

STATE OF RHODE ISLAND

INVESTMENT GRADE CORPORATE CREDIT & SECURITIZED CREDIT

March, 2020

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IMPLEMENTATION PLAN

NEPC, LLC



NEPC, LLC

To: State of Rhode Island Investment Team
From: William Forde, CFA, CAIA, Sr. Consultant
Date: March, 2020
Subject: Asset Allocation Implementation Plan

Summary

As a reminder, the SIC approved a new asset allocation at the December 2019 Investment Committee meeting (see appendix). Subsequent to the December meeting, NEPC has worked with the RI investment team on the best way to implement and transition to the newly approved asset allocation. To date, a number of these changes have already been implemented and addressed, including:

- Funding of new Equity Options allocation at 2% (funded from Core Bonds)
- Increase of Long Treasuries from 4 to 5% (funded from Core Bonds)
- Increase of TIPs allocation from 1 to 2% (funded from Cash)

Regarding the remaining work to be done, NEPC thought it would be useful to outline an implementation plan specific to the below:

- The transition away from the legacy Core Bond allocation
- Funding of the new Investment Grade Corp. Credit and Securitized allocations
- Reevaluating implementation of the Long Treasury allocation

Recommendations

1. NEPC recommends the SIC formally terminate its existing Core Bond mandate with MacKay Shields
 - a. In anticipation of future asset movements required to fulfill our fixed income implementation plan, it may be more efficient to consolidate the assets in the core bond portfolios into a single manager custody account in advance. As such, we recommend transferring the existing Mackay assets in-kind to Fidelity who will manage the entire core bond allocation until IG and Securitized managers are approved.
2. NEPC recommends consolidating the Long Treasury allocation from 2 to 1 manager and terminating the existing relationship with MacKay Shields



Core Bond Allocation Transition

As of Jan. 31st, the legacy Core Bond allocation is \$835 million or roughly 9.5% of the total Fund. The expectation is that this allocation will continue to be trimmed down as we transition the new asset allocation. However, there are additional impacts to the legacy Core Bond allocation and its managers that NEPC wanted to highlight.

The newly approved asset allocation effectively impacted the legacy Core Bond allocation in two ways. First, it decreased the Core Bond allocation by 5% (from 11.5% to 6.5%). Second, the new asset allocation called for the disaggregation of the legacy Core Bond allocation in lieu of dedicated mandates within Investment Grade Corp. Credit (3.25%) and Securitized Credit (3.25%). As a result of the Core Bond allocation decreasing and morphing into two new allocations, we recommend that the SIC terminate its existing Core Bond relationship with MacKay Shields and transfer those assets directly to the existing Fidelity Core Bond account.

Funding of the new Investment Grade Credit and Securitized allocations

NEPC and the RI Investment team continue to evaluate and diligence managers within both the IG Corp. Credit and Securitized space. Our hope is that we can recommend a manager(s) to the SIC at the March meeting. As previously noted, these new allocations will primarily be sourced from the remaining assets within the legacy Core Bond allocation. The full funding of these allocation in April or May should result in the full liquidation/ transfer of assets within the Fidelity Core and MacKay Core bond strategies. Of note, Fidelity is one of the shortlist of firms who are in consideration for the IG Corp. Credit and Securitized mandates. Thus, while the new asset allocation effectively terminates the existing relationship between the SIC and the Fidelity Core Bond strategy, there is the potential that Fidelity may be chosen to manage assets within one of the two new allocations and take the desired legacy assets in kind.

Long Treasuries Allocation

The newly approved asset allocation increased the Long Treasuries allocation from 4 to 5%. Currently, the Fund has two managers within the space: Western Asset Management and MacKay Shields.

In our evaluation of the Long Treasuries allocation and implementation, we've made several observations. (1) Long Treasuries remains a low alpha asset class where differentiation between managers is relatively small. (2) The SIC guidelines specify a 1% tracking error maximum for managers which is reflective of the philosophy that active management value add is not a material objective of the allocation. (3) As a firm, MacKay Shields has had organizational turnover within its fixed income investment team and currently does not manage a dedicated Long Bond strategy.

It has been these observations that led NEPC to conclude that the Long Treasury implementation should be focused on gaining broad exposure to the asset class while prioritizing downside protection, and also doing so at a low cost. As such, NEPC recommends consolidating from 2 to 1 manager and terminating the existing relationship



with MacKay Shields's Long Treasury strategy. This recommendation is based on our belief that there is not a strong benefit from having multiple managers within the Long Treasury portfolio. In addition, if gaining inexpensive exposure to the asset class in a risk aware fashion is a priority, consolidating mandates will lead to lower management fees with little or no additional investment risk. Based on initial discussions, we believe the savings would be 2.4 bps annually or \$104,000 a year. Lastly, the recent organizational challenges from MacKay Shields also factored into the recommendation.

**Core Bond Portfolio Transition Plan
(\$mm)**

3/9/2020 MacKay + Fidelity			3/23/2020 Fidelity			Transition Target (5/1 Start)
Treasury/Gov't Related \$130	Treasury/Gov't Related \$130	➔	Treasury/Gov't Related \$260	➔	Corporate (Fidelity) \$270	
Corporate \$94	Corporate \$94		Corporate \$188		Securitized (Loomis) \$270	
Securitized \$94	Securitized \$94		Securitized \$188			
Cash \$3.5	Cash \$3.5		Cash \$7			
TOTAL \$321.5	TOTAL \$321.5		TOTAL \$643		TOTAL \$540	
Total \$643						

3/20: -MacKay Shields terminated; Fidelity assumes oversight responsibility for all assets in the terminated portfolio

4/1-4/15: -Fidelity approved to manage IG Corporate allocation, Loomis approved to manage Securitized allocation
 -Fidelity initiates liquidation of treasuries
 -Securitized bonds + ~\$80million from treasury liquidation are transferred in-kind to Loomis
 -~\$80million from treasury liquidation transferred out of the account to help fund Wellington EMD allocation

4/15-5/1: -Fidelity and Loomis finalize construction of Corporate and Securitized portfolios

5/1: -BNY performance turned on for new accounts

**\$ values estimated based on 3/9 MVs; subject to change*

REVISITING THE CORE BOND ALLOCATION

- **As a reminder, the SIC approved the disaggregation and decrease of its Core Bond allocation**
 - Dedicated allocations to Investment Grade Corporate Credit and Securitized Credit were approved
 - Treasury exposure was maintained with an increase in the Long Bond allocation

		Current Target	Current Allocation
Stability	CPC	10%	8%
	Inflation Protection	8%	8%
	Core Bonds	0%	11%
	IG Corp Credit (Core Bonds)	3.25%	0.00%
	Securitized Credit (Core Bonds)	3.25%	0.00%
	Absolute Return	6.5%	6.6%
	Strategic Cash	2%	3%
	Volatility Protection	15%	21%
	TOTAL STABILITY	33%	36%

- **As detailed in the implementation memo, the approved changes have a direct impact on the SIC's implementation and manager roster**
 - The SIC will have to move away from the legacy core bond strategies and managers
 - New strategies within IG Corp. and Securitized will have to be identified but could be managed by the legacy core bond managers
 - Given the overlap in exposure across the legacy and new allocations, a transition plan is recommended

SEARCH PROCESS SUMMARY

- **The SIC approved a 3.25% allocation (~\$280M) to IG Corp. Credit and Securitized Credit, respectively**
- **Over the last several months, NEPC and the RI Investment Team have conducted additional research to identify our highest conviction managers**
 - Given both allocations subside within the Stability bucket, we've focused on firms with the following characteristics:
 - Tracking error in line with our expectations
 - A long track record within the asset class and an experienced/stable team
- **As a result of this additional research, NEPC and the RI Investment Team recommend Fidelity and Loomis to present to the SIC**
 - Fidelity – Investment Grade Corp. Credit
 - Loomis – Securitized Credit



INVESTMENT GRADE CORP. CREDIT

NEPC, LLC

FIDELITY INVESTMENT GRADE CREDIT

General Firm & Strategy Information	
Firm Name	Fidelity Institutional Asset Management
Strategy Name	FIAM U.S. Investment Grade Credit Strategy
Strategy AUM	\$2.9 Billion
Strategy Inception Date	March 2002
NEPC Product Rating	3 (Neutral)*
Representative List of Competitors	<ol style="list-style-type: none"> 1. IR+M 2. Loomis 3. MacKay Shields 4. Neuberger Berman 5. Payden & Rygel 6. PGIM 7. Pinebridge 8. Voya 9. Wellington 10. Western

General Firm & Strategy Information	
Strategy Description	The strategy seeks to achieve absolute and risk-adjusted total returns in excess of the index by primarily investing in IG corporate bonds. However, the strategy can tactically invest 0-15% of the portfolio in out of benchmark positions. Portfolio returns will predominantly be driven by Fidelity's fundamental research on issuers and sector valuations. As such, security selection is expected to be the most consistent driver of alpha. The team will use top-down macro views to help shape overall risk. However, they will de-emphasize interest rate anticipation based on its belief that it's a low probability and high-risk endeavor.
Strategy Benchmark	Barclay's U.S. Corp. Investment Grade
Important Considerations	<ol style="list-style-type: none"> 1. Use of Out of Benchmark Positions: 0-15% in out of benchmark positions. These tend to be \$ denominated investments in BAB's, Sovereigns, Treasuries/Agencies, and TIPs 2. Derivative Usage: 0-10% in derivate usage to help effectively manage risk

Fees	
Fee	<p><u>Standard Separate Account Fee:</u> First \$100M @ 0.28% Next \$400M @ 0.22%</p> <p>OPTION 1 <u>Effective fee: 0.18%</u> 0.18% on first \$250M 0.15% on next \$250M 0.12% thereafter</p> <p>OPTION 2: <u>Performance Based Fee</u> 0.07% flat 25% incentive fee on net outperformance relative to benchmark over rolling 36 months; Max fee of 0.28%</p>

*Fidelity is a 1-rated manager on NEPC's Core Plus Bond FPL

**The proposed performance based fee is net of management fee and operating expenses



PEER GROUP PERFORMANCE (GROSS)

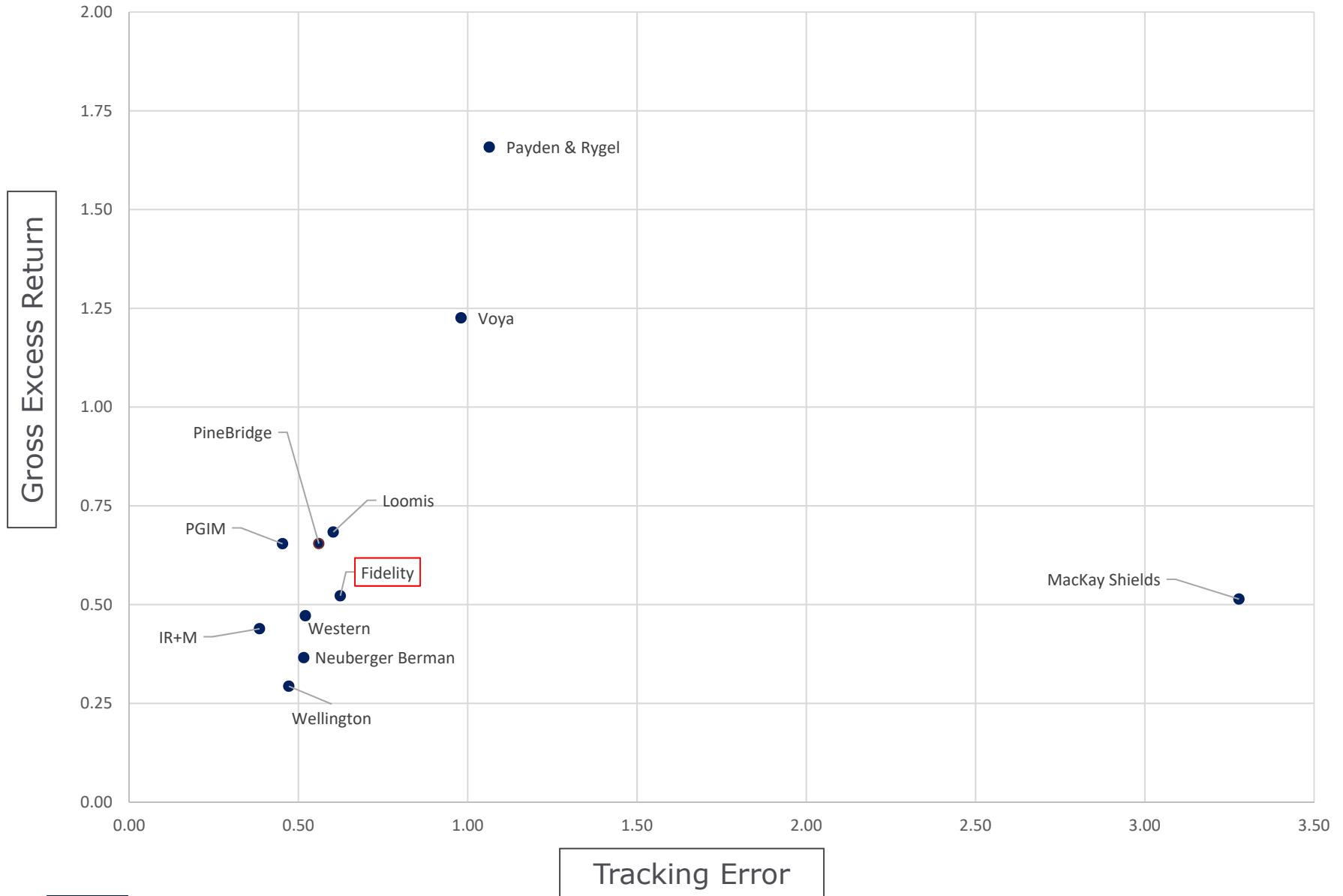
- **The below reflects absolute gross of fee performance based on each manager's composite track record**
 - Performance is also color coded based on its out/under performance relative to the Barclay's US Corp. Investment Grade index

NEPC Rating	Firm Name	Product Name	1 Year	Rank	3 Years	Rank	5 Years	Rank	7 Years	Rank	10 Years	Rank
1 (Preferred)	Fidelity	Investment Grade Credit	15.08	34	6.50	22	5.14	31	4.63	39	5.98	61
1 (Preferred)	IR+M	IR+M Corporate Credit	14.70	46	6.22	45	5.08	36	4.54	49		
1 (Preferred)	Loomis	Investment Grade Corporate Bond	15.77	15	6.65	16	5.21	26	4.79	27	6.34	36
3 (Neutral)	MacKay Shields	Municipal Investment Grade	8.52	94	5.71	77	4.58	76	4.62	39	5.92	68
3 (Neutral)	Neuberger Berman	Investment Grade Credit	15.38	23	6.21	46	5.01	42	4.47	53	5.82	76
3 (Neutral)	Payden & Rygel	US Investment Grade Corporate	15.20	31	7.09	3	6.09	1	5.76	1	6.85	16
1 (Preferred)	PGIM	PGIM Fixed Income US Corporate Fixed Income	15.42	21	6.40	26	5.22	24	4.76	30	6.24	42
3 (Neutral)	PineBridge	PineBridge USD Investment Grade Credit Bond Strategy	15.71	17	6.31	35	4.95	48	4.76	29	6.85	17
3 (Neutral)	Voya	Voya Investment Grade Credit	16.10	11	6.81	10	5.48	13	5.33	9	7.27	3
1 (Preferred)	Wellington	Investment Grade Corporate Bond	15.11	32	6.02	61	4.80	63	4.40	63	5.97	62
1 (Preferred)	Western	WA US Investment Grade Credit	14.80	43	6.28	37	5.02	41	4.58	45	6.09	53
Barclays US Corp. Investment Grade			14.54		5.92		4.60		4.10		5.54	



*NEPC ratings are based on NEPC's Core & Core Plus Focused Placement List

PEER GROUP PERFORMANCE (7 YEAR)



*Tracking error is relative to the policy index

As of December 2019

SECURITIZED CREDIT

NEPC, LLC

LOOMIS INVESTMENT GRADE SECURITIZED

General Firm & Strategy Information	
Firm Name	Loomis, Sayles & Company, L.P.
Strategy Name	Investment Grade Securitized
Strategy AUM	\$1.3 Billion
Strategy Inception Date	May 2006
NEPC Product Rating	3 (Neutral)*
Representative List of Competitors	<ol style="list-style-type: none"> 1. BlackRock 2. Fidelity 3. Loomis 4. Neuberger Berman 5. PGIM 6. PIMCO 7. Voya 8. Wellington 9. Western

General Firm & Strategy Information	
Strategy Description	Loomis implements a duration neutral value strategy seeking broad exposure to the investment grade securitized market through a fundamental approach. The strategy will primarily invest in Agency MBS, IG ABS, CMBS, and non-Agency RMBS. The strategy seeks 1-2% in excess returns over a 3-5 year period with a typical tracking error of 0.50% - 2.50%.
Strategy Benchmark	Bloomberg Barclays US Securitized
Important Considerations	<ol style="list-style-type: none"> 1. Strategy AUM: Most strategy assets are held within their mutual fund

Fees	
Fee	<p><u>Standard Separate Account Fee:</u> First \$50M @ 0.34% Next \$50M @ 0.30% Remaining @ 0.25%</p> <p>OPTION 1 <u>ERSRI Commingled Fee:</u> 0.22% flat</p> <p>OPTION 2 <u>Performance Based Fee:</u> 0.10% flat 20% incentive fee on net outperformance relative to benchmark over rolling 36 months; Max fee of 0.34%; Min annual fee of \$250,000</p>



*Loomis is a 1-rated manager on NEPC's Core Plus FPL

**The proposed performance based fee is net of management fee and operating expenses

PEER GROUP PERFORMANCE (GROSS)

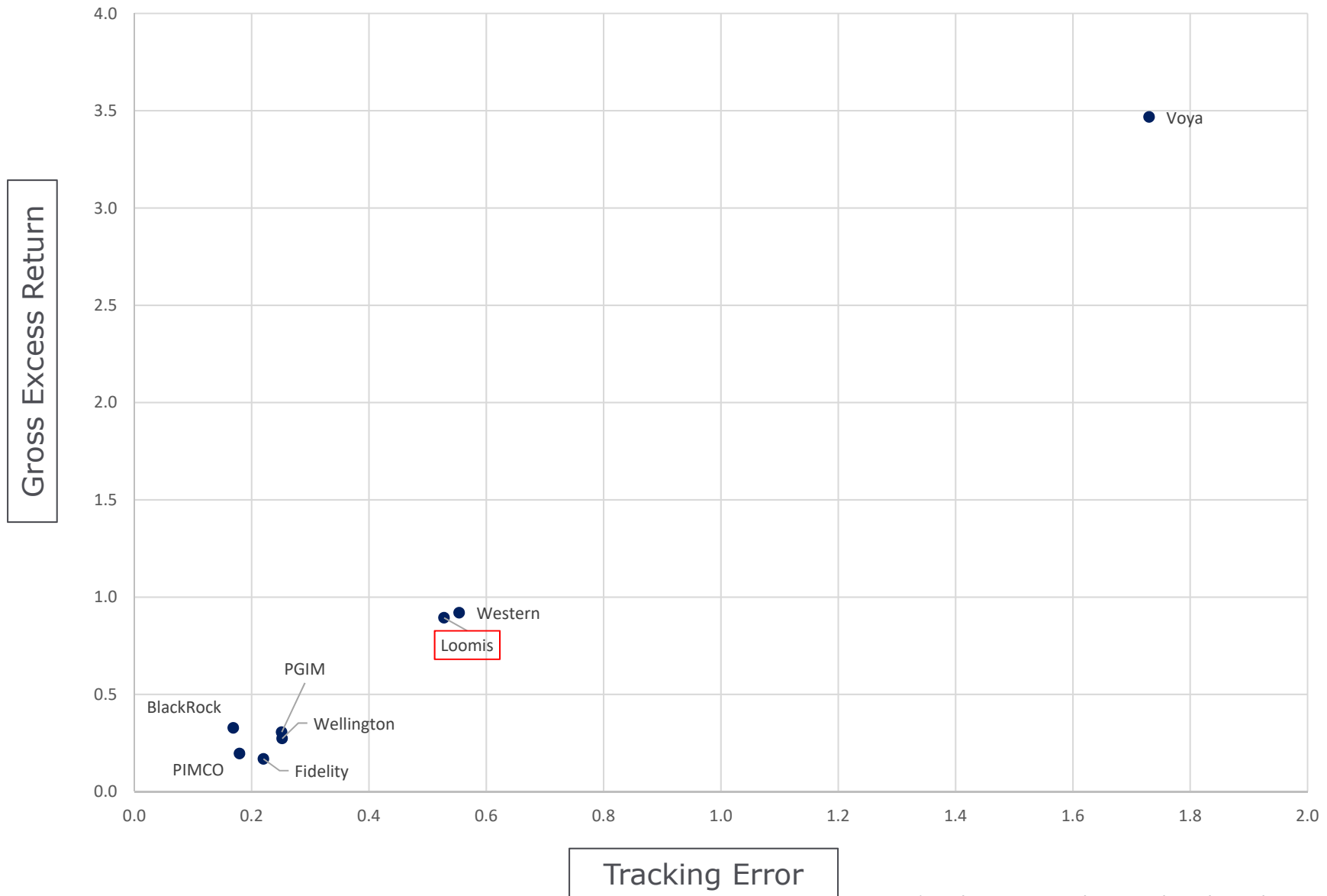
- **The below reflects absolute gross of fee performance based on each manager's composite track record**
 - Performance is also color coded based on its out/under performance relative to the Barclay's US Securitized index

NEPC Rating	Firm Name	Product Name	1 Year	Rank	3 Years	Rank	5 Years	Rank	7 Years	Rank	10 Years	Rank
3 Rated (Neutral)	BlackRock	US Mortgage Bond	6.86	39	3.55	63	2.95	63	2.99	56	4.06	55
1 Rated (Preferred)	Fidelity	Agency MBS	6.71	44	3.42	73	2.79	75	2.68	74	3.51	77
1 Rated (Preferred)	Loomis	Investment Grade Securitized	6.71	44	4.18	48	3.51	47	3.45	45	5.16	42
3 Rated (Neutral)	Neuberger Berman	Mortgage Constrained	6.55	56	3.29	82	2.55	92	2.57	83	3.37	89
1 Rated (Preferred)	PGIM	PGIM Fixed Income US Mortgage Backed Securities Plus	6.67	47	3.63	59	2.93	64	2.93	59	4.20	51
1 Rated (Preferred)	PIMCO	Mortgage Constrained	6.63	49	3.48	67	2.82	71	2.63	79	3.52	76
3 Rated (Neutral)	Voya	Voya Securitized Credit - Opportunistic	7.83	18	6.58	12	6.09	9				
1 Rated (Preferred)	Wellington	Mortgage-Backed Securities	6.34	69	3.55	63	2.89	68	2.82	66	4.29	49
1 Rated (Preferred)	Western	WA US Agency MBS Plus	6.82	40	4.45	40	3.54	45	3.65	41	5.43	37
		Bloomberg Barclays US Securitized	6.44	63	3.29	82	2.62	88	2.51	90	3.32	92



*NEPC ratings are based on NEPC's Core & Core Plus Focused Placement List

PEER GROUP PERFORMANCE (5 YEAR)



*Tracking error is relative to the policy index
 **Neuberger does not appear due to its negative info ratio



APPENDIX

		Current Target	Current Allocation	Mix ECO	Benchmark
Growth	US Equities	22.0%	15.9%	12.7%	MSCI ACWI (net)
	Int'l Equities	13.3%	9.2%	7.6%	
	Emerging Int'l Equities	4.7%	5.1%	4.7%	
	Global Equity	0%	15%	15%	
	Global Equity	40%	45%	40%	
	Private Equity	11.25%	6.96%	11.25%	
	Non-Core Real Estate	2.25%	1.78%	2.25%	
	Opp. Private Credit	1.5%	0.6%	1.5%	
	Private Growth	15%	9%	15%	
	TOTAL GROWTH	55%	54%	55%	
				ILPA All Funds Index 1Q Lag	
				NFI-ODCE Index, 1Q Lag + 2.5%	
				ILPA Distressed Index 1Q Lag	
Income	Equity Options	0.0%	0.0%	2.0%	CBOE Put Index
	Liquid Credit	2.8%	3.9%	2.8%	50% BofA US HY Index / 50% CS LL Index
	EMD (Blended)	0%	0%	2.0%	50% JPM EMBI Global Div./ 50% JPM GBI-EM Global Div.
	HY Infrastructure	1%	1%	1%	Alerian MLP Index
	REITs	1%	1%	1%	MSCI US REIT index
	Private Credit	3.2%	1.7%	3.2%	S&P/LSTA Leveraged Loan Index + 3%
	TOTAL INCOME	8%	8%	12%	
					Barclays Long Treasury Index
Stability	Long Treasuries	4%	4%	5%	CSLABT18 Index
	Systematic Trend	4%	4%	5%	
	CPC	8%	8%	10%	
	Core Real Estate	3.6%	4.5%	3.6%	NFI-ODCE Index, 1Q Lag
	Private Infrastructure	2.4%	2.0%	2.4%	CPI + 4%, 1 Month Lag
	TIPS	1%	2%	2%	Bloomberg Barclays 1-10 Year TIPS Index
	Commodities	1%	0%	0%	Bloomberg Barclays Commodity Index
	Inflation Protection	8%	8%	8%	
	Core Bonds	11.5%	11.8%	0.0%	Bloomberg Barclays US Aggregate Bond Index
	IG Corp. Credit (Core Bonds)	0%	0%	3.25%	Bloomberg Barclays US Corporate Index
	Securitized Credit (Core Bonds)	0%	0%	3.25%	Bloomberg Barclays US Securitized MBS/ABS/CMBS Index
	Absolute Return	6.5%	7.0%	6.5%	HFRI FoF Index
	Strategic Cash	3%	3%	2%	BofA ML 0-1 Year US Treasury Index
	Volatility Protection	21%	22%	15%	
TOTAL STABILITY	37%	38%	33%		
Other	Short-Term Cash	0%	0%	0%	
	Russell Overlay	0%	0%	0%	
	Total Cash	0%	0%	0%	