



**Employee Pension Board of Trustees
Pension Board Meeting Agenda
December 14, 2020
1:00 PM
Online Meeting**

Call to Order

Approve Agenda

Approve Minutes

**Approval of November 24, 2020 Employee Pension Board of Trustees
Pension Board Meeting Minutes**

New Business

Investment Portfolio Update

Calendar

2021 Meeting Schedule

Adjournment



**Employee Pension Board of Trustees
Pension Board Meeting Minutes
November 24, 2020
3:00 PM
Online Meeting**

Web Link: <https://us02web.zoom.us/j/83138711085>

Phone: 1-312-626-6799 **Meeting ID:** 83138711085

Call to Order

Jeff Hartman	Police Sgt
Ellen Lawrence	Council Liaison
David Caldwell	Vice Chair
Michael Karasick	Chair
Ted Armstrong	Board Member
Carol Lippman	Board Member
Brad Holmes	Employee Representative
Lori Obermoeller	Director of Finance
Anne Cronin	Accounting Associate
Peter Kim	Finance Director

Approve Agenda

Motion to Approve Agenda

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Ted Armstrong, Board Member
SECONDER:	Carol Lippman, Board Member
AYES:	Hartman, Lawrence, Caldwell, Karasick, Armstrong, Lippman, Holmes

Approve Minutes

Approval of October 20, 2020 Employee Pension Board of Trustees Pension Board Meeting Minutes

Approval of October 21, 2020 Employee Pension Board of Trustees Pension Board Meeting Minutes

Approval of November 17, 2020 Employee Pension Board of Trustees Pension Board Meeting Minutes

Motion to Approve Minutes from 10/20, 10/21, and 11/17

Minutes Acceptance: Minutes of Nov 24, 2020 3:00 PM (Approve Minutes)



**Employee Pension Board of Trustees
Pension Board Meeting Minutes
November 24, 2020
3:00 PM
Online Meeting**

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Carol Lippman, Board Member
SECONDER:	Brad Holmes, Employee Representative
AYES:	Hartman, Lawrence, Caldwell, Karasick, Armstrong, Lippman, Holmes

New Business

IPS Approval

The Pension Board discussed the final draft of the investment policy statement for the retirement plan for employees of the City of Creve Coeur. The following changes were made:

Actuarial Target Index, Changed to Read:

"The assumed portfolio return as stated in the annual actuarial report. This rate is set by the Pension Board, in consultation, with the Plan Investment Advisor and the Plan Actuary"

Creve Coeur IPS Revised Final

Draft IPS with Changes Tracked

Motion to Approve the Investment Statement Policy as Amended

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Ted Armstrong, Board Member
SECONDER:	David Caldwell, Vice Chair
AYES:	Hartman, Lawrence, Caldwell, Karasick, Armstrong, Lippman, Holmes

Mortality Table Approval

The Pension Board discussed adopting a new mortality table as recommended by the Plan Actuary. Adopting a new mortality table will increase liabilities and decrease the funded ratio.

Motion to Approve Adopting a New Mortality Table

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Ted Armstrong, Board Member
SECONDER:	Ellen Lawrence, Council Liaison
AYES:	Hartman, Lawrence, Caldwell, Karasick, Armstrong, Lippman, Holmes

COLA Emails

The Pension Board discussed emails sent in by retirees suggesting a cost of living increase. Jeff Hartman strongly recommended adopting a cost of living increase for retirees enrolled in the plan. City Council would have to approve the increase and the plan would have to be 80% funded.

COLA Emails from Pension Retirees

Minutes Acceptance: Minutes of Nov 24, 2020 3:00 PM (Approve Minutes)



**Employee Pension Board of Trustees
Pension Board Meeting Minutes
November 24, 2020
3:00 PM
Online Meeting**

Adjournment

Motion to Adjourn

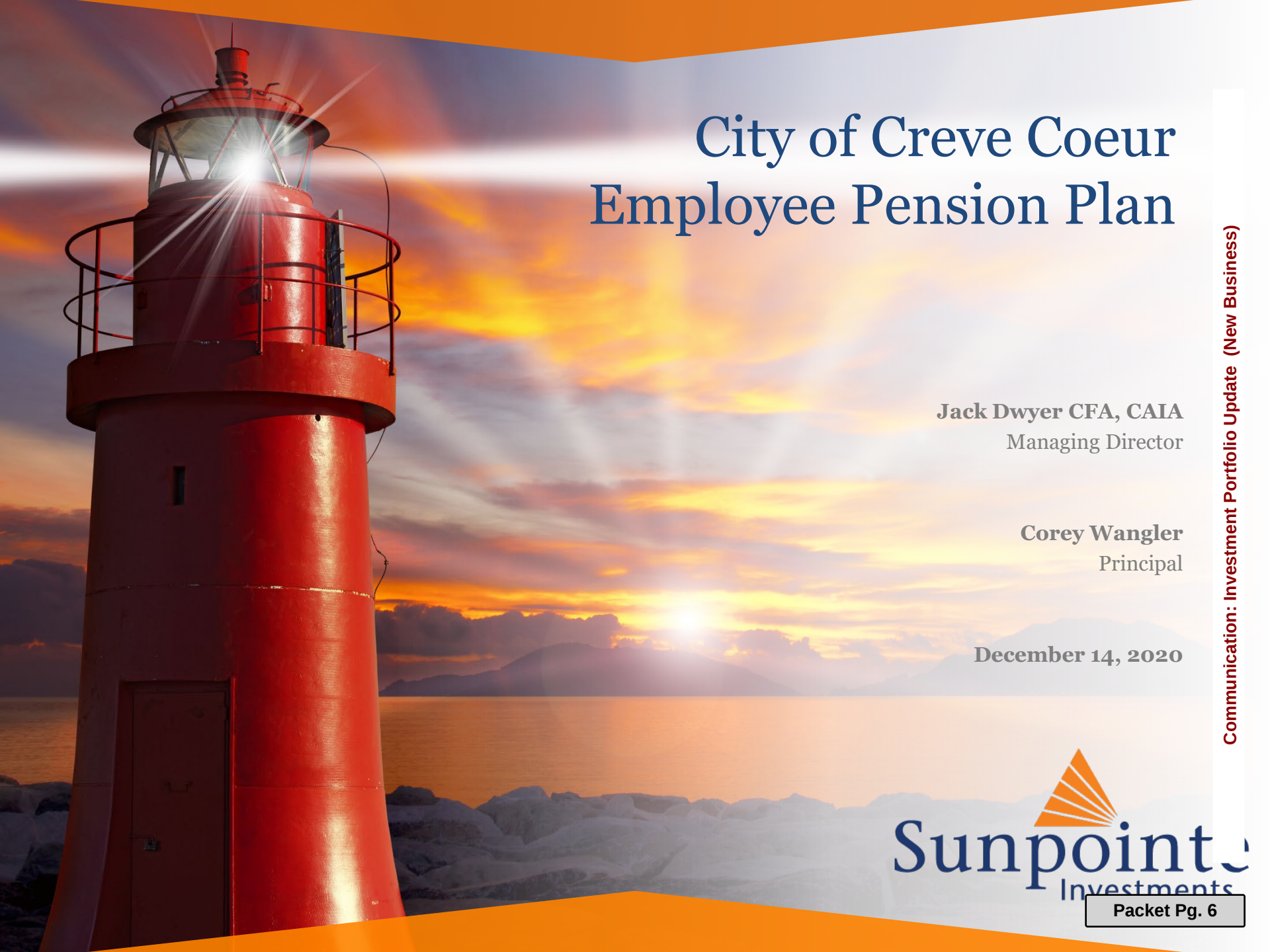
RESULT:	APPROVED [UNANIMOUS]
MOVER:	Ted Armstrong, Board Member
SECONDER:	David Caldwell, Vice Chair
AYES:	Hartman, Lawrence, Caldwell, Karasick, Armstrong, Lippman, Holmes

Minutes Acceptance: Minutes of Nov 24, 2020 3:00 PM (Approve Minutes)

City of Creve Coeur Employee Pension Plan
12/9/2020
Implementation Plan

	Ticker	Expense Ratio	Current Value	Current %	Current Policy	Transactions	Resulting Balance	Result %	Rec'd Policy
RISK MITIGATION ASSETS				28.6%	30.0%				30.0%
Defensive				28.6%	30.0%				23.0%
Cash	-		20,839	0.1%		-	20,839	0.1%	
Cash			\$ 20,839	0.1%	0.0%	\$ -	\$ 20,839	0.1%	0
Vanguard Total Bond Market	BND	0.035%	-	0.0%			-	0.0%	
Vanguard Intermediate-Term Corporate	VCIT	0.05%	-	0.0%			-	0.0%	
SPDR Bloomberg Barclays High Yield Bond ETF	JNK	0.40%	-	0.0%			-	0.0%	
Vanguard High-Yield Corporate Fund (Active)	VWEAX	0.13%	-	0.0%			-	0.0%	
Commerce Core Bond Account	-	0.30%	8,725,063	28.5%		(1,825,000)	6,900,063	22.5%	
US Fixed Income			\$ 8,725,063	28.5%	30.0%	\$ (1,825,000)	\$ 6,900,063	22.5%	23
Total Defensive			\$ 8,745,903	28.6%	30.0%	\$ (1,825,000)	\$ 6,920,903	22.6%	23
Flexible				0.0%	0.0%				7.2%
PIMCO Income Fund	PIMIX	1.09%	-	0.0%		700,000	700,000	2.3%	
Diversifying Strategies			\$ -	0.0%	0.0%	\$ 700,000	\$ 700,000	2.3%	2
Cliffwater Corp Lending FD I	CCLFX	1.79%	-	0.0%		1,500,000	1,500,000	4.9%	
Credit Strategies			\$ -	0.0%	0.0%	\$ 1,500,000	\$ 1,500,000	4.9%	5
Total Flexible			\$ -	0.0%	0.0%	\$ 2,200,000	\$ 2,200,000	7.2%	7
TOTAL RISK MITIGATION			\$ 8,745,903	28.6%	30.0%	\$ 375,000	\$ 9,120,903	29.8%	30.0%
RISKY ASSETS				71.4%	70.0%				70.0%
Growth				71.4%	70.0%				70.0%
iShares MSCI USA QLT	VTI	0.03%	1,205,654	3.9%			1,205,654	3.9%	
Vanguard Dividend Appreciation	VIG	0.06%	1,193,135	3.9%			1,193,135	3.9%	
Vanguard Total Stock Market (Large Portion)	QUAL	0.15%	6,841,791	22.4%			6,841,791	22.4%	
US All Cap/Large Cap Equity			\$ 9,240,580	30.2%	45.0%	\$ -	\$ 9,240,580	30.2%	45
Vanguard Value ETF	VTV	0.04%	512,932	1.7%			512,932	1.7%	
US Large Cap Value			\$ 512,932	1.7%	0.0%	\$ -	\$ 512,932	1.7%	0
Vanguard Mid Cap ETF IV	VO	0.04%	509,177	1.7%			509,177	1.7%	
Vanguard Total Stock Market (Mid Portion)	VTI	0.03%	1,805,473	5.9%			1,805,473	5.9%	
US Mid Cap Equity			\$ 2,314,650	7.6%	0.0%	\$ -	\$ 2,314,650	7.6%	0
Vanguard Small Cap ETF	VB	0.05%	581,223	1.9%			581,223	1.9%	
Vanguard Intl Dividend Aprctn ETF	VTI	0.03%	855,224	2.8%			855,224	2.8%	
US Small Cap Equity			\$ 1,436,447	4.7%	0.0%	\$ -	\$ 1,436,447	4.7%	0
Vanguard Small Cap Value ETF IV	VBR	0.07%	338,634	1.1%			338,634	1.1%	
US Small Cap Value Equity			\$ 338,634	1.1%	0.0%	\$ -	\$ 338,634	1.1%	0
iShs MSCI Intl Quality Fact ETF	IQLT	0.30%	553,990	1.8%			553,990	1.8%	
Vanguard FTSE Developed Markets ETF	VEA	0.05%	3,584,871	11.7%		(275,000)	3,309,871	10.8%	
Vanguard Intl Dividend Aprctn ETF	VIGI	0.20%	551,455	1.8%			551,455	1.8%	
International All Cap/Large Cap Equity			\$ 4,690,315	15.3%	16.0%	\$ (275,000)	\$ 4,415,315	14.4%	16
iShares MSCI EAFE Value ETF	EFV	0.39%	486,499	1.6%			486,499	1.6%	
International Large Cap Value Equity			\$ 486,499	1.6%	0.0%	\$ -	\$ 486,499	1.6%	0
International Small Cap Equity	0	0	-	0.0%		-	-	0.0%	
International Small Cap Equity			\$ -	0.0%	0.0%	\$ -	\$ -	0.0%	0
Vanguard EM Equity Fund	VWO	0.10%	2,844,732	9.3%		(100,000)	2,744,732	9.0%	
Emerging Market Equity			\$ 2,844,732	9.3%	9.0%	\$ (100,000)	\$ 2,744,732	9.0%	9
Total Growth			\$ 21,864,789	71.4%	70.0%	\$ (375,000)	\$ 21,151,154	70.2%	70.0%
Regional Exposure									
			United States	61.8%	64.3%			62.8%	64
			International Developed	23.7%	22.9%			22.8%	22
			Emerging Markets	13.0%	12.9%			12.8%	12
Hybrid/Income				0.0%	0.0%				0.0%
Real Estate/Commodities			\$ -	0.0%	0.0%	\$ -	\$ -	0.0%	0
Total Hybrid/Income			\$ -	0.0%	0.0%	\$ -	\$ -	0.0%	0.0%
TOTAL RISKY ASSETS			\$ 21,864,789	71.4%	70.0%	\$ (375,000)	\$ 21,151,154	70.2%	70.0%
			\$ 30,610,691	100%	100%	\$ -	\$ 30,272,057	100%	100

Communication: Investment Portfolio Update (New Business)



City of Creve Coeur Employee Pension Plan

Jack Dwyer CFA, CAIA
Managing Director

Corey Wangler
Principal

December 14, 2020

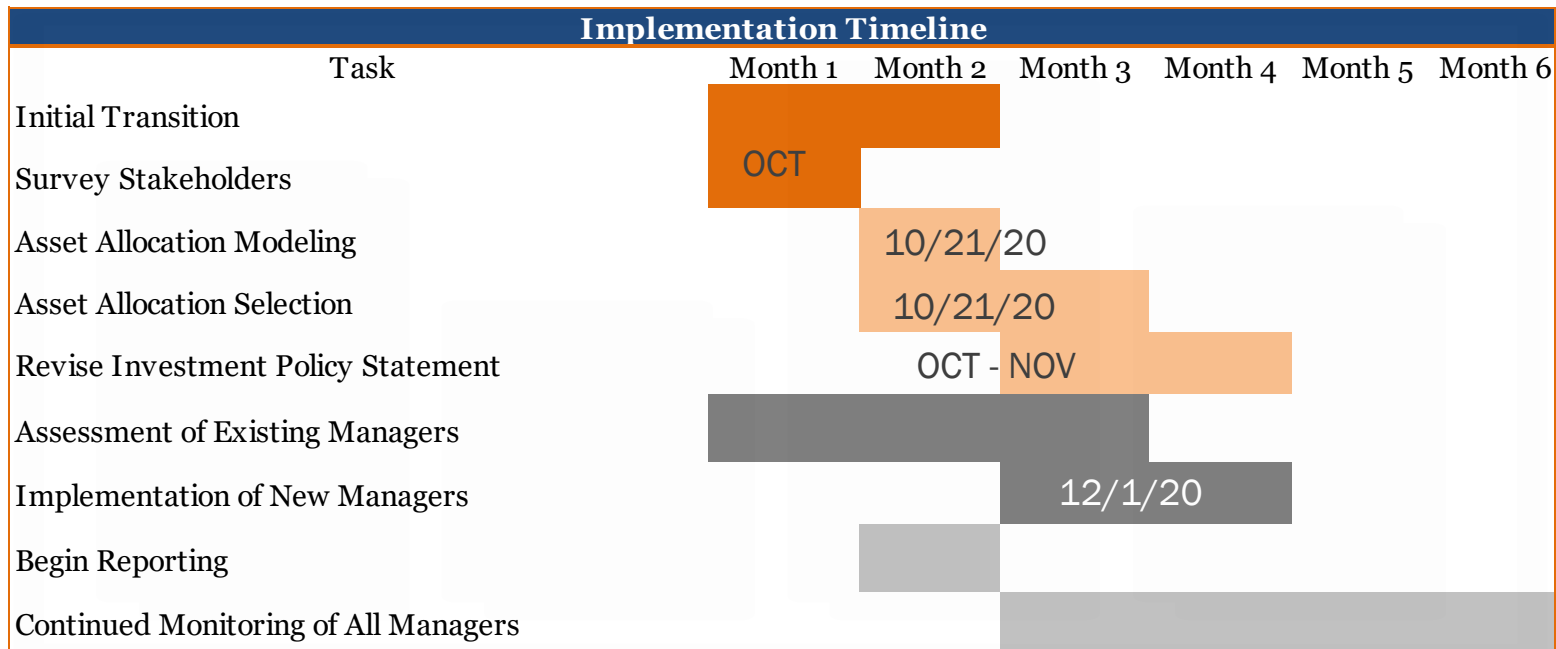


- Executive Summary
- Asset Allocation Study
- Appendix I: Active vs. Passive
- Appendix II: Liquidity and Alternative Investments
- Appendix III: Survey Responses
- Capital Market Assumptions

Today we plan to:

- Update you on the progress of implementing the portfolio.
- Review the selected asset allocation and discuss it relative to the assumed actuarial return.
 - The current 10-year Sunpointe expected return for the portfolio is 5.3%.
 - The plan's assumed actuarial return used in reports prepared by Milliman is 6.75%.
- Discuss the bond allocation and possible alternatives

- Selected 70/30 target allocation our last meeting on 10/21/20
- Investment Policy Statement (IPS) signed on 11/27/20
- Initial trades were made on 12/1/2020
- The focus of today's meeting is to revisit asset allocation modeling and confirm the selection of a target asset allocation.



- Overview:
 - Moved core US equity from S&P 500 to All-cap equities to reduce costs.
 - Trimmed overweight in value, but left some large and small-cap value positions
 - Trimmed overweight in small-cap equities
 - Added two US quality factor funds to the US equity allocation.
 - The quality factor is characterized as stocks with a high return on equity, and lower earnings variability and debt-to-equity.
 - These funds would be expected to trail the broad equity benchmark during periods of very strong returns but outperform during difficult equity markets.
 - Overall international exposure remained similar
 - Reduced international developed exposure
 - Increased exposure in emerging market equities
 - Added two international quality factor funds to the international equity allocation
 - Eliminated the separate REIT allocation; the core US equity position has a 3.6% allocation in REITs.

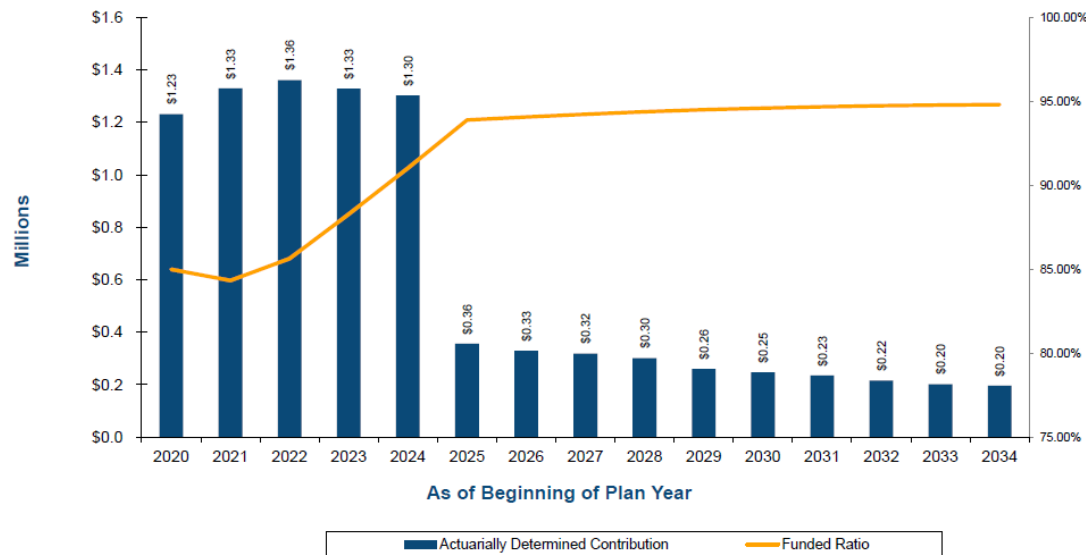
- Since 9/30, bonds have become underweight due to the strong performance of equities.
- REITs were consolidated into US equities.
- Relative to the MSCI ACWI All-Cap Index (global equities) the plan remains overweight US small-cap and value primarily at the expense of international developed market equities.

Risk Level	Current Policy	12/7/20 weight (%)	9/30/20 weight (%)	Difference (12/7 minus 9/30)	ACWI All-Cap Index
Risk Mitigation Asset		28.6%	29.9%	-1.3%	
Cash		0.1%	0.1%	0.0%	
Fixed Income	30%	28.6%	29.9%	-1.3%	
Risky Asset		71.5%		71.5%	
US Equity	45%	45.3%	44.0%	1.2%	
US Large Cap Equity		30.2%	22.4%	7.8%	30.0%
US Large Cap Value		1.7%	4.2%	-2.5%	
US Mid Cap Equity		7.6%	4.9%	2.7%	7.7%
US Small Cap Equity		4.7%	7.6%	-2.9%	2.8%
US Small Cap Value Equity		1.1%	1.4%	-0.3%	
REITS		0.0%	3.5%	-3.5%	
International Equity	25%	26.2%	26.0%	0.3%	
International All Cap/Large Cap Equity		15.3%	18.3%	-3.0%	20.7%
International Large Cap Value Equity		1.6%	2.7%	-1.1%	
Emerging Market Equity		9.3%	4.9%	4.4%	8.7%
Total	100.0%				

- The plan's assumed actuarial return used in reports prepared by Milliman is 6.75%. This is down from 6.9% in 2017. Lowering the assumed actuarial return would lower the funded status of the plan.
- The updated mortality table being adopted next July will lower the funded status of the plan.
- Larger contributions from the City over the next 4 years are expected to maintain relatively low net distributions, but net distributions are expected to increase in 2025.

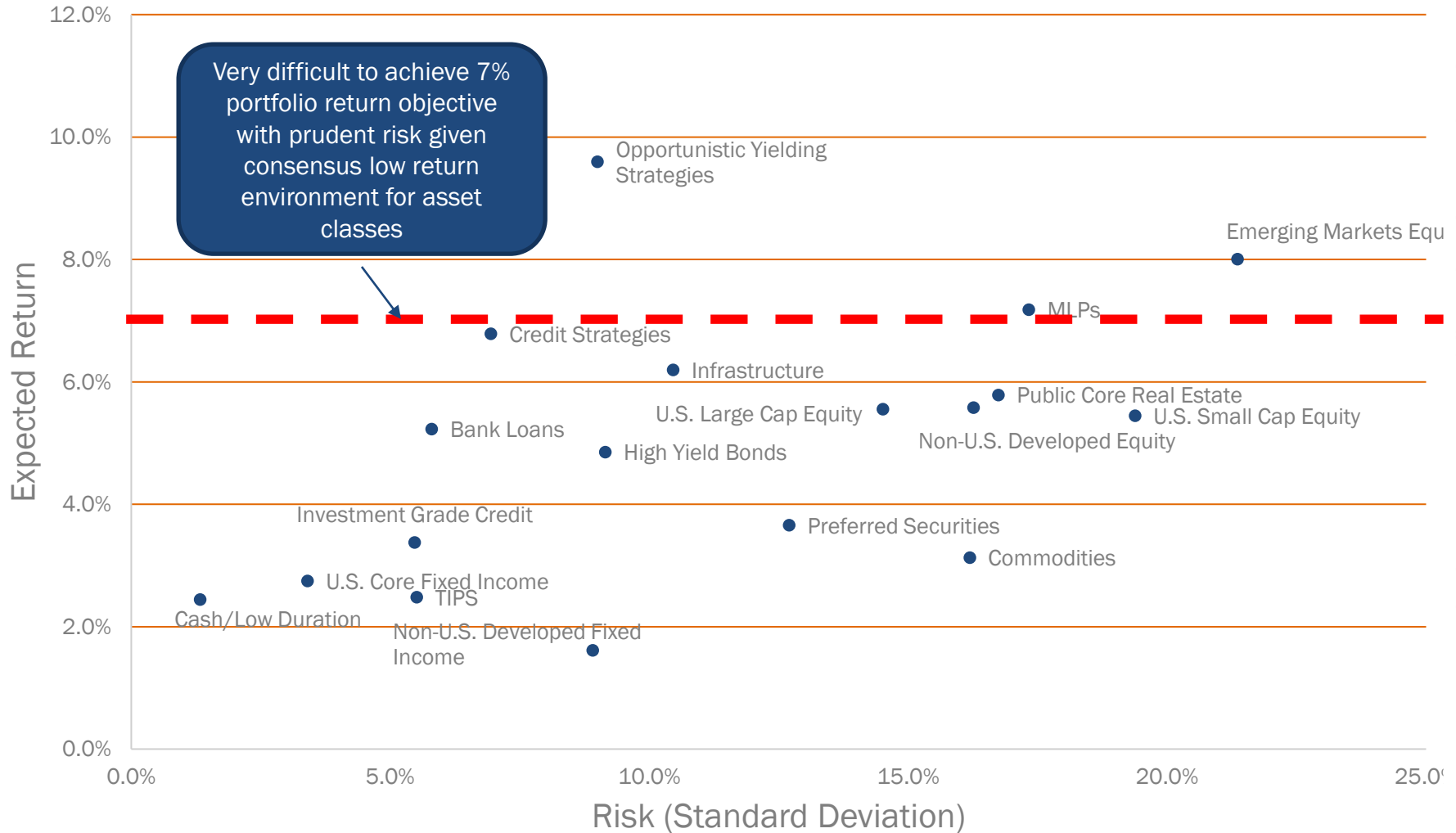
Milliman

Retirement Plan for Employees of the City of Creve Coeur
2020 Projections



1. Assumptions are the same as 2020 valuation plus:
Administrative expenses remain the same
Employer contributes Actuarially Determined Contribution each year
2. Potential variability of results discussed in ASOP 51 section of the 2020 actuarial valuation
3. Mortality updated to Pub2010 table starting 7/1/2021

10-Year Average Expected Returns



	Actual 12/9/2020 Allocation	CCEPP Current Strategic Policy	65% Risk Passive	65% Risk Best Ideas	70% Risk Passive	70% Risk Best Ideas
Risk Mitigation						
Defensive						
US Core Fixed Income	29%	30%	30%	20%	25%	17%
Investment Grade Credit			5%		5%	
Total Defensive	29%	30%	35%	20%	30%	17%
Flexible						
Diversifying Strategies				4%		3%
Trading Strategies (L/S)				4%		3%
Credit Strategies				7%		7%
Total Flexible	0%	0%	0%	15%	0%	13%
Total Risk Mitigation	29%	30%	35%	35%	30%	30%
Risky Asset						
US All Cap/Large Cap Equity	32%	45%	28%	23%	31%	25%
US Mid Cap Equity	8%		9%	7%	9%	7%
US Small Cap Equity	6%		4%	3%	5%	4%
Intl All Cap/Large Cap Equity	16%	16%	16%	13%	16%	13%
Emerging Market Equity	9%	9%	8%	6%	9%	7%
Total Growth	71%	70%	65%	52%	70%	56%
Hybrid/Income						
Infrastructure				3%		4%
Opportunistic Yielding Strategies				10%		10%
Total Hybrid/Income	0%	0%	0%	13%	0%	14%
Total Risky Asset	71%	70%	65%	65%	70%	70%
Total	100%	100%	100%	100%	100%	100%
Return						
10 Yr. Horizon Expected Return	5.4%	5.3%	5.2%	6.0%	5.4%	6.1%
Risk (Using 10-yr Horizon Returns)						
Standard Deviation (1 Yr.)	11.0%	10.4%	10.2%	9.9%	11.0%	10.5%
95% Confidence Return Range (1 Yr.)	-16.6% - 27.3%	-15.6% - 26.1%	-15.1% - 25.6%	-13.7% - 25.7%	-16.6% - 27.3%	-14.9% - 27.1%
95% Confidence Return Range (10 Yr.)	-1.6% - 12.3%	-1.3% - 11.8%	-1.2% - 11.7%	-0.3% - 12.2%	-1.6% - 12.3%	-0.6% - 12.7%
Probability of 10% or Worse Loss	7.4%	6.5%	6.1%	4.8%	7.3%	5.7%
Lowest Likely Return (1 Yr.)	-19.6%	-18.5%	-18.0%	-16.5%	-19.6%	-17.8%
Lowest Likely Return (10 Yr.)	-2.4%	-2.1%	-2.0%	-1.0%	-2.3%	-1.3%
Sharpe Ratio	0.27	0.27	0.27	0.36	0.27	0.35
Probability of Achieving 6.75% Goal Return						
10 Years	34.5%	32.6%	31.7%	40.1%	34.5%	42.1%

	Actual 12/4/2020 Allocation	65% Risk Passive	65% Risk Best Ideas	70% Risk Passive	70% Risk Best Ideas
Expected Return	5.4%	5.2%	6.0%	5.4%	6.1%
Expected Annual Dollar return	\$1,629,469	\$1,571,639	\$1,797,546	\$1,617,174	\$1,832,440
Difference (70% Passive minus 65% Passive)	\$45,535				
Difference (65% Best Ideas minus 65% Passive)	\$225,907				
Difference (70% Best Ideas minus 70% Passive)	\$215,266				

Passive Portfolios:

- Keeping a passive portfolio with 70% risky / 30% risk mitigation allocation is expected to earn on average about \$45,500 more per year versus a passive 65/35 portfolio.
- Keeping a 70% risk portfolio means a wider range of probable outcomes (-16.6% to +27.3%) compared to a 65% risk portfolio (-15.1% to 25.6%)

Our best ideas portfolios with a mix of passive and active management, including alternatives:

- Dollar expected earnings increase by over \$200,000/year based on a \$30 million portfolio.
 - Expected returns are based on net returns manager returns
 - The incremental cost not included above would be \$10,000 to add active management to the Sunpointe agreement.
- Increases expected return by 0.7-0.8%, compared to a similar passive portfolio.
- Truncates the lower end of probable returns: For example, the 70% risk best idea portfolio has a probable range of -14.9% to +27.1% while the passive portfolio's range is -16.6% to +27.3%.
- Using the 70% risk best ideas portfolio increases the likelihood of achieving a 6.75% return from 32.6% currently to 42.3%.

- Our first choice would be to move a portion of the bond allocation into **Cliffwater Corporate Lending** and/or **PIMCO Income Fund**.
- If active management is not an option, we would recommend trimming the Commerce Bond account and adding investments of \$1.3 million in an intermediate-term corporate bond ETF and \$700,000 in a high yield bond fund.
- If the goal was primarily to reduce fees, we could invest some portion in Vanguard Total Bond Market, a low cost ETF with a similar mandate to Commerce.
- Commerce has a minimum annual fee of \$15,000. Therefore, the plan should keep at least \$5 million at Commerce to avoid a higher percentage fee.

Fund	Ticker	Yield	Average Credit quality	Duration (years)	Expense Ratio
PIMCO Income Fund	PIMIX	2.80%		2.0	1.09% ¹
Cliffwater Corp Lending FD I	CCLFX	6.80%			1.79% ²
Vanguard Total Bond Market	BND	1.20%	A+	6.5	0.035%
Vanguard Intermediate-Term Corporate	VCIT	1.60%	BBB	6.4	0.05%
SPDR Bloomberg Barclays High Yield Bond ETF	JNK	4.10%	B	3.3	0.40%
Vanguard High-Yield Corporate Fund (Active)	VWEAX	3.30%	B	3.7	0.13%
Commerce Core Bond Account		1.50%	A+	6.1	0.30%

¹ PIMCO Management Fee is 0.50%. The Expense Ratio includes certain investment expenses, such as interest expense from borrowings and repurchase agreements and dividend expense from investments on short sales, incurred directly by the Fund or indirectly through the Fund's investments in underlying PIMCO Funds (if applicable), none of which are paid to PIMCO.

² : 1.83% net, including leverage interest expense. (Management fee: 1.0%, Underlying managers: 0.7%)

- Funds with more credit exposure have performed better since March of 2020. During the first quarter, the 10-year Treasury yield fell from 1.9% to 0.7%.

Name	As of Date	3M	6M	YTD	1Y
Cliffwater Corporate Lending I	12/10/2020	3.44	6.39	8.19	8.74
PIMCO Income Instl	12/10/2020	3.41	6.61	5.03	6.11
Vanguard High-Yield Corporate Adm	12/10/2020	3.38	6.66	4.76	5.62
SPDR® Blmbg Barclays High Yield Bd ETF	12/10/2020	4.50	6.82	3.78	5.17
Vanguard Interm-Term Corp Bd ETF	12/10/2020	1.28	3.51	8.56	9.12
Vanguard Total Bond Market ETF	12/10/2020	0.20	1.27	7.19	7.34
BBgBarc US Agg Bond TR USD	12/10/2020	0.19	1.37	7.14	7.18

- PIMCO Income is a portfolio of a broad range of intermediate-duration bonds that is actively managed to maximize current income while maintaining a relatively low risk profile, with a secondary goal of capital appreciation. The fund is nimble and can invest where it sees the most opportunity. Right now a significant portion of the fund is invested in securitized investments including mortgage back securities (MBS) and asset backed securities (ABS).

Retirement Plan for Employees of the City of Creve Coeur

“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 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.”¹

Time Horizon:

The investment guidelines are based upon a 20-year investment horizon with the ability to pay current and future obligations. The time horizon should be reviewed at least annually to coincide with the actuarial forecast of gross and net distributions. .

Spending:

The net distribution rate from the portfolio is expected to be less than 4% per year between 2020 and 2025. In 2026, net distributions are expected to jump to approximately 7% of the portfolio and grow steadily after that due to the closed nature of the plan.

Risk Tolerance:

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.

¹ Source: INVESTMENT POLICY STATEMENT for the Retirement Plan for Employees of the City of Creve Coeur, November 2020

Appendix I: Active / Passive

Survey comments:

- We MUST have a combination of active and passive investing.
- Keep it simple, even if the return assumption has to be lowered. For this fund I am strongly committed to all passive. Arguments to use active "for a small part of the fund" do not influence me. Even if it does well the overall impact will be small. I believe in no style bias on the equity side. I do not shy away from hi-yield bonds because they correlate with equities.

Active manager performance by asset class:

- The more efficient the asset class, the less dispersion between managers. Therefore, we will tend to lean heavily toward passive management in asset classes like US large cap equities.
- On the other hand, we focus resources on selecting active managers in less efficient asset classes like US small-cap and international equities that present more opportunities.

Active equity manager outperformance January 2010-June 2019	
	Percent of Managers outperforming respective ETF
US Large-cap	42%
US Mid-cap	49%
US SmallCap	54%
International (ACWI ex US)	64%
International Developed (EAFE)	61%
Emerging Markets	65%

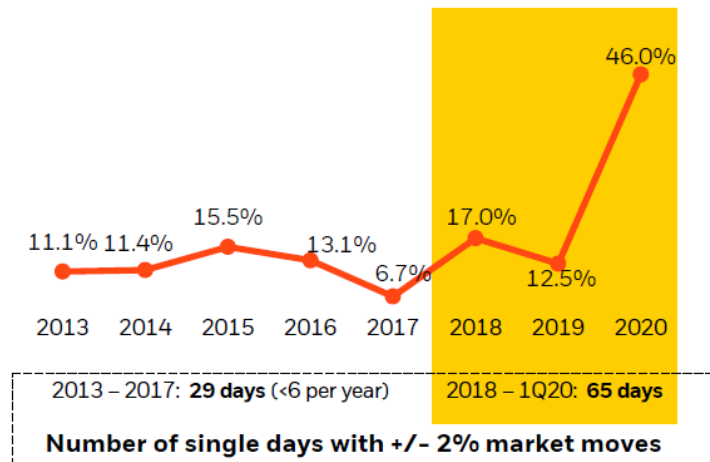
Source: eVestment, JP Morgan Asset Management, 2019

- Record low bond yields and increasing stock volatility make it less likely that a portfolio made up of only stocks and bonds will continue to perform as well as it has recently.

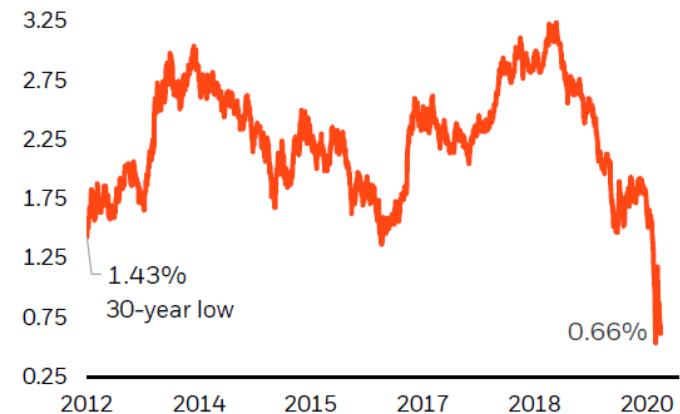
TODAY MORE THAN EVER

60/40 portfolios are under pressure

“The 60”
Stock volatility is increasing
Annual volatility of the S&P 500



“The 40”
Bonds yields are at record lows
10-yr Treasury yield



New sources of return and diversification may be needed.

Past performance is no guarantee of future results. Equity market data source: Morningstar, as of 6/30/20, represented by the S&P 500 Index. Average annual volatility based on standard deviation. Index performance is for illustrative purposes only. It is not possible to invest in an unmanaged index. Rates data source: U.S. Dept. of the Treasury as of 6/30/20. Data is since 7/25/12 when the 10-year Treasury hit a 30 year low point.

- Most benchmarks are market-capitalization weighted which can lead to issues like concentration in a few stocks if they perform particularly well.
- Market capitalization in the top 5 stocks has approached record highs. Active managers are not forced to hold the largest weights in stocks that have already appreciated.

Market Cap of 5 Largest Companies as Share of S&P 500 Index (%)



Source: Compustat, Goldman Sachs Global Investment Research, and GSAM as of September 8, 2020. Chart shows the market capitalization of the 5 largest companies in the S&P 500 Index as a percent of the total market cap. Past performance does not guarantee future results, which may vary.

Appendix II: Liquidity and Alternatives

With regard to liquidity, is there an absolute dollar amount or percentage you wish to keep liquid (cash, money market) at any one time? If so, how much?

- Depends upon pension payment requirements
- Zero
- Only enough to pay one or two months of participant benefits
 - This could be up to \$333,000 (about 1.3% of the portfolio)
- Enough to meet annual liabilities, fees, any other expenses.
 - This could be up to \$2 million (about 8% of the portfolio)
- Up to 10%.
- Five years worth of benefit payments.
 - This could be up to \$10 million (about 40% of the portfolio)

- Although investors hold mutual funds for about 4.5 years on average, mutual fund managers can not invest in less liquid markets and must hold cash to fulfill potential redemptions.

OVERCOMING BEHAVIORAL BIASES

Liquidity bias

Recency bias

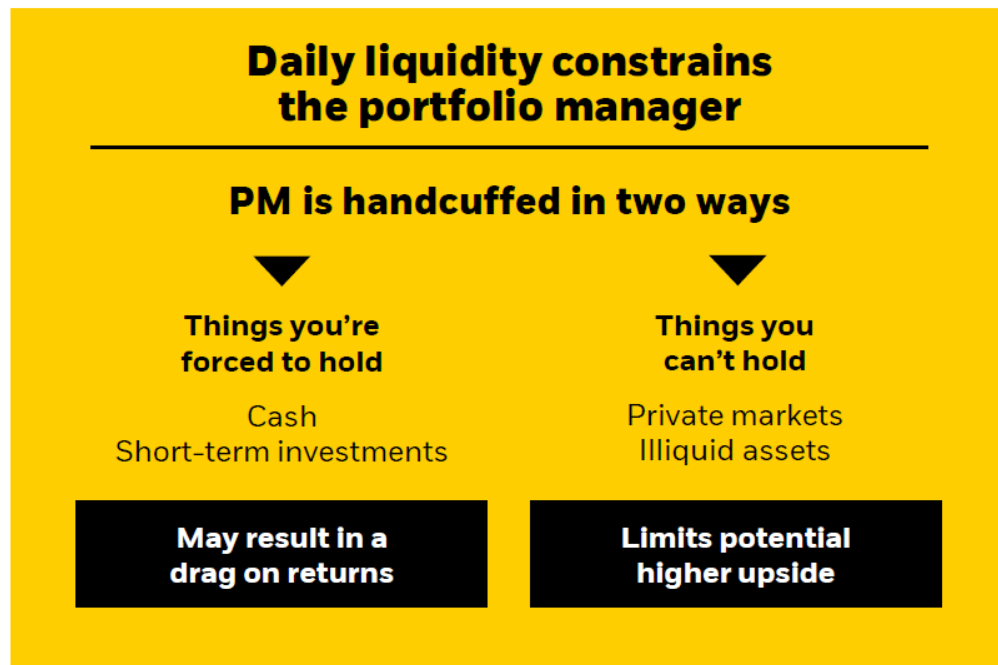
Daily liquidity comes with a cost

Do you need it?

1,642 days

Average holding period
for mutual funds

Typically there is no
drawback to monthly or
even quarterly liquidity



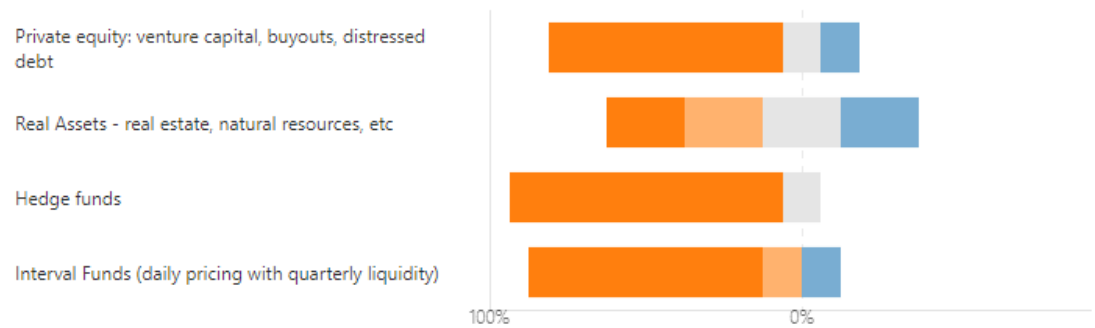
Source: Dalbar as of 12/31/19. 4.5 years is the average holding period for an equity mutual fund.

- Board Members expressed reservations about the use of alternative across the board.
- We would agree that private equity funds are not appropriate for the Pension Plan.
- Given the long time horizon of the fund, there may be some opportunities to accept illiquidity in an attempt to achieve higher expected returns.

14. Please indicate how comfortable you are with each of the investment strategies listed below

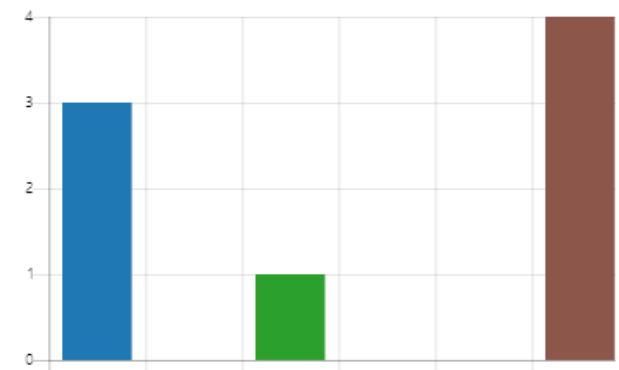
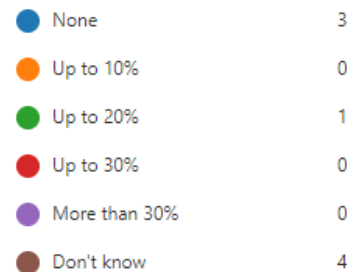
[More Details](#)

Not comfortable Somewhat comfortable Moderately comfortable Very comfortable Extremely comfortable



24. What percentage of the fund should be invested in yielding credit strategies ?

[More Details](#)



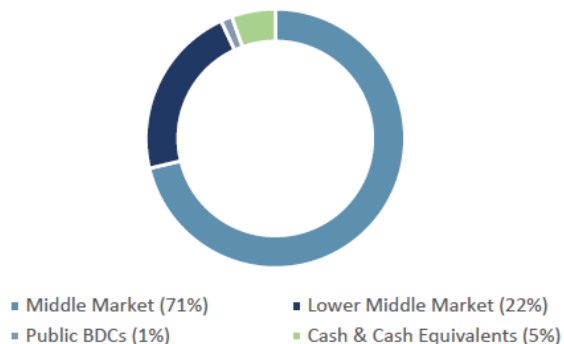
1. Invest as you always have and settle for today's low returns
2. Reduce risk in deference to the high level of uncertainty and accept even lower returns
3. Increase risk in pursuit of higher returns
4. Put more into special niches and special investment managers

- Interval funds provide investors such features as:
 - daily pricing
 - 1099 tax reporting
 - quarterly liquidity with a fund-level gate of 5-25% of NAV.
- The interval fund structure allows accredited investors the opportunity to access less liquid, potentially higher yielding alternative investments.
- Details on two interval funds are included on the following pages.

- Both interval funds have outperformed the Bloomberg Barclays Aggregate over the past 6 months since US Treasury Bond yields fell in March.
- One of the two have actually outperformed over the past 1 year even with the tailwinds of falling rates for bonds.

Name	As of Date	3M	6M	YTD	1
Cliffwater Corporate Lending I	12/03/2020	3.44	6.60	8.09	8.8
Variant Alternative Income Institutional	12/03/2020	1.79	2.91	4.84	6.1
BBgBarc US Agg Bond TR USD	12/03/2020	-0.27	1.80	7.11	6.7

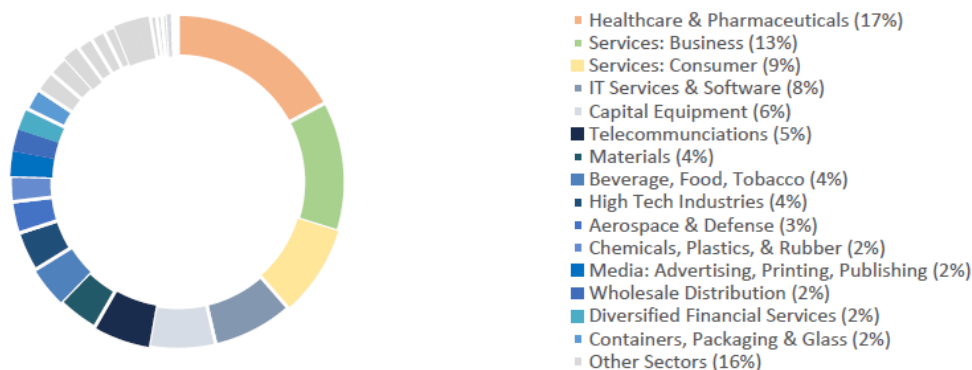
Fund Allocations



Direct & Underlying Loan Characteristics

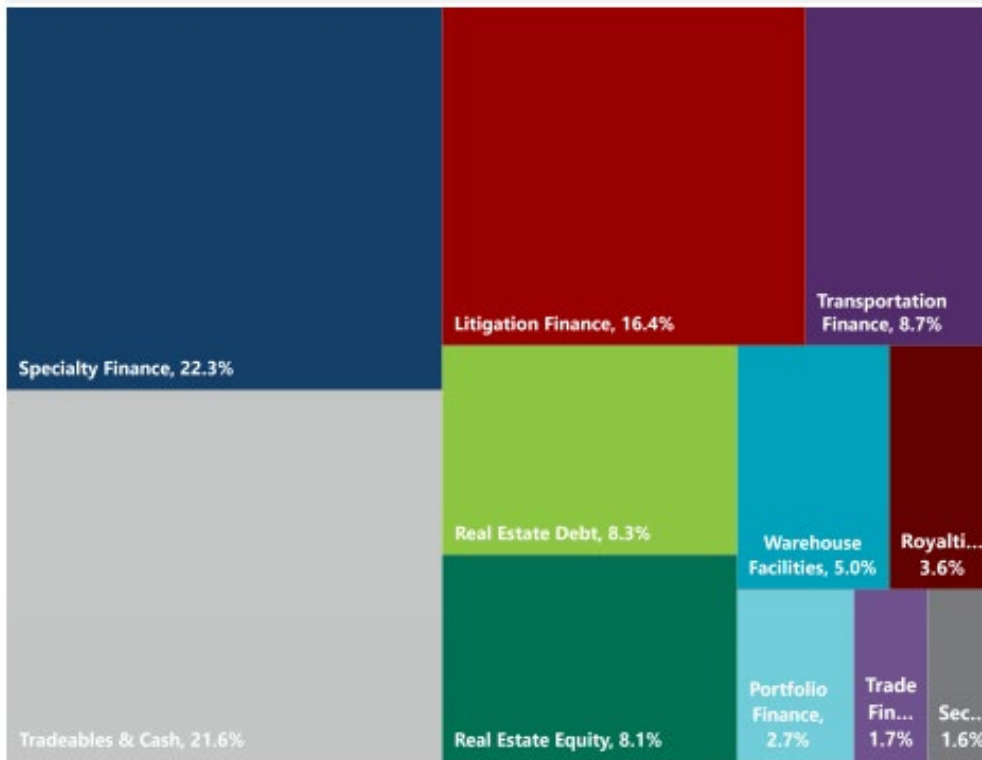
# Corporate Loans	917
% Floating Rate	99%
% First Lien	97%
Average Term to Maturity	4.2 years
Average LTV Ratio (Loan-to-Value)	45%
Average EBITDA	\$62M
Weighted Average Original Issue Discount	2%
Weighted Average Spread	LIBOR + 5.69%
Weighted Average Current Yield	6.83%

Industry Exposures: Direct & Underlying Loans

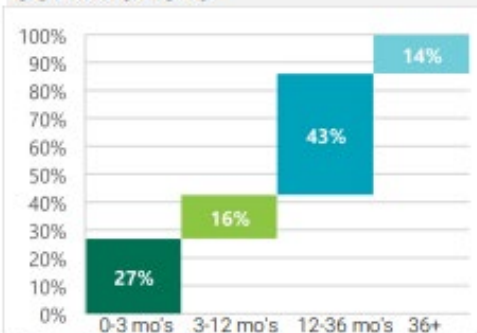


- **Expense:** 1.79% net, including leverage interest expense. (Management fee: 1.0%, Underlying managers: 0.7%)
- **Subadvisor relationships:** Subadvisors manage separate accounts. This allows for lower fees & expenses and maintains liquidity and other controls with the fund and its advisor.
- **Focus on principal protection before yield:** While the combination of market risk premiums has produced attractive returns, we favor some less risky exposures in the current environment (senior versus subordinated loans, less cyclical businesses, etc.).

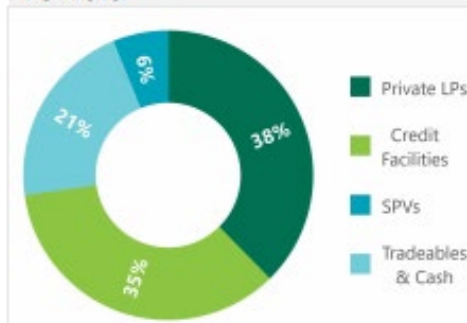
Asset class¹⁵



Commitment¹⁶



Vehicle¹⁷



Fund Overview

The Variant Alternative Income Fund offers investors efficient access to a diversified portfolio of unconventional income-generating assets. The Fund invests in niche market opportunities with strong cash flow characteristics and low correlations to public equity and bond markets. The Fund's primary objective is to provide a high level of current income. Capital appreciation will be considered a secondary objective. Variant, an innovator in alternative income investing, is led by an investment team with decades of experience investing in market niches.

Expense Ratio

2.26% net, including interest expense from leverage. (Management fee: 0.95%, Underlying managers: 1.0%, Operating expenses: capped at 0.5%)

Equity-like returns

Bond-like volatility

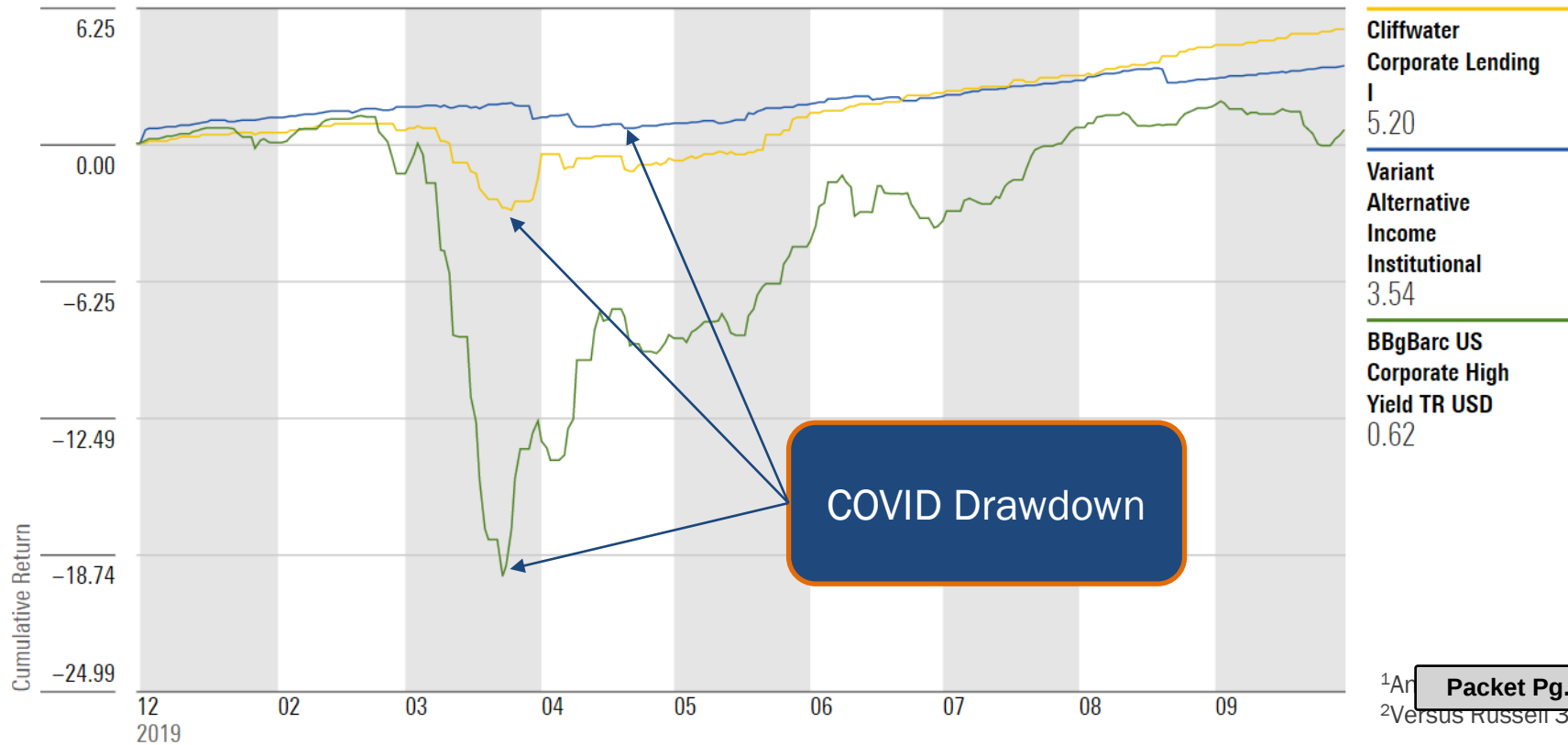
ASSET CLASS RETURN AND RISK (2004-2019)

	Return ¹	Risk ¹	Max Draw Down	Stock Beta ²
Cliffwater Direct Lending Index (CDLI)	9.55%	3.32%	-8%	0.14
Russell 3000 (US Stocks)	9.57%	15.20%	-46%	1.00
Bloomberg Barclays High Yield	7.39%	10.27%	-27%	0.52
Bloomberg Barclays U.S. Aggregate (US Bonds)	4.15%	3.23%	-3%	-0.04

Current Yield: 7.0%

Current Yield: 5.1%

Current Yield: 1.2%



Communication: Investment Portfolio Update (New Business)

Appendix III: Survey Responses

- Eight survey responses received.
- Common Ground: Everyone agreed that
 - It is extremely important there is sufficient money to pay beneficiaries (Q 11)
 - They feel calm and rational when markets are going up (Q 12)
 - You generally view yourself as guardians (Q 16)
- Areas to build consensus
 - Estimates of time horizon ranged from 7-50 years.
 - Many responses expressed relative risk aversion, but most said they would invest up to 75% of the plan in equities.
 - There were strong opinions both in favor of and opposed to the use of active management.
 - There was a wide range of opinions on how much liquidity (cash or short-term investments) was desired.
- Most were hesitant regarding alternative assets.

- Everyone expects inflation to be below 3% over the next 5 years;
 - 5 of 8 responses expect inflation between 1-2%.
- Half the respondents expect US equity returns to be between 5-7.5%, but two members expect higher than that and two expect annual returns lower than 5%.
- Most expect bond returns to be below 3%.

18. What are your return expectations for U.S. stocks over 5 years?

[More Details](#)

Less than 5%	2
5-7.5%	4
7.5%-10%	2
>10%	0



20. What are your return expectations for U.S. bonds over 5 years?

[More Details](#)

Less than 1%	3
1-3%	3
>3-5%	1
>5%	1



Sunpointe
Expected Return

5.6%

2.7%

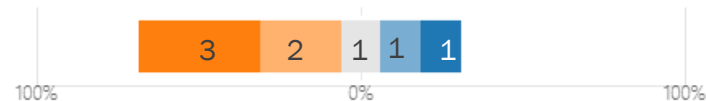
- Most are okay with the plan experiencing a loss in a particular year, but everyone agrees that it is moderately to very important to meet the return goal over the long term and extremely important to have sufficient funds to pay beneficiaries.

9. How important is it to you that the portfolio never experience a loss in any one year period?

[More Details](#)

Not at all Somewhat Moderately Very important Extremely important

How important is it to you that the portfolio never experience a loss in any one year period?

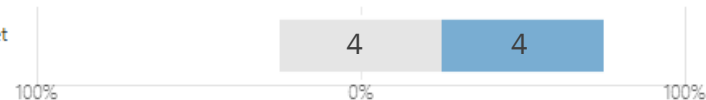


10. How important is it to you that the goal return be met over the long term?

[More Details](#)

Not important Somewhat Moderately Very important Extremely important

How important is it to you that the goal return be met over the long term?

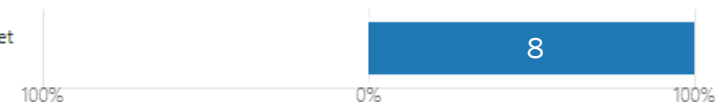


11. How important is it to you that there is sufficient money to pay the beneficiaries?

[More Details](#)

Not important Somewhat Moderately Very important Extremely important

How important is it to you that the goal return be met over the long term?



- There does not seem to be consensus about how much risk the pension fund can tolerate.
 - Half felt the fund should emphasize growth
 - Half felt investments should be more conservative.

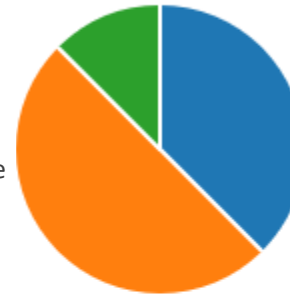
3. While recognizing that investments in the financial markets carry an element of risk, which of the following statements is most true?

- Safety of principal is my primary concern. The appreciation of capital and income is a secondary consideration. (2)
- My investments should be relatively safe and emphasize current income. (1)
- My investments can be exposed to a moderate amount of risk, with a primary goal of generating income. (1)
- My investments can be exposed to risk and should emphasize growth over time, but should also generate some income. (3)
- My investments should grow substantially over time and be exposed to considerable market risk. I do not need current income. (1)



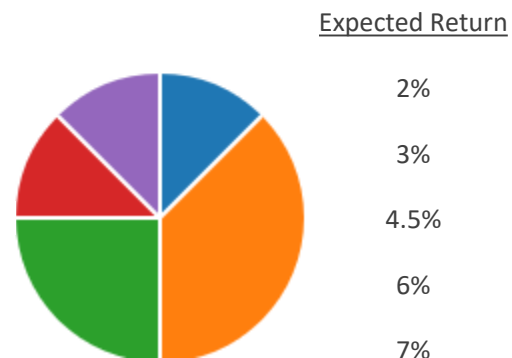
- The responses are skewed towards more conservative, but a wide range exists
5. In general, volatile investments are uncertain in the short term, but may produce greater returns in the long term compared with stable investments. Similarly, volatile investments may produce greater losses than stable investment choices. With respect to your long term goals, how much volatility are you willing to accept?

- Minimal. I prefer stable investments with current income comprising the majority of the returns. (3)
- Some. There can be some declines in value so long as income is generated & the investment exhibits some appreciation over time. (4)
- Moderate. Somewhat volatile performance is acceptable as long as the investment's goal is capital appreciation over the long term. (1)
- Considerable. Substantial risk can be undertaken to pursue greater returns. (0)



6. Consider the following two hypothetical investments, A and B. A provides an annual return of 2% with minimal risk of principal loss. B provides an average annual return of 7%, but carries a potential principal loss of 17% or greater in any one year. If you could choose to invest in A and B to meet the fund's goals, you would invest how?

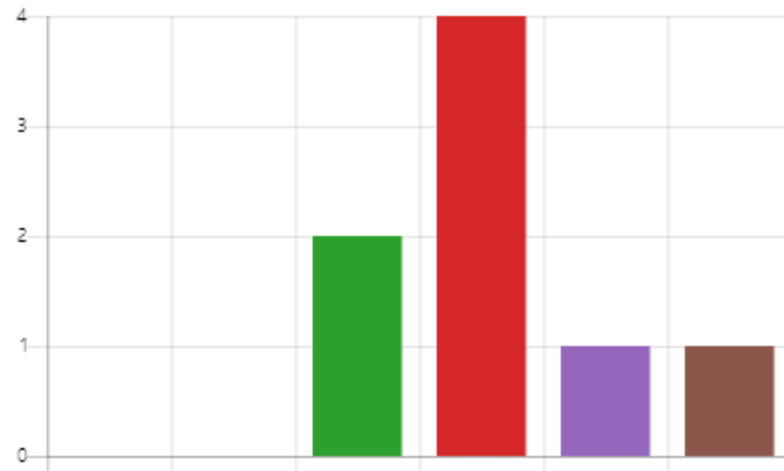
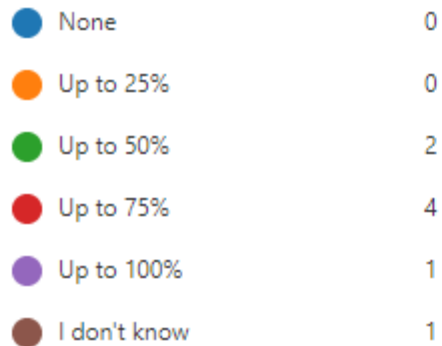
- I would invest 100% in A and 0% in B: 2% expected return (1)
- I would invest 80% in A and 20% in B: 3% expected return (3)
- I would invest 50% in A and 50% in B: 4.5% expected return (2)
- I would invest 20% in A and 80% in B: 6% expected return (1)
- I would invest 0% in A and 100% in B: 7% expected return (1)



- However, the majority of respondents think that up to 75% of the fund should be invested in equities. This would indicate a higher risk tolerance.

21. What percentage of the fund should be invested in equities?

[More Details](#)





PIMCO ASSET MANAGEMENT

PIMCO Income Fund

Investment Committee Report

June 2019

Fund Summary and Investment Thesis

PIMCO has a rigorous macroeconomic research process that is critical to their investment style. Macroeconomic forecasting is the starting point for their top-down process and it is very qualitative. Many competitors rely on a small group of economists with the responsibility for generating these views. The sheer amount of fixed income assets PIMCO manages is extraordinary leading to several advantages because of this size. As one of the largest fixed income managers, PIMCO can invest more in its investment professionals, research, and risk management capabilities than smaller bond managers. At PIMCO, all of the investment professionals participate in the macroeconomic forecasting process as this structure encourages more diversity of opinion and rigorous debate that leads to better outcomes and conclusions. This is a continual process but primarily takes place during their Secular and Cyclical Forums. These forecasts influence many structural elements of the portfolios, including duration, sector, quality, and yield curve exposure.

- PIMCO's focused and flat organizational structure enables the portfolio management team to focus entirely on investing as they do not have any other responsibilities within the organization. The portfolio management group's structure can best be described as a hub and spoke system, with the Investment Committee serving as the hub, which is responsible for determining the firm's macroeconomic outlook and setting the target portfolio characteristics for all of the strategies. The sector specialists are considered the spokes in the system and they are responsible for covering their specific space, relaying information, providing strategic ideas, and trading.
- PIMCO has attracted the best talent that shares their firm's dedication to clients. Their investment teams are recognized as some of the best in the industry. Their philosophy and collaborative environment amongst the investment teams has led to consistent performance over the years.
- PIMCO's Income Fund offers multiple benefits to investors. It provides access to multiple sources of return through a benchmark-agnostic strategy with flexibility across a global opportunity set. The team focuses on income as a driver of total return by seeking consistent income distribution and capital appreciation, helping to build up returns over time. The strategy also seeks to reduce downside risk versus other credit-oriented strategies, utilizing a bend but don't break philosophy where they expect price volatility, while avoiding permanent loss of capital.

- The PIMCO Income Fund was launched in March of 2007 as an alternative option to a traditional fixed income allocation. Supported by PIMCO's fixed income department and research resources, the portfolio managers construct the portfolio by finding the balance between capital preservation and yield. The Fund currently has \$218.69B in AUM as of 3/31/2019.
- Their size also helps them gain greater access to information from trading desks, government and corporate issuers, as well as policymakers around the world. Access to all of this intelligence improves their ability to make more informed investment decisions that ultimately benefit the portfolio. This translates over to their emerging market capabilities with 19 portfolio managers based in offices around the globe that facilitate on-the-ground research and trading throughout the day.

Firm Background and Organizational Overview

- Pacific Investment Management Company (PIMCO) was incorporated in 1971 as the active bond management unit of Pacific Mutual Life Insurance Co. The unit focused on investing in bonds, mortgages, private placements, and convertibles for the separate accounts of the insurer's clients.
- Bill Gross, James Muzzy, and Bill Podlich are credited with co-founding PIMCO even though the business technically existed before they arrived. The company used the three-legged stool management style that emphasized lean and efficient operations and a flat management structure. Bill Gross was responsible for all of the investing, James Muzzy was in charge of sales and client relations, and Bill Podlich handled the business-side of the organization.
- Portfolio managers focus solely on investing assets and have no direct client service or marketing responsibilities. The client service professionals are responsible for monitoring portfolios and communicating this information with clients and prospects.
- PIMCO has built up a global presence with its core competency in the fixed income space. Its investment capabilities have increased in recent years as they have expanded their offering to include equities and real assets. In 1985 PIMCO formally split from Pacific Mutual but was acquired by Allianz, a large global financial services company based in Germany, in 2000. PIMCO continues to operate as a separate and autonomous subsidiary of Allianz.
- PIMCO is a limited liability company that is a majority owned subsidiary of Allianz Asset Management. Allianz Asset Management is a subsidiary of Allianz SE, a large global financial services company based in Germany. PIMCO operates as a separate and autonomous subsidiary of Allianz. PIMCO does provide equity to select key professionals through its M Unit program, which allows the employees to benefit in the profit distributions of the firm. The Class M Unit Equity Participation Plan grants options on PIMCO equity that vest in 1/3 increments 3, 4, and 5 years after granted. Upon vesting, the options will convert into PIMCO M Units, which are non-voting common equity of PIMCO. M Units pay out quarterly distributions equal to a pro-rata share of PIMCO's net profits.

Team Summary

- PIMCO's Income Team is led by Dan Ivascyn, Alfred Murata, and Josh Anderson, all of whom are Managing Directors at PIMCO. Dan, Alfred and Josh are supported by teams of sector specialists who are tasked with finding the most attractive opportunities across every sector of the fixed income markets on a global basis.
- The Income Team, as with all other portfolio management teams, reports to and acts under the oversight of the firm's Investment Committee, which is led by PIMCO's Group CIO, Dan Ivascyn. The Investment Committee is charged with establishing the firm's economic outlook and general investment themes while the Income Fund Portfolio Managers are responsible for sector and bond allocations to ensure the objectives of the strategy are met.
- The Income Team is further supported by a deep bench of experienced credit research analysts. The Global Credit Research team consists of over 65 seasoned credit analysts. Analysts are assigned to specific industries that are occasionally rotated by the Head of Global Credit Research, Christian Stracke. The credit research analysts are assigned based on both industry and geography.
- The team is global, with the majority of the credit analysts located at PIMCO's headquarters in Newport Beach, California with other analysts located in global offices throughout Asia and Europe. This approach reflects the importance that PIMCO places on its ability to evaluate companies across countries and industries to enhance bottom-up security selection in portfolios.

Portfolio Management Team

Dan J. Ivascyn Group CIO, Managing Director Co-lead Portfolio Manager 21 years at PIMCO			Alfred T. Murata, J.D., Ph.D. Managing Director Co-lead Portfolio Manager 18 years at PIMCO			Joshua Anderson, CFA Managing Director Co-lead Portfolio Manager 16 years at PIMCO		
Governments	Global	Mortgage Credit	Investment Grade	High Yield	Emerging Markets	Bank Loans	Real Return	Short-term
Mihir Worah	Andrew Balls	Dan Ivascyn	Mark Kiesel	Jon Horne, Andrew Jessop	Pramol Dhawan	Elizabeth MacLean	Mihir Worah	Jerome Schneider
9 portfolio managers	14 portfolio managers	66 portfolio managers	25 portfolio managers	12 portfolio managers	21 portfolio managers	5 portfolio managers	9 portfolio managers	13 portfolio managers
Bottom-up firmwide resources								
Credit Research		Quantitative Portfolios		Risk Management		Portfolio Analytics		
Christian Stracke , head portfolio manager 67 portfolio managers and analysts		Mihir Worah , head portfolio manager 12 portfolio managers and analysts		Sudi Mariappa , head portfolio manager 13 portfolio managers and analysts		Ravi Mattu , head portfolio manager 71 portfolio managers and analysts		

Daniel J. Ivascyn. Mr. Ivascyn is Group Chief Investment Officer and a managing director in the Newport Beach office. He is lead portfolio manager for the firm's income strategies and credit hedge fund and mortgage opportunistic strategies. He is a member of PIMCO's Executive Committee and a member of the Investment Committee. Morningstar named him Fixed-Income Fund Manager of the Year (U.S.) for 2013. Prior to joining PIMCO in 1998, he worked at Bear Stearns in the asset-backed securities group, as well as T. Rowe Price and Fidelity Investments. He has 27 years of investment experience and holds an MBA in analytic finance from the University of Chicago Graduate School of Business and a bachelor's degree in economics from Occidental College.

Alfred T. Murata. Mr. Murata is a managing director and portfolio manager in the Newport Beach office, managing income-oriented, multi-sector credit, opportunistic and securitized strategies. Morningstar named him Fixed-Income Fund Manager of the Year (U.S.) for 2013. Prior to joining PIMCO in 2001, he researched and implemented exotic equity and interest rate derivatives at Nikko Financial Technologies. He has 19 years of investment experience and holds a Ph.D. in engineering economic systems and operations research from Stanford University. He also earned a J.D. from Stanford Law School and is a member of the State Bar of California.

Joshua Anderson, CFA. Mr. Anderson is a managing director and portfolio manager on the income team in the Newport Beach office. He also leads the global ABS (asset-backed securities) portfolio management team and supports the firm's opportunistic strategies. Previously at PIMCO, he oversaw PIMCO's European opportunistic investments across public and private mortgage, real estate and specialty finance markets, and earlier he was a structured product portfolio manager in the Newport Beach office. Prior to joining PIMCO in 2003, he was an analyst at Merrill Lynch covering both the residential ABS and collateralized debt obligation sectors and was ranked as one of the top analysts by Institutional Investor magazine. He was previously a portfolio manager at Merrill Lynch Investment Managers. He has 23 years of investment experience and holds an MBA from the State University of New York, Buffalo.

Employee Compensation

- PIMCO offers an industry and market attractive Total Compensation Plan for their employees, designed to reward qualities that drive results: integrity, teamwork and individual/team performance. The Total Compensation Plan includes an incentive component that rewards their high- performance standards. Key Principles on Compensation Philosophy include:
 - PIMCO's pay practices are designed to attract and retain high performers so that their clients benefit from a stable environment where individuals are productively working towards their client's goals.
 - PIMCO's pay philosophy embraces their organizational values: they believe clients benefit from their corporate culture of rewarding strong performance, a strong work ethic, and a strong meritocracy.
 - PIMCO's goal is to ensure key professionals are aligned with their clients' and PIMCO's long-term success through equity participation.
 - PIMCO's "Discern and Differentiate" discipline is exercised where individual performance rating is used for guidance as it relates to total compensation levels so that their most client accretive professionals flourish.
- The Total Compensation Plan consists of three components:
 - *Base Salary* – Base salary is determined based on core job responsibilities, positions/levels and market factors. Base salary levels are reviewed annually, when there is a significant change in job responsibilities or position, or a significant change in market levels.
 - *Performance Bonus* – Performance bonuses are designed to reward individual performance. Each professional and his or her supervisor will agree upon performance objectives to serve as a basis for performance evaluation during the year. The objectives will outline individual goals according to pre-established measures of the group or department success delivering results for clients. Achievement against these goals as measured by the employee and supervisor will be an important, but not

exclusive, element of the bonus decision process. Award amounts are determined at the discretion of the Compensation Committee and will also consider firm performance.

- *Deferred Compensation* – Long Term Incentive Plan (“LTIP”) and/or M Options which is awarded to key professionals. Employees who reach a total compensation threshold are delivered their annual compensation in a mix of cash and/or deferred compensation. PIMCO incorporates a progressive allocation of deferred compensation as a percentage of total compensation, which is in line with market practices.

Investment Strategy Overview

Investment Philosophy

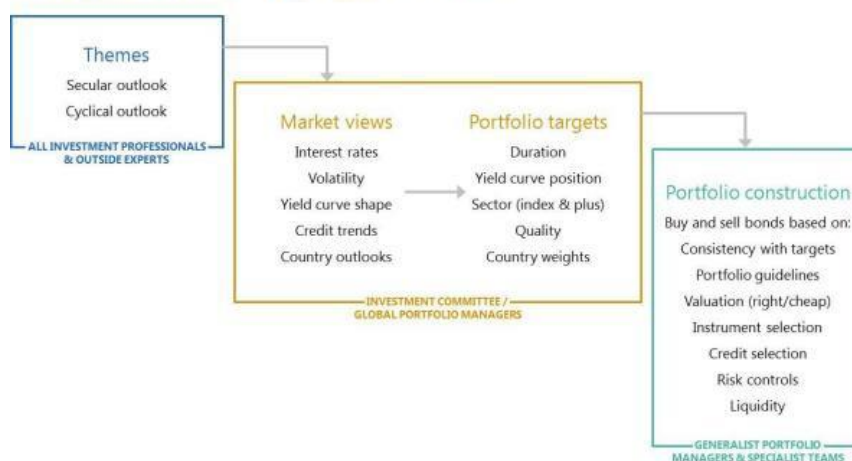
- The objectives of PIMCO’s Income Fund are to deliver consistent income while generating attractive risk-adjusted total return over time. The Fund aims to meet these objectives by utilizing a global multi-sector, benchmark agnostic approach that takes advantage of PIMCO’s global resources to source the best income generating ideas while emphasizing quality and staying senior in the capital structure.
- In order to achieve its objectives, the Fund is divided into two general sections: higher yielding assets that are expected to benefit when economic growth is robust and higher quality assets that are expected to benefit if economic growth is weak. We believe this is the best approach in order to achieve the strategy’s objectives across different market environments.
- The fund’s philosophy is based on 4 main tenets:
 - *Stable Income* - The Fund is managed in an effort to maximize income; it also aims for capital appreciation and attractive risk-adjusted returns. This means that the strategy balances the need to generate yield with the need to protect capital. Instead of pursuing the highest yields, the Fund searches for the most attractive risk-adjusted income opportunities while simultaneously balancing downside risks.
 - *Quality and Duration Flexibility* - The Fund does not intend to stretch for yield by investing in risky securities. While the Fund can invest in below investment grade securities, it limits exposure to high yield corporate holdings to less than half of the portfolio. The Fund also utilizes a wide duration band of zero to eight years in order to navigate different interest rate environments given PIMCO’s views.
 - *Structural Seniority* - Being senior in the capital structure provides support in periods of market stress.
 - *Risk Management* - PIMCO believes that avoiding negative surprises is critical to sustaining a high and consistent level of income, along with attractive risk-adjusted total return. The Fund’s credit research helps steer clear of sectors, security structures or companies that are unsound in PIMCO’s view.

Investment Process

- PIMCO’s investment process starts with an annual Secular Forum at which PIMCO investment professionals from around the globe gather with industry experts for a three-day discussion about the future of the global economy and financial markets. The goal of this Forum is to look beyond the current business cycle and determine how secular forces will play out over the next three to five years. In addition to the Secular Forum, PIMCO holds Cyclical Forums three times a year to evaluate growth and inflation expectations over the next 6-12 months.

- Following the Secular and Cyclical forums, PIMCO's portfolio managers meet for a Strategy Week to discuss how the firm's economic outlook will impact each sector of the financial markets and to identify what are the most attractive risk-adjusted investment opportunities across different scenarios.
- Based on these discussions, the investment committee sets targets across key risk factors that are then adjusted on an ongoing basis as new market information becomes available. The Income Team leverages PIMCO's top down macroeconomic process to set the Fund's exposures across key risk factors and also leverages their global resources to source the best income-producing investment ideas globally.
- This combined top-down and bottom-up approach, enables the Income team to build a portfolio with diverse sources of high-quality yield and overall risk exposures that are in line with PIMCO's overall views of the global economy and the markets.

The chart below shows PIMCO's global investment process:



Research Process

- PIMCO's research and innovation are important value-adds to the investment performance. The majority of research is performed in house by the experienced and qualified team. Their focus falls on Economic Analysis and Quantitative Research with a significant emphasis on Credit Research.
- The credit research team consists of over 65 analysts, assigned to specific industries, with each analyst covering 1-3 industries. Analysts focus on 4 main criteria: business model, financial analysis, structure, and relative value.



Risk Management

- PIMCO's Portfolio Risk Management team enforces internal Investment Committee defined targets and limits, and partners with portfolio managers to provide analysis and insights on portfolio construction, stress tests, potential drawdowns and other market risks. The enforcement of the IC's model portfolio is the responsibility of the Portfolio Risk Management Team.
- The enhanced partnership between the risk management team and PMs has grown under the Group CIO Dan Ivascyn and Global Head of Risk Management Sudi Mariappa. This partnership was designed for risk managers to gain a better understanding of the PM's approach to managing portfolios and working to maintain the consistency of PIMCO investment themes.
- The Global Risk Management Team is led by Sudi Mariappa. The team has professionals located in each region with a major trading center, allowing for 24-hour portfolio coverage.

Portfolio Construction

- Major macro or structural strategies in PIMCO's portfolios, such as duration, convexity, sector concentration, yield curve exposure and credit risk, are set by the Investment Committee on a consensus basis. All portfolios are then constructed with securities that, in aggregate, seek to optimally achieve the target characteristics.
- In selecting these securities, PIMCO considers the entire global fixed income universe. Many members of PIMCO's portfolio management group are specialists within a particular sector of the bond market, and the group will rely heavily on these specialists for knowledge and execution within each sector.
- Proprietary models are used to compare embedded risks and determine a theoretical fair value for every security held in Income portfolios. Portfolio managers can use these models, while also relying on teams of sector specialists, to determine the optimal issue to include in portfolios. While PIMCO utilizes a team approach, the co-lead portfolio managers are ultimately responsible for determining what securities are selected.

Portfolio Characteristics

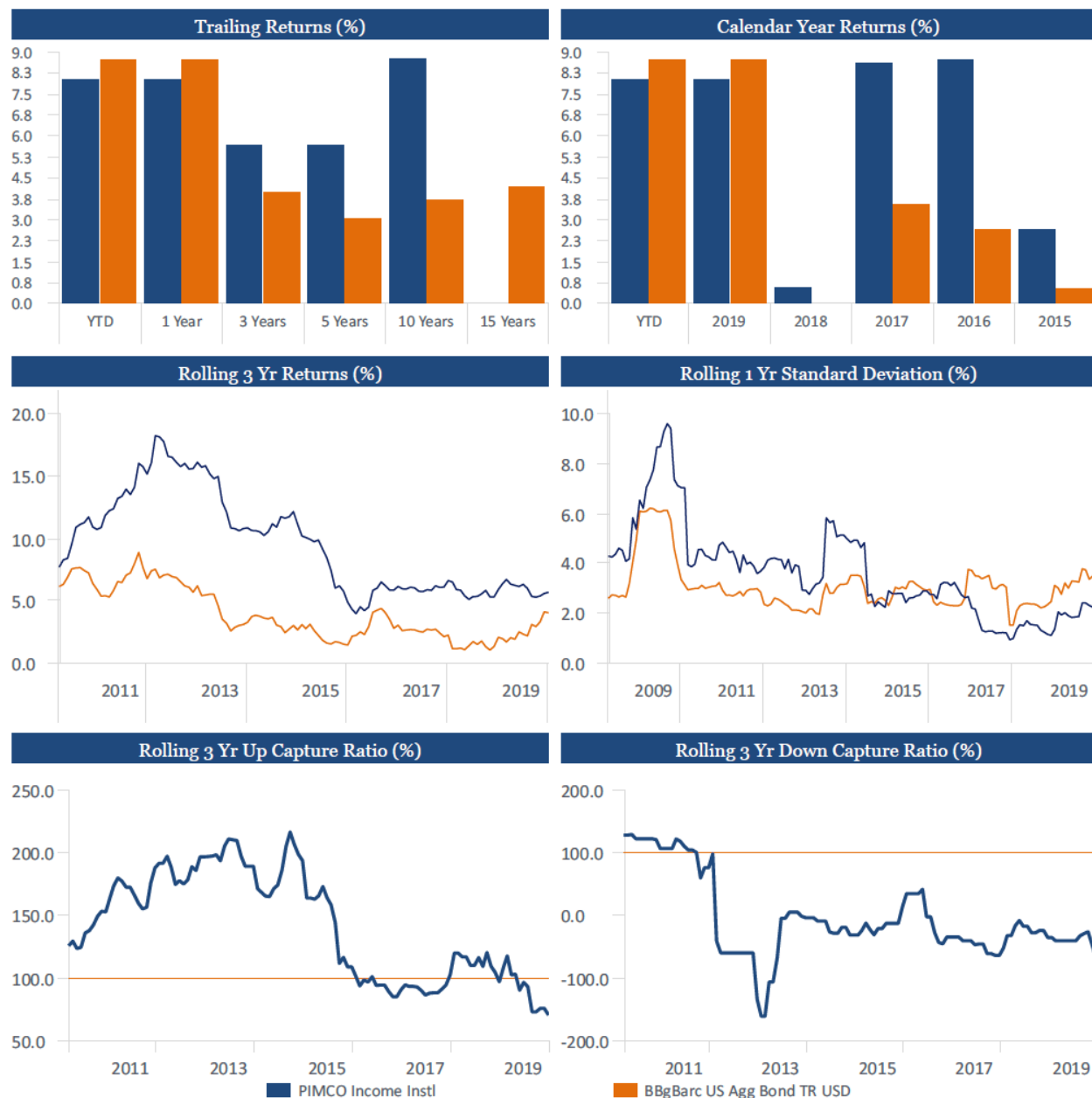
Maturity %		Risk Characteristics (Trailing 3 Years)	
0-1 yrs	36.20	Standard Deviation	1.89
1-3 yrs	30.78	Sharpe Ratio ⁴	2.03
3-5 yrs	7.14	Information Ratio ⁵	0.49
5-10 yrs	26.02	Tracking Error ⁶	3.19
10-20 yrs	0.44	Sector Allocation - Duration in Years	
20+ yrs	-0.58		
Effective Maturity (yrs)	2.59	US Government Related ⁷	-0.27
Duration in Years		Securitized ⁸	2.46
		Invest. Grade Credit	0.32
Effective Duration (yrs)	0.91	High Yield Credit	0.11
		Non-USD Developed	-2.16
		Emerging Markets ⁹	0.35
		Other ¹⁰	0.11
		Net Other Short Duration Instruments ¹¹	0.00

Portfolio characteristics as of 12/31/2019

Strategy Vehicles

- Separate Account: N/A
- Commingled Fund: N/A
- Mutual Fund:
 - Institutional – PIMIX - \$1M Minimum – 50 bps fee
 - Retail – PONAX - \$1K Minimum – 90 bps fee
- Current Availability/Capacity: The fund is currently open, and the firm has no concerns regarding capacity for this strategy.

Performance



Communication: Investment Portfolio Update (New Business)

Important Information

The charts and information in this presentation are for illustrative purposes only, and are based upon sources of information that Sunpointe, LLC generally considers reliable, however we cannot guarantee, nor have we verified, the accuracy of such independent market information. The charts and information, and the sources utilized in the compilation thereof, are subjective in nature and open to interpretation.

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PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.



CLIFFWATER LLC

Cliffwater Corporate Lending Fund

Investment Committee Report

April 2019

Fund Summary and Investment Thesis

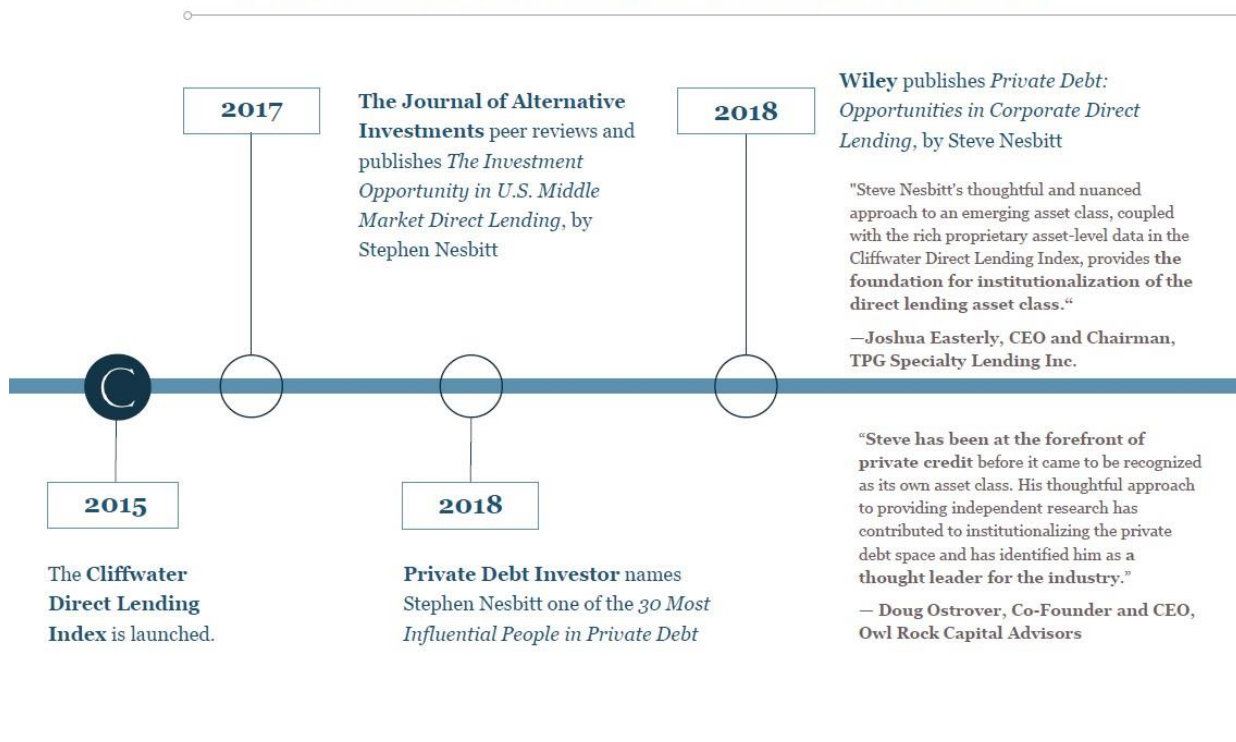
- **Expertise in the Direct Lending Space.** Cliffwater began their research effort in the direct lending space after the 2008 financial crisis. They have recommended direct lending investments to their clients since 2011 and have managed a publicly traded BDC portfolio since August 2014. They also launched the Cliffwater Direct Lending Index in 2015 and a series of other indices and databases. Additionally, the firm's deep experience in sourcing and conducting due diligence on alternative fund managers, as well as constructing multi-manager portfolios, makes this offering very compelling.
- **Access to Top-Tier Private Debt Managers.** This is a fund of funds structure that will be launched with four underlying direct lending sub-advisors and a fifth sub-advisor focused on the cash flow portion of the portfolio. Cliffwater believes the direct lending marketplace is multi-factored and that combining managers with different styles and risks will result in a superior outcome. The four direct lending managers are Crescent, Audax, Benefit Street and Tennenbaum with Beach Point managing the overall cash position and other credit instruments in the fund. All four of the core managers have originated over \$45B in loans with an average loss rate of less than 0.1%. Cliffwater has allocated approximately \$2.6B across these four funds on the advisory side of their business. They plan to equal weight the four managers, but there will be tilts based on deal flow and the opportunity set. All will be SMAs with preferential fees and an ability to turn off future loan activity.
- **Compelling Opportunity in Niche Market.** The landscape in the direct lending space has changed dramatically over the past several years resulting in a great opportunity for non-bank lenders. Currently, it is estimated that domestic and foreign banks finance approximately 10% of loans to U.S. middle market companies, which is down from 75% in 2001. Regulatory burdens have driven many banks out of the direct lending business. Other direct lenders, like the sub-advisors for this fund, now fill the void, financing approximately 90% of U.S. middle market loans today. Corporate direct lending has the following attractive characteristics – historically high yield relative to losses, mostly floating rate loans, ability to construct large, diversified portfolios, and a short effective life of three years on average offers attractive liquidity.

- **Diversification Achieved with Single Allocation.** This multi sub-advisor approach allows Cliffwater to build a well-diversified portfolio of loans where any single borrower will represent a small fraction of total assets. These sub-advisors will also have different styles. For example, some may focus on senior debt while others specialize in second lien or subordinated debt. Also, some managers may focus more on sponsored deals while others lend more to non-sponsored borrowers. The size of the borrowers will likely vary across the managers as well. Cliffwater can also tactically weight the portfolio towards a sub-advisor(s) that they believe has a more attractive opportunity set at any given time. Finally, they can always adjust allocations to sub-advisors if they are not investing and/or performing as expected.
- **Interval Fund Structure Provides Flexibility.** The firm initially wanted to set up an LP structure, but settled on the interval fund after several requests from RIAs. The structure provides a nice balance between the less liquid loan investments and the underlying liquidity necessary to meet redemptions. Cliffwater believes organic liquidity is around 8%, which should be sufficient to meet the 5% quarterly redemption minimum. Cliffwater intends to use a half turn of leverage, which should help enhance returns, without creating unnecessary volatility. This will also allow them to consider a few more opportunistic investments that may be less liquid.

Firm Background and Organizational Overview

- Cliffwater is an SEC Registered Investment Adviser founded in 2004 by Stephen Nesbitt as a lift out from Wilshire Investments to specialize in alternative assets. The firm has been institutionally-driven since inception. The firm will also implement the endowment model for clients wanting the full- service consulting experience. Cliffwater has \$70B of assets under advisement on behalf of 46 clients with \$1.4B being discretionary. The firm provides research and coverage across Private Equity, Private Debt, Real Estate, Real Assets and Hedge Funds. They have some SMAs in place today but don't currently offer any commingled funds – the interval fund will be the first liquid product launch for the firm.
- The firm is 100% employee-owned, led by Stephen Nesbitt (CEO & CIO) and has 43 employees located in Los Angeles and New York. Currently, six partners own the firm including four who have worked together going back to Wilshire. Two founding partners (Barbara Smith & Dennis Sugino) have retired/departed from the original founding group, which also included Stephen and Kathleen Barchick. The other 4 equity partners are Tom Lynch (Portfolio Advisory), Gabrielle Zadra (Research), Daniel Stern (Research), and Jon Rogal (GC).
- Direct lending is a core piece of their business today, an effort that they started in 2008 – they have allocated \$3-4B for clients over time across the middle market. Their history has been allocating across private commingled funds, SMAs and private BDCs. They like SMAs and private BDCs due to the terms. They want to bring their scale and pricing down to the interval fund structure. Their proprietary database has data on 6,800+ direct middle market loans, 65+ private funds, 70+ BDCs and over 235 direct lending managers. Cliffwater is launching its own fund/peer universe in Q1 2019.

A RECOGNIZED AUTHORITY IN DIRECT LENDING



Team Summary

Stephen Nesbitt, Kathleen Barchick (worked together for 25 years), Thomas Lynch (worked together for 30 years), and Gabrielle Zadra are the four main leaders of the firm. Tom built the PE business at Wilshire, so he knows the space very well. Gabrielle runs overall research for the firm and Jeff Topor reports to her as the head of direct lending research. Eli Sokolov, Eric Abelson and Josh Blum oversee other research areas. Josh Blum focuses on BDC research – both private and public. Josh is the PM for their public (\$50M) BDC strategy. Lance Johnson is the COO, John Rogal is the head of legal and compliance, Jon Tabak is the head of ODD, and David Wippel is the head of risk and reporting.

THE CLIFFWATER TEAM

Portfolio Advisory							
James Feidler Sr. Managing Director	Kathleen Barchick Sr. Managing Director	Stephen Nesbitt CEO / CIO	Thomas Lynch* Sr. Managing Director	Mark Johnson* Sr. Managing Director			
Investment Research							
Mark Williams Managing Director	Eli Sokolov Managing Director	Eric Abelson Managing Director	Gabrielle Zadra Sr. Managing Director	Daniel Stern* Sr. Managing Director	Chris Solarz* Managing Director	Andrew Rudolph* Managing Director	Bernard Gehlmann* Managing Director
Jordan Kelly Associate	Josh Blum Director	Kyle Barber Senior Associate	Jeffrey Topor Vice President	William Dornbrook Vice President	Brett Gardocki* Sr. Associate	Susanne Wei* Vice President	Tom O'Sullivan* Analyst
Legal Operations & Due Diligence							
Kevin McCann* Director	Jonathan Tabak* Managing Director	Jonathan Rogal Sr. Managing Director / Gen. Counsel	Mario Indelicato Chief Compliance Officer	Stanley Liu Director	Jeffrey Loeb Director		
Operations & Reporting							
Steve Thomas Vice President	Paulo Jeronymo Vice President	Thidar Maw Vice President	David Wippel Managing Director	Nico Chavez Associate	Christina Nolan Associate	Scott Lynds Analyst	Ananh Onevathana Analyst
Corporate							
D'Ann Patterson Office Manager	Carol Komesu Treasurer / Controller	Lance Johnson COO / CFO	Thomas Brown Chief Technology Officer	Philip Hasbrouck Managing Director	Brian Rhone* Managing Director	Fiona Roses* Office Manager	Gillian Shaughnessy Admin Assistant

Cliffwater Direct Lending Team

Stephen L. Nesbitt, Chief Executive Officer & Chief Investment Officer
Steve oversees all investment research as the firm's Chief Investment Officer. Prior to forming Cliffwater in 2004, Steve was a Senior Managing Director at Wilshire Associates. From 1990 to 2004, Steve led the Consulting division at Wilshire Associates and also started and built its asset management business using a 'manager of manager' investment approach, including private equity and hedge fund-of-fund portfolios. Steve started his career at Wells Fargo Investment Advisors, an early pioneer in index funds, where he developed and managed index funds and oversaw asset allocation. He graduated summa cum laude, with a BA in Mathematics and Economics from Eisenhower College (Rochester Institute of Technology) and an MBA, with Distinction, from The Wharton School at The University of Pennsylvania.

Gabrielle Zadra, Head of Private Market Research

Gabrielle is a Senior Managing Director of Cliffwater LLC and leads our private assets research team. Prior to joining Cliffwater in 2004, Gabrielle was an Associate with Pathway Capital Management, LLC where she led due diligence on private equity investments including venture capital, buyout, debt- related and special situation partnerships. Previous experience includes working in investment banking with the Banc of America Securities Technology Group. She also worked for the Service Employees International Union / AFL-CIO. Gabrielle earned a BA in History and Women's Studies from Oberlin College, and an MBA from The Anderson School at the University of California, Los Angeles.

Eric Abelson, Managing Director, Private Markets Research

Eric is a Managing Director of Cliffwater LLC and a member of our private assets research team. Prior to joining Cliffwater in 2007, Eric was a Senior Associate with WestLB Mellon Asset Management where he performed due diligence on private equity investments including venture capital, buyout, special situation partnerships, and co-investment opportunities. Previous experience includes working in equity management for Sit Investment Associates. He earned a BS in Environmental Economics from the University of California at Berkeley. Eric holds the Chartered Financial Analyst® designation and is a member of the CFA Institute and a member of the CFA Society Los Angeles.

Eli Sokolov, Managing Director, Credit Research

Eli is a Managing Director of Cliffwater LLC and a member of our hedge fund research team. Prior to joining Cliffwater in 2007, Eli was a Senior Associate at MSCI Barra, where he conducted research in the areas of trading cost, securities analyst skill, real estate risk, firm valuation, and alpha forecasts.

He earned a BA in Astrophysics and Economics with distinction from the University of California, Berkeley and an MBA with highest honors from The Anderson School at the University of California, Los Angeles. Eli holds the Chartered Financial Analyst® designation and is a member of the CFA Society Los Angeles.

Jeff Topor, Vice President, Direct Lending Research

Jeff is a Vice President of Cliffwater LLC and a member of our private assets research team. Prior to joining Cliffwater in 2013, Jeff was part of a team of consultants at Endowance Solutions where he identified and implemented Business Intelligence reporting tools for large enterprises. He earned a BS in Business Administration from the University of Southern California with majors in Finance and International Business, and a minor in Spanish.

Investment Strategy Overview

- The Cliffwater Corporate Lending Fund (CCLFX) is a closed-end management investment company structured as an interval fund and registered under the Investment Company Act of 1940, as amended, and organized as a Delaware statutory trust on March 21, 2018. As the investment advisor for the fund, Cliffwater provides all the day-to-day investment management services. The fund is non-diversified, which means that under the Investment Company Act, it is not limited in the percentage of its assets that it may invest in any single issuer of securities.
- The Fund's primary investment objective is to seek consistent current income, while the secondary objective is capital preservation. The overall return objective for the fund is 8-9% annualized. The Fund uses a multi-manager approach whereby the Fund's assets are allocated among Cliffwater and one or more sub-advisors in percentages determined at the discretion of the PM team led by Stephen Nesbitt. Cliffwater will delegate the management of a substantial portion of Fund assets to a group of experienced sub-advisors with expertise in managing portfolios of direct loans, direct loan instruments, and/or other corporate loans.
- The sub-advisors, on behalf of the Fund, will originate and/or invest in a wide range of direct loan instruments and/or other corporate loans, with a focus on U.S. middle market corporate loans, and related direct loan instruments. For these purposes, "middle market corporate loans" generally refers to direct loans made to a company with annual earnings (as measured by earnings before interest, taxes, depreciation and amortization, or "EBITDA") between approximately \$10 million and \$100 million.

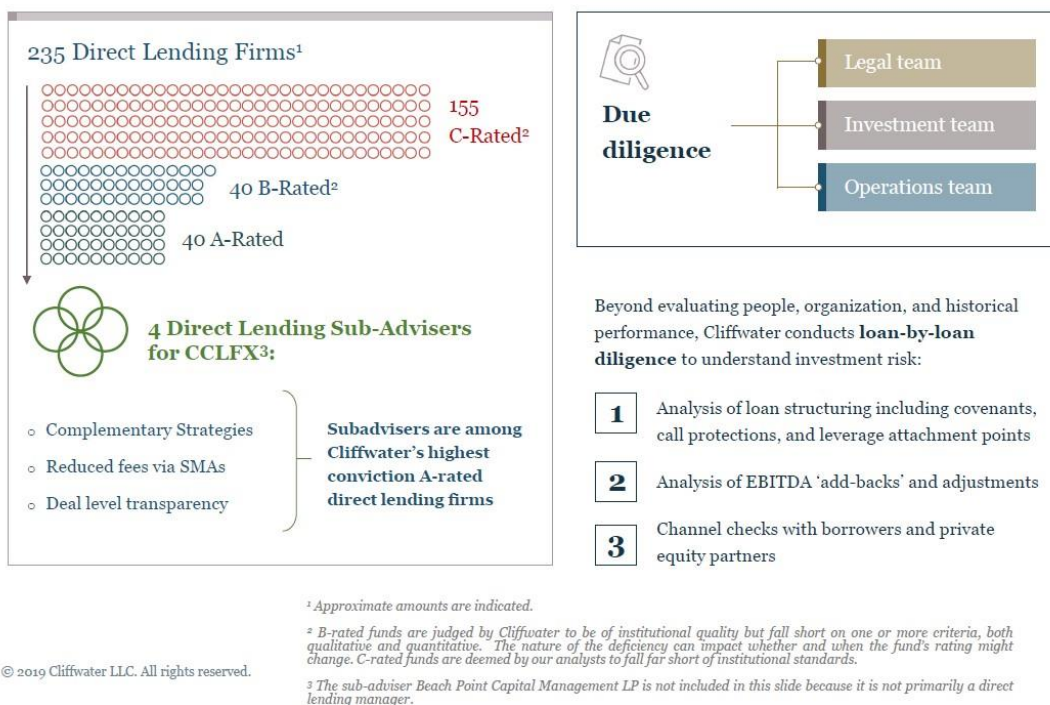
Key Characteristics of U.S. Middle-Market Loans:



- Cliffwater will select as sub-advisors a combination of teams with expertise in managing portfolios of direct loans and/or other corporate loans with different styles to reduce the fund's risk exposure to any one investment style and minimize overlap. In reviewing investment styles, they will consider preferences for (i) various loan terms, (ii) structure or industry, (iii) borrower size (e.g., lower middle market vs. upper middle market), (iv) sponsored or non-sponsored borrower (where "sponsored borrower" refers to companies with the backing of a financial sponsor), and (v) loan seniority (e.g., senior secured vs. second lien).

- The manager selection starts with their universe of 235 direct lending firms. In their rating system, a C-rating is assigned to those managers that they determine are not institutional quality, a B-rating is assigned to those managers that are institutional quality, but possess some perceived weaknesses such that they don't believe they should be recommended for approval, and an A-rating is assigned to those managers that they determine are potentially of high, institutional quality and are appropriate to move on to more comprehensive due diligence. They eliminated 155 that are C- rated, 40 that are B-rated and focused on the remaining 40 that are A-rated. Cliffwater's more comprehensive due diligence process for A-rated managers comprises two independent phases: investment due diligence and operational due diligence. The senior team members at Cliffwater have been conducting manager due diligence across alternatives since its founding in 2004 and going back further to their previous firm.
- Cliffwater's due diligence process begins with an assessment of the manager's organization, including the quality of personnel and resources. A review of the manager's investment process follows, focusing on strategy, origination, underwriting, loan detail, workout capabilities, and investment monitoring. They also review the manager's methods for portfolio construction and use of financing, including the expected mix of loans in the portfolio, such as the loans' seniority in the capital structure, industry, and borrower profile (e.g., sponsored vs. non-sponsored), the portfolio's financing sources and terms of financing, and an assessment of the appropriateness of fees and expenses. Finally, they review the manager's track record by collecting detailed past performance data and comparing it with that achieved by other direct lending managers to determine if the manager has been successful in originating, underwriting and working out loans and if the manager has met its return targets in differing credit environments. They also place special emphasis on a manager's credit loss history. As part of the investment due diligence process, Cliffwater's team also interviews senior members of the manager's investment team during onsite visits and conducts third-party reference checks.
- In its operational due diligence process, Cliffwater first examines how the manager's operational activities are organized and the manager's governance and compliance structure. They look for a strong business management structure that includes business professionals and processes focused on legal, regulatory and compliance, as well as sound business risk management practices, including liability insurance and disaster recovery plans. Next, they evaluate the manager's operations and technology systems and the personnel carrying them out to assess whether experienced operating staff is managing non-investment functions and duties are segregated to ensure proper controls. They also review the manager's compliance program and other key processes and procedures, including those in the areas of valuation and financing to determine whether they are structured to mitigate risk. Finally, they conduct a review of the manager's outside service providers such as administrators, auditors and third-party valuation experts, to determine if they meet industry standards.

CLIFFWATER DUE DILIGENCE & MANAGER SELECTION PROCESS



- On an ongoing basis, the Cliffwater portfolio management team will determine the allocations to each sub-advisor based upon long-term fundamental policies, existing market conditions and current manager circumstances. They will review the performance of each manager's underlying portfolio investments and will evaluate absolute and relative returns (against market indices and various peer universes). They also will continue to evaluate each sub-advisor's organizational stability, investment team and compliance program, and will monitor changes in personnel, investment strategy, compliances policies, valuation policies, and any other developments that could negatively impact the organization. At least once a year, they will re-underwrite the investment and operations due diligence on each manager. The results of such due diligence processes will be reviewed by Cliffwater's Investment Policy Committee to determine whether any changes in the sub-advisors may be appropriate.

- Cliffwater has chosen four sub-advisors to work with on day one that they know very well. The four are designed to complement each other from a sponsored/non-sponsored standpoint and where they play in the cap structure.

DIRECT LENDING SUB-ADVISERS PLATFORM OVERVIEWS

Sub-Adviser	Strategy Inception	Loans Funded	Amount Invested	Median or Range of Borrower EBITDA	Company Ownership	% First Lien Senior Secured
Audax	2007	592	\$13.5 Billion	\$59 million	100% Sponsored	100%
Crescent ¹	2005	140+	\$3.8 Billion	\$16 million	100% Sponsored	100%
Benefit Street	2008	334	\$20.3 Billion	\$20-\$100 million	60% Sponsored	82%
BlackRock TCP	2000	521	\$15.9 Billion	\$15-\$75 million	30%-50% Sponsored	86%
Total or Range, as applicable	2000-2018	+1,500	\$53.5 Billion	\$15-\$100 million	30-100% Sponsored	80-100%

"% First Lien Senior Secured" refers to the percentage of the portfolio invested in loans with a first lien on assets.

"Company Ownership" indicates the percentage of the portfolio owned by private equity sponsors.

1. Reflects Crescent's Direct Lending Senior Secured Debt business only. Total amount invested including Crescent's Direct Lending Mezzanine business is over \$17 billion. Data is as of December 31, 2018, unless otherwise noted. Benefit Street number of assets funded and historical seniority profile is as September 30, 2018. Please see important disclosures at the end of this presentation.

Sub-Advisor Overview

- Audax:** Firm started in 2000 and Mike McGonigle, Head of Senior Debt, joined in 2007. They are the most conservative of the managers and will be weighted more heavily as they ramp up the fund. They are focused on sponsor-backed, ~50mm EBITDA companies. They invest in all 1st Lien Sponsored deals with a 7% yield expectation.
- Crescent:** Acquired this team in 2012 but have been doing direct lending since 2005. Focused on sub ~20mm EBITDA companies, where yields are higher, but deals are more difficult to source and underwrite. They will be focused on smaller deals with an 8.5% yield expectation. They do at least 80% 1st Lien and only Sponsored deals.
- Benefit Street:** They have been in this space since 2008. Almost all 1st Lien (80%+) but may do other things if there is an opportunity. Expected yield of 10%-12.5% depending upon environment.
- Tennenbaum:** They are a wholly-owned subsidiary of BlackRock. They focus on Non-Sponsored 1st Lien Deals but, will opportunistically invest in other areas of the market. The expected yield is 10%- 13% depending upon environment.
- Beach Point:** Beach Point was founded in 2009. Cliffwater will invest the liquidity bucket in their Dynamic Income Strategy which is allocated almost exclusively to HY Bonds and Syndicated Loans.

- Cliffwater retains overall supervisory responsibility for the general management and investment of the fund's investment portfolio. They may exercise their discretion to manage a portion of fund assets directly for any reason, including to modify the fund's exposure to a particular investment or market-related risk created by a sub-advisor, to invest the fund's assets pending allocation to a sub- advisor, or to establish positions in securities and strategies it deems appropriate for meeting the fund's investment objectives. The engagement of each current sub-advisor has been approved by the Board and the initial shareholder of the fund. The engagement of a new sub-advisor will be subject to Board approval and an approval by the holders of a majority of outstanding shares.

Portfolio Construction

- The fund will invest at least 80% of its assets (net assets, plus any borrowings for investment purposes) in loans to companies. The fund's corporate loan investments are made through a combination of: (i) investing in loans to companies that are originated directly by a non-bank lender (for example, traditional direct lenders include insurance companies, business development companies, asset management firms, and specialty finance companies (ii) investing in notes or other pass-through obligations representing the right to receive the principal and interest payments on a direct loan (or fractional portions thereof) (iii) purchasing asset-backed securities representing ownership in a pool of direct loans (iv) investing in companies and/or private investment funds that primarily hold direct loans (v) investments in high yield securities; and (vi) investments in bank loans.
- The fund's corporate loan investments may include secured debt (including first lien senior secured, unitranche and second lien debt) and unsecured debt (including senior unsecured and subordinated debt). First lien senior secured debt has first claim to any underlying collateral of a loan, second lien debt is subordinated in payment and/or lower in lien priority to first lien holders, and unitranche loans are loans that combine both senior and subordinated debt into one tranche of debt, generally in a first lien position. In connection with a corporate loan, the fund may invest in warrants or other equity securities of borrowers and may receive non-cash income features, including payment in kind ("PIK") interest and original issue discount ("OID").
- The fund will also invest in other public and private credit investments, including U.S. or global high yield securities, bank loans, loan participations and assignments, non-performing loans, private and public business development companies ("BDCs"), collateralized loan obligations ("CLOs"), collateralized debt obligations ("CDOs"), mezzanine debt and distressed securities.
- A portion of the fund's assets will be invested in cash or cash equivalents; in certain circumstances or market environments, the fund may hold a larger position in cash or cash equivalents and reduce its investment in credit investments. The fund also may invest in preferred securities, convertible securities, derivatives (such as options, swaps, futures contracts, forward agreements, reverse repurchase agreements and other similar transactions) for hedging and investment purposes, exchange-traded funds and other investment companies. When the fund invests in loans and debt securities, the fund may acquire warrants or other equity securities of borrowers as well. The fund may also invest in warrants and equity securities directly.

- There is no limit on the duration, maturity or credit quality of any investment in the fund's portfolio. The fund may leverage its investments by borrowing, including borrowings through one or more special purpose vehicles ("SPVs") that are wholly-owned subsidiaries of the fund. Certain fund investments may be held by these SPVs. The fund may borrow cash for a number of reasons, including without limitation, in connection with its investment activities, to make distributions, to satisfy repurchase requests from shareholders, and to otherwise provide temporary liquidity.
- Borrowing, including any borrowing through any SPVs that are wholly-owned subsidiaries of the fund, will be limited to 33.33% of the fund's assets (50% of its net assets). The fund may invest directly in foreign debt and equity securities, including those from emerging markets, issued in both
- U.S. dollars and foreign currencies. It is not anticipated that investments in foreign securities and/ or emerging markets will constitute a significant portion of the fund's investments.
- This strategy is being offered in an Interval Fund structure. From a liquidity standpoint, this means that the fund intends to provide a limited degree of liquidity to shareholders by conducting quarterly offers to repurchase its shares at their NAV on the date on which the repurchase price for shares is determined. Each repurchase offer will be for no less than 5% nor more than 25% of the fund's shares outstanding. If the value of shares tendered for repurchase exceeds the value the fund intended to repurchase, the fund may determine to repurchase less than the full number of shares tendered. In such event, shareholders will have their shares repurchased on a pro-rata basis, and tendering shareholders will not have all of their tendered shares repurchased by the fund.

Risks | Concerns

- **First Time Fund** – While Cliffwater obviously has a lot of experience in the direct lending space and has allocated meaningful assets to different strategies/funds over the past several years, this is their first offering in a fund structure. This is mitigated by the fact they have pre-identified the first four sub-advisors the fund will allocate to and all are very experienced, well-respected corporate debt investors. Also, despite never managing a fund before, Cliffwater is considered to be a thought leader in this space.
- **Key Man Risk** – While Cliffwater has a deep team, Stephen Nesbitt is clearly the key person from a research and portfolio management perspective. Obviously, this is mitigated by the fact that there will be 4+ underlying sub-advisors managing their own portfolios of loans. But, Stephen is responsible for the advisor selection and monitoring and overall portfolio construction, including cash and liquidity management. We would definitely have concerns if Stephen, for whatever reason, was no longer involved in the day-to-day management of the fund.
- **Sub-Advisors** – Cliffwater has already selected the initial four sub-advisors for the fund and they all are very experienced, strong players in the direct lending space. We would expect them to deliver on their mandate and produce the expected outcomes for the overall fund. Going forward, we believe Cliffwater will continue to select only high-quality sub-advisors for the fund. But, there is a risk that it will be more challenging to find top-tier managers as their assets grow and they have to put more money to work. Finally, there is also the risk of adverse changes with the current advisors, but they can always redeem their investment easily given the SMA structure.
- **Competitive Market Environment** – The lending market is currently very competitive and evolving. As banks have exited the market due to regulatory burdens, the void has been filled by a multitude of asset managers and other institutional pools of money. This has created significant competition for loans and ultimately could become a concern if underwriting standards were to weaken. We believe this is mitigated by Cliffwater's ability to only allocate to high quality advisors that have proven expertise and strong underwriting teams.
- **Fees** – The Institutional share class will have total annual expenses capped at 2.25%, which is considered a high fee. The management fee portion is 1.7% (which includes both the Cliffwater and sub-advisor fees) and fund expenses account for the rest of the fee. On the positive side, Cliffwater is reducing their fee by 65 bps for the first six months after the fund is launched so the expense ratio will be more in the 1.6% range for that time period.
- **NOTE: THIS FUND IS PROJECTED TO LAUNCH SOMETIME IN APRIL 2019. INITIAL AUM PROJECTIONS ARE IN THE \$200M RANGE – WE WILL BE MONITORING AUM LEVELS CLOSELY.**

Terms & Conditions

Symbol	CCLFX
Structure	Closed-end management investment company - interval fund (1940 Act-registered)
Minimum Investment	\$10,000,000
NAV Frequency	Daily
Subscriptions	Daily
Liquidity	Quarterly, no less than 5% of fund shares outstanding ¹
Distributions	Quarterly
Re-Investment	Yes. Re-investment is automatic unless investors opt out.
Tax Reporting	1099-DIV
Expense Cap	2.25% on NAV ²

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¹ The fund may determine to repurchase less than the full number of shares tendered. In such event, shareholders will have their shares repurchased on a pro rata basis, and tendering shareholders will not have all of their tendered shares repurchased by the fund.
² Pursuant to an Expense Limitation and Reimbursement Agreement, Cliffwater has agreed to waive fees that it would otherwise have been paid, and/or to assume expenses of the fund, if required to ensure that the total annual expenses (with certain exclusions) do not exceed 2.25% of the average daily net assets of the fund's shares.

Cliffwater is reducing their management fee from 1% to 0.35% for the first six months the fund operates – they expect overall fees for the first six months will be around 1.6%.

The minimum investment is the aggregate for an RIA, not for individual investors.

Third Party Service Providers

- Fund Administrator UMB Financial Services, Inc.
- Auditor Cohen & Company, Ltd.
- Legal Counsel Drinker Biddle & Reath LLP
- Custodian State Street Bank & Trust Company

Important Information

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The information in these materials (the "Presentation") relates to a private investment fund (the "Fund") managed by a third party investment adviser (each a "Manager") that is available through an investment in the Conway Onshore Access Fund, LLC or the Conway Offshore Access Fund Ltd. (the "Conway Access Funds"). The Conway Access Funds, which are managed by CIR Feeder Fund Management, LLC ("CIR"), offer multiple series of interests and shares, respectively, each of which corresponds to a private investment fund (such as the Fund). CIR is a wholly owned subsidiary of Conway Investment Research, LLC ("CIR LLC"), which provides customized investment research and solutions to its clients including Multi-Family Offices, Wealth Management Groups, Trust Companies, Financial Planning Firms, Endowments and Foundations. The information contained herein is given as of the date hereof and does not purport to give information as of any other date. The content may differ slightly from the subject matter that has already been provided in previous instances. Fund performance information, unless otherwise stated, is net of Fund Expenses and Manager fees, assumes the reinvestment of dividends, interest and any other distributions, and is gross of CIR access fees and Conway Access Funds' expenses. Fees and expenses paid to CIR and/or its affiliates will reduce actual returns. To the extent that the performance returns presented herein reflect the returns of a "master fund" or similar trading vehicle or similar class, rather than the entity in which investors will invest directly, the returns have been presented pro forma to include the deduction of fees and expenses that would be borne by an investor in the Fund.

PAST PERFORMANCE SHOULD NOT BE CONSIDERED INDICATIVE OF FUTURE RESULTS. Actual results

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Neither the Conway Access Funds nor the Fund are registered as an investment company in reliance on an exemption in Section 3(c)(7) of the Investment Company Act of 1940, as amended, and the interests in the Fund and each Conway Access Fund are not registered under the Securities Act of 1933, as amended, or the securities laws of any state. Neither the Conway Access Funds nor the Fund are subject to the same regulatory requirements as mutual funds, nor are they required to provide periodic pricing or valuation information to investors. Each subscriber to a Conway Access Fund must certify that the subscriber is a "qualified purchaser" as defined in Section 2(a)(51) of the Investment Company Act of 1940.

Investments in a hedge fund (such as the Fund) are speculative and not suitable for all investors, nor does it constitute a complete investment program. Investments in hedge funds involve a high degree of risk, including risks inherent in an investment in securities, as well as specific risks associated with the use of leverage, short sales, options, futures and forward contracts as well as swaps and other derivative instruments, investments in non-U.S. securities, high yield bonds (junk bonds) and illiquid investments. Performance can be volatile, and results may vary substantially over time. There can be no assurance that a Manager's investment strategy will be successful; an investor could lose all or a substantial amount of his or her investment. The Conway Access Funds, as investor in the Fund, has a limited right to redeem or transfer interests in the Fund. In addition, interests in the Fund will not be listed on an exchange, and no secondary market for the Fund's interests is expected to develop. Any investor must be able to bear the risks involved and must meet the suitability requirements relating to such investment.

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Index and Other Definitions

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Indices are unmanaged. Past performance of indices of asset classes does not represent actual returns or volatility of actual accounts or investment managers, and should not be viewed as indicative of future results. The figures for the index reflect the reinvestment of dividends but do not reflect the deduction of fees or expenses which would reduce returns. Investors cannot invest direct in the indices. Investments made by the Fund may not be restricted to the instruments comprising any one index and generally do not correspond to the investments reflected in such indices.

Accordingly, no representation or warranty is made as to the sufficiency, relevance, importance, appropriateness, completeness, or comprehensiveness of such comparison for any specific purpose. Information is presented without the effect of federal, state and local taxes, which may have an adverse impact on the results.

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10-Year Forward Expected Returns

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Asset Class	Representative Index	2019 Arithmetic Expected Return	2020 Arithmetic Expected Return	2019-2020 Difference	2020 Compound Expected Return	2020 Standard Deviation	2020 Yield	10 Year Benchmark Return (2010-2019)
Cash/Low Duration	FTSE 3-Month Treasury Bills	2.5%	2.5%	-0.1%	2.4%	1.3%	1.6%	0.6%
Municipal Bonds	Barclays Intermediate Municipal 5-10 Year	3.4%	2.6%	-0.8%	2.6%	3.8%	1.8%	4.0%
Municipal High Yield	Barclays High Yield Municipal	4.7%	4.3%	-0.5%	4.0%	7.3%	4.2%	7.2%
Investment Grade Credit	Barclays U.S. Corporate Investment Grade	4.2%	3.5%	-0.6%	3.4%	5.5%	2.8%	5.5%
U.S. Core Fixed Income	Barclays U.S. Aggregate	3.7%	2.8%	-0.9%	2.7%	3.4%	2.3%	3.8%
Non-U.S. Developed Fixed Income	FTSE WGBI NonUSD	2.5%	2.0%	-0.6%	1.6%	8.9%	0.7%	1.4%
Bank Loans	Credit Suisse Leveraged Loan	5.6%	5.4%	-0.2%	5.2%	5.8%	6.1%	8.2%
High Yield Bonds	Barclays U.S. Corporate High Yield	5.7%	5.2%	-0.4%	4.8%	9.2%	5.4%	7.6%
Emerging Market Debt	50% JPM EMBI Global / 50% JPM GBI-EM Gbl Div	6.4%	5.1%	-1.3%	4.7%	9.3%	5.1%	4.7%
Preferred Securities	S&P Preferred Stock	5.3%	4.4%	-0.9%	3.7%	12.7%	4.8%	7.3%
Credit Strategies	Blended Private Debt Index	7.4%	7.0%	-0.4%	6.8%	6.9%	7.3%	8.5%
Diversifying Strategies	HFRI Fund of Funds Conservative	4.7%	4.7%	0.0%	4.2%	10.0%	0.0%	2.8%
Tactical Asset Allocation	60% MSCI ACWI / 40% Barclays U.S. Aggregate	5.8%	5.3%	-0.5%	5.0%	7.5%	2.3%	7.1%
Trading Strategies (Equity Long/Short)	HFRI Equity Hedge	6.5%	6.3%	-0.2%	4.8%	10.0%	0.0%	4.7%
U.S. Large Cap Equity	S&P 500	6.7%	6.5%	-0.2%	5.6%	14.5%	1.9%	13.6%
U.S. Mid Cap Equity	Wilshire U.S. Mid Cap	7.9%	7.6%	-0.3%	6.2%	17.4%	1.7%	13.2%
U.S. Small Cap Equity	Wilshire U.S. Small Cap	7.6%	7.2%	-0.4%	5.4%	19.4%	1.5%	11.8%
Global Equity	MSCI ACWI	7.2%	7.0%	-0.2%	5.9%	15.3%	2.4%	9.4%
Non-U.S. Developed Equity	MSCI EAFE	7.2%	6.8%	-0.4%	5.6%	16.3%	3.2%	6.0%
Non-U.S. Developed Small Cap Equity	MSCI EAFE Small Cap	8.2%	7.8%	-0.5%	6.4%	17.5%	2.6%	9.1%
Emerging Markets Equity	MSCI Emerging Markets	10.2%	10.1%	-0.1%	8.0%	21.4%	2.6%	4.0%
China Equity	MSCI China	N/A	10.7%	N/A	8.0%	23.4%	1.5%	5.4%
Private Equity	Cambridge U.S. Private Equity	12.0%	12.0%	0.0%	9.6%	22.0%	0.0%	16.4%
MLPs	Alerian MLP	9.4%	8.6%	-0.8%	7.2%	17.3%	6.4%	4.2%
TIPS	Barclays U.S. Treasury TIPS	3.1%	2.6%	-0.5%	2.5%	5.5%	0.2%	3.4%
Public Core Real Estate	FTSE NAREIT All Equity REITs	7.0%	7.1%	0.1%	5.8%	16.7%	3.7%	12.6%
Private Real Estate	NCREIF Property	9.0%	9.0%	0.0%	7.6%	17.0%	0.0%	9.8%
Opportunistic Yielding Strategies	Blended Private Debt Index	10.0%	10.0%	0.0%	9.6%	9.0%	7.3%	8.5%
Commodities	Bloomberg Commodity	4.5%	4.3%	-0.2%	3.1%	16.2%		
Infrastructure	S&P Global Infrastructure	6.9%	6.7%	-0.2%	6.2%	10.5%		

Communication: Investment Portfolio Update (New Business)

2020 Capital Market Assumptions – Correlation Matrix | 36

Asset Class	Cash/Low Duration	US Core Fixed Income	Municipal Bonds	Investment Grade Credit	TIPS	Tactical Allocation	Diversifying Strategies	Long/Short Equity	Municipal High Yield	Preferred Securities	Global Equity	US ALL Cap/Large Cap Equity	US Mid Cap Equity	US Small Cap Equity	Intl All Cap/Large Cap Equity	Intl Small Cap Equity	Emerging Market Equity	Private Equity	Emerging Market Equity	Infrastructure	MLP	Commodities	Bank Loans	High Yield Bonds	Emerging Market Debt	Credit & Yielding Strats	Opportunistic Fixed Income	Public Core Real Estate	Private Core Real Estate
Cash/Low Duration	1.00	0.08	0.03	-0.11	0.07	0.01	0.12	0.04	-0.08	-0.15	0.02	-0.07	-0.08	-0.09	0.06	-0.03	0.15	-0.13	0.15	0.16	-0.02	0.14	-0.10	-0.12	-0.03	-0.10	0.05	-0.02	0.3
US Core Fixed Income		1.00	0.84	0.77	0.63	-0.19	0.31	-0.24	0.17	0.25	-0.14	-0.19	-0.18	-0.27	-0.11	-0.12	-0.04	-0.26	-0.04	0.10	-0.04	-0.17	-0.20	0.03	0.35	-0.09	0.97	0.09	0.9
Municipal Bonds			1.00	0.58	0.56	-0.18	0.19	-0.23	0.16	0.15	-0.14	-0.19	-0.20	-0.27	-0.11	-0.13	-0.05	-0.26	-0.05	0.03	-0.01	-0.25	-0.23	-0.01	0.33	-0.13	0.81	0.01	0.5
Investment Grade Credit				1.00	0.50	0.34	0.24	0.29	0.41	0.73	0.38	0.30	0.33	0.19	0.40	0.40	0.41	0.25	0.41	0.52	0.32	0.18	0.30	0.54	0.67	0.41	0.87	0.40	0.5
TIPS					1.00	0.14	0.10	0.05	0.45	0.06	0.06	-0.01	0.04	-0.09	0.04	0.04	0.21	-0.09	0.21	0.20	0.25	0.29	0.21	0.31	0.55	0.27	0.69	0.12	0.6
Tactical Allocation						1.00	-0.08	0.93	0.61	0.53	0.87	0.79	0.86	0.77	0.85	0.85	0.87	0.82	0.87	0.77	0.73	0.62	0.89	0.91	0.73	0.93	0.05	0.58	0.5
Diversifying Strategies							1.00	0.03	-0.08	0.15	0.05	0.04	0.06	0.02	0.05	0.05	0.04	-0.03	0.04	0.11	0.00	-0.07	-0.23	-0.13	-0.03	-0.18	0.26	0.03	0.3
Long/Short Equity								1.00	0.43	0.55	0.95	0.87	0.92	0.85	0.93	0.92	0.90	0.87	0.90	0.82	0.68	0.64	0.75	0.81	0.65	0.81	-0.01	0.56	0.9
Municipal High Yield									1.00	0.27	0.46	0.44	0.50	0.35	0.42	0.45	0.49	0.42	0.49	0.46	0.45	0.28	0.74	0.69	0.72	0.73	0.35	0.58	0.3
Preferred Securities										1.00	0.62	0.52	0.55	0.45	0.65	0.68	0.57	0.55	0.57	0.63	0.38	0.32	0.41	0.62	0.54	0.50	0.38	0.52	0.9
Global Equity											1.00	0.95	0.96	0.89	0.98	0.93	0.90	0.88	0.90	0.90	0.63	0.58	0.72	0.82	0.70	0.80	0.09	0.71	0.5
US ALL Cap/Large Cap Equity												1.00	0.97	0.92	0.88	0.82	0.75	0.89	0.75	0.81	0.64	0.48	0.68	0.76	0.59	0.75	0.02	0.75	0.9
US Mid Cap Equity													1.00	0.95	0.90	0.88	0.80	0.92	0.80	0.84	0.69	0.55	0.76	0.83	0.65	0.83	0.05	0.77	0.5
US Small Cap Equity														1.00	0.83	0.81	0.69	0.95	0.69	0.74	0.61	0.44	0.66	0.73	0.52	0.73	-0.06	0.77	0.6
Intl All Cap/Large Cap Equity															1.00	0.96	0.90	0.84	0.90	0.90	0.56	0.56	0.67	0.78	0.68	0.75	0.10	0.66	0.3
Intl Small Cap Equity																1.00	0.87	0.86	0.87	0.83	0.53	0.55	0.69	0.78	0.68	0.75	0.09	0.63	0.8
Emerging Market Equity																	1.00	0.72	1.00	0.84	0.57	0.62	0.72	0.80	0.78	0.78	0.18	0.54	0.3
Private Equity																		1.00	0.72	0.71	0.61	0.44	0.73	0.79	0.56	0.78	-0.05	0.72	0.5
Emerging Market Equity																			1.00	0.84	0.57	0.62	0.72	0.80	0.78	0.78	0.18	0.54	0.3
Infrastructure																				1.00	0.61	0.61	0.62	0.75	0.70	0.72	0.30	0.71	0.0
MLP																					1.00	0.56	0.64	0.73	0.57	0.73	0.15	0.45	0.7
Commodities																						1.00	0.58	0.58	0.47	0.61	-0.01	0.32	0.9
Bank Loans																							1.00	0.92	0.72	0.97	0.04	0.59	0.6
High Yield Bonds																								1.00	0.85	0.98	0.28	0.68	0.5
Emerging Market Debt																									1.00	0.80	0.57	0.61	0.1
Credit & Yielding Strats																										1.00	0.16	0.65	0.4
Opportunistic Fixed Income																											1.00	0.26	0.9
Public Core Real Estate																												1.00	0.1
Private Core Real Estate																													0

Communication: Investment Portfolio Update (New Business)

The charts and information in this presentation are for illustrative purposes only, and are based upon sources of information that Sunpointe, LLC generally considers reliable, however we cannot guarantee, nor have we verified, the accuracy of such independent market information. The charts and information, and the sources utilized in the compilation thereof, are subjective in nature and open to interpretation.

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City of Creve Coeur
Employee Pension Fund
Board of Trustees

2021 Pension Board Meeting Schedule

Core Topics for all Meetings

Tuesday	January 19, 2021	5:30 p.m.	Approval of Meeting Minutes Presentation of Quarterly Reports Discussion of other Topics as necessary Invoice(s) Paid Since Last Meeting Retirement(s) since last meeting Other Business
Tuesday	April 27, 2021	5:30 p.m.	Approval of Meeting Minutes Presentation of Quarterly Reports Discussion of other Topics as necessary Invoice(s) Paid Since Last Meeting Retirement(s) since last meeting Other Business
(Finance comm. Meeting scheduled for 4/20/21)			
Tuesday	July 20, 2021	5:30 p.m.	Approval of Meeting Minutes Presentation of Quarterly Reports Discussion of other Topics as necessary Invoice(s) Paid Since Last Meeting Retirement(s) since last meeting Review Investment Policy Assumptions & Asset Allocations Other Business
Tuesday	October 19, 2021	5:30 p.m.	Approval of Meeting Minutes Presentation of Quarterly Reports Actuarial Report Discussion of other Topics as necessary Invoice(s) Paid Since Last Meeting Retirement(s) since last meeting Other Business

NOTE: Other meetings needed during the year will be scheduled when it is necessary.