOVA SCOTIA NT 2.45% 9/19/22		0.96%	70,000	96.27	$67,388	99.55	$69,686	$1,715	3.46
AMERICAN HONDA NT 2.6% 11/16/22		1.03%	75,000	96.96	$72,723	100.00	$75,000	$1,950	3.39
VISA INC NT 2.8% 12/14/22		0.77%	55,000	98.02	$53,908	99.86	$54,924	$1,540	3.31
MCDONALDS CORP NT 3.35% 4/1/23		0.56%	40,000	99.15	$39,660	99.66	$39,863	$1,340	3.56
BANK OF AMERICA NT V/R 4/24/23		0.62%	45,000	97.24	$43,757	100.00	$45,000	$1,296	3.54
SIMON PPTY NT 2.75% 6/1/23		1.03%	75,000	96.38	$72,287	99.82	$74,864	$2,063	3.60
AFLAC INC NT 3.625% 6/15/23		1.00%	70,000	100.22	$70,151	104.99	$73,493	$2,538	3.57
TOTAL CAP CANADA NT 2.75% 7/15/23		0.83%	60,000	96.76	$58,055	98.33	$58,999	$1,650	3.49
HOWARD HUGHES MEDICAL NT 3.5% 9/1/23		0.79%	55,000	100.67	$55,370	100.84	$55,461	$1,925	3.35
21ST CENTURY FOX NT 4% 10/1/23		0.43%	30,000	101.82	$30,547	99.40	$29,819	$1,200	3.60
MID AMERICA APT LP NT 4.3% 10/15/23		0.36%	25,000	101.15	$25,287	99.05	$24,762	$1,075	4.04

Bond Yield is Market Yi

Portfolio Holdings - As of September 30, 2018

	Ticker	% of Portfolio	Quantity	Price	Market Value	Unit Cost	Total Cost	Est. Ann. Income	Yi
MOSAIC CO NT 4.25% 11/15/23		0.36%	25,000	101.03	$25,257	99.79	$24,948	$1,063	4.0
LA LAND & EXPL DEB 7.65% 12/01/23		0.74%	45,000	115.55	$51,998	129.94	$58,473	$3,443	4.2
FEDERAL REALTY NT 3.95% 1/15/24		0.78%	55,000	100.23	$55,128	99.02	$54,460	$2,173	3.9
HEALTH CARE REIT NT 4.5% 1/15/24		0.36%	25,000	101.68	$25,421	98.96	$24,740	$1,125	4.1
SPECTRA ENERGY NT 4.75% 3/15/24		0.44%	30,000	103.34	$31,002	99.77	$29,930	$1,425	4.0
GENERAL MOTORS FIN NT 3.95% 4/13/24		0.48%	35,000	97.26	$34,039	99.83	$34,941	$1,383	4.5
VOYA FINL NT 3.125% 7/15/24		0.47%	35,000	94.34	$33,020	99.70	$34,895	$1,094	4.2
LOWES COS INC NT 3.125% 9/15/24		0.76%	55,000	97.80	$53,792	97.79	$53,786	$1,719	3.5
CAPITAL ONE FIN NT 3.3% 10/30/24		0.47%	35,000	95.20	$33,320	99.71	$34,898	$1,155	4.2
AUTONATION INC NT V/R 11/15/24		0.47%	35,000	94.75	$33,163	99.88	$34,957	$1,225	4.4
ORACLE CORP NT 2.95% 11/15/24		0.96%	70,000	96.58	$67,607	99.84	$69,889	$2,065	3.5
UNITED PARCEL SVC NT 2.8% 11/15/24		1.36%	100,000	95.97	$95,965	99.65	$99,647	$2,800	3.5
PRAXAIR INC NT 2.65% 2/5/25		0.94%	70,000	94.63	$66,243	100.09	$70,065	$1,855	3.6
QUEST DIAGNOSTICS NT 3.5% 3/30/25		0.55%	40,000	96.42	$38,569	101.43	$40,571	$1,400	4.1
ONCOR ELEC NT 2.95% 4/1/25		1.02%	75,000	96.01	$72,007	95.39	$71,544	$2,213	3.6
KONINKLIJKE PHILIPS NT 7.75% 5/15/25		0.51%	30,000	120.60	$36,180	127.27	$38,180	$2,325	4.1
GOLDMAN SACHS NT V/R 9/29/25		0.68%	50,000	95.55	$47,775	100.00	$50,000	$1,636	4.0
NORTHERN TR CORP NT 3.95% 10/30/25		0.79%	55,000	101.58	$55,867	100.35	$55,194	$2,173	3.7
PNC BANK NA NT 4.2% 11/1/25		0.80%	55,000	101.77	$55,971	99.97	$54,984	$2,310	3.9
METLIFE NT 3.6% 11/13/25		0.78%	55,000	99.59	$54,777	99.99	$54,996	$1,980	3.6
FL PWR & LIGHT NT 3.125% 12/1/25		1.03%	75,000	97.06	$72,798	102.13	$76,595	$2,344	3.5
HENRY J KAISER FMY NT 3.356% 12/1/25		0.82%	60,000	96.64	$57,982	100.00	$60,000	$2,014	3.9
VALSPAR CORP NT 3.95% 1/15/26		0.42%	30,000	99.00	$29,700	99.56	$29,868	$1,185	4.1
US BANCORP NT 3.1% 4/27/26		0.94%	70,000	94.56	$66,189	99.66	$69,763	$2,170	3.9
ILLINOIS TOOL NT 2.65% 11/15/26		0.79%	60,000	92.48	$55,487	99.69	$59,811	$1,590	3.7
REALTY INCOME NT 3% 1/15/27		0.39%	30,000	92.15	$27,644	98.67	$29,601	$900	4.1
BP CAPITAL MARKETS NT 3.279% 9/19/27		1.36%	100,000	95.66	$95,656	100.00	$100,000	$3,279	3.8
EDWARDS LIFESCIENCES NT 4.3% 6/15/28		0.57%	40,000	99.95	$39,980	99.77	$39,907	$1,720	4.3

Bond Yield is Market Yi

Portfolio Holdings - As of September 30, 2018

	Ticker	% of Portfolio	Quantity	Price	Market Value	Unit Cost	Total Cost	Est. Ann. Income	Yie
SANOFI NT 3.625% 6/19/28		1.41%	100,000	99.08	$99,084	99.27	$99,270	$3,625	0.00
CITIGROUP INC NT 4.125% 7/25/28		0.41%	30,000	96.61	$28,984	99.69	$29,907	$1,238	4.56
PROLOGIS LP NT 3.875% 9/15/28		1.00%	70,000	100.38	$70,263	99.32	$69,524	$2,713	3.83
CBS/VIACOM CORP NT 7.875% 7/30/30		0.44%	25,000	124.98	$31,244	134.73	$33,684	$1,969	5.05
AT&T CORP NT V/R 11/15/31		0.92%	50,000	129.23	$64,615	136.21	$68,107	$4,125	5.16
BOEING CO NT 8.625% 11/15/31		0.73%	36,000	141.80	$51,049	146.71	$52,815	$3,105	4.40
VALERO ENERGY NT 7.5% 4/15/32		0.45%	25,000	127.35	$31,838	129.76	$32,440	$1,875	4.74
LUBRIZOL CORP NT 6.5% 10/1/34		0.81%	45,000	127.40	$57,330	133.57	$60,108	$2,925	4.14
TRUSTEES OF UN CLG NT 4.877% 7/7/35		0.87%	60,000	102.03	$61,220	100.00	$60,000	$2,926	4.70
NORTHERN STATES PWR NT 6.25% 6/1/36		0.80%	45,000	124.38	$55,969	139.54	$62,791	$2,813	4.27
TYCO ELECTRONICS NT 7.125% 10/1/37		0.47%	25,000	132.78	$33,195	136.19	$34,048	$1,781	4.32
CANADIAN NATL NT 6.375% 11/15/37		0.90%	50,000	126.54	$63,270	129.58	$64,791	$3,188	4.32
JPMORGAN CHASE NT 5.5% 10/15/40		0.89%	55,000	114.26	$62,844	107.34	$59,034	$3,025	4.48
APPLIED MATERIALS NT 5.85% 6/15/41		0.67%	40,000	118.26	$47,302	120.39	$48,156	$2,340	4.55
BURLINGTON NORTH NT 4.95% 9/15/41		0.63%	40,000	109.92	$43,968	104.25	$41,701	$1,980	4.26
CANADIAN PAC RR NT 5.75% 1/15/42		0.41%	25,000	115.70	$28,925	124.17	$31,042	$1,438	4.64
ANHEUSER-BUSCH NT 4% 1/17/43		0.70%	55,000	89.78	$49,380	89.98	$49,488	$2,200	4.71
MIDAMERICAN ENERGY NT 4.8% 9/15/43		0.77%	50,000	108.26	$54,129	99.53	$49,764	$2,400	4.25
SOUTHERN CAL EDISON NT 4.65% 10/1/43		0.74%	50,000	103.85	$51,925	99.51	$49,756	$2,325	4.39
AMERICAN INTL GRP NT 4.5% 7/16/44		0.40%	30,000	94.38	$28,313	99.40	$29,819	$1,350	4.89
PROGRESSIVE CORP NT 3.7% 1/26/45		0.70%	55,000	89.92	$49,457	98.05	$53,926	$2,035	4.35
NORFOLK SOUTHERN NT 4.45% 6/15/45		0.50%	35,000	100.29	$35,101	107.85	$37,747	$1,558	4.43
WW GRAINGER NT 4.6% 6/15/45		0.59%	40,000	104.06	$41,624	109.64	$43,855	$1,840	4.34
TRAVELERS COS INC NT 4.3% 8/25/45		0.79%	55,000	100.44	$55,240	99.22	$54,569	$2,365	4.27
TRI-STATE GENERATION NT 4.25% 6/1/46		0.65%	50,000	91.04	$45,520	98.31	$49,157	$2,125	4.84
Total for Credit		**60.60%**			**$4,263,206**		**$4,375,780**	**$161,723**	**3.75**

Mortgage

Bond Yield is Market Yi

Commerce Trust Company
Wealth | Investments | Planning

Portfolio Holdings - As of September 30, 2018

	Ticker	% of Portfolio	Quantity	Price	Market Value	Unit Cost	Total Cost	Est. Ann. Income	Yi
MASTR 2003-12 CL 5A1 4.5% 12/25/18		0.00%	184	99.78	$184	102.56	$189	$8	3.9
GSR 2004-2F CL 12A1 4.5% 9/25/19		0.00%	252	99.93	$252	101.63	$256	$11	4.1
FNMA POOL # 735604 5% 6/1/20		0.06%	4,125	103.02	$4,250	106.47	$4,392	$206	3.1
FNMA POOL # AL6326 2.5% 8/1/28		0.41%	29,414	97.37	$28,641	102.00	$30,002	$735	2.8
FNMA POOL # AU6690 2.5% 9/1/28		0.45%	32,629	96.58	$31,511	102.25	$33,363	$816	2.9
IMM 2004-10 CL 4A1 V/R 3/25/35		0.51%	36,324	98.49	$35,774	98.00	$35,597	$1,073	0.9
IMM 2005-6 CL 2A2 V/R 10/25/35		0.29%	20,781	98.96	$20,565	95.50	$19,846	$575	1.2
FHR 4823 CL VE 4% 1/15/36		1.01%	70,000	101.04	$70,730	100.75	$70,525	$2,800	3.9
FNMA POOL # CA1792 4.5% 3/1/38		1.02%	69,122	103.66	$71,653	103.63	$71,627	$3,110	4.2
FNR 2017-110 CL A 3.5% 3/25/38		0.99%	69,745	99.38	$69,309	102.66	$71,597	$2,441	3.5
FNR 2012-114 CL ND 2% 10/25/41		0.71%	54,787	90.75	$49,716	95.00	$52,048	$1,096	2.5
FNR 2017-99 CL PA 3% 10/25/42		1.32%	94,203	98.68	$92,958	101.14	$95,278	$2,826	3.0
FHLMC POOL # Q16613 3% 3/1/43		0.79%	57,354	96.64	$55,427	101.36	$58,133	$1,721	3.2
FHR 4272 CL DG 3% 4/15/43		0.31%	22,332	96.95	$21,652	101.75	$22,723	$670	3.1
FNR 2015-2 CL PA 2.25% 3/25/44		0.53%	39,589	94.86	$37,553	101.23	$40,077	$891	2.5
FNMA POOL #AS4374 3.5% 2/1/45		0.70%	49,637	98.83	$49,058	103.05	$51,149	$1,737	3.5
FNR 2016-9 CL D 3% 3/25/46		0.63%	45,959	96.41	$44,307	103.16	$47,410	$1,379	3.2
Total for Mortgage		**9.72%**			**$683,539**		**$704,213**	**$22,097**	**3.1**
Tax Exempt Revenue									
RIVER CITY INC KY 2.75% 12/1/33		0.88%	70,000	88.66	$62,061	84.73	$59,312	$1,925	3.7
Total for Tax Exempt Revenue		**0.88%**			**$62,061**		**$59,312**	**$1,925**	**3.7**
Taxable Muni Bonds									
CINCINNATI OH SD TXBL 2.05% 12/15/19		0.84%	60,000	98.90	$59,341	100.00	$60,000	$1,230	2.9
UNIV OF N TX TXBL 2.303% 4/15/21		1.04%	75,000	97.93	$73,444	100.00	$75,000	$1,727	3.1
MONTGOMERY CO VA TXBL 3.350% 6/1/21		0.78%	55,000	100.29	$55,158	100.00	$55,000	$1,843	3.2
TX ST TXBL GO 2.315% 10/1/21		0.84%	60,000	97.98	$58,790	100.00	$60,000	$1,389	3.0
IN BD BK TXBL 2.263% 2/1/22		1.03%	75,000	96.38	$72,283	100.00	$75,000	$1,697	3.4

Bond Yield is Market Yi

Commerce Trust Company
Wealth | Investments | Planning

Portfolio Holdings - As of September 30, 2018

	Ticker	% of Portfolio	Quantity	Price	Market Value	Unit Cost	Total Cost	Est. Ann. Income	Yie
NEW YORK CITY NY TXBL 3.467% 11/1/23		1.06%	75,000	99.69	$74,766	100.00	$75,000	$2,600	3.53
ANCHORAGE AK TXBL COPS 3.058% 7/1/24		1.04%	75,000	97.35	$73,010	100.00	$75,000	$2,294	3.57
CT ST TXBL GO 3.693% 9/15/24		0.91%	65,000	98.91	$64,289	100.00	$65,000	$2,400	3.90
PALM BEACH CO FL TXBL 4% 11/1/25		0.79%	55,000	101.66	$55,915	98.89	$54,390	$2,200	3.73
IN ST TXBL UNIV 3.3% 2/1/26		1.02%	75,000	95.81	$71,856	100.00	$75,000	$2,475	3.96
MINNEAPOLIS MN TXBL GO 4.379% 3/1/34		0.74%	50,000	104.65	$52,323	100.00	$50,000	$2,190	3.97
Total for Taxable Muni Bonds		**10.11%**			**$711,175**		**$719,390**	**$22,045**	**3.50**
Treasury									
US TREASURY NT 1.375% 8/31/23		1.98%	150,000	92.83	$139,242	94.19	$141,287	$2,063	2.95
US TREASURY NT 2.25% 1/31/24		1.37%	100,000	96.47	$96,473	100.26	$100,258	$2,250	2.97
US TREASURY NT 1.625% 2/15/26		1.94%	150,000	90.76	$136,143	92.79	$139,190	$2,438	3.03
US TREASURY BOND 2.75% 8/15/42		0.92%	70,000	92.64	$64,845	93.98	$65,789	$1,925	3.19
US TREASURY BOND 3.125% 8/15/44		0.84%	60,000	98.77	$59,262	112.42	$67,451	$1,875	3.20
Total for Treasury		**7.05%**			**$495,965**		**$513,974**	**$10,550**	**3.04**
TOTAL FOR FIXED INCOME INVESTMENTS		**95.32%**			**$6,705,364**		**$6,877,119**	**$233,072**	**3.55**
Grand Total		**100.00%**			**$7,034,740**		**$7,206,496**	**$241,331**	**3.50**

Attachment: Commerce Report (Commerce Report)

Employee Pension Board of Trustees
City of Creve Coeur
Creve Coeur, MO 63141

Meeting: 10/23/18 05:30 PM
Department: Employee Pension Board of Trustees
Category: Report
Prepared By: Christy Williams
Department Head: Christy Williams

SCHEDULED

STAFF REPORT

Fiduciary Advisors Report

Actuarial Valuation as of July 1, 2018

Retirement Plan for Employees of

the City of Creve Coeur

Actuarial Valuation as of July 1, 2018

Presented by
The St. Louis Office of
Milliman, Inc.

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St. Louis, Missouri 63102

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Tel +1 314 231.3031
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October 8, 2018

Board of Trustees
Retirement Plan
City of Creve Coeur
300 N. New Ballas Road
St. Louis, Missouri 63141

RE: July 1, 2018 Actuarial Valuation Results

Dear Members of the Board:

As requested, we performed an actuarial valuation of the Retirement Plan for Employees of the City of Creve Coeur as of July 1, 2018, for the Plan Year ending June 30, 2019. Our findings are set forth in this actuary's report. This report reflects the benefit provisions in effect as of July 1, 2018.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the Plan's Administrative Staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the Plan have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the Plan and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the Plan. Further, in our opinion, each actuarial assumption used is reasonably related to the experience of the Plan and to reasonable expectations which, in combination, represent our best estimate of anticipated experience under the Plan.

This valuation report is only an estimate of the Plan's financial condition as of a single date. It can neither predict the Plan's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of Plan benefits, only the timing of Plan contributions. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. The City has the final decision regarding the appropriateness of the assumptions and adopted them as presented in this report.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the Fund. The calculations in the enclosed report have been made on a basis consistent with our understanding of the Fund's funding requirements and goals. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

Milliman's work is prepared solely for the internal business use of the City of Creve Coeur and its employees (for their use in administering the Plan). To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exception(s):

(a) The System may provide a copy of Milliman's work, in its entirety, to the System's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the System.

(b) The System may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

October 8, 2018
Board of Trustees

The signing actuaries are independent of the City. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

We respectfully submit the following report, and we look forward to discussing it with you.

Sincerely,

Michael J. Zwiener, FSA
Consulting Actuary

MJZ/dmm

Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Contents

Retirement Plan for Employees of
the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Introduction and Purpose

In this report, we present the results of the July 1, 2018 actuarial valuation for the Retirement Plan for Employees of the City of Creve Coeur.

PURPOSES OF THE VALUATION

The actuarial valuation of the Plan is intended to accomplish several purposes:

- In general, the determination of current levels of employer contributions which, together with prior funding, will accumulate monies sufficient to meet benefit payments when due under the terms of the Plan;
- review plan experience for the year ended on the valuation date to ascertain whether the assumptions and methods employed for valuation purposes are reflective of actual events and remain appropriate for prospective application; and
- assessment of the relative funded position of the plan on an ongoing basis, i.e., through a comparison of plan assets and projected plan liabilities.

Retirement Plan for Employees of
the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Discussion of Valuation Results

1. Actuarially Determined Contribution

   The results of this valuation are used to actuarially determine contribution amounts to the Fund for the July 1, 2018 – June 30, 2019 fiscal year. A comparison of actuarially determined contribution amounts for the current and immediately preceding valuation are summarized below.

	Actuarial Valuation as of	
	July 1, 2017	July 1, 2018
Actuarially Determined Employer Contribution*	$1,159,936	$1,262,474
Actuarially Determined Employer Contribution**	1,241,132	1,347,691
Actual Employer Contribution	1,188,826	N/A

   * Assuming payment as of first day of plan year
   ** Assuming payment as of last day of plan year

2. Plan Assets

   The market value of plan assets increased from $24,250,103 at July 1, 2017 to $25,729,821 at June 30, 2018. Valuation assets are defined to be actuarial value using an asset smoothing method. The results are presented on page 8. A balance sheet and statement of income and disbursements are presented on pages 6 and 7. Investment income (net of investment expenses) on a market value basis was $1,849,705 for a return of 7.7%. During the prior year, investment return was 11.43%. Contributions to the fund were $1,287,867 and benefit payments were $1,657,854.

   On an actuarial value basis, fund assets are $25,291,347 on July 1, 2018, compared to $24,015,386 on July 1, 2017. Net investment income was $1,645,948 for return of 6.9%. The development of the actuarial value of assets is shown on page 8.

3. Actuarial Assumptions, Methods and Plan Provisions

   The interest discount rate was updated from 7.00% to 6.75% for both the actuarial accrued liability and the actuarial present value of accumulated plan benefits.

All other actuarial assumptions, methods, and Plan provisions remained the same as the prior valuation. Descriptions of all actuarial assumptions, methods, and Plan provisions can be found on pages 11-16.

4. Plan Population

The number of active participants decreased from 46 on July 1, 2017 to 40 on July 1, 2018. The number of retirees/beneficiaries/alternate payees increased from 72 to 78, and the number of deferred vested participants remained at 29.

5. Plan Experience

Plan experience resulted in a small overall experience loss for the plan year ending June 30, 2018, prior to taking into account the assumption changes. The decrease in discount rate from 7.00% to 6.75% increased the Actuarial Accrued Liability by about $793,000.

6. GASB 67/68

Results under GASB 67 and 68 are presented in a separate report.

7. Funded Status

<u>Accrued Benefit Basis</u>

Another measure of a plan's funded status is the relationship of the market value of plan assets to the present value of benefits accrued to date. The amounts for the current and prior year are shown in the following table:

	07/01/2017 $	07/01/2018 $
a) Present Value Vested Accrued Benefits	27,309,910	29,678,099
b) Present Value All Accrued Benefits	27,836,041	30,192,891
c) Market Value of Assets	24,240,103	25,729,821
d) Ratio: (c)/(a)	88.8%	86.7%
e) Ratio: (c)/(b)	87.1%	85.2%

The interest discount utilized for this purpose was 7.00% in 2017 and 6.75% in 2018. The discount rate that is required to value plan liabilities on a settlement basis is typically lower than the "ongoing basis" discount rate. Therefore, these amounts should not be used to assess the plan's funded status on a settlement basis.

Accrued Liability Basis

The most common measure of a public sector plan's funded status is dividing the Plan Assets by the Actuarial Accrued Liability. As of the valuation date, this ratio is 78.83% using Actuarial Value of Assets and 80.20% using the Market Value of Assets.

Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Summary of Valuation Results

	7/1/2017	7/1/2018
Participant Data		
Number of Participants:		
Active participants	46	40
Terminated vested participants	29	29
Retirees and beneficiaries	72	78
Total	147	147
Assets		
Market Value	24,250,103	25,729,821
Investment Yield	11.4%	7.7%
Actuarial Value	24,015,386	25,291,347
Investment Yield	4.5%	6.9%
Actuarial Present Values		
Accrued Liability	30,186,089	32,083,624
- Actuarial Value of Assets	24,015,386	25,291,347
Unfunded Actuarial Liability	6,170,703	6,792,277
Funded Ratio (Market Value Basis)	80.3%	80.2%
Funded Ratio (Actuarial Value Basis)	79.6%	78.8%
Costs and Contributions		
Normal Cost	314,178	291,592
% of Covered Payroll	8.83%	9.04%
Actuarially Determined Contribution	1,159,936	1,262,474
% of Covered Payroll	32.60%	39.15%
Funded Status of Accumulated Benefits		
Present Value of Accrued Benefits	27,836,041	30,192,891
Funded Ratio (Market Value Basis)	87.12%	85.22%
Funded Ratio (Actuarial Value Basis)	86.27%	83.77%

Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Statement of Assets as of June 30, 2018

Assets	Market Value
1. Commerce	$7,201,537
2. Schwab	18,528,284
3. Total Assets	25,729,821
Liabilities	
None	
Net Assets	25,729,821

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Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Statement of Income and Disbursements

1. Market Value of Assets as of June 30, 2017	$24,250,103
2. Income	
a. Employer Contributions	1,188,826
b. Employee Contributions	99,041
c. Net Earnings	1,893,838
d. Total Income	3,181,705
3. Expenses	
a. Employee Benefit Distributions	1,657,854
b. Expenses	44,133
d. Total Expenses	1,701,987
4. Net Increase (Decrease) = (2c) - (3d)	1,479,718
5. Market Value of Assets as of June 30, 2018 = (1) + (4)	25,729,821
6. Net Rate of Return	7.7%

Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Development of Actuarial Value of Assets

1.	Actuarial Value Beginning of Year		$24,015,386
2.	Market Value End of Year		25,729,821
3.	Market Value Beginning of Year		24,250,103
4.	Non-Investment Cash Flows [1]		(369,987)
5.	Investment Income		
	a.	Market Total: (2) - (3) - (4)	1,849,705
	b.	Assumed Rate of Return	7.00%
	c.	Expected Investment Return [2]	1,684,558
	d.	Gain/(Loss): (5a) - (5c)	165,147
6.	Phased-In Recognition of Investment Gains/(Losses)		
	a.	Current Year: (1/3) x (5d)	55,049
	b.	(1/3) of Gain/(Loss) during plan year ending June 30, 2017	328,380
	c.	(1/3) of Gain/(Loss) during plan year ending June 30, 2016	(422,039)
	d.	Phased-In Investment Gain to be Recognized in Future Years	(38,610)
7.	Actuarial Value End of Year:		
		(1) + (4) + (5c) + (6e)	25,291,347
8.	Excess of Market Value over Actuarial Value:		
		(2) - (7)	438,474
9.	Approximate Rate of Return on Actuarial Value		6.9%
10.	Ratio of Actuarial Value of Assets to Market Value of Assets: (7) / (2)		98.3%

[1] Contributions less benefit payments

[2] Assumed Rate times (3) + (4) times Assumed Rate/2

Retirement Plan for Employees of
the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Statement of Accrued Benefits

	July 1, 2017	July 1, 2018
1. Accumulated Plan Benefits		
a. Actuarial Present Value of Vested Benefits		
i. Participants currently receiving payments	$16,014,879	$18,545,877
ii. Active Participants	9,287,367	8,892,656
iii. Deferred Vested Participants	2,007,664	2,239,566
iv. Total Vested Benefits	27,309,910	29,678,099
b. Actuarial Present Value of Non-Vested Benefits	526,131	514,792
c. Total Actuarial Present Value of Accumulated Plan Benefits = (aiv) + (b)	27,836,041	30,192,891
2. Net Assets (Market Value) available for benefits	$24,250,103	$25,729,821
3. Funded Ratio		
a. Vested Benefits = (2) / (1aiv)	88.8%	86.7%
b. Accumulated Benefits = (2) / (1c)	87.1%	85.2%
4. Net Assets (Actuarial Value) available for benefits	$24,015,386	$25,291,347
5. Funded Ratio		
a. Vested Benefits = (4) / (1aiv)	87.9%	85.2%
b. Accumulated Benefits = (4) / (1c)	86.3%	83.8%

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Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Development of Actuarially Determined Contribution

1.	Accrued Liability	
	a. Active Participants	$11,298,181
	b. Terminated Vested Participants	2,239,566
	c. Retired Participants	18,545,877
	d. Total	32,083,624
2.	Actuarial Value of Assets	25,291,347
3.	Covered Payroll	3,224,888
4.	Unfunded Actuarial Liability (UAL)	6,792,277
	a. Outstanding UAL from July 1, 2015	5,346,789
	b. Outstanding UAL after July 1, 2015	1,445,488
5.	Normal Cost:	
	a. Expected Employee Contributions	96,747
	i. As a percentage of Covered Payroll: (5a) / (3)	3.00%
	b. Employer Normal Cost	194,845
	i. As a percentage of Covered Payroll: (5b) / (3)	6.04%
	c. Total Normal Cost: (5a) + (5b)	291,592
6.	10-Year Amortization of UAL from July 1, 2015	921,296
7.	15-Year Amortization of Additional UAL after July 1, 2015	146,333
8.	Employer Cost	
	a. Actuarially Determined Contribution: (4b) + (5) + (6)	1,262,474
	b. Payable as of the end of the plan year: (8a) x 1.0675	1,347,691
	c. As a percentage of Eligible Payroll: (8b) / (3)	39.15%
9.	Funded Ratio: (2) / (1d)	78.83%

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**Retirement Plan for Employees of
the City of Creve Coeur**

July 1, 2018 Actuarial Valuation

Actuarial Methods

Following are brief descriptions of the actuarial cost and asset valuation methods used in the valuation.

Actuarial Cost Method

Entry Age Normal:

The Entry Age Normal Cost Method on an individual basis is used. Normal costs are computed as a level percentage of pay.

The Unfunded Entry Age Accrued Liability as of July 1, 2015 is amortized over a 10 year period. Each year, the amortization period will decrease by 1 until it reaches 0 years as of July 1, 2025. Any subsequent Unfunded Entry Age Accrued Liability is amortized over a 15 year period.

Asset Valuation Method

A three-year smoothed value, with difference between actual investment return and expected investment return recognized in equal installments over a three-year period.

**Retirement Plan for Employees of
the City of Creve Coeur**

July 1, 2018 Actuarial Valuation

Actuarial Assumptions

Following are the primary actuarial assumptions used in performing the valuation.

Interest Rates	6.75% per annum as of July 1, 2018; 7.00% per annum in 2017
Annual Pay Increases	4.00% per year
Mortality	RP-2000 Combined Healthy Table with a 70% Blue Collar adjustment with a fully generational projection of mortality improvement using Scale BB
Turnover	Rates are as follows:

Age	Percentage
25	10%
35	8%
45	4%
55	0%

Rate of Disability	None assumed.
Retirement	Non-Uniformed participants are assumed 60% retirement at their Unreduced Early Retirement Age, if it is prior to their Normal Retirement Age. Retirement rates of 5% are assumed between their Unreduced Early Retirement Age and age 65, at which a retirement rate of 100% is assumed. Uniformed participant retirement rates are as follows:

Age	Percentage
55	60%
55 - 61	5%
62	100%

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Expenses	None assumed.
Marriage	For retired members, actual marital status and spouse birth date is used. For active members, 100% are assumed married with males assumed three years older than their spouses.
Form of Payment	It is assumed that all employees will elect a life annuity with 120 months guaranteed.

**Retirement Plan for Employees of
the City of Creve Coeur**

July 1, 2018 Actuarial Valuation

Summary of Plan Provisions

A summary of the current primary provisions of the Plan are described below. A complete description of the provisions can be found in the local statutes.

Effective Date

Last amended and restated effective July 1, 2013.

Eligibility

Full-time employees enter the Plan on the July 1 on or immediately following their completion of two years of continuous employment and attainment of age 21. No Employees hired after May 23, 2006 may enter the Plan.

Employee Contributions

Participants are required to contribute 3% of salary. Contributions accumulate at an interest rate of 5%.

Credited Service

Elapsed time, in years and completed months, from date of hire..

Final Average Compensation

Average of the high 60 consecutive months in the last 120 months.

Normal Retirement Age

Age 55 for a uniformed participant and age 65 for a non-uniformed participant.

Normal Retirement Benefit

A benefit equal to Final Average Compensation times 1.7% times Credited Service not to exceed 30 years. If a participant elected not to participate in the City's defined contribution plan, then the multiplier would be 2.0%.

Normal Form of Payment

The benefit is payable for 120 months guaranteed and for the member's lifetime, thereafter.

Unreduced Early Retirement Eligibility

The participant will be eligible to retire with an unreduced benefit prior to their Normal Retirement Age when the sum of their age and Credited Service equals 85.

Early Retirement Age

Age 50 with at least 20 years of Credited Service.

Early Retirement Benefit

The actuarial equivalent of a benefit calculated in the same manner as the Normal Retirement Benefit with Final Average Compensation and Credited Service determined as of the Early Retirement Date.

Late Retirement Benefit

If a member remains employed after his Normal Retirement Date, he will receive a monthly benefit equal to the benefit computed using service and pay as of his late retirement date. Benefits commence on the first day of the month following actual retirement.

Pre-Retirement Death Benefit

The Surviving Spouse of a Participant who is actively employed and has satisfied Early or Normal Retirement eligibility requirements is entitled to a Death Benefit determined as if the Participant had retired on his date of death, selected a Joint & 2/3 Survivor Annuity and died the next day.

The Surviving Spouse of any other actively employed vested participant is entitled to a Death Benefit determined as follows:

i) assume the Participant separated from service on date of death
ii) survived to the earliest possible retirement eligibility date
iii) retired with a Joint and 2/3 Survivor Annuity, and
iv) died the next day

Vested Termination

Members who terminate employment are eligible for a monthly benefit calculated in the same manner as the Normal Retirement Benefit, multiplied by the applicable vesting percentage:

Sum of Attained Age & Years of Credited Service	Vesting Percentage
50	50%
51	60%
52	70%
53	80%
54	90%
55 and after	100%

However, if a participant has at least 8 years of Credited Service, then they are fully vested.

Refund of Contribution

If a participant terminates employment without a vested benefit, then the participant will receive a refund of contributions with interest. If the sum of benefit payments received by a retiree or beneficiary is less than the sum of contributions with interest, then the difference may be paid to their beneficiary as an additional death benefit.

Optional Forms of Payment

Life Annuity
Joint & 50% Survivor Annuity
Joint & 2/3 Survivor Annuity
Joint & 100% Survivor Annuity

Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Distribution of Active Participants by Age and by Years of Service

Number of Participants by Age-Service Groups

	Years of Service										
Attained Age	Under 1 No.	1 to 4 No.	5 to 9 No.	10 to 14 No.	15 to 19 No.	20 to 24 No.	25 to 29 No.	30 to 34 No.	35 to 39 No.	40 and up No.	Total
Under 25	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	1	1	0	0	0	0	0	2
40 to 44	0	0	0	1	2	1	0	0	0	0	4
45 to 49	0	0	0	2	2	2	0	0	0	0	6
50 to 54	0	0	0	2	2	4	4	0	0	0	12
55 to 59	0	0	0	1	1	3	2	2	0	0	9
60 to 64	0	0	0	0	1	0	0	2	1	0	4
65 to 69	0	0	0	2	0	0	1	0	0	0	3
70 and up	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	9	9	10	7	4	1	0	40

Average Age	53.3
Average Service	21.5

Average Compensation by Age-Service Groups (for Groups with 5 or more Participants)

	Years of Service										
Attained Age	Under 1 No.	1 to 4 No.	5 to 9 No.	10 to 14 No.	15 to 19 No.	20 to 24 No.	25 to 29 No.	30 to 34 No.	35 to 39 No.	40 and up No.	Average
Under 25	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	N/A	N/A	0	0	0	0	0	N/A
40 to 44	0	0	0	N/A	N/A	N/A	0	0	0	0	N/A
45 to 49	0	0	0	N/A	N/A	N/A	0	0	0	0	80,014
50 to 54	0	0	0	N/A	N/A	N/A	N/A	0	0	0	82,821
55 to 59	0	0	0	N/A	N/A	N/A	N/A	N/A	0	0	69,165
60 to 64	0	0	0	0	N/A	0	0	N/A	N/A	0	N/A
65 to 69	0	0	0	N/A	0	0	N/A	0	0	0	N/A
70 and up	0	0	0	0	0	0	0	0	0	0	0
Average	0	0	0	66,984	84,555	82,565	72,429	N/A	N/A	0	78,656

This work product was prepared solely for the City of Creve Coeur for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Inactive Participants - Summary by Age

Deferred Vested Participants

Age Group	No. of	Total Monthly Benefit Amount	Average Monthly Benefit Amount
Less than 30	0	$0	$0
30 - 34	0	$0	$0
35 - 39	1	$962	$962
40 - 44	6	$4,756	$793
45 - 49	2	$1,381	$691
50 - 54	6	$5,953	$992
55 - 59	9	$9,301	$1,033
60 and over	5	$3,800	$760
Total	29	$26,153	$902

Retired Participants

Age Group	No. of	Total Monthly Benefit Amount	Average Monthly Benefit Amount
Less than 55	2	$5,106	$2,553
55 - 59	6	$16,493	$2,749
60 - 64	14	$34,546	$2,468
65 and over	56	$92,501	$1,652
Total	78	$148,646	$1,906

Retirement Plan for Employees of the City of Creve Coeur

July 1, 2018 Actuarial Valuation

Summary of Changes in Participant Data

	Active Participants	Retired Participants	Terminated Vested Participants	Total
Count as of July 1, 2017	46	72	29	147
New Entrants	0	0	0	0
Rehired	0	0	0	0
Retired	(5)	6	(1)	0
Lump Sum Payouts	0	0	0	0
Died with Beneficiary	0	(1)	0	(1)
New Alternate Payees	0	1	0	1
New Beneficiaries	0	1	0	1
Died without Beneficiary	0	(1)	0	(1)
Certain Period Expired	0	0	0	0
Terminated with Vesting	(1)	0	1	0
Terminated without Vesting	0	0	0	0
Data Corrections	0	0	0	0
Total Changes	(6)	6	0	0
Count as of July 1, 2018	40	78	29	147

Follow Up of the Investment Policy

INVESTMENT POLICY STATEMENT

for the

Retirement Plan for Employees of the City of Creve Coeur

This investment policy statement should be reviewed and updated periodically. Any change to this policy should be communicated in writing on a timely basis to all interested parties.

EXECUTIVE SUMMARY

Type of Portfolio: Defined Benefit Pension Plan

Sponsor: City of Creve Coeur

Pension Board: Employee Pension Fund Board of Trustees (“Board”)

Discretionary Equity Portfolio Investment Manager: Fiduciary Advisors, Inc.

Equity Portfolio Custodian: Charles Schwab & Co., Inc.

Discretionary Fixed Income Portfolio Investment Manager: Commerce Trust Company

Fixed Income Portfolio Custodian: Commerce Trust Company

Strategic Asset Allocation:

Major Asset Class	Strategic Allocation	Lower Limit	Upper Limit
Equity	64%	59%	69%
Alternatives	6%	1%	11%
Fixed Income	30%	25%	35%

Equity/Alternative Portfolio	Strategic Allocation	Lower Limit	Upper Limit
Money Market	0%	0%	2%
Large Blend	32%	27%	37%
Large Value	6%	4%	8%
Mid Cap	7%	5%	9%
Small Cap	11%	8%	14%
Small Value	2%	1%	3%
International- Large	25%	20%	30%
International- Small	8%	6%	10%
REITS	5%	3%	7%
Commodities	4%	2%	6%

Fixed Income: See Fixed Income Investment Guidelines as approved by the Board and adopted by Commerce Trust Company.

Attachment: 2018 Investment Policy Statement (Follow Up of the Investment Policy)

BACKGROUND

Administration of the City of Creve Coeur Employees' Pension Plan, including investment of plan funds, is the responsibility of The Board of Trustees, which is the named fiduciary, (Article VIII of the Plan dated June 26, 2001, as amended).

The plan is a frozen defined benefit pension plan for full time city employees meeting the plan eligibility requirements. Employees hired after May 23, 2006 are not eligible to participate in this plan. Lump sum payments are not a distribution option.

STATEMENT OF OBJECTIVES

In establishing this Investment Policy, the Board has considered the fact that the Plan, together with social security, is the major retirement vehicle for most plan participants and has acted to discharge its fiduciary responsibility solely in the interests of such participants and their beneficiaries.

The purpose of a formal Investment Policy is to identify and establish investment objectives and guidelines that are realistic over variable market environments and appropriate to the funding requirements of the plan. The investment policy statement serves as the cornerstone of which all investment decisions will be made in order to achieve the long-term goals of the Board and will also serve as a standard by which to measure investment performance.

The basic goal underlying the establishment of this policy is to provide that the assets of the Plan shall be invested in a prudent manner, and that together with expected contributions to the Plan they will be sufficient to meet the obligations of the Plan.

Time Horizon

The investment guidelines are based upon a long term investment horizon with the ability to pay current obligations. The Plan's strategic asset allocation is also based on this long-term perspective.

Risk Tolerances

The Board recognizes that some risk must be assumed in order to achieve the investment objectives of the Portfolio. In establishing the risk tolerances of the IPS, the ability to withstand short and intermediate term variability were considered.

The Portfolio's long time horizon, current financial condition and other factors suggest collectively some interim fluctuations in market value and rates of return may be tolerated in order to achieve the longer-term objectives.

Performance Expectations

The desired investment objective is a rate of return on assets that, before fees, matches the policy index as defined later in this IPS.

DUTIES AND RESPONSIBILITIES

Board

As a fiduciary under the Portfolio, the Board is responsible for the following items with respect to this IPS:

1. Approving and maintaining this IPS.

2. Monitoring and supervising the Managers for adherence to this IPS, including any limitations.

3. Controlling and monitoring all investment, record keeping and administrative expenses associated with the Portfolio.

4. Avoiding prohibited transactions and conflicts of interest.

Custodian

Custodians are responsible for the safekeeping of the Portfolio's assets. The specific duties and responsibilities of the custodian are:

1. Value the holdings.
2. Collect all income and dividends owed to the Portfolio.
3. Settle all transactions (buy-sell orders).
4. Provide monthly reports that detail transactions, cash flows, securities held and their current value, and change in value of each security and the overall Portfolio since the previous report.
5. Maintain separate accounts by legal registration.

Discretionary Investment Manager

As distinguished from the Board, who is responsible for establishing and monitoring the investment objectives, the Manager is responsible for making investment decisions. The specific duties and responsibilities of the Manager are to:

1. Manage the Portfolio in accordance with the guidelines and objectives outlined in this IPS.

2. Exercise full investment discretion with regard to adding, replacing, and managing the investment of the Portfolio.

3. Communicate to the Board all investment changes pertaining to the Portfolio’s investments.

4. Use the same care, skill, prudence, and due diligence under the circumstances then prevailing that a prudent investment professional acting in a like capacity and familiar with such matters would use in the conduct of like activities for like not for profit organization investment portfolios with like aims and in accordance and compliance with the documents governing the Portfolio, (insofar as such documents are consistent with applicable laws), and all applicable laws, rules, and regulations.

ASSET CLASS AND INVESTMENT OPTIONS

The following asset classes, along with appropriate Index and Peer comparisons, have been selected by the Manager and approved by the Board:

***Equity Portfolio Asset Classes*:**

Asset Class	Index Comparison	Peer Group Comparison
Money Market	90 day T-Bills	Money Market Database
Large Blend	S&P 500	Large Blend
Large Value	MSCI US Prime Mkt Value	Large Value
Mid Cap	MSCI US Mid Cap 450	Mid Blend
Small Cap	MSCI US Small Cap 1750	Small-Cap Blend
Small Value	MSCI US Small Cap Value	Small Cap Value
International- Large	MSCI ACWI ex US NR USD	Foreign Large Blend
International- Small	MSCI ACWI ex US Small Cap	Foreign Small/Mid
REITS	MSCI US REIT	Real Estate
Commodities	Bloomberg Commodity TR	Commodities Broad Basket

Equity Portfolio Policy Index

Index	Percentage
S&P 500	32%
MSCI US Prime Mkt Value	6%
MSCI US Mid Cap 450	7%
MSCI US Small Cap 1750	11%
MSCI US Small Cap Value	2%
MSCI ACWI ex US NR USD	25%
MSCI ACWI ex US Small Cap	8%
MSCI US REIT	5%
Bloomberg Commodity TR	4%

Fixed Income Portfolio:

Asset Class	Index Comparison	Peer Group Comparison
U.S. Intermediate Term Bond	Barclays US Aggregate Bond Index	Intermediate Term Bond

Fixed Income Portfolio Policy Index:

Index	Percentage
Barclays US Agg Bond Idx	100%

Fixed Income Investment Policy: See separate Fixed Income Investment Policy

Attachment: 2018 Investment Policy Statement (Follow Up of the Investment Policy)

Prohibited Investment Activity:

Investment activity in the following is specifically prohibited without the Board's written permission (does not include underlying investments of mutual funds or ETFs)

1. Commodity trading including all futures contracts
2. Purchasing of letter stock
3. Short selling
4. Option trading
5. Stock loans
6. Securities of the investment manager, the custodian, or their parent or affiliate

INVESTMENT SELECTION

The Equity Portfolio Manager will apply the following due diligence criteria in selecting an investment fund (Fund) option.

Regulatory oversight: Each Fund should be a regulated bank, an insurance company, a mutual fund organization, or a registered investment adviser.

Correlation to style or peer group: The Fund should be highly correlated to the asset class of the investment option.

Performance relative to a peer group: The Fund's performance should be evaluated against the peer group's median manager's return, for one-, three- and five-year cumulative periods (waived for passive index funds).

Performance relative to assumed risk: The Fund's risk-adjusted performance (Alpha and/or Sharpe Ratio) should be evaluated against the peer group's median manager's risk-adjusted performance (waived for passive index funds).

Minimum track record: The Fund's inception date should be greater than three years (waived for passive index fund, fund of funds or funds with other share classes with at least a three-year performance history).

Assets under management: The Fund should have at least $75 million under management.

Holdings consistent with style: The Fund should have no more than 20% of the portfolio invested in "unrelated" asset class securities.

Expense ratios/fees: The Fund's fees should not be in the bottom quartile (most expensive) of its peer group.

Stability of the organization: There should be no perceived organizational problems with the mutual fund complex sponsoring the Fund.
The same portfolio management team should be in place for at least two years (waived for passive index funds).

Fund performance and risk measures will be evaluated not only as of the most recent snapshot period, but also from the analysis of performance and risk on a rolling three-year basis.

MONITORING PROCEDURES

The Board acknowledges fluctuating rates of return characterize the securities markets, particularly during short-term time periods. Recognizing that short-term fluctuations may cause variations in performance, the Board intends to evaluate investment performance from a long-term perspective.

The Board is aware the ongoing review and analysis of the investment options is just as important as the due diligence process. The performance of the investment options will be monitored on an ongoing basis and it is at the Board's discretion to take corrective action by replacing a Manager if they deem it appropriate at any time.

On a timely basis, but not less than semi-annual, the Board will meet to review:

1. Manager's adherence to this IPS;

2. The performance of the various managers as compared to the weighted returns of the policy indexes indicated below:

Primary Equity Portfolio Policy Index

Index	Percentage
S&P 500	32%
MSCI US Prime Mkt Value	6%
MSCI US Mid Cap 450	7%
MSCI US Small Cap 1750	11%
MSCI US Small Cap Value	2%
MSCI EAFE	25%
MSCI EAFE Small Cap	8%
MSCI US REIT	5%
Bloomberg Commodity	4%

Secondary Equity Portfolio Policy Index

Index	Percentage
MSCI US Broad Market	58%
MSCI ACWI ex USA IMI	33%
MSCI US REIT	5%
Bloomberg Commodity	4%

Fixed Income Portfolio Policy Index:

Index	Percentage
Barclays US Agg Bond Idx	100%

3. The performance of the Portfolio's investments subject to this IPS;

   a. Each fund's performance compared to an appropriate index and peer group as designated in this IPS.

4. Material changes in the Manager's organization and/or personnel; and,

5. Any legal, SEC and/or other regulatory agency proceedings affecting the Manager.

Portfolio Rebalancing

The portfolio will be reviewed at least quarterly to determine if the allocation is within the upper and lower limits as established in this Investment Policy. If the portfolio's allocation exceeds the upper or lower limits of this Investment Policy, the portfolio will be rebalanced to put the portfolio back within the approved ranges of this Investment Policy.

The portfolio can be rebalanced even if the allocation does not exceed the upper or lower limits at the discretion of the Discretionary Investment Manager.

Measuring Costs

The Board will review at least annually all costs associated with the management of the Portfolio's investment program, including:

1. Expense ratios of each investment against the appropriate peer group.

2. Custody/Trustee Fees: The holding of the assets, collection of the income and disbursement of payments, transaction or commission fees.

3. Discretionary investment management fee.

4. Administrative Fees: Costs to administer the Portfolio, including recordkeeping, account settlement, and allocation of assets and earnings, and (when applicable) the proper use of 12b-1 fees (or other soft dollar arrangements) to offset these fees.

The Equity Discretionary Investment Manager will provide reports with the following information to assist in the Board's review of plan fees:

1. Each funds' expense ratio compared to the Morningstar peer group.

2. Report showing all transaction fees from the custodian.

3. Report showing actual fees charged by the Investment Manager.

4. Report showing any administrative fees (if applicable) associated with the equity portfolio.

As a result of this review process, the Board may decide to add, delete or change services or service providers.

INVESTMENT POLICY REVIEW

The Manager and the Board will review this IPS periodically to determine whether stated investment objectives are still relevant and the continued feasibility of achieving the same. It is not expected that the IPS will change frequently. In particular, short-term changes in the financial markets should not require adjustments to the IPS.

Approved:

EMPLOYEE PENSION FUND BOARD OF TRUSTEES

By:____ Date:____________________

Name:_____________________________________

Title: _____________________________________

Approved:

FIDUCIARY ADVISORS, INC.
Discretionary Equity Investment Manager

By:____ Date:____________________

Name: **Todd Grizzle**

Title: **V.P. Investments**

Invoices Paid Since July 24, 2018

City of Creve Coeur
Employee Pension Fund Board of Trustees

DATE: August 9, 2018

TO: Commerce Trust
c/o John Bascio, Plan Administrator

FROM: City of Creve Coeur
Employee Pension Fund Board of Trustees

SUBJECT: Pension Plan Disbursements

This is your authorization to make the following disbursements from the City of Creve Coeur Pension account.

Payee	Reason for Payment	Amount
City of Creve Coeur	MAPERS - Hotel for Lori Obermoeller	$ 240.42
Lori Obermoeller 830 Kylewood Place, Ballwin, MO 63021	MAPERS - Meals & Mileage for Lori Obermoeller ($3.31+$188.03)	$ 191.34
Jon Mcintosh 1721 Lance End Lane, Fenton, MO 63026	MAPERS - Hotel for Jon Mcintosh	$ 306.94
Conduent HR Consulting	Benefit Calculations	$ 1,000.00
	Total	$ 1,738.70

Please prepare the check(s) and advise Lori Obermoeller by e-mail at lobermoeller@crevecoeurmo.gov

Thank you for your immediate attention to this matter.

TAN-TAR-A RESORT

Confirmation #	H29244
Arrival	Wednesday Jul 25, 2018
Departure	Friday Jul 27, 2018
Nights	2
Room Type	HANDICAPP ACCESSIBLE
Room #	1614
Group	MO ASN OF PUBLIC EMPLO

LORI OBERMOELLER
CITY OF CREVE COEUR
300 N NEW BALLAS RD
Saint Louis, MO 63141

Charge Summary

Total Charges	$234.00
Taxes	$6.42
Payments	-$240.42
Total Due	$0.00

Date	Description		Price	Qty	Extended Cost	Sales Tax	Lodging Tax	Total Charge	Balance
Wed 7/25/18	MO ASN PUBLIC EMPL		117.00	1	117.00	0.00	3.21	120.21	120.21 I
Thu 7/26/18	MO ASN PUBLIC EMPL		117.00	1	117.00	0.00	3.21	120.21	240.42 I
Fri 7/27/18	Guest Payment VISA	3429	-240.42	1	-240.42	0.00	0.00	-240.42	0.00 I

Tan-Tar-A Resort • 494 Tan Tar A Drive • PO Box 188TT • Osage Beach MO 65065
573-348-3131 • www.tan-tar-a.com

Folio Printed On: Fri, 7/27/18 10:39AM

a

City of Creve Coeur, Missouri
Request to Attend/Reimbursement for Municipal Conference, Seminar or Training Program

TO:	City Administrator's Office
Name of Individual Attending	Lori Obermoeller
Name of Event	MAPERS Annual Conference
Dates of Attendance	July 25 - 27, 2018
Sponsoring Agency	MAPERS
Location	Tan-Tar-A Resort, Osage Beach, MO
Date Departing	7/25/18
Date Returning	7/27/18
GL Account No. to be Charged	Pension Fund

Estimated Expenses

Registration					$ 75.00
Airfare					
Per Diem	$ 50.00 (rate)	x	1 (# of days)	=	$ 12.50
Mileage (17 Mile 1 way)	$ 0.545 (rate)	x	350 (# of miles)	=	$ 190.75
Lodging	$ 120.21 (rate)	x	2 (# of nights)	=	$ 240.42
Gas					
Other					
Other					
Estimated Attendance Expense					$ 518.67

will ride w/ Jon if he goes alone

Actual Expenses (attach ALL Receipts)

Registration					75.00
Airfare					
Per Diem	(rate)	x	(# of days)	=	$3.31
Mileage	.545 (rate)	x	345 (# of miles)	=	$188.03
Lodging	(rate)	x	(# of nights)	=	240.42
Gas					
Other					
Other					
Attendance Expense					$506.76

Advance(s) Requested

Vendor # ______ $ Amount ______
Vendor Name ______
Vendor Address ______

Vendor # ______ $ Amount ______
Vendor Name ______
Vendor Address ______

Total $ Amt Advanced $ -

Amount paid on City credit card 315.42
Amount paid by City check
Total Paid by Check/Credit Card 315.42

Reimbursement Requested 191.34
OR
Amount Returned to the City

If reimbursement is requested:
Name of Employee Lori Obermoeller
Vendor Number ______

Attendance Approval (Sign & Forward)	Date	Expense/Reimbursement Approval (Sign & Forward)	Date
Department Head [signature]	5-14-18	Department Head [signature]	8-2-18
City Administrator [signature]	5/15/18	City Administrator [signature]	8/3/18
Director of Finance [signature]	5-15-18	Director of Finance [signature]	8-2-18

Submit w/one copy of the program for conference/seminar w/this form

Finance Dept Use Only

Vendor # ______ Vendor # ______
Date Paid ______ Date Paid ______
Check No. ______ Check No. ______

Finance Dept Use Only

Vendor # ______
Date Paid ______
Check No. ______

CA-4 (revised 11/13)

Attachment: Invoices Paid Since July 24, 2018 (Invoices Paid Since July 24, 2018)

303

BUY ONE GET ONE FREE ANY LARGE
REGULAR MENU, BREAKFAST SANDWICH
OR McCAFE BEVERAGE*
Go to www.mcdvoice.com within 7 days
and tell us about your visit.
Validation Code:___________
Expires 30 days after receipt date.
Valid at participating US McDonald's.
Survey Code:
10243-03030-72518-10518-00033-1

McDonald's Restaurant #10243
6033 HWY 54 AND KK
OSAGE BEACH, MO 65065
TEL# 573 348 0566

KS# 3	07/25/2018 10:51 AM
Side1	Order 03
1 McDouble	1.59
1 S French Fries	1.49
Subtotal	3.08
Tax	0.23
Take-Out Total	3.31
Cash Tendered	10.00
Change	6.69

WWW.MCDVOICE.COM
Please rate = "HIGHLY SATISFIED"
*(Free Sandwich or McCafe Beverage
must be of equal or lesser value)

Attachment: Invoices Paid Since July 24, 2018 (Invoices Paid Since July 24, 2018)

LAKE OF THE OZARKS
TAN-TAR-A RESORT

Confirmation # H53141

Jonathan McIntosh
City of Creve Coeur
300 North New Ballas R
Creve Coeur, MO 63141

Arrival Wednesday Jul 25, 2018
Departure Friday Jul 27, 2018
Nights 2

Room Type 2 DOUBLE BEDS
Room # 6037

Charge Summary

Total Charges	$289.84
Taxes	$17.10
Payments	-$306.94
Total Due	$0.00

Date	Description	Price	Qty	Extended Cost	Sales Tax	Lodging Tax	Total Charge	Balance
Wed 7/25/18	Standard Room Rate	149.00	1	149.00	8.16	4.47	161.63	161.63 I
Thu 7/26/18	Standard Room Rate	149.00	1	149.00	0.00	4.47	153.47	315.10 I
Thu 7/26/18	Sales Tax Adj *(-)	-8.16	1	-8.16	0.00	0.00	-8.16	306.94 I
Fri 7/27/18	Guest Payment AMEX 1019	-306.94	1	-306.94	0.00	0.00	-306.94	0.00 I

Tan-Tar-A Resort • 494 Tan Tar A Drive • PO Box 188TT • Osage Beach MO 65065
573-348-3131 • www.tan-tar-a.com

'olio Printed On: Fri, 7/27/18 7:42AM

CONDUENT

Conduent HR Consulting, LLC
420 Lexington Ave, Suite 2220
New York, NY 10170

July 17, 2018

Ms. Lori Obermoeller
lobermoeller@crevecoeurmo.gov
Retirement Plan Board of Trustees
City of Creve Coeur
300 North New Ballas Road
Creve Coeur, MO 63141

Client #: 00015236
Invoice #: 2384455
Total Due This Invoice: $2,200.00
Terms: Net Due in 30 Days

EFT/ACH to:
Conduent HR Consulting, LLC
Wells Fargo Bank
2975 Regent Blvd.
Irving, TX 75063
Account #: 4121887111
Routing #: 121000248

Mail To:
Conduent HR Consulting, LLC
P.O. Box 202617
Dallas, TX 75320-2617

Direct Inquiries to:
Veronica Pulbere - Accounting Dept.
Email: Veronica.Pulbere@Conduent.com
Phone: (201) 902-2417

Actuarial and consulting services during the month of March - June 2018:

INCLUDES	Amount
Meeting on rate of return analysis	~~1,200.00~~ Write off per Wendy
Benefit calculations – Joel Snead, Thomas Rich, Gigi Vidernschek, Jamison White (and revision)	1,000.00

TOTAL AMOUNT DUE ~~$ 2,200.00~~