

**South Central Connecticut Regional Water Authority**  
**90 Sargent Drive, New Haven, Connecticut**  
Via Remote Access\*\*

**AGENDA**

**Special Meeting of Thursday, October 8, 2020 at 11:00 a.m.**

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1. Safety Moment
2. Meet as Pension & Benefit Committee: S. Sack
  - a. Discussion re market expectations, market returns and asset allocation – S. Kelliher, J. McLaughlin and A. Kantapin
3. Act on matters arising from committee meeting
4. Adjourn

\*\*In accordance with the Governor Lamont's, Executive Order No. 7B for the Protection of Public Health and Safety during COVID-19 Pandemic and Response, the public hearing will be held remotely under the requirements of Paragraph 1 of Executive Order No. 7B - Suspension of In-Person Open Meeting Requirements. Members of the public may attend the meeting via conference call, videoconference or other technology. For information on attending the meeting via remote access, and to view meeting documents, please visit <https://www.rwater.com/about-us/our-boards/board-meetings-minutes?year=2020&category=1422&meettype=&page=>. For questions, contact the board office at [jslubowski@rwater.com](mailto:jslubowski@rwater.com) or call 203-401-2515.

**Topic: Authority Special Meeting** (including Pension & Benefit Committee)

Time: Oct 8, 2020 11:00 AM Eastern Time (US and Canada)

Join Meeting (*via conference call*)

Dial by your location

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+1 346 248 7799 US (Houston)

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Meeting ID: 852 7605 7417

Passcode: 933430

Find your local number: <https://us02web.zoom.us/j/k3PbeM4FU>

South Central CT  
Regional Water Authority  
IPS & Asset Allocation Discussion

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## **IPS Executive Summary**

**South Central Connecticut Regional Water Authority**  
**EXECUTIVE SUMMARY**

**Plans Names:** This Investment Policy Statement covers three separate portfolios for the South Central Connecticut Regional Water Authority (“the Plans”)

1. South Central Connecticut Regional Water Authority Salaried Employees’ Retirement Plan
2. South Central Connecticut Regional Water Authority Retirement Plan
3. South Central Connecticut Regional Water Authority Retired Employees’ Contributory Welfare Trust (VEBA)

**Plan Trustee:** Broadridge Matrix Trust Company

**Primary Investment Custodian:** Morgan Stanley & Co

**Pension Payroll Custodian:** Broadridge Matrix Trust Company

**Plan Administrator:** Regional Water Authority Board

**Plan Actuary:** The Angell Pension Group, Inc.

**Plan Advisor:** The Kelliher Corbett Group at Morgan Stanley

**Primary Objectives:**

- 1) Milestone goal of being fully funded, for the pension plans by end of Fiscal Year 2023, excluding ongoing plan service costs, subject to prevailing market conditions
- 2) To achieve a long-term rate of return that meets the assumed actuarial rate of return

**Target Rate of Return:** To meet the assumed actuarial rate of return

**Time Horizon:** Aligned with actuarial liabilities of the South Central Connecticut Regional Water Authority Pension plans and VEBA

**Asset Allocation:**

Asset Class	Minimum	Maximum	Preferred
Equities	45%	60%	55%
Fixed Income	20%	45%	30%
Alternative/Hedge/Balanced	5%	20%	15%

The maximum allowable allocation to illiquid securities is 10%  
When investing in alternative investments, the VEBA plan permits the use of liquid investments only

**Cash Limits:** The investor wishes to maintain sufficient liquidity to fund benefit obligations

**Restrictions:**

- Average bond quality rated Investment Grade or Better (excluding mutual fund/ETFs)
- Maximum Average Bond Maturity: 20 years
- Maximum Individual Bond Maturity: 30 years
- Maximum Portion of Portfolio in a Single Diversified Fund: 20%
- Maximum Portion of Portfolio in a Single Security/Individual Company: 3% (excluding U.S. Government Securities)

**Meeting Frequency:** Quarterly

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## **IPS Target Allocation & Expected Asset Class Returns**

## South Central CT Regional Water Authority

### IPS Target Allocation and **Expected** Asset Class Returns

#### As of 5/31/2020

Asset Class	IPS Target Allocation	Morgan Stanley Long-Term Expected Real Rate of Return	Weighted Average Expected Return
Fixed Income	30.00%	3.50%	1.05%
Global Equities	55.00%	7.50%	4.13%
Alternative/Hedge/Swing	15.00%	5.90%	0.89%
<b>Total</b>	<b>100.00%</b>	<b>-</b>	<b>6.06%</b>

#### As of 5/31/2019

Asset Class	IPS Target Allocation	Morgan Stanley Long-Term Expected Real Rate of Return	Weighted Average Expected Return
Fixed Income	27.00%	3.70%	1.00%
Global Equities	55.00%	7.60%	4.18%
Alternative/Hedge/Swing	18.00%	5.90%	1.06%
<b>Total</b>	<b>100.00%</b>	<b>-</b>	<b>6.24%</b>

Source: Morgan Stanley Wealth Management Global Investment Committee as of April 2020 & April 2019

Estimates are for illustrative purposes only, are based on proprietary models and are not indicative of the future performance of any specific investment, index or asset class. Actual performance may be more or less than the estimates shown in this table. Estimates of future performance are based on assumptions that may not be realized. Investor Suitability: Morgan Stanley Wealth Management recommends that investors independently evaluate each asset class, investment style, issuer, security, instrument or strategy discussed. Legal, accounting and tax restrictions, transaction costs and changes to any assumptions may significantly affect the economics and results of any investment. Investors should consult their own tax, legal or other advisors to determine suitability for their specific circumstances. Investments in private funds (including hedge funds, managed futures funds and private equity funds) are speculative and include a high degree of risk.



## South Central CT Regional Water Authority

### IPS Target Allocation and **Historical** Asset Class Returns

#### As of 5/31/2020

Asset Class	IPS Target Allocation	Trailing 10 Year Historical Returns	Weighted Average Expected Return
Fixed Income	30.00%	3.92%	1.18%
Global Equities	55.00%	9.28%	5.10%
Alternative/Hedge/Swing	15.00%	2.53%	0.38%
<b>Total</b>	<b>100.00%</b>	<b>-</b>	<b>6.66%</b>

#### As of 5/31/2019

Asset Class	IPS Target Allocation	Trailing 10 Year Historical Returns	Weighted Average Expected Return
Fixed Income	27.00%	3.83%	1.03%
Global Equities	55.00%	9.96%	5.48%
Alternative/Hedge/Swing	18.00%	3.53%	0.64%
<b>Total</b>	<b>100.00%</b>	<b>-</b>	<b>7.15%</b>

Historical Return Proxies: Global Equities = MSCI World NR USD, Fixed Income: BBgBard US Agg Bond TR USD, Alternative/Hedge Swing = HFRI Fund of Funds Composite

Estimates are for illustrative purposes only, are based on proprietary models and are not indicative of the future performance of any specific investment, index or asset class. Actual performance may be more or less than the estimates shown in this table. Estimates of future performance are based on assumptions that may not be realized. Investor Suitability: Morgan Stanley Wealth Management recommends that investors independently evaluate each asset class, investment style, issuer, security, instrument or strategy discussed. Legal, accounting and tax restrictions, transaction costs and changes to any assumptions may significantly affect the economics and results of any investment. Investors should consult their own tax, legal or other advisors to determine suitability for their specific circumstances. Investments in private funds (including hedge funds, managed futures funds and private equity funds) are speculative and include a high degree of risk.



## Long-Term Capital Market Expectations

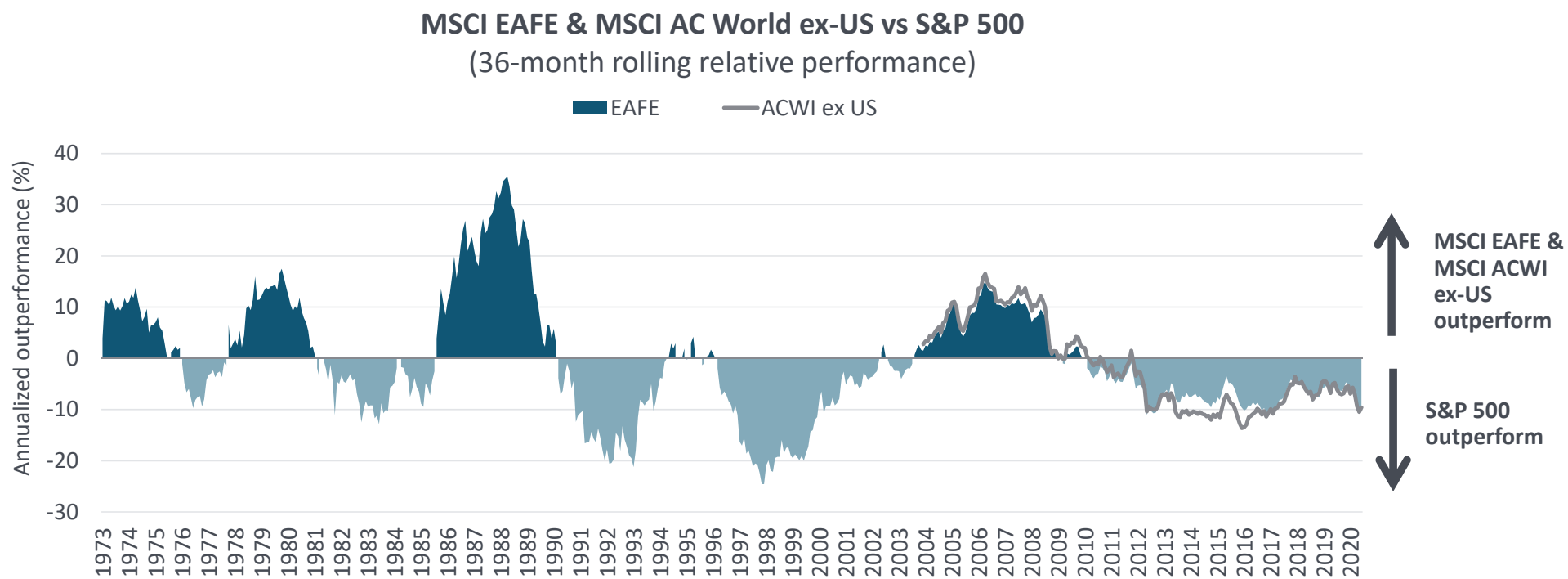
MFS 10-Year Market Expectations			
Asset Class	Return (%)	Risk (%)	Return/Risk
EM Equities	9.1	21.7	0.41
EAFE Equities	7.0	16.9	0.41
Global Equities	4.3	15.8	0.27
U.S. Equities	2.5	15.1	0.16

*Annualized geometric return and risk expectations for 10-year time horizon. Risk is defined as standard deviation.*

Source: This projection is for illustrative purposes only and does not represent investment in any particular vehicle. Projections of future asset values are not promises or even estimates of actual returns. Please refer to back page for more information on the methodology utilized for the MFS Long-Term Capital Market Expectations. Projections based on data as of July 2020.

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# Market Leadership Has Alternated Between U.S. and International Equities

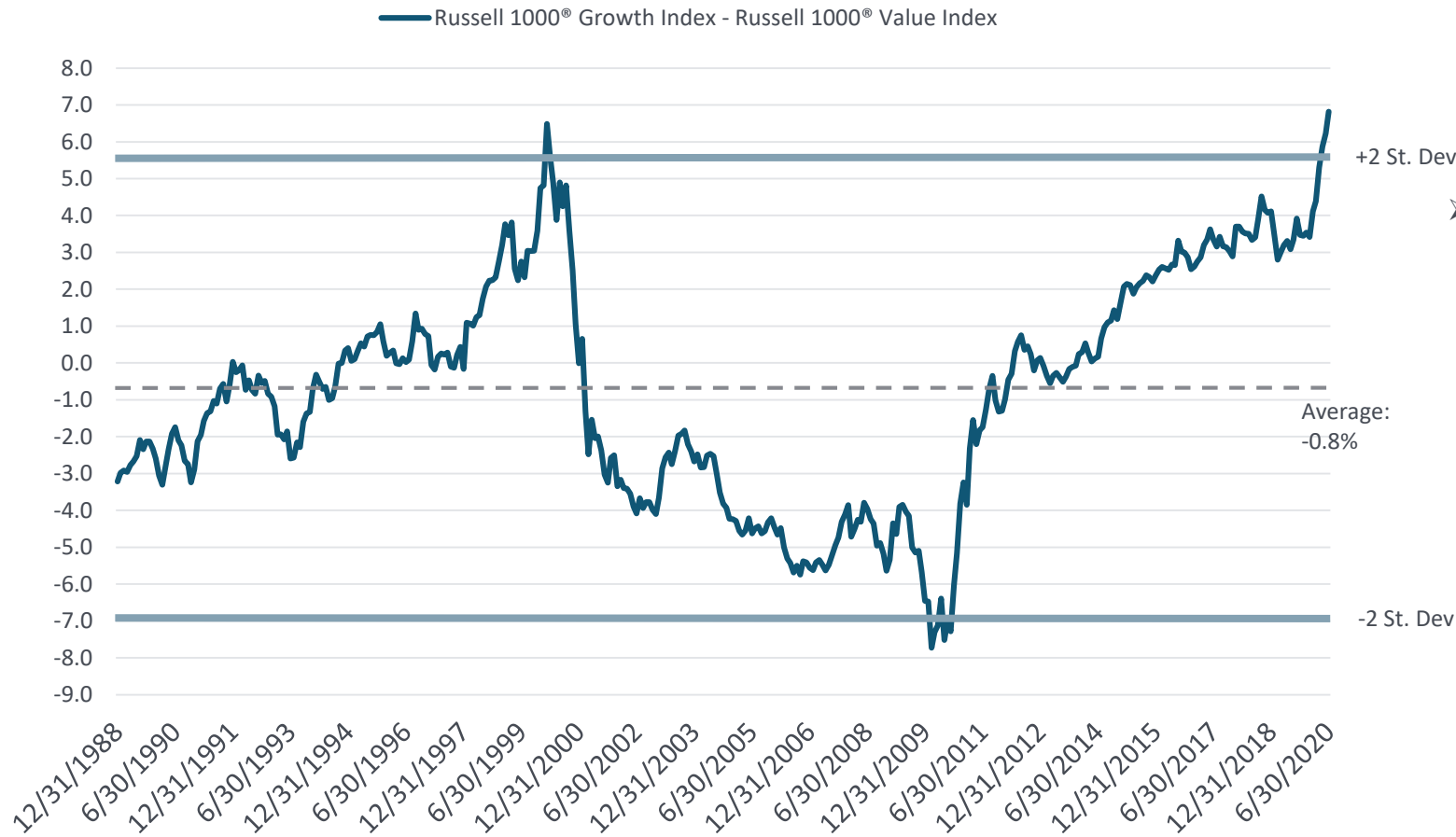


Source: Factset: S&P 500 Index (Total Return), MSCI EAFE Index (\$Net), MSCI AC World ex USA (\$Net). Monthly data as of 31 January 1973 through 30 June 2020. Past performance is no guarantee of future results. It is not possible to invest in an index.

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# US Large Cap Growth vs. Large Cap Value Returns

Annualized Trailing 10 Year Rolling Relative Total Return



➤ Growth's outperformance of value is above a 2 standard deviation event currently. This is also now above the inflection point where value started to outperform growth roughly 20 years ago.

*Large cap value looks close to a period of outperformance based on historical data*

Past performance is no guarantee of future results.  
 No forecasts can be guaranteed.

Source: SPAR, FactSet Inc. Data as of 6/30/2020

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## **Portfolio Update – Trailing 5 Years**

SCCT Regional Water Authority  
Trailing Five Year Investment Results  
September 30, 2015 - September 30, 2020

Account Number	Account Type	Beg. Asset Value 30-Sep-2015	Net Deposits/Withdrawals	Transfers	Net Invested	Ending Asset Value 30-Sep-2020	Net \$ Gain/Loss	Gain/Loss (net) %	Gain/Loss (gross) %
447-xxx450	Salaried	\$21,058,465	\$0	\$5,628,934	\$26,687,399	\$37,659,411	\$10,972,012	7.81%	8.23%
447-xxx451	Union	\$15,465,737	\$0	\$481,207	\$15,946,944	\$23,306,672	\$7,359,728	7.78%	8.20%
447-xxx456	VEBA	\$2,932,568	\$0	\$2,690,986	\$5,623,554	\$7,690,392	\$2,066,838	7.51%	7.93%
447-xxx626	Skybridge (Salaried)**	\$0	\$0	\$550,434	\$550,434	\$561,695	\$11,260	0.46%	0.46%
447-xxx627	Skybridge (Union)**	\$0	\$0	\$365,314	\$365,314	\$377,196	\$11,882	0.73%	0.73%
axx15a	Matrix Trust (Salaried)	(\$31,527)	\$5,522,869	(\$5,589,872)	(\$98,530)	(\$98,530)	\$0	-	-
axx15b	Matrix Trust (Union)	(\$59,679)	\$443,710	(\$350,073)	\$33,958	\$33,958	\$0	-	-
axx16	Matrix Trust(VEBA)	\$43,097	\$4,790,545	(\$3,776,930)	\$1,056,712	\$1,056,712	\$0	-	-
Consolidated		\$39,408,660	\$10,757,125	\$0	\$50,165,784	\$70,587,505	\$20,421,720	7.68%	8.09%

September 30, 2015 - September 30, 2020

Actuarial Assumed Rate of Return

**Actuarial Assumed Rate of Return: 7.00%** 7.00%

Guidelines/Benchmarks - Market Cap Weighted

**Least Equity Risk:** 34%R3000, 11%MSCI ACWxUS, 39%BBgBarc Agg, 4% FTSE WGBI, 9% HFRI FOF, 1% Global RE, 2% T-Bills 7.45%

**Strategic:** 42%R3000, 15%MSCI ACWxUS, 31%BBgBarc Agg, 3% FTSE WGBI, 5% HFRI FOF, 2% Global RE, 2% T-Bills 8.36%

**Most Equity Risk:** 44%R3000, 16%MSCI ACWxUS, 16%BBgBarc Agg, 2% FTSE WGBI, 15% HFRI FOF, 5% Global RE, 2% T-Bills 8.46%

Guidelines/Benchmarks - Equal Weighted

**Least Equity Risk:** 34%R3000, 11%MSCI ACWxUS, 39%BBgBarc Agg, 4% FTSE WGBI, 9% HFRI FOF, 1% Global RE, 2% T-Bills 5.91%

**Strategic:** 42%R3000, 15%MSCI ACWxUS, 31%BBgBarc Agg, 3% FTSE WGBI, 5% HFRI FOF, 2% Global RE, 2% T-Bills 6.46%

**Most Equity Risk:** 44%R3000, 16%MSCI ACWxUS, 16%BBgBarc Agg, 2% FTSE WGBI, 15% HFRI FOF, 5% Global RE, 2% T-Bills 6.47%

Russell 3000	13.69%
Russell 3000 Equal Weight	9.16%
S&P 500	14.15%
S&P 500 Equal Weight	10.27%
Russell 1000 Value	7.66%
Russell 1000	14.09%
Russell 1000 Growth	20.10%
Russell 2000	8.00%
MSCI All Country World ex. US	6.23%
MSCI EAFE	5.26%
MSCI EM	8.97%
BBgBarc Aggregate	4.18%
BBgBarc Govt/Credit Intermediate	3.39%
BBgBarc US Corp Bond	5.98%
HFRI Fund of Funds Index*	2.75%
DJ Global World Real Estate	5.14%
Morningstar US Real Asset	2.22%
FTSE WGBI Index	3.95%
S&P GSCI	-7.88%
30 Day T-Bill	1.09%

Performance for accounts held outside of Morgan Stanley are calculated using simple math

\*\*Skybridge accounts opened on 4/25/2016

\*Skybridge & HFRI FOF as of 8/31/2020

The information and data contained in this report are from sources considered reliable, but their accuracy and completeness is not guaranteed. This report has been prepared for illustrative purposes only and is not intended to be used as a substitute for monthly transaction statements you receive on a regular basis from Morgan Stanley & Co. Incorporated Please compare the data on this document carefully with your monthly statements to verify its accuracy. The Company strongly encourages you to consult with your own accountants or other advisors with respect to any tax questions.

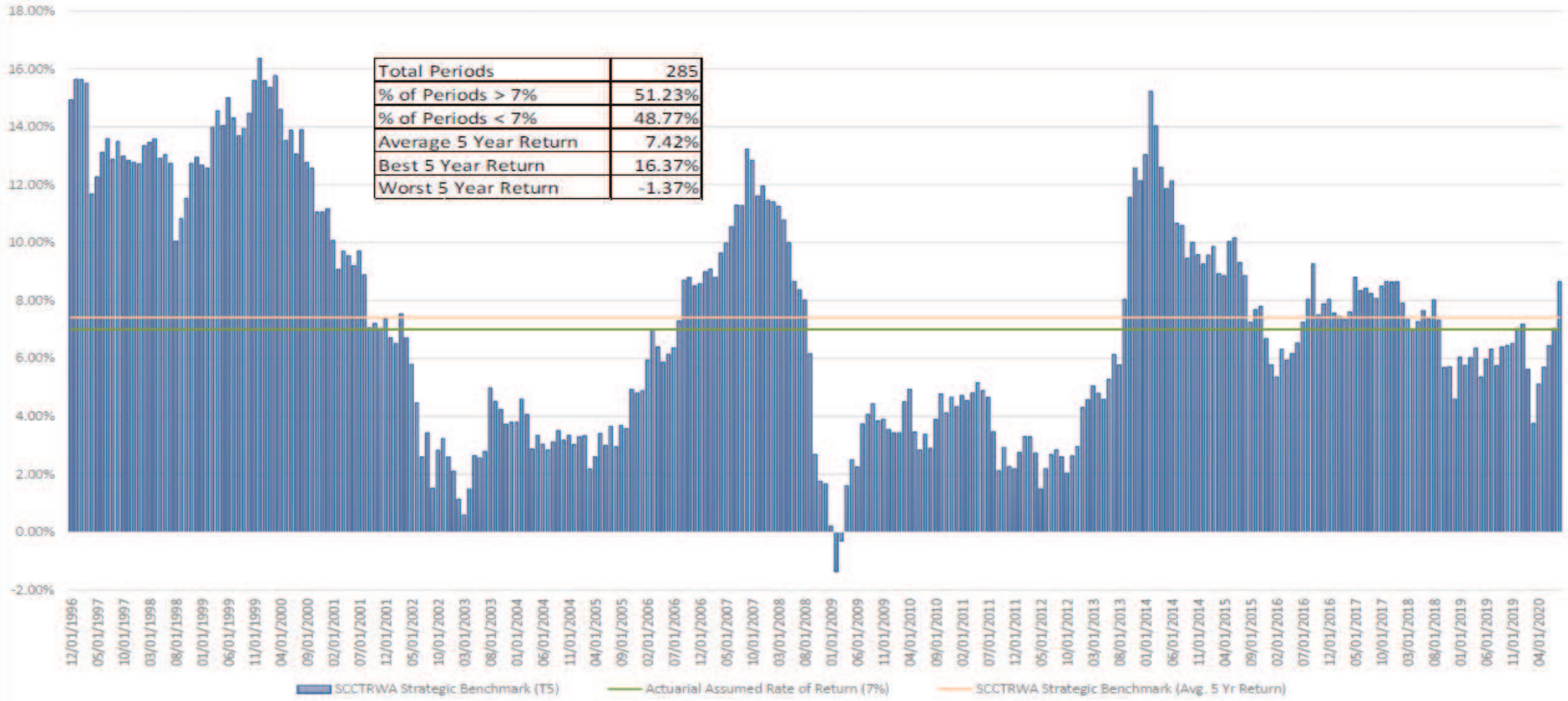
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## **Benchmark Rolling 5, 7 & 10 Year Returns**

# Strategic Benchmark - Rolling 5 Year Returns

December 31, 1996 - August 31, 2020



Source: Morningstar Advisor Workstation

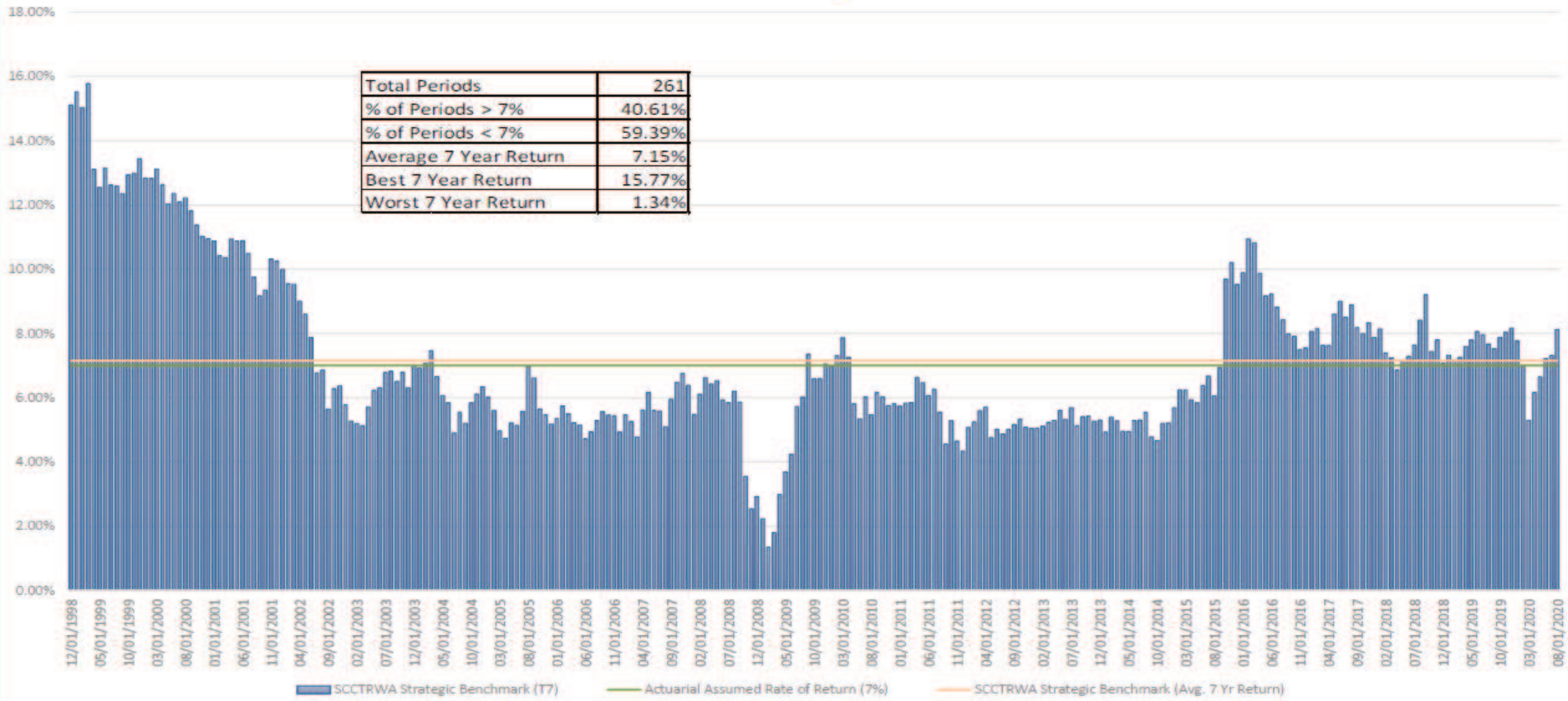
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Strategic Benchmark: 42% Russell 3000, 15% MSCI ACWI ex. USA, 31% BBgBarc US Aggregate Bond, 3% FTSE WGBI, 5% HFRI Fund of Funds, 2% DJ Global Real Estate, 2% T-Bill



# Strategic Benchmark - Rolling 7 Year Returns

December 31, 1998 - August 31, 2020



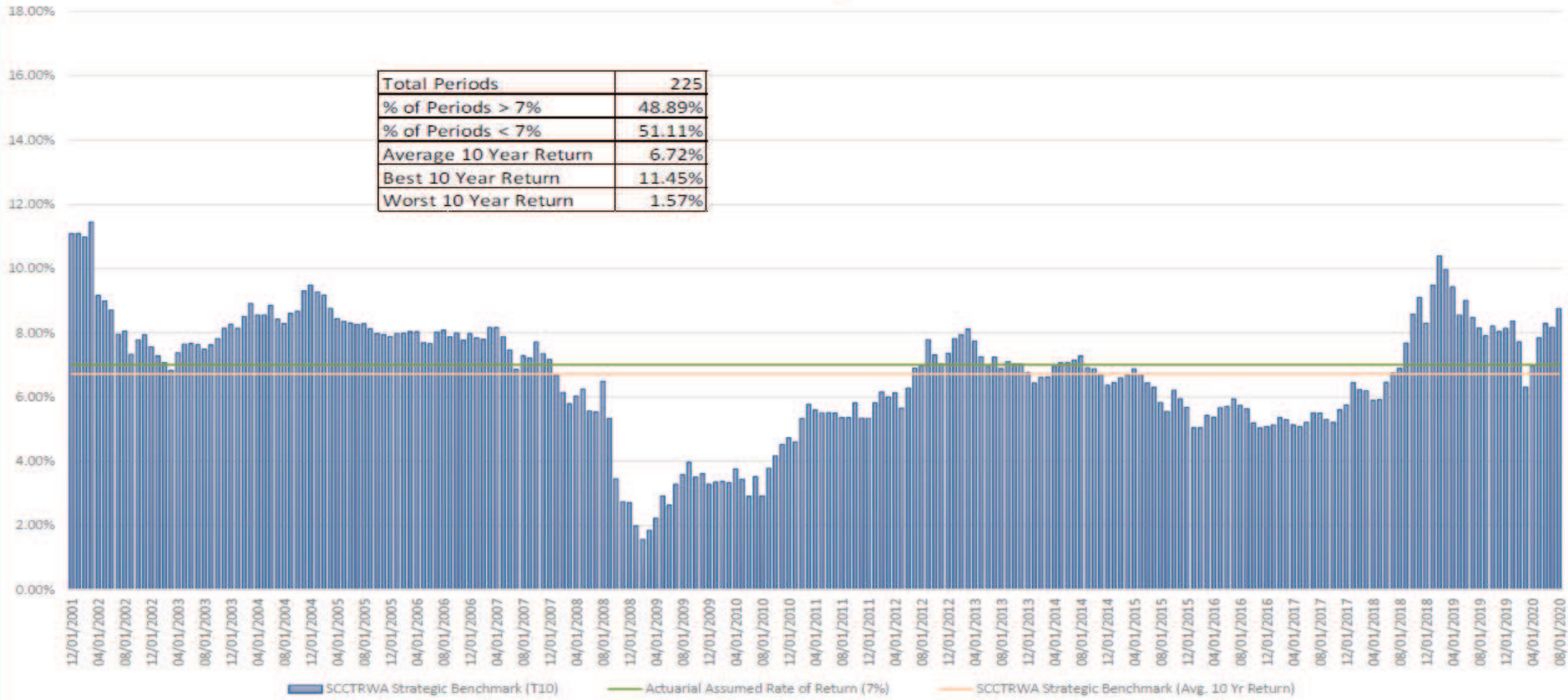
Source: Morningstar Advisor Workstation

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Strategic Benchmark: 42% Russell 3000, 15% MSCI ACWI ex. USA, 31% BBgBarc US Aggregate Bond, 3% FTSE WGBI, 5% HFRI Fund of Funds, 2% DJ Global Real Estate, 2% T-Bill

# Strategic Benchmark - Rolling 10 Year Returns

December 31, 2001 - August 31, 2020



Source: Morningstar Advisor Workstation

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Strategic Benchmark: 42% Russell 3000, 15% MSCI ACWI ex. USA, 31% BBgBarc US Aggregate Bond, 3% FTSE WGBI, 5% HFRI Fund of Funds, 2% DJ Global Real Estate, 2% T-Bill

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## **Actuarial Liability/Cash Flow Analysis**

# Liability/Cash Flow Analysis - Salaried Plan

Valuation Year	Duration	Gross Benefit Payments (\$)	PV Benefit Payments (\$)	Pension Contribution (\$)	Net Benefit Payments (\$)	Present Value (Net \$)	Hybrid LDI (Net \$) <sup>1</sup>	Investment Product
2021	0	\$ 3,498,736	\$ 3,269,847	\$ (2,089,386)	\$ 1,409,350	\$ 1,317,150	\$ 1,409,350	Cash Flow Matched
2022	1	\$ 3,714,762	\$ 3,244,617	\$ (2,021,415)	\$ 1,693,347	\$ 1,479,035	\$ 1,693,347	
2023	2	\$ 3,670,582	\$ 2,996,288	\$ (1,918,075)	\$ 1,752,507	\$ 1,430,568	\$ 1,752,507	Core Fixed Income
2024	3	\$ 3,972,897	\$ 3,030,904	\$ (1,856,668)	\$ 2,116,229	\$ 1,614,461	\$ 2,116,229	
2025	4	\$ 3,907,857	\$ 2,786,248	\$ (1,733,725)	\$ 2,174,132	\$ 1,550,126	\$ 2,174,132	
<b>2021-2025</b>	<b>0-4</b>	<b>\$ 18,764,834</b>	<b>\$ 15,327,904</b>	<b>\$ (9,619,269)</b>	<b>\$ 9,145,565</b>	<b>\$ 7,391,339</b>	<b>\$ 9,145,565</b>	
2026	5	\$ 4,100,978	\$ 2,732,655	\$ (1,655,205)	\$ 2,445,773	\$ 1,629,722	\$ 2,445,773	Plus Fixed Income
2027	6	\$ 4,105,909	\$ 2,556,954	\$ (1,521,975)	\$ 2,583,934	\$ 1,609,144	\$ 2,583,934	
2028	7	\$ 4,099,737	\$ 2,386,084	\$ (1,420,628)	\$ 2,679,109	\$ 1,559,266	\$ 2,679,109	Alternative/Balanced
2029	8	\$ 4,182,284	\$ 2,274,885	\$ (1,339,017)	\$ 2,843,267	\$ 1,546,549	\$ 2,843,267	
2030	9	\$ 4,424,084	\$ 2,248,980	\$ (1,255,827)	\$ 3,168,257	\$ 1,610,581	\$ 3,168,257	
<b>2026-2030</b>	<b>5-9</b>	<b>\$ 20,912,992</b>	<b>\$ 12,199,558</b>	<b>\$ (7,192,652)</b>	<b>\$ 13,720,340</b>	<b>\$ 7,955,262</b>	<b>\$ 13,720,340</b>	
2031	10	\$ 4,359,818	\$ 2,071,318	\$ (1,153,300)	\$ 3,206,518	\$ 1,523,394	\$ 1,523,394	US/Global Equity
2032	11	\$ 4,284,008	\$ 1,902,151	\$ (1,067,776)	\$ 3,216,232	\$ 1,428,046	\$ 1,428,046	
2033	12	\$ 4,444,926	\$ 1,844,486	\$ (996,617)	\$ 3,448,309	\$ 1,430,925	\$ 1,430,925	
2034	13	\$ 4,388,127	\$ 1,701,791	\$ (901,977)	\$ 3,486,150	\$ 1,351,989	\$ 1,351,989	
2035	14	\$ 4,312,915	\$ 1,563,199	\$ (802,703)	\$ 3,510,212	\$ 1,272,262	\$ 1,272,262	
<b>2031-2035</b>	<b>10-14</b>	<b>\$ 21,789,794</b>	<b>\$ 9,082,945</b>	<b>\$ (4,922,373)</b>	<b>\$ 16,867,421</b>	<b>\$ 7,006,616</b>	<b>\$ 7,006,616</b>	
2036	15	\$ 4,386,026	\$ 1,485,699	\$ (734,254)	\$ 3,651,772	\$ 1,236,982	\$ 1,236,982	US/Global Equity
2037	16	\$ 4,208,375	\$ 1,332,264	\$ (644,820)	\$ 3,563,555	\$ 1,128,130	\$ 1,128,130	
2038	17	\$ 4,014,414	\$ 1,187,720	\$ (571,065)	\$ 3,443,349	\$ 1,018,763	\$ 1,018,763	
2039	18	\$ 3,816,316	\$ 1,055,243	\$ (507,981)	\$ 3,308,335	\$ 914,782	\$ 914,782	
2040	19	\$ 3,912,264	\$ 1,011,003	\$ (463,531)	\$ 3,448,733	\$ 891,218	\$ 891,218	
<b>2036-2040</b>	<b>15-19</b>	<b>\$ 20,337,395</b>	<b>\$ 6,071,929</b>	<b>\$ (2,921,651)</b>	<b>\$ 17,415,744</b>	<b>\$ 5,189,875</b>	<b>\$ 5,189,875</b>	
<b>2041-2045</b>	<b>20-24</b>	<b>\$ 16,711,967</b>	<b>\$ 3,565,715</b>	<b>\$ (1,513,212)</b>	<b>\$ 15,198,755</b>	<b>\$ 3,242,852</b>	<b>\$ 3,242,852</b>	US/Global Equity
<b>2046-2050</b>	<b>25-29</b>	<b>\$ 12,631,014</b>	<b>\$ 1,928,395</b>	<b>\$ (632,982)</b>	<b>\$ 11,998,032</b>	<b>\$ 1,831,757</b>	<b>\$ 1,831,757</b>	
<b>2051+</b>	<b>30+</b>	<b>\$ 19,267,060</b>	<b>\$ 1,587,889</b>	<b>\$ (256,289)</b>	<b>\$ 19,010,771</b>	<b>\$ 1,566,767</b>	<b>\$ 1,566,767</b>	
<b>Total</b>		<b>\$ 130,415,056</b>	<b>\$ 49,764,335</b>	<b>\$ (27,058,428)</b>	<b>\$ 103,356,628</b>	<b>\$ 34,184,467</b>	<b>\$ 41,703,771</b>	
<b>Asset Value (08/31/2020)</b>							<b>\$ 38,982,027</b>	

Liability Conscious Allocation	Hybrid LDI Derived % of Net Liabilities	Hybrid LDI Derived % of Current Assets	Present Value LDI Derived % of Net Liabilities	Present Value LDI Derived % of Current Assets	IPS Target
Cash/Fixed	40%	43%	36%	32%	30%
Equity	46%	42%	55%	60%	55%
Alternative/Balanced	14%	15%	9%	8%	15%

<sup>1</sup>Hybrid LDI uses Net Benefit Payment for years 0-10 and Present Value of Net Benefit Payment for subsequent years Contributions based on ARC. ARC, discount rate and present value of benefit payments provided by Angell Pension Group.

# Liability/Cash Flow Analysis - Union Plan

Valuation Year	Duration	Gross Benefit Payments (\$)	PV Benefit Payments (\$)	Pension Contribution (\$)	Net Benefit Payments (\$)	Present Value (Net \$)	Hybrid LDI (Net \$) <sup>1</sup>	Investment Product
2021	0	\$ 1,736,743	\$ 1,623,124	\$ (1,081,857)	\$ 654,886	\$ 612,043	\$ 654,886	Cash Flow Matched
2022	1	\$ 1,791,882	\$ 1,565,099	\$ (959,660)	\$ 832,222	\$ 726,895	\$ 832,222	
2023	2	\$ 1,846,400	\$ 1,507,212	\$ (869,907)	\$ 976,493	\$ 797,109	\$ 976,493	Core Fixed Income
2024	3	\$ 1,922,366	\$ 1,466,564	\$ (802,521)	\$ 1,119,845	\$ 854,324	\$ 1,119,845	
2025	4	\$ 2,019,263	\$ 1,439,707	\$ (712,920)	\$ 1,306,343	\$ 931,405	\$ 1,306,343	
<b>2021-2025</b>	<b>0-4</b>	<b>\$ 9,316,654</b>	<b>\$ 7,601,706</b>	<b>\$ (4,426,865)</b>	<b>\$ 4,889,789</b>	<b>\$ 3,921,776</b>	<b>\$ 4,889,789</b>	
2026	5	\$ 2,124,627	\$ 1,415,729	\$ (638,379)	\$ 1,486,248	\$ 990,350	\$ 1,486,248	Plus Fixed Income
2027	6	\$ 2,205,879	\$ 1,373,711	\$ (564,678)	\$ 1,641,201	\$ 1,022,058	\$ 1,641,201	
2028	7	\$ 2,308,583	\$ 1,343,616	\$ (506,457)	\$ 1,802,126	\$ 1,048,853	\$ 1,802,126	Alternative/Balanced
2029	8	\$ 2,414,814	\$ 1,313,499	\$ (437,184)	\$ 1,977,630	\$ 1,075,700	\$ 1,977,630	
2030	9	\$ 2,499,831	\$ 1,270,787	\$ (392,021)	\$ 2,107,810	\$ 1,071,503	\$ 2,107,810	
<b>2026-2030</b>	<b>5-9</b>	<b>\$ 11,553,734</b>	<b>\$ 6,717,342</b>	<b>\$ (2,538,719)</b>	<b>\$ 9,015,015</b>	<b>\$ 5,208,465</b>	<b>\$ 9,015,015</b>	
2031	10	\$ 2,536,358	\$ 1,205,005	\$ (337,613)	\$ 2,198,745	\$ 1,044,608	\$ 1,044,608	US/Global Equity
2032	11	\$ 2,551,790	\$ 1,133,025	\$ (300,450)	\$ 2,251,340	\$ 999,622	\$ 999,622	
2033	12	\$ 2,583,165	\$ 1,071,922	\$ (267,343)	\$ 2,315,822	\$ 960,984	\$ 960,984	
2034	13	\$ 2,590,315	\$ 1,004,569	\$ (241,531)	\$ 2,348,784	\$ 910,899	\$ 910,899	
2035	14	\$ 2,552,360	\$ 925,093	\$ (200,560)	\$ 2,351,800	\$ 852,401	\$ 852,401	
<b>2031-2035</b>	<b>10-14</b>	<b>\$ 12,813,988</b>	<b>\$ 5,339,614</b>	<b>\$ (1,347,497)</b>	<b>\$ 11,466,491</b>	<b>\$ 4,768,513</b>	<b>\$ 4,768,513</b>	
2036	15	\$ 2,504,363	\$ 848,314	\$ (181,015)	\$ 2,323,348	\$ 786,998	\$ 786,998	US/Global Equity
2037	16	\$ 2,457,751	\$ 778,061	\$ (163,619)	\$ 2,294,132	\$ 726,263	\$ 726,263	
2038	17	\$ 2,424,757	\$ 717,398	\$ (143,539)	\$ 2,281,218	\$ 674,930	\$ 674,930	
2039	18	\$ 2,357,666	\$ 651,914	\$ (127,547)	\$ 2,230,119	\$ 616,646	\$ 616,646	
2040	19	\$ 2,297,535	\$ 593,727	\$ (118,739)	\$ 2,178,796	\$ 563,043	\$ 563,043	
<b>2036-2040</b>	<b>15-19</b>	<b>\$ 12,042,072</b>	<b>\$ 3,589,414</b>	<b>\$ (734,459)</b>	<b>\$ 11,307,613</b>	<b>\$ 3,367,880</b>	<b>\$ 3,367,880</b>	
<b>2041-2045</b>	<b>20-24</b>	<b>\$ 10,189,788</b>	<b>\$ 2,172,843</b>	<b>\$ (444,611)</b>	<b>\$ 9,745,177</b>	<b>\$ 2,078,035</b>	<b>\$ 2,078,035</b>	US/Global Equity
<b>2046-2050</b>	<b>25-29</b>	<b>\$ 7,684,479</b>	<b>\$ 1,171,897</b>	<b>\$ (223,743)</b>	<b>\$ 7,460,736</b>	<b>\$ 1,137,776</b>	<b>\$ 1,137,776</b>	
<b>2051+</b>	<b>30+</b>	<b>\$ 11,380,122</b>	<b>\$ 1,015,749</b>	<b>\$ (42,249)</b>	<b>\$ 11,337,873</b>	<b>\$ 1,011,978</b>	<b>\$ 1,011,978</b>	
<b>Total</b>		<b>\$ 74,980,837</b>	<b>\$ 27,608,565</b>	<b>\$ (9,758,143)</b>	<b>\$ 65,222,694</b>	<b>\$ 21,494,423</b>	<b>\$ 26,268,987</b>	
<b>Asset Value (08/31/2020)</b>							<b>\$ 24,017,685</b>	

Liability Conscious Allocation	Hybrid LDI Derived % of Net Liabilities	Hybrid LDI Derived % of Current Assets	Present Value LDI Derived % of Net Liabilities	Present Value LDI Derived % of Current Assets	IPS Target
Cash/Fixed	37%	41%	33%	29%	30%
Equity	47%	42%	57%	62%	55%
Alternative/Balanced	16%	17%	10%	9%	15%

<sup>1</sup>Hybrid LDI uses Net Benefit Payment for years 0-10 and Present Value of Net Benefit Payment for subsequent years Contributions based on ARC. ARC, discount rate and present value of benefit payments provided by Angell Pension Group.

# Liability/Cash Flow Analysis - VEBA

Valuation Year	Duration	Gross Benefit Payments (\$)	PV Benefit Payments (\$)	Pension Contribution (\$)	Net Benefit Payments (\$)	Present Value (Net \$)	Hybrid LDI (Net \$) <sup>1</sup>	Investment Product
2021	0	\$ 1,931,002	\$ 1,872,040	\$ (1,851,000)	\$ 80,002	\$ 77,559	\$ 80,002	Cash Flow Matched
2022	1	\$ 2,083,675	\$ 1,887,898	\$ (1,851,000)	\$ 232,675	\$ 210,813	\$ 232,675	
2023	2	\$ 2,200,406	\$ 1,863,235	\$ (1,851,000)	\$ 349,406	\$ 295,866	\$ 349,406	
2024	3	\$ 2,317,482	\$ 1,833,992	\$ (1,851,000)	\$ 466,482	\$ 369,161	\$ 466,482	
2025	4	\$ 2,354,224	\$ 1,741,185	\$ (1,851,000)	\$ 503,224	\$ 372,185	\$ 503,224	
<b>2021-2025</b>	<b>0-4</b>	<b>\$ 10,886,789</b>	<b>\$ 9,198,350</b>	<b>\$ (9,255,000)</b>	<b>\$ 1,631,789</b>	<b>\$ 1,325,584</b>	<b>\$ 1,631,789</b>	Core Fixed Income
2026	5	\$ 2,334,070	\$ 1,613,346	\$ (1,851,000)	\$ 483,070	\$ 333,906	\$ 483,070	
2027	6	\$ 2,387,520	\$ 1,542,328	\$ (1,851,000)	\$ 536,520	\$ 346,590	\$ 536,520	
2028	7	\$ 2,442,397	\$ 1,474,560	\$ (1,851,000)	\$ 591,397	\$ 357,047	\$ 591,397	
2029	8	\$ 2,414,977	\$ 1,362,621	\$ (1,851,000)	\$ 563,977	\$ 318,217	\$ 563,977	
2030	9	\$ 2,390,289	\$ 1,260,460	\$ (1,851,000)	\$ 539,289	\$ 284,381	\$ 539,289	Plus Fixed Income
<b>2026-2030</b>	<b>5-9</b>	<b>\$ 11,969,253</b>	<b>\$ 7,253,315</b>	<b>\$ (9,255,000)</b>	<b>\$ 2,714,253</b>	<b>\$ 1,640,140</b>	<b>\$ 2,714,253</b>	
2031	10	\$ 2,368,100	\$ 1,167,064	\$ (1,851,000)	\$ 517,100	\$ 254,841	\$ 254,841	
2032	11	\$ 2,233,736	\$ 1,028,828	\$ (1,851,000)	\$ 382,736	\$ 176,283	\$ 176,283	
2033	12	\$ 2,144,121	\$ 922,946	\$ (1,851,000)	\$ 293,121	\$ 126,175	\$ 126,175	
2034	13	\$ 2,137,766	\$ 860,010	\$ (1,851,000)	\$ 286,766	\$ 115,364	\$ 115,364	Alternative/Balanced
2035	14	\$ 2,062,010	\$ 775,265	\$ (1,851,000)	\$ 211,010	\$ 79,335	\$ 79,335	
<b>2031-2035</b>	<b>10-14</b>	<b>\$ 10,945,733</b>	<b>\$ 4,754,113</b>	<b>\$ (9,255,000)</b>	<b>\$ 1,690,733</b>	<b>\$ 751,998</b>	<b>\$ 751,998</b>	
2036	15	\$ 1,931,878	\$ 678,821	\$ (42,273)	\$ 1,889,605	\$ 663,967	\$ 663,967	
2037	16	\$ 1,841,452	\$ 604,717	\$ -	\$ 1,841,452	\$ 604,717	\$ 604,717	
2038	17	\$ 1,766,165	\$ 542,050	\$ -	\$ 1,766,165	\$ 542,050	\$ 542,050	US/Global Equity
2039	18	\$ 1,655,500	\$ 474,847	\$ -	\$ 1,655,500	\$ 474,847	\$ 474,847	
2040	19	\$ 1,590,097	\$ 426,250	\$ -	\$ 1,590,097	\$ 426,250	\$ 426,250	
<b>2036-2040</b>	<b>15-19</b>	<b>\$ 8,785,092</b>	<b>\$ 2,726,685</b>	<b>\$ (42,273)</b>	<b>\$ 8,742,819</b>	<b>\$ 2,711,831</b>	<b>\$ 2,711,831</b>	
<b>2041-2045</b>	<b>20-24</b>	<b>\$ 6,262,259</b>	<b>\$ 1,394,075</b>	<b>\$ -</b>	<b>\$ 6,262,259</b>	<b>\$ 1,394,075</b>	<b>\$ 1,394,075</b>	
<b>2046-2050</b>	<b>25-29</b>	<b>\$ 4,151,347</b>	<b>\$ 656,236</b>	<b>\$ -</b>	<b>\$ 4,151,347</b>	<b>\$ 656,236</b>	<b>\$ 656,236</b>	US/Global Equity
<b>2051+</b>	<b>30+</b>	<b>\$ 6,773,951</b>	<b>\$ 579,272</b>	<b>\$ -</b>	<b>\$ 6,773,951</b>	<b>\$ 579,272</b>	<b>\$ 579,272</b>	
<b>Total</b>		<b>\$ 59,774,424</b>	<b>\$ 26,562,046</b>	<b>\$ (27,807,273)</b>	<b>\$ 31,967,151</b>	<b>\$ 9,059,136</b>	<b>\$ 10,439,454</b>	
<b>Asset Value (08/31/2020)</b>							<b>\$ 7,809,018</b>	

Liability Conscious Allocation	Hybrid LDI Derived % of Net Liabilities	Hybrid LDI Derived % of Current Assets	Present Value LDI Derived % of Net Liabilities	Present Value LDI Derived % of Current Assets	IPS Target
Cash/Fixed	31%	42%	26%	30%	30%
Equity	58%	44%	67%	62%	55%
Alternative/Balanced	11%	14%	7%	8%	15%

<sup>1</sup>Hybrid LDI uses Net Benefit Payment for years 0-10 and Present Value of Net Benefit Payment for subsequent years Contributions based on ARC. ARC, discount rate and present value of benefit payments provided by Angell Pension Group.

The Kelliher Corbett Group  
at Morgan Stanley

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## **Advisory & Investment Cost Update**

# Custom Solutions – As Your Outsourced Chief Investment Officer (OCIO)

## We Utilize an Institutional, Multi-Factor Approach to Building Tailored Portfolios

OCIO offers a comprehensive, full-discretion relationship, allowing the trustees and Investment Committee to focus on the big picture rather than day-to-day operations.



### INVESTMENT POLICY SETTING

- Spending policy analysis
- Liability analysis
- Policy benchmark development
- Daily policy guideline review



### ASSET ALLOCATION STRATEGY

- Capital markets assumptions
- Strategic and Tactical asset allocation
- Portfolio asset allocation optimization
- Managing policy constraints and restrictions



### PERFORMANCE MONITORING

- Performance reporting and attribution
- As-needed review of strategy changes
- Fiduciary education
- Conference calls and periodic meetings



### CASH FLOW & LIABILITY MANAGEMENT

- Spending policy analysis
- Liability and future funding analysis
- Cash flow matching strategies
- Immunization strategies



### PORTFOLIO CONSTRUCTION

- Manager Due Diligence
- Ex ante and what if portfolio analysis
- Manager pairing and overlap analysis
- Active/Passive investment optimization



### RISK MANAGEMENT

- Ex ante portfolio and manager risk analysis
- Stress Testing
- Regulatory risk management
- Portfolio monitoring and oversight



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## Included in Morgan Stanley Advisory Fee

- Investment Policy Review
- Asset Allocation
- Fiduciary
- Custody
- Discretion
- Pension Asset/Liability Analysis
- Morgan Stanley Resources
- Manager Due Diligence
- Zero Commission Trading
- Agent Only Trades/No Principal Trades
- No Load/No 12b-1 Mutual Fund Trades (rebate when necessary)
- Institutional Share Class When Mutual Funds
- No Proprietary Managers
- Quarterly Trustee Meetings/Daily Guidance

Please refer to important disclaimers at the end of this presentation

# Mutual Fund/ETF/Bonds Cost Analysis Comparison Over Time

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12/31/2016 – 0.58%

12/31/2017 – 0.56%

12/31/2018 – 0.54%

12/31/2019 – 0.40%

09/30/2020 – 0.41%

17 basis points savings

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*Resulted in cost savings of approximately 29% since 12/2016*

# Advisory Cost Comparison Over Time

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December 2018 & Prior – 0.40% (\$56,800,971 – 12/31/2018)

December 2019 – 0.38% (\$69,017,372 – 12/31/2019)

September 2020 – 0.38% (\$69,560,769 – 09/30/2020)

Approaching next tier of \$70,000,000 - \$84,999,999 at 0.20%

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## Tiered Fee Schedule for Consolidated Assets of Salary, Union, and VEBA plans

Asset Level	Fee
\$0 - \$54,999,999.99	0.40%
\$55,000,000 - \$69,999,999.99	0.30%
\$70,000,000 - \$84,999,999.99	0.20%
\$85,000,000 - \$99,999,999.99	0.10%
\$100,000,000 or greater	0.025%

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# Advisory Cost

## 2020 Monthly Reconciliation

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	Consolidated Billable Asset Value (\$)	Annualized Blended Advisory Cost (%)	Published Monthly Advisory Cost (\$)	Actual Advisory Cost (\$)
Jan-20	\$69,017,372	0.38%	\$21,838	\$22,075
Feb-20	\$68,793,153	0.38%	\$21,782	\$20,685
Mar-20	\$65,863,195	0.38%	\$21,049	\$21,383
Mar-20	<i>Advisory Rebate/Correction</i>		-	-\$4,924
Apr-20	\$59,942,831	0.39%	\$19,569	\$19,186
May-20	\$63,673,380	0.39%	\$20,502	\$20,738
Jun-20	\$65,751,695	0.38%	\$21,021	\$20,641
Jul-20	\$66,554,384	0.38%	\$21,222	\$21,550
Aug-20	\$68,942,833	0.38%	\$21,819	\$22,152
Sep-20	\$70,767,177	0.38%	\$22,211	\$21,836
<b>Total</b>			<b>\$191,013</b>	<b>\$185,321</b>
<b>Total Excluding Rebate/Correction</b>			<b>\$191,013</b>	<b>\$190,246</b>

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Difference between actual and published costs are due to money market fund rebates and deposit/withdrawal adjustments

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# Mutual Fund/ETF Cost Analysis – 12/31/2016

	Exp. Ratio	Assets	Total Annual Mgt Cost (\$)	%
<b>Cash Equivalents</b>				
MS Bank Deposit Program	0.00	\$ 1,144,711	\$ -	
		\$ 1,144,711	\$ -	<b>0.00%</b>
<b>Bond</b>				
Guggenheim Limited Duration	0.56	\$ 1,163,820	\$ 6,517.39	
Vanguard Intermediate-Term Bond ETF	0.09	\$ 1,306,355	\$ 1,175.72	
Pioneer Bond Y	0.58	\$ 1,607,451	\$ 9,323.22	
DoubleLine Core Fixed Income I	0.48	\$ 1,593,585	\$ 7,649.21	
Janus Flexible Bond I	0.56	\$ 1,579,802	\$ 8,846.89	
Templeton Global Bond Adv	0.68	\$ 1,489,034	\$ 10,125.43	
SPDR Doubleline Total Return	0.55	\$ 1,108,835	\$ 6,098.59	
PIMCO Income P	0.55	\$ 473,482	\$ 2,604.15	
Pioneer Strategic Income Y	0.73	\$ 702,718	\$ 5,129.84	
Loomis Sayles Core Plus	0.48	\$ 225,886	\$ 1,084.25	
Loomis Sayles Strategic Income	0.71	\$ 238,236	\$ 1,691.48	
Pioneer Dynamic Credit Y	0.85	\$ 483,480	\$ 4,109.58	
		\$ 11,972,684	\$ 64,355.75	<b>0.54%</b>
<b>U.S. Equity</b>				
Columbia Dividend Income Z	0.77	\$ 2,946,729	\$ 22,689.82	
MFS Massachusetts Investors Gr Stk I	0.49	\$ 2,387,478	\$ 11,698.64	
First Eagle Fund of America I	1.00	\$ 2,937,948	\$ 29,379.48	
SPDR S&P Dividend	0.35	\$ 1,917,505	\$ 6,711.27	
Guggenheim S&P 500 Equal Weight	0.40	\$ 2,505,573	\$ 10,022.29	
Vanguard Total Stk Mkt ETF	0.05	\$ 4,008,323	\$ 2,004.16	
Vanguard Russell 1000 Growth Index	0.12	\$ 1,972,558	\$ 2,367.07	
		\$ 18,676,114	\$ 84,872.73	<b>0.45%</b>
<b>International</b>				
First Eagle Global I	0.84	\$ 1,964,775	\$ 16,504.11	
American Funds EuroPacific Gr F2	0.60	\$ 1,985,603	\$ 11,913.62	
MFS International Value I	0.76	\$ 1,908,501	\$ 14,504.61	
Oppenheimer Developing Markets Y	1.07	\$ 1,268,393	\$ 13,571.80	
Vanguard FTSE Developed Markets	0.09	\$ 1,210,266	\$ 1,089.24	
		\$ 8,337,538	\$ 57,583.38	<b>0.69%</b>
<b>Alternative/Hedge/Swing</b>				
AQR Long/Short Equity	1.35	\$ 1,244,653	\$ 16,802.81	
AQR Style Premia	1.56	\$ 1,151,539	\$ 17,964.00	
American Funds American Balanced	0.39	\$ 1,254,039	\$ 4,890.75	
Janus Balanced I	0.67	\$ 1,263,443	\$ 8,465.07	
Gateway	0.70	\$ 954,878	\$ 6,684.14	
SPDR SSGA Multi-Asset Real Return	0.70	\$ 928,992	\$ 6,502.95	
Cohen & Steers Global Realty	0.95	\$ 643,723	\$ 6,115.37	
Cohen & Steers Real Estate Securities	0.97	\$ 467,539	\$ 4,535.13	
		\$ 7,908,805	\$ 71,960.22	<b>0.91%</b>
		<b>\$ 48,039,852</b>	<b>\$ 278,772.08</b>	<b>0.58%</b>

Assets as of 12/31/2016

\*\*Excludes Hedge Fund of Funds

Source: Morningstar Advisor Workstation, Morgan Stanley

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# Mutual Fund/ETF Cost Analysis – 12/31/2017

	Exp. Ratio	Assets	Total Annual Mgt Cost (\$)	%
<b>Cash Equivalents</b>				
MS Bank Deposit Program	0.00	\$ 458,155	\$ -	
		\$ 458,155	\$ -	<b>0.00%</b>
<b>Bond</b>				
Guggenheim Limited Duration Instl	0.50	\$ 1,442,723	\$ 7,213.61	
Vanguard Short-Term Corporate Bond ETF	0.07	\$ 1,070,249	\$ 749.17	
Pioneer Dynamic Credit Y	0.88	\$ 575,307	\$ 5,062.70	
DoubleLine Core Fixed Income I	0.49	\$ 2,001,845	\$ 9,809.04	
Janus Henderson Flexible Bond I	0.56	\$ 1,991,678	\$ 11,153.39	
Loomis Sayles Core Plus Bond Y	0.48	\$ 286,352	\$ 1,374.49	
Pioneer Bond Y	0.58	\$ 1,999,008	\$ 11,594.24	
SPDR® DoubleLine Total Return Tact ETF	0.55	\$ 1,224,172	\$ 6,732.95	
Vanguard Inter-Term Bond ETF	0.07	\$ 844,853	\$ 591.40	
Loomis Sayles Strategic Income Y	0.71	\$ 291,981	\$ 2,073.06	
Pioneer Strategic Income Y	0.74	\$ 860,784	\$ 6,369.80	
PIMCO Income P	0.60	\$ 574,726	\$ 3,448.36	
Templeton Global Bond Adv	0.68	\$ 1,735,415	\$ 11,800.83	
		\$ 14,899,091	\$ 77,973.04	<b>0.52%</b>
<b>U.S. Equity</b>				
SPDR® S&P Dividend ETF	0.35	\$ 2,311,671	\$ 8,090.85	
Columbia Dividend Income Inst	0.73	\$ 3,591,925	\$ 26,221.05	
Guggenheim S&P 500® Equal Weight ETF	0.20	\$ 2,983,253	\$ 5,966.51	
Vanguard Total Stock Market ETF	0.04	\$ 4,577,130	\$ 1,830.85	
MFS® Massachusetts Inv Gr Stk I	0.49	\$ 3,037,592	\$ 14,884.20	
Vanguard Russell 1000 Growth ETF	0.12	\$ 2,422,001	\$ 2,906.40	
First Eagle Fund of America I	1.01	\$ 2,383,177	\$ 24,070.09	
Vanguard Mid-Cap ETF	0.06	\$ 1,188,825	\$ 713.29	
		\$ 22,495,573	\$ 84,683.24	<b>0.38%</b>
<b>International</b>				
First Eagle Global I	0.84	\$ 2,347,771	\$ 19,721.28	
Vanguard FTSE Developed Markets ETF	0.07	\$ 1,472,385	\$ 1,030.67	
MFS® International Value I	0.76	\$ 2,353,758	\$ 17,888.56	
American Funds Europacific Growth F2	0.60	\$ 2,387,122	\$ 14,322.73	
Oppenheimer Developing Markets Y	1.07	\$ 1,522,427	\$ 16,289.97	
		\$ 10,083,463	\$ 69,253.21	<b>0.69%</b>
<b>Alternative/Hedge/Swing</b>				
American Funds American Balanced F2	0.39	\$ 1,474,650	\$ 5,751.14	
Janus Henderson Balanced I	0.65	\$ 1,485,963	\$ 9,658.76	
AQR Style Premia Alternative I	1.60	\$ 1,524,325	\$ 24,389.20	
AQR Long-Short Equity I	1.38	\$ 1,535,495	\$ 21,189.84	
Gateway Y	0.70	\$ 1,164,186	\$ 8,149.30	
Cohen & Steers Real Estate Securities I	0.91	\$ 330,489	\$ 3,007.45	
Cohen & Steers Global Realty I	0.95	\$ 573,466	\$ 5,447.93	
SPDR® SSgA Multi-Asset Real Return ETF	0.70	\$ 1,185,990	\$ 8,301.93	
		\$ 9,274,564	\$ 85,895.53	<b>0.93%</b>
		\$ <b>57,210,846</b>	\$ <b>317,805.03</b>	<b>0.56%</b>

Assets as of 12/31/2017

\*\*Excludes Hedge Fund of Funds

Source: Morningstar Advisor Workstation, Morgan Stanley

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# Mutual Fund/ETF Cost Analysis – 12/31/2018

	Exp. Ratio	Assets	Total Annual Mgt Cost (\$)	%
<b>Cash Equivalents</b>				
MS Bank Deposit Program	0.00	\$ 578,583	\$ -	
		\$ 578,583	\$ -	<b>0.00%</b>
<b>Bond</b>				
Individual Bonds	0.00	\$ 400,000	\$ -	
Guggenheim Limited Duration Instl	0.51	\$ 1,503,493	\$ 7,667.82	
SPDR® DoubleLine Shrt Dur Ttl RetTactETF	0.45	\$ 1,185,600	\$ 5,335.20	
Vanguard Short-Term Bond ETF	0.07	\$ 2,378,707	\$ 1,665.09	
DoubleLine Core Fixed Income I	0.48	\$ 2,092,443	\$ 10,043.73	
Janus Henderson Flexible Bond I	0.50	\$ 2,092,345	\$ 10,461.72	
Loomis Sayles Core Plus Bond Y	0.48	\$ 297,222	\$ 1,426.66	
Pioneer Bond Y	0.47	\$ 2,092,409	\$ 9,834.32	
Loomis Sayles Strategic Income Y	0.71	\$ 287,725	\$ 2,042.85	
Pioneer Dynamic Credit Y	0.91	\$ 589,504	\$ 5,364.49	
Pioneer Strategic Income Y	0.74	\$ 888,929	\$ 6,578.08	
PIMCO Income I2	0.84	\$ 1,150,226	\$ 9,661.90	
Templeton Global Bond Adv	0.71	\$ 1,790,373	\$ 12,711.65	
		\$ 16,748,976	\$ 82,793.51	<b>0.49%</b>
<b>U.S. Equity</b>				
SPDR® S&P Dividend ETF	0.35	\$ 2,598,318	\$ 9,094.11	
Columbia Dividend Income Instl	0.71	\$ 3,410,672	\$ 24,215.77	
Invesco S&P 500® Equal Weight ETF	0.20	\$ 2,968,672	\$ 5,937.34	
Vanguard Total Stock Market ETF	0.04	\$ 4,711,461	\$ 1,884.58	
MFS Massachusetts Inv Gr Stk I	0.49	\$ 2,843,872	\$ 13,934.97	
Vanguard Russell 1000 Growth ETF	0.12	\$ 2,171,341	\$ 2,605.61	
Vanguard Mid-Cap ETF	0.05	\$ 2,072,973	\$ 1,036.49	
Janus Henderson Enterprise I	0.77	\$ 1,089,338	\$ 8,387.90	
		\$ 21,866,647	\$ 67,096.79	<b>0.31%</b>
<b>Global/International</b>				
First Eagle Global I	0.84	\$ 2,197,512	\$ 18,459.10	
Vanguard FTSE Developed Markets ETF	0.07	\$ 1,345,803	\$ 942.06	
MFS International Value I	0.73	\$ 2,190,540	\$ 15,990.94	
American Funds Europacific Growth F2	0.58	\$ 2,173,926	\$ 12,608.77	
Oppenheimer Developing Markets Y	1.05	\$ 1,305,530	\$ 13,708.07	
		\$ 9,213,310	\$ 61,708.94	<b>0.67%</b>
<b>Balanced/Hedged Equity</b>				
American Funds American Balanced F2	0.39	\$ 1,435,108	\$ 5,596.92	
Janus Henderson Balanced I	0.65	\$ 1,446,815	\$ 9,404.30	
Gateway Y	0.70	\$ 1,141,966	\$ 7,993.76	
		\$ 4,023,889	\$ 22,994.98	<b>0.57%</b>
<b>Alternative</b>				
AQR Style Premia Alternative I	2.33	\$ 1,053,421	\$ 24,544.71	
Catalyst/Millburn Hedge Strategy I	2.00	\$ 121,481	\$ 2,429.61	
AQR Long-Short Equity I	2.11	\$ 1,004,705	\$ 21,199.27	
Calamos Phineus Long/Short I	2.54	\$ 558,066	\$ 14,174.89	
Cohen & Steers Global Realty I	0.90	\$ 597,061	\$ 5,373.54	
		\$ 3,334,733	\$ 67,722.02	<b>2.03%</b>
Assets as of 12/31/2018		\$ 55,766,139	\$ 302,316.24	<b>0.54%</b>
**Excludes Hedge Fund of Funds				

Source: Morningstar Advisor Workstation, Morgan Stanley

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# Mutual Fund/ETF Cost Analysis – 12/31/2019

	Exp. Ratio	Assets	Total Annual Mgt Cost (\$)	%
<b>Cash Equivalents</b>				
MS Bank Deposit Program/T-Bills	0.00	\$ 6,712,219	\$ -	
		\$ 6,712,219	\$ -	<b>0.00%</b>
<b>Bond</b>				
Individual Bonds	0.00	\$ 9,659,796	\$ -	
Guggenheim Limited Duration Instl	0.50	\$ 188,815	\$ 944.08	
SPDR® DoubleLine Shrt Dur Ttl RetTactETF	0.45	\$ 160,778	\$ 723.50	
Vanguard Short-Term Bond ETF	0.07	\$ 346,623	\$ 242.64	
DoubleLine Core Fixed Income I	0.48	\$ 2,428,218	\$ 11,655.45	
Janus Henderson Flexible Bond I	0.52	\$ 262,258	\$ 1,363.74	
Loomis Sayles Core Plus Bond Y	0.48	\$ 364,350	\$ 1,748.88	
Pioneer Bond Y	0.46	\$ 265,202	\$ 1,219.93	
Loomis Sayles Strategic Income Y	0.71	\$ 362,346	\$ 2,572.66	
Pioneer Dynamic Credit Y	0.92	\$ 689,322	\$ 6,341.76	
Pioneer Strategic Income Y	0.72	\$ 1,041,841	\$ 7,501.26	
PIMCO Income I2	1.15	\$ 1,394,156	\$ 16,032.79	
		\$ 17,163,705	\$ 50,346.67	<b>0.29%</b>
<b>U.S. Equity</b>				
Columbia Dividend Income Inst	0.71	\$ 3,675,328	\$ 26,094.83	
SPDR® S&P Dividend ETF	0.35	\$ 2,716,143	\$ 9,506.50	
Vanguard Value ETF	0.04	\$ 1,414,230	\$ 565.69	
Invesco S&P 500® Equal Weight ETF	0.20	\$ 2,725,206	\$ 5,450.41	
Vanguard Total Stock Market ETF	0.03	\$ 5,340,557	\$ 1,602.17	
MFS Massachusetts Inv Gr Stk I	0.48	\$ 3,173,808	\$ 15,234.28	
Vanguard Russell 1000 Growth ETF	0.08	\$ 1,429,347	\$ 1,143.48	
Schwab US Mid-Cap ETF™	0.04	\$ 1,356,383	\$ 542.55	
Janus Henderson Enterprise I	0.75	\$ 1,399,637	\$ 10,497.27	
		\$ 23,230,638	\$ 70,637.18	<b>0.30%</b>
<b>Global/International</b>				
First Eagle Global I	0.84	\$ 2,754,908	\$ 23,141.23	
Vanguard FTSE Developed Markets ETF	0.05	\$ 1,624,713	\$ 812.36	
MFS International Intrinsic Value I	0.73	\$ 2,616,110	\$ 19,097.61	
American Funds Europacific Growth F2	0.58	\$ 2,631,789	\$ 15,264.38	
Invesco Oppenheimer Developing Markets Y	1.00	\$ 1,411,437	\$ 14,114.37	
WisdomTree Global High Dividend ETF	0.58	\$ 1,335,288	\$ 7,744.67	
		\$ 12,374,245	\$ 80,174.61	<b>0.65%</b>
<b>Balanced/Hedged Equity</b>				
American Funds American Balanced F2	0.38	\$ 2,423,260	\$ 9,208.39	
Janus Henderson Balanced I	0.64	\$ 2,423,868	\$ 15,512.76	
Gateway Y	0.70	\$ 1,345,604	\$ 9,419.23	
		\$ 6,192,732	\$ 34,140.37	<b>0.55%</b>
<b>Alternative</b>				
BlackRock Event Driven Equity Instl	1.63	\$ 705,476	\$ 11,499.26	
Catalyst/Millburn Hedge Strategy I	2.02	\$ 156,936	\$ 3,170.11	
Calamos Phineus Long/Short I	2.04	\$ 667,192	\$ 13,610.71	
Cohen & Steers Global Realty I	0.90	\$ 747,642	\$ 6,728.78	
		\$ 2,277,246	\$ 35,008.86	<b>1.54%</b>
Assets as of 12/31/2019		\$ 67,950,784	\$ 270,307.69	<b>0.40%</b>
**Excludes Hedge Fund of Funds				

Source: Morningstar Advisor Workstation, Morgan Stanley

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# Mutual Fund/ETF Cost Analysis – 9/30/2020

	Exp. Ratio	Assets	Total Annual Mgt Cost (\$)	%
<b>Cash Equivalents</b>				
MS Bank Deposit Program/T-Bills	0.00	\$ 505,828	\$ -	
		\$ 505,828	\$ -	<b>0.00%</b>
<b>Bond</b>				
Individual Bonds	0.00	\$ 10,661,620	\$ -	
Guggenheim Limited Duration Instl	0.52	\$ 199,346	\$ 1,036.60	
Vanguard Short-Term Bond ETF	0.05	\$ 352,963	\$ 176.48	
PIMCO Investment Grade Credit Bond I-2	0.95	\$ 2,023,561	\$ 19,223.83	
American Funds Bond Fund of Amer F2	0.34	\$ 1,796,350	\$ 6,107.59	
American Funds Strategic Bond F-2	0.52	\$ 1,850,722	\$ 9,623.76	
DoubleLine Core Fixed Income I	0.48	\$ 2,613,079	\$ 12,542.78	
Janus Henderson Flexible Bond I	0.52	\$ 284,689	\$ 1,480.38	
Loomis Sayles Core Plus Bond Y	0.48	\$ 1,843,024	\$ 8,846.52	
Pioneer Bond Y	0.46	\$ 332,269	\$ 1,528.44	
PIMCO Income I2	1.19	\$ 1,162,322	\$ 13,831.63	
		\$ 23,119,945	\$ 74,398.01	<b>0.32%</b>
<b>U.S. Equity</b>				
Columbia Dividend Income Inst	0.69	\$ 3,568,186	\$ 24,620.49	
Vanguard Value ETF	0.04	\$ 1,233,218	\$ 493.29	
Goldman Sachs Equal Wght US Lg Cp Eq ETF	0.09	\$ 2,657,831	\$ 2,392.05	
ProShares S&P 500 Dividend Aristocrats	0.35	\$ 2,505,409	\$ 8,768.93	
Vanguard Total Stock Market ETF	0.03	\$ 5,595,535	\$ 1,678.66	
MFS Massachusetts Inv Gr Stk I	0.47	\$ 3,484,919	\$ 16,379.12	
Vanguard Russell 1000 Growth ETF	0.08	\$ 1,760,910	\$ 1,408.73	
Schwab US Mid-Cap ETF™	0.04	\$ 1,251,074	\$ 500.43	
Janus Henderson Enterprise I	0.75	\$ 1,403,172	\$ 10,523.79	
		\$ 23,460,254	\$ 66,765.48	<b>0.28%</b>
<b>Global/International</b>				
First Eagle Global I	0.85	\$ 2,692,910	\$ 22,889.73	
Vanguard FTSE Developed Markets ETF	0.05	\$ 1,508,188	\$ 754.09	
MFS International Intrinsic Value I	0.73	\$ 2,865,890	\$ 20,921.00	
American Funds Europacific Growth F2	0.58	\$ 2,745,678	\$ 15,924.93	
Invesco Developing Markets Y	1.00	\$ 1,394,104	\$ 13,941.04	
WisdomTree Global High Dividend ETF	0.58	\$ 1,044,483	\$ 6,058.00	
		\$ 12,251,252	\$ 80,488.79	<b>0.66%</b>
<b>Balanced</b>				
American Funds American Balanced F2	0.37	\$ 3,240,290	\$ 11,989.07	
Janus Henderson Balanced I	0.65	\$ 3,351,117	\$ 21,782.26	
		\$ 6,591,407	\$ 33,771.33	<b>0.51%</b>
<b>Alternative</b>				
BlackRock Event Driven Equity Instl	1.36	\$ 722,930	\$ 9,831.84	
Calamos Market Neutral Income I	1.01	\$ 677,245	\$ 6,840.18	
JPMorgan Hedged Equity I	0.60	\$ 694,316	\$ 4,165.90	
Cohen & Steers Global Realty I	0.90	\$ 652,564	\$ 5,873.08	
		\$ 2,747,055	\$ 26,710.99	<b>0.97%</b>
Assets as of 09/30/2020		\$ 68,675,742	\$ 282,134.60	<b>0.41%</b>

\*\*Excludes Hedge Fund of Funds

Source: Morningstar Advisor Workstation, Morgan Stanley

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