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## Report Prepared For:

# Investment Performance

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# **Dallas Jewish Community Foundation** December 31, 2021

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### Model Portfolio Performance Summary

			Pe	erformance(%)			
-	1 Month	Quarter To Date	Year To Date	1 Year	3 Years	Since Inception	Inception Date
Models							
Growth Fund (Model 1) Growth Portfolio Benchmark	<b>2.69</b> 2.82	<b>4.33</b> <i>4.73</i>	<b>12.20</b> <i>12.22</i>	<b>12.20</b> 12.22	<b>12.25</b> <i>12.74</i>	<b>8.09</b> <i>8.44</i>	04/01/2017
Balanced Fund (Model 2) Balanced Portfolio Benchmark	<b>2.17</b> <i>2.37</i>	<b>3.52</b> 4.00	<b>9.93</b> 10.05	<b>9.93</b> 10.05	<b>10.72</b> <i>11.17</i>	<b>7.11</b> 7.40	04/01/2017
Income Fund (Model 3) Income Fund Benchmark	<b>1.46</b> 2.71	<b>2.41</b> 2.45	<b>7.52</b> <i>6.96</i>	<b>7.52</b> 6.96	<b>8.17</b> <i>7.83</i>	<b>5.50</b> <i>4.97</i>	04/01/2017
Passive Balanced Fund (Model 5) MSCI ACWI 60%/BC Agg 40%	<b>2.16</b> 2.30	<b>3.58</b> 4.02	<b>10.32</b> <i>10.20</i>	<b>10.32</b> <i>10.20</i>	<b>14.00</b> <i>14.31</i>	<b>9.66</b> <i>9.80</i>	04/01/2017
Balanced Plus Fund (Model 6) Balanced Plus Portfolio Benchmark	<b>2.19</b> 2.54	<b>4.70</b> <i>4.28</i>	<b>14.07</b> <i>11.57</i>	<b>14.07</b> 11.57	<b>13.65</b> <i>13.49</i>	<b>9.30</b> 9.09	04/01/2017
Stable Value Fund (Model 4)	Current Y	ield = 0.04%					
Sub-Models							
Equity Portfolio S&P 500 60%/MSCI ACWI Ex US 40%	<b>4.20</b> <i>4.34</i>	<b>6.75</b> 7.29	<b>19.13</b> 20.03	<b>19.13</b> 20.03	<b>19.11</b> 20.83	<b>12.50</b> <i>14.18</i>	04/01/2017
Equity Income Portfolio S & P 500 60%/DJ EPAC Sel Div 40% S & P 500 V1 60%/MSCI EAFE V140%	<b>4.51</b> 5.25 6.61	<b>7.08</b> 8.06 5.42	<b>19.88</b> 21.72 19.15	<b>19.88</b> 21.72 19.15	<b>16.43</b> <i>19.17</i> <i>14.28</i>	<b>10.78</b> <i>13.13</i> <i>8.84</i>	04/01/2017
Liquid Alternatives Portfolio Liquid Alts Benchmark	<b>2.54</b> <i>1.82</i>	<b>2.49</b> 2.40	<b>8.52</b> <i>9.93</i>	<b>8.52</b> 9.93	<b>6.73</b> <i>4.05</i>	<b>3.34</b> 1.25	04/01/2017
Illiquid Alternatives Portfolio Illiquid Fund Benchmark R3000+3% 70%/HFRX 30%	<b>0.48</b> 1.38 3.22	<b>0.10</b> 1.56 7.11	<b>13.38</b> 5.64 20.70	<b>13.38</b> 5.64 20.70	<b>14.65</b> <i>7.36</i> <i>21.31</i>	<b>10.96</b> 5.88 15.44	04/01/2017
<b>Bond Portfolio</b> Barclays 80% Agg/15% Uni/5% 1-3yr	<b>0.02</b> -0.23	<b>0.01</b> -0.02	<b>-0.05</b> <i>-1.43</i>	<b>-0.05</b> -1.43	<b>4.25</b> <i>4.71</i>	<b>3.25</b> <i>3.52</i>	04/01/2017



### Investment Manager Performance Summary

Investment Manager Performance Sum	imary								
	Alloc	ation			Р	erformance(%)			
	Market Value (\$000)	%	1 Month	Quarter To Date	YTD	1 Year	3 Years	Since Inception	Inception Date
Equity Income Portfolio	1,224	100.00	4.51	7.08	19.88	19.88	16.43	10.78	04/01/2017
S&P 500 60%/DJ EPAC Sel Div 40%			5.25	8.06	21.72	21.72	19.17	13.13	
S&P 500 V1 60%/MSCI EAFE V1 40%			6.61	5.42	19.15	19.15	14.28	8.84	
Domestic Equities	730	59.67	4.30	9.79	25.76	25.76	21.91	14.46	04/01/2017
S&P 500 Index			4.48	11.03	28.70	28.70	26.07	18.04	
Large Cap Core									
Parametric	730	59.67	4.30	9.91	25.83	25.83	21.90	14.46	04/01/2017
80% Russell 1000 / 20% BXM			3.99	9.22	25.28	25.28	23.01	15.86	
S&P 500 Index			4.48	11.03	28.70	28.70	26.07	18.04	
International Equities	494	40.33	4.81	3.10	11.01	11.01	7.48	4.83	04/01/2017
MSCI EAFE Net			5.12	2.69	11.26	11.26	13.54	8.46	
Developed International									
iShares International Select	494	40.33	4.82	3.18	10.94	10.94	7.45	4.76	04/01/2017
DJ EPAC Select Dividend			6.41	3.63	11.61	11.61	9.11	5.77	

Investment Manager Performance Sun	nmary								
	Alloca	ation			P	erformance(%)			
-	Market Value (\$000)	%	1 Month	Quarter To Date	YTD	1 Year	3 Years	Since Inception	Inception Date
Equity Portfolio	65,235	100.00	4.20	6.75	19.13	19.13	19.11	12.50	04/01/2017
S&P 500 60%/MSCI ACWI Ex US 40%			4.34	7.29	20.03	20.03	20.83	14.18	
Domestic Equities	39,274	60.20	4.57	10.22	26.58	26.58	24.13	16.12	04/01/2017
S&P 500 Index			4.48	11.03	28.70	28.70	26.07	18.04	
Large Cap Core									
iShares Core S&P 500	24,809	38.03	4.55	11.00	28.48	28.48	25.55	17.65	11/01/2017
S&P 500 Index			4.48	11.03	28.70	28.70	26.07	18.04	
Parametric JLENS	7,905	12.12	4.31	10.61	27.73	27.73	-	26.45	10/09/2019
S&P 500 Index			4.48	11.03	28.70	28.70	26.07	27.15	
Small / Mid Cap									
Silvercrest Small Cap Value	3,279	5.03	5.52	7.50	24.11	24.11	17.65	9.24	04/01/2017
Russell 2000 Value			4.08	4.36	28.27	28.27	17.99	9.59	
Geneva Small Cap Growth	3,281	5.03	4.19	5.78	12.20	12.20	-	26.75	07/01/2020
Russell 2000 Growth			0.44	0.01	2.83	2.83	21.16	26.74	
International Equities	25,961	39.80	3.65	1.68	8.54	8.54	11.72	7.03	04/01/2017
MSCI AC World ex US Net			4.13	1.82	7.82	7.82	13.18	8.39	
Developed International									
iShares MSCI EAFE	18,248	27.97	4.15	2.63	11.31	11.31	13.11	8.05	04/01/2017
MSCI EAFE Net			5.12	2.69	11.26	11.26	13.54	8.46	
Emerging Markets									
Lazard Em Mkts Select ADR	3,849	5.90	5.01	0.09	8.90	8.90	7.54	3.92	04/01/2017
MSCI Emerging Markets			1.88	-1.31	-2.54	-2.54	10.94	7.92	
MSCI Emerging Markets Value Net			3.55	-0.41	4.00	4.00	7.08	5.23	
Martin Currie Em Mkts	3,864	5.92	0.07	-0.92	-4.63	-4.63	-	20.10	07/01/2020
MSCI Emerging Markets Net			1.88	-1.31	-2.54	-2.54	10.94	17.72	



Investment Manager Performance Summar	'Y								
	Alloc	ation			Р				
	Market Value (\$000)	%	1 Month	Quarter To Date	YTD	1 Year	3 Years	Since Inception	Inception Date
Bond Portfolio	28,607	100.00	0.02	0.01	-0.05	-0.05	4.25	3.25	04/01/2017
Barclays 80% Agg/15% Uni/5% 1-3yr			-0.23	-0.02	-1.43	-1.43	4.71	3.52	
Core Fixed Income									
BlackRock	14,371	50.23	-0.20	-0.08	-1.87	-1.87	4.73	3.52	04/01/2017
Barclays Aggregate			-0.26	0.01	-1.54	-1.54	4.79	3.58	
Israel Bonds	1,823	6.37	0.03	0.33	1.56	1.56	2.49	2.70	08/01/2018
Opportunistic /Ultra Short Fixed Income	12,414	43.39	0.28	0.04	1.76	1.76	3.37	2.65	04/01/2017
BC Universal			-0.07	-0.03	-1.10	-1.10	5.15	3.80	
Opportunistic Fixed Income									
JPMorgan Strategic Income	4,232	14.79	-0.07	-0.18	0.64	0.64	2.06	1.81	04/01/2017
BC Agg Gov/CR 1-3 YR A Plus			-0.17	-0.57	-0.54	-0.54	2.17	1.78	
PGIM Short Duration HY	3,444	12.04	1.19	0.68	5.90	5.90	N/A	5.03	02/01/2020
BC HY Ba/B 1% Cap 1-5 Yr			1.32	0.77	5.02	5.02	6.77	4.92	
JPMorgan Ultra-Short Income	2,811	9.83	-0.10	-0.26	0.14	0.14	N/A	0.21	12/01/2020
ICE BofA US Tsy Bill (3M) TR			0.01	0.01	0.05	0.05	0.99	0.06	
Ultra Short Fixed Income									
Institutional Money Market	1,927	6.74	0.00	-0.01	0.01	0.01	0.62	0.77	04/01/2017



### December 31, 2021

Investment Manager Performance Summa	ary								
	Alloc	ation			Р	erformance(%)			
	Market Value (\$000)	%	1 Month	Quarter To Date	YTD	1 Year	3 Years	Since Inception	Inception Date
Liquid Alternatives Portfolio Liquid Alternatives Benchmark	13,312	100.00	2.54 1.82	<b>2.49</b> 2.40	8.52 9.93	<b>8.52</b> 9.93	6.73 4.05	<b>3.34</b> 1.25	04/01/2017
Equity Market Neutral									
JPMorgan Hedged Equity HFRX Equity Hedge	1,327	9.97	<b>1.54</b> 1.70	<b>4.48</b> 2.65	<b>13.42</b> 12.14	<b>13.42</b> 12.14	- 9.10	<b>15.92</b> 16.15	07/01/2020
Diamond Hill L/S HFRX Equity Hedge	1,155	8.68	<b>4.12</b> 1.70	<b>4.12</b> 2.65	<b>19.49</b> 12.14	<b>19.49</b> 12.14	<b>13.96</b> 9.10	<b>7.62</b> 4.98	04/01/2017
Neuberger Berman L/S HFRX Equity Hedge	1,151	8.65	<b>2.29</b> 1.70	<b>2.38</b> 2.65	<b>9.06</b> 12.14	<b>9.06</b> 12.14	9.10	<b>10.73</b> 15.28	09/01/2020
ACAP Strategic HFRX Equity Hedge	1,136	8.53	<b>-0.86</b> 1.70	<b>-4.23</b> 2.65	<b>-12.17</b> 12.14	<b>-12.17</b> 12.14	9.10	<b>-3.17</b> 18.18	11/01/2020
Western Asset HFRX Macro Discretionary Thematic	1,971	14.81	<b>2.14</b> 0.00	<b>0.47</b> -1.42	<b>-0.46</b> 0.11	<b>-0.46</b> 0.11	<b>7.09</b> 5.98	<b>5.31</b> 3.80	04/01/2017
Blackrock Event Driven HFRX Event Driven	1,969	14.79	<b>0.71</b> -1.16	<b>0.72</b> -1.81	<b>1.96</b> 0.48	<b>1.96</b> 0.48	6.36	<b>5.04</b> 4.53	02/01/2020
Cash Flow Strategies									
Lazard Global Infrastructure S&P Global Infrastructure	1,732	13.01	<b>6.72</b> 5.91	<b>9.85</b> 5.16	<b>19.93</b> 15.24	<b>19.93</b> 15.24	<b>11.99</b> 10.70	<b>8.37</b> 6.94	04/01/2017
<b>Cohen &amp; Steers Realty Shares</b> FTSE NAREIT All Equity REITS	747	5.61	<b>9.19</b> 9.60	<b>16.01</b> 16.17	<b>42.59</b> 41.30	<b>42.59</b> 41.30	- 19.93	<b>39.18</b> 34.66	09/01/2020
Global Macro									
<b>Abbey Capital</b> Barclay BTOP50	1,966	14.77	<b>0.80</b> 0.97	<b>-1.34</b> 3.17	<b>10.16</b> 11.66	<b>10.16</b> 11.66	<b>10.46</b> 7.74	<b>5.63</b> 4.00	04/01/2017



#### Investment Manager Performance Summary

Decemb	er 31,	2021
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Investment Manager Performance	e Summary								
_	Alloc	ation			Р	erformance(%)			
	Market Value (\$000)	⁰∕₀	1 Month	Quarter To Date	YTD	1 Year	3 Years	Since Inception	Inception Date
Illiquid Alternatives Portfolio	12,581	100.00	0.48	0.10	13.38	13.38	14.65	10.96	04/01/2017
Illiquid Fund Benchmark			1.38	1.56	5.64	5.64	7.36	5.88	
R3000+3%/HFRX Absolute 30%			3.22	7.11	20.70	20.70	21.31	15.44	
Semi-Liquid Alternatives	5,752	45.72	1.03	-0.61	2.36	2.36	13.59	9.75	04/01/2017
HFRI Fund of Funds			0.77	0.77	6.53	6.53	8.59	5.57	
Paloma	349	2.78	0.33	1.56	8.38	8.38	-	9.50	05/01/2020
HFRI Fund of Funds			0.77	0.77	6.53	6.53	8.59	14.46	
Millennium	2,668	21.21	1.09	1.61	11.14	11.14	14.32	10.59	04/01/2017
HFRI Fund of Funds			0.77	0.77	6.53	6.53	8.59	5.57	
Alkeon Capital	1,284	10.20	-0.88	-4.95	-14.86	-14.86	20.23	15.22	04/01/2017
HFRX Equity Hedge			1.70	2.65	12.14	12.14	9.10	4.98	
Shannon River	681	5.41	-1.72	-6.52	-0.26	-0.26	-	5.21	07/01/2019
HFRX Equity Hedge			1.70	2.65	12.14	12.14	9.10	8.47	
Starboard	769	6.11	7.26	4.26	-	-	-	6.77	05/01/2021
HFRX Equity Hedge			1.70	2.65	12.14	12.14	9.10	6.07	
Private Markets Program	6,830	54.28	0.00	0.49	24.06	24.06	13.86	13.99	02/01/2018
Hamilton Lane Private Markets	3,015	23.96	0.00	0.00	31.91	31.91	17.12	17.03	02/01/2018
Hamilton Lane Private Credit	393	3.12	0.00	0.00	10.01	10.01	9.07	5.15	05/01/2018
Varde	1,022	8.12	0.00	-1.93	6.73	6.73	-	11.33	11/01/2019
Partners Group	1,341	10.66	0.00	3.93	23.53	23.53	-	16.86	03/01/2019
Oaktree	1,059	8.42	0.00	-0.02	34.55	34.55	-	26.95	08/01/2020
Staging Account	-	0.00	2.16	8.61	24.89	24.89	18.56	12.81	04/01/2017



#### **Benchmark Definitions**

The Income Fund Benchmark consists of a 30%/50%/20% hybrid containing (60% S&P 500 Value/40% MSCI EAFE Value), (80% BC Aggregate/15% BC Universal/5% BC Gov 1-3yr), (20% HFRX Equity Hedge/15% S&P Global Infrastructure/15% BC Hedge BTOP 50/15% FTSE EPRA/NAREIT Global REITs/15% HFRX Macro Discretionary/10% HFRX Event Driven/90-Day T-Bills), respectively. The Benchmark is rebalanced on a monthly basis.

The Growth Fund Benchmark consists of a 50%/25%/25% hybrid containing (60% S&P 500/40% MSCI ACWI Ex US), (80% BC Aggregate/15% BC Universal/5% BC Gov 1-3yr), (20% HFRX Equity Hedge/15% S&P Global Infrastructure/15% BC Hedge BTOP 50/15% FTSE EPRA/NAREIT Global REITs/15% HFRX Macro Discretionary/10% HFRX Event Driven/10% 90-Day T-Bills), respectively. The Benchmark is rebalanced on a monthly basis.

The Balanced Fund Benchmark consists of a 40%/35%/25% hybrid containing (60% S&P 500/40% MSCI ACWI Ex US), (80% BC Aggregate/15% BC Universal/5% BC Gov 1-3yr), (20% HFRX Equity Hedge/15% S&P Global Infrastructure/15% BC Hedge BTOP 50/15% FTSE EPRA/NAREIT Global REITs/15% HFRX Macro Discretionary/10% HFRX Event Driven/10% 90-Day T -Bills), respectively. The Benchmark is rebalanced on a monthly basis.

The Balanced Plus Fund Benchmark consists of a 40%/20%/15%/25% hybrid containing (60% S&P 500/40% MSCI ACWI Ex US), (80% BC Aggregate/15% BC Universal/5% BC Gov 1-3yr), (20% HFRX Equity Hedge/15% S&P Global Infrastructure/15% BC Hedge BTOP 50/15% FTSE EPRA/NAREIT Global REITs/15% HFRX Macro Discretionary/10% HFRX Event Driven/10% 90-Day T-Bills), and (60% MSCI ACWI/40% BC Aggregate) respectively. The Benchmark is rebalanced on a monthly basis.

**The Illiquid Fund Benchmark** consists of a 15%/15%/30%/20%/20% hybrid containing the HFRX EH Equity Market Neutral index, the HFRX Equity Hedge index, the HRFI RV Arbitrage, the MSCI ACWI net, and the 90-Day T-Bill index respectively. The Benchmark is rebalanced on a monthly basis.

The Liquid Alt Benchmark consists of a 20%/15%/15%/15%/15%/10%/10% hybrid containing the HFRX Equity Hedge index, the S&P Global Infrastructure index, the Barclays BTOP50 index, the FTSE EPRA/NAREIT Global REITs TR, HFRX Macro Discretionary, the HFRX Event Driven, and the 90-Day T-Bills index respectively. The Benchmark is rebalanced on a monthly basis.



## **Performance Appendix**

Performance Data below is net of fees. Please see the Morgan Stanley Smith Barney LLC Form ADV Part 2 Brochure for advisory accounts and/or any applicable brokerage account trade confirmation statements for a full disclosure of the applicable charges, fees and expenses. Your Financial Advisor will provide those documents to you upon request.

Account Name	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
			-12.17				-3.17	
ACAP Strategic	-4.23	-12.17 10.16	-12.17				-3.17 5.63	11/01/2020 04/01/2017
Abbey Capital	-1.34 -4.95	-14.86	-14.86	20.23			15.22	04/01/2017
Alkeon Capital								
BlackRock	-0.08	-1.87	-1.87	4.73			3.52	04/01/2017
Blackrock Event Driven	0.72	1.96	1.96				5.04	02/01/2020
Cohen & Steers Realty	16.01	42.59	42.59				39.18	09/01/2020
Consulting Group Advisor	8.95	21.37	21.37	5.58			2.11	04/01/2017
Diamond Hill	3.23	13.93	13.93	10.28			5.36	04/01/2017
Diamond Hill L/S	4.12	19.49	19.49	13.96			7.64	03/01/2017
Geneva Small Cap Growth	5.78	12.20	12.20				24.48	06/01/2020
Israel Bonds	0.33	1.56	1.56	2.49			4.50	07/01/2018
Israel Bonds (IB)	0.04	1.76	1.76	3.37			2.65	04/01/2017
JPMorgan Hedged Equity	4.48	13.42	13.42				15.92	07/01/2020
JPMorgan Strategic Income	-0.18	0.64	0.64	2.06			1.81	04/01/2017
JPMorgan Ultra-Short Inc	-0.26	0.14	0.14				0.17	11/01/2020
Lazard Em Mkts Select ADR	0.09	8.90	8.90	7.54			-259.30	03/01/2017
Lazard Emerging Markets	-0.36	2.01	2.01	8.19			4.32	04/01/2017
Lazard Global Infrastructure	9.85	19.93	19.93	11.99			8.37	04/01/2017
Martin Currie Em Mkts	-0.92	-4.63	-4.63				19.08	06/01/2020
Millennium	1.61	11.14	11.14	14.32			10.59	04/01/2017
Neuberger Berman L/S	2.38	9.06	9.06				10.73	09/01/2020
PGIM Short Dur HY	0.68	5.90	5.90				5.03	02/01/2020
Parametric	9.91	25.83	25.83	21.90			14.46	04/01/2017
Parametric JLENS	10.61	27.73	27.73				26.23	10/01/2019
Passive Balanced Fund	3.58	10.32	10.32	14.00			9.65	03/01/2017
Shannon River	-6.52	-0.26	-0.26				5.04	06/01/2019
Silvercrest Small Cap Value	7.50	24.11	24.11	17.65			9.24	04/01/2017
Staging Account	8.61	24.89	24.89	18.56			12.81	04/01/2017
Starboard	4.26						6.77	05/01/2021
Western Asset	0.56	0.40	0.40	7.27			5.36	04/01/2017
Western Asset Macro Opp	0.47	-0.46	-0.46	7.09			5.31	04/01/2017
iShares Intl Select ETF	3.18	10.94	10.94	7.45			4.76	04/01/2017
iShares MSCI EAFE	2.63	11.31	11.31	13.11			8.05	04/01/2017
	2.05	11.21	11.21	12.11			0.05	01/01/2017

### **Performance Appendix**

Performance Data below is net of fees. Please see the Morgan Stanley Smith Barney LLC Form ADV Part 2 Brochure for advisory accounts and/or any applicable brokerage account trade confirmation statements for a full disclosure of the applicable charges, fees and expenses. Your Financial Advisor will provide those documents to you upon request.

Account Name	QTD	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
iShares S&P 500	11.00	28.48	28.48	25.55			17.60	10/10/2017

All performance above are Time Weighted(TWR) performance

### **IRR** Appendix

			1	3	5	10	Since	Inception
Account Name	QTD	YTD	Year	Years	Years	Years	Inception	Date
Hamilton Lane Private Credit	0.00	9.86	9.86	9.20			7.96	01/16/2018
Hamilton Lane Private Markets	0.00	32.22	32.22	17.76			17.29	01/16/2018
Oaktree	-0.02	27.82	27.82				25.63	08/01/2020
Paloma	1.56	8.38	8.38				9.47	04/27/2020
Partners Group	3.93	23.52	23.52				16.59	02/14/2019
Varde	-1.90	6.70	6.70				11.41	10/01/2019

All performance above are Dollar Weighted(IRR) performance

### **Glossary of Terms**

Active Contribution Return: The gain or loss percentage of an investment relative to the performance of the investment benchmark.

Active Exposure: The percentage difference in weight of the portfolio compared to its policy benchmark.

Active Return: Arithmetic difference between the manager's return and the benchmark's return over a specified time period.

Actual Correlation: A measure of the correlation (linear dependence) between two variables X and Y, with a value between +1 and -1 inclusive. This is also referred to as coefficient of correlation.

**Alpha**: A measure of a portfolio's time weighted return in excess of the market's return, both adjusted for risk. A positive alpha indicates that the portfolio outperformed the market on a risk-adjusted basis, and a negative alpha indicates the portfolio did worse than the market.

Best Quarter: The highest quarterly return for a certain time period.

**Beta**: A measure of the sensitivity of a portfolio's time weighted return (net of fees) against that of the market. A beta greater than 1.00 indicates volatility greater than the market.

Consistency: The percentage of quarters that a product achieved a rate of return higher than that of its

benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.

**Core:** Refers to an investment strategy mandate that is blend of growth and value styles without a pronounced tilt toward either style.

Cumulative Selection Return (*Cumulative Return*): Cumulative investment performance over a specified period of time.

**Distribution Rate:** The most recent distribution paid, annualized, and then divided by the current market price. Distribution rate may consist of investment income, short-term capital gains, long-term capital gains, and/or return of capital.

**Down Market Capture:** The ratio of average portfolio returns over the benchmark during periods of negative benchmark return. Lower values indicate better product performance.

**Downside Risk:** A measure similar to standard deviation, but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the value, the more risk the product has.

**Downside Semi Deviation:** A statistical calculation that measures the volatility of returns below a minimum acceptable return. This return measure isolates the negative portion of volatility: the larger the

number, the greater the volatility.

**Drawdown:** A drawdown is the peak-to-trough decline during a specific period of an investment, fund or commodity.

**Excess over Benchmark:** The percentage gain or loss of an investment relative to the investment's benchmark.

**Excess Return:** Arithmetic difference between the manager's return and the risk-free return over a specified time period.

**Growth**: A diversified investment strategy which includes investment selections that have capital appreciation as the primary goal, with little or no dividend payouts. These strategies can include reinvestment in expansion, acquisitions, and/or research and development opportunities.

**Growth of Dollar:** The aggregate amount an investment has gained or lost over a certain time period, also referred to as Cumulative Return, stated in terms of the amount to which an initial dollar investment would have grown over the given time period.

**Investment Decision Process (IDP):** A model for structuring the investment process and implementing the correct attribution methodologies. The IDP includes every decision made concerning the division of the assets under management over the various asset categories. To analyze each decision's contribution to the total return, a modeling approach must measure the marginal value of every individual decision. In this respect, the hierarchy of the decisions becomes very important. We therefore use the IDP model, which serves as a proper foundation for registering the decisions and relating them to each other.

**Information Ratio:** Measured by dividing the active rate of return by the tracking error. The higher the Information Ratio, the more value-added contribution by the manager.

Jensen's Alpha: The Jensen's alpha measure is a risk-adjusted performance measure that represents the average return on a portfolio or investment above or below that predicted by the capital asset pricing model (CAPM) given the portfolio's or investment's beta and the average market return. This metric is also commonly referred to as alpha.

**Kurtosis:** A statistical measure that is used to describe the distribution, or skewness, of observed data around the mean, sometimes referred to as the volatility of volatility.

**Maximum Drawdown:** The drawdown is defined as the percent retrenchment from a fund's peak to the fund's trough value. It is in effect from the time the fund's retrenchment begins until a new fund high is reached. The maximum drawdown encompasses both the period from the fund's peak to the fund's valley (length), and the time from the fund's valley to a new fund high (recovery). It measures the largest percentage drawdown that has occurred in any fund's data record.

**Modern Portfolio Theory (MPT):** An investment analysis theory on how risk-averse investors can construct portfolios to optimize or maximize expected return based on a given level of market risk, emphasizing that risk is an inherent part of higher reward.

Mutual Fund (MF): An investment program funded by shareholders that trade in diversified holdings and is professionally managed.

**Peer Group:** A combination of funds that share the same investment style combined as a group for comparison purposes.

Peer/ Plan Sponsor Universe: A combination of asset pools of total plan investments by specific sponsor and plan types for comparison purposes.

**Performance Ineligible Assets**: Performance returns are not calculated for certain assets because accurate valuations and transaction data for these assets are not processed or maintained by us. Common examples of these include life insurance, some annuities and some assets held externally.

**Performance Statistics**: A generic term for various measures of investment performance measurement terms.

Portfolio Characteristics: A generic term for various measures of investment portfolio characteristics.

**Preferred Return:** A term used in the private equity (PE) world, and also referred to as a "Hurdle Rate." It refers to the threshold return that the limited partners of a private equity fund must receive, prior to the PE firm receiving its carried interest or "carry."

**Ratio of Cumulative Wealth:** A defined ratio of the Cumulative Return of the portfolio divided by the Cumulative Return of the benchmark for a certain time period.

**Regression Based Analysis:** A statistical process for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables

**Residual Correlation**: Within returns-based style analysis, residual correlation refers to the portion of a strategy's return pattern that cannot be explained by its correlation to the asset-class benchmarks to which it is being compared.

Return: A rate of investment performance for the specified period.

**Rolling Percentile Ranking:** A measure of an investment portfolio's ranking versus a peer group for a specific rolling time period (i.e. Last 3 Years, Last 5 years, etc.).

**R-Squared:** The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio's performance to the appropriate benchmark.

SA/CF (Separate Account/Comingled Fund): Represents an acronym for Separate Account and Commingled Fund investment vehicles.

Sector Benchmark: A market index that serves as a proxy for a sector within an asset class.

**Sharpe Ratio:** Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance results in.

**Standard Deviation:** A statistical measure of the range of a portfolio's performance; the variability of a return around its average return over a specified time period.

**Total Fund Benchmark:** The policy benchmark for a complete asset pool that could consist of multiple investment mandates.

Total Fund Composite: The aggregate of multiple portfolios within an asset pool or household.

**Tracking Error:** A measure of standard deviation for a portfolio's investment performance, relative to the performance of an appropriate market benchmark.

Treynor Ratio: A ratio that divides the excess return (above the risk free rate) by the portfolio's beta to

arrive at a unified measure of risk adjusted return. It is generally used to rank portfolios, funds and benchmarks. A higher ratio is indicative of higher returns per unit of market risk. This measurement can help determine if the portfolio is reaching its goal of increasing returns while managing market risk.

**Up Market Capture:** The ratio of average portfolio returns over the benchmark during periods of positive benchmark return. Higher values indicate better product performance.

**Upside Semi Deviation:** A statistical calculation that measures the volatility of returns above an acceptable return. This return measure isolates the positive portion of volatility: the larger the number, the greater the volatility.

Value: A diversified investment strategy that includes investment selections which tend to trade at a lower price relative to its dividends, earnings, and sales. Common attributes are stocks that include high dividend, low price-to-book ratio, and/or low price-to-earnings ratio.

Worst Quarter: The lowest rolling quarterly return for a certain time period.

#### **Information Disclosures**

Performance results are annualized for time periods greater than one year and include all cash and cash equivalents, realized and unrealized capital gains and losses, and dividends, interest and income. The investment results depicted herein represent historical performance. As a result of recent market activity, current performance may vary from the figures shown. Past performance is not a guarantee of future results.

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Investors should carefully consider the fund's investment objectives, risks, charges and expenses before investing. The prospectus and, if available the summary prospectus, contains this and other information that should be read carefully before investing. Investors should review the information in the prospectus carefully. To obtain a prospectus, please contact your Financial Advisor or visit the funds' company website.

Past performance is no guarantee of future results.

Investing involves market risk, including possible loss of principal. Growth investing does not guarantee a

profit or eliminate risk. The stocks of these companies can have relatively high valuations. Because of these high valuations, an investment in a growth stock can be more risky than an investment in a company with more modest growth expectations. Value investing involves the risk that the market may not recognize that securities are undervalued and they may not appreciate as anticipated. Small and mid-capitalization companies may lack the financial resources, product diversification and competitive strengths of larger companies. The securities of small capitalization companies may not trade as readily as, and be subject to higher volatility than those of larger, more established companies. Bond funds and bond holdings have the same interest rate, inflation and credit risks that are associated with the underlying bonds owned by the funds. The return of principal in bond funds, and in funds with significant bond holdings, is not guaranteed. International securities' prices may carry additional risks, including foreign economic, political, monetary and/or legal factors, changing currency exchange rates, foreign taxes and differences in financial and accounting standards. International investing may not be for everyone. These risks may be magnified in emerging markets. Alternative investments, including private equity funds, real estate funds, hedge funds, managed futures funds, and funds of hedge funds, private equity, and managed futures funds, are speculative and entail significant risks that can include losses due to leveraging or\other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification, absence and/or delay of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds and risks associated with the operations, personnel and processes of the advisor. Master Limited Partnerships (MLPs) are limited partnerships or limited liability companies that are taxed as partnerships and whose interests (limited partnership units or limited liability company units) are traded on securities exchanges like shares of common stock. Currently, most MLPs operate in the energy, natural resources or real estate sectors. Investments in MLP interests are subject to the risks generally applicable to companies in the energy and natural resources sectors, including commodity pricing risk, supply and demand risk, depletion risk and exploration risk; and MLP interests in the real estate sector are subject to special risks, including interest rate and property value fluctuations, as well as risks related to general and economic conditions. Because of their narrow focus, MLPs maintain exposure to price volatility of commodities and/or underlying assets and tend to be more volatile than investments that diversify across many sectors and companies. MLPs are also subject to additional risks including: investors having limited control and rights to vote on matters affecting the MLP, limited access to capital, cash flow risk, lack of liquidity, dilution risk, conflict of interests, and limited call rights related to acquisitions.

**Mortgage backed securities** also involve prepayment risk, in that faster or slower prepayments than expected on underlying mortgage loans can dramatically alter the yield-to-maturity of a mortgage-backed security and prepayment risk includes the possibility that a fund may invest the proceeds at generally lower interest rates.

Tax managed funds may not meet their objective of being tax-efficient.

**Real estate** investments are subject to special risks, including interest rate and property value fluctuations, as well as risks related to general and economic conditions. **High yield** fixed income securities, also known as "junk bonds", are considered speculative, involve greater risk of default and tend to be more volatile than investment grade fixed income securities.

Credit quality is a measure of a bond issuer's creditworthiness, or ability to repay interest and principal to bondholders in a timely manner. The credit ratings shown are based on security rating as provided by Standard & Poor's, Moody's and/or Fitch, as applicable. Credit ratings are issued by the rating agencies for the underlying securities in the fund and not the fund itself, and the credit quality of the securities in the fund does not represent the stability or safety of the fund. Credit ratings shown range from AAA, being the highest, to D, being the lowest based on S&P and Fitch's classification (the equivalent of Aaa and C, respectively, by Moody(s). Ratings of BBB or higher by S&P and Fitch (Baa or higher by Moody's) are considered to be investment grade-quality securities. If two or more of the agencies have assigned different ratings to a security, the highest rating is applied. Securities that are not rated by all three agencies are listed as "NR".

"Alpha tilt strategies comprise a core holding of stocks that mimic a benchmark type index such as the S&P 500 to which additional securities are added to help tilt the fund toward potentially outperforming the market in an effort to enhance overall investment returns. Tilt strategies are subject to significant timing risk and could potentially expose investors to extended periods of underperformance."

**Custom Account Index:** The Custom Account Index is an investment benchmark based on your historical target allocations and/or manager selection that you may use to evaluate the performance of your account. The Custom Account index does take into consideration certain changes that may have occurred in your portfolio since the inception of your account, i.e., asset class and/or manager changes. However, in some circumstances, it may not be an appropriate benchmark for use with your specific account composition. For detailed report of the historical composition of this blend please contact your Financial Advisor.

#### Peer Groups

Peer Groups are a collection of similar investment strategies that essentially group investment products that share the same investment approach. Peer Groups are used for comparison purposes to compare and illustrate a clients investment portfolio versus its peer across various quantitative metrics like performance and risk. Peer Group comparison is conceptually another form of benchmark comparison whereby the actual investment can be ranked versus its peer across various quantitative metrics.

All Peer Group data are provided by Investment Metrics, LLC.

The URL below provides all the definitions and methodology about the various Peer Groups

https://www.invmetrics.com/style-peer-groups

#### Peer Group Ranking Methodology

A percentile rank denotes the value of a product in which a certain percent of observations fall within a peer group. The range of percentile rankings is between 1 and 100, where 1 represents a high statistical value and 100 represents a low statistical value.

The 30th percentile, for example, is the value in which 30% of the highest observations may be found, the 65th percentile is the value in which 65% of the highest observations may be found, and so on.

Percentile rankings are calculated based on a normalized distribution ranging from 1 to 100 for all products in each peer group, where a ranking of 1 denotes a high statistical value and a ranking of 100 denotes a low statistical value. It is important to note that the same ranking methodology applies to all statistics, implying that a ranking of 1 will always mean highest value across all statistics.

For example, consider a risk/return assessment using standard deviation as a measure of risk. A percentile ranking equal to 1 for return denotes highest return, whereas a percentile ranking of 1 for standard deviation denotes highest risk among peers.

In addition, values may be used to demonstrate quartile rankings. For example, the third quartile is also known as the 75th percentile, and the median is the 50th percentile.

#### Alternatives

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For most investment advisory clients, the program account will be charged an asset-based wrap fee every quarter ("the Fee"). In general, the Fee covers investment advisory services and reporting. In addition to the Fee, clients will pay the fees and expenses of any funds in which their account is invested. Fund fees and expenses are charged directly to the pool of assets the fund invests in and impact the valuations. Clients must understand that these fees and expenses are an additional cost and will not be included in the Fee amount in the account statements.

As fees are deducted quarterly, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, for an account with an initial value of \$100,000 and a 2.5% annual fee, if the gross performance is 5% per year over a three year period, the compounding effect of the fees will result in a net annual compound rate of return of approximately 2.40% per year over a three year period, and the total value of the client's portfolio at the end of the three year period would be approximately \$115,762.50 without the fees and \$107,372.63 with the fees. Please see the applicable Morgan Stanley Smith Barney LLC Form ADV Part 2A for more information including a description of the fee schedule. It is available at <u>www.morganstanley.com/ADV</u>

<<u>http://www.morganstanley.com/ADV></u> <<u>http://www.morganstanley.com/ADV></u> or from your Financial Advisor/Private Wealth Advisor.

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#### **Money Market Funds**

You could lose money in Money Market Funds. Although MMFs classified as government funds (i.e., MMFs that invest 99.5% of total assets in cash and/or securities backed by the U.S government) and retail funds (i.e., MMFs open to natural person investors only) seek to preserve value at \$1.00 per share, they cannot guarantee they will do so. The price of other MMFs will fluctuate and when you sell shares they may be worth more or less than originally paid. MMFs may impose a fee upon sale or temporarily suspend sales if liquidity falls below required minimums. During suspensions, shares would not be available for purchases, withdrawals, check writing or ATM debits. A MMF investment is not insured or guaranteed by the Federal Deposit Insurance Corporation or other government agency.