



Board Presentation/Executive Summary

Texas Municipal Retirement System

Period Ended: December 31, 2018



Capital Markets Update



Fourth Quarter Economic Environment

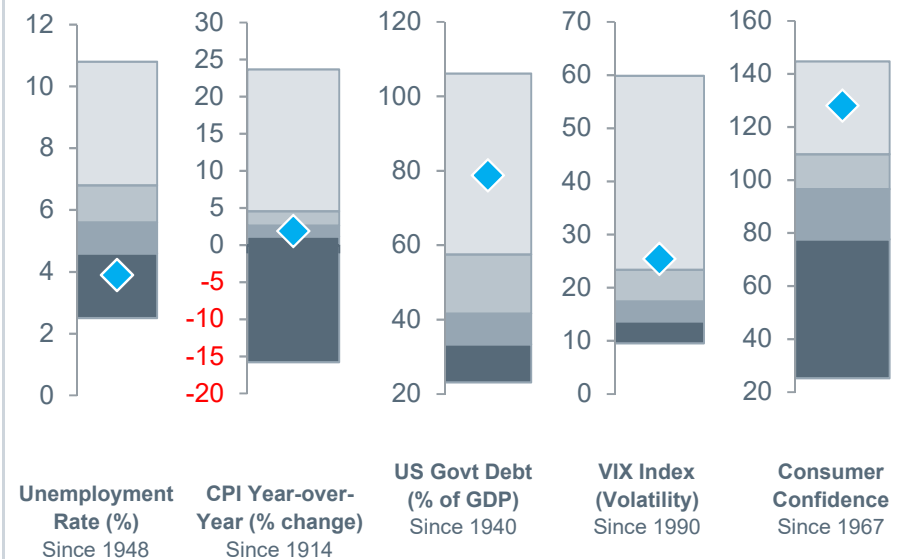
Key Economic Indicators

The fourth quarter of 2018 was characterized by a heightened level of volatility and negative returns for the majority of risk assets. Though equity markets experienced an initial decline in October, the strongest risk-off environment emerged in December as global growth forecasts, inflation expectations, and corporate earnings expectations began to roll over in unison. During the quarter, the Federal Reserve, European Central Bank, and International Monetary Fund lowered 2019 GDP growth forecasts across regions, and the 5Y/5Y inflation expectation rate fell from nearly 2.3% at the start of the quarter to 1.9% at quarter-end. In a move that proved to be more controversial than many anticipated, the FOMC raised the target range for the federal funds rate by 0.25% for the fourth time in 2018 during its December meeting, resulting in a target range of 2.25% to 2.5%. US Economic data remained strong, with non-farm payrolls up 312,000 in December on a 3.9% unemployment rate. While the odds of a recession occurring in 2019 remain low, leading indicators such as falling oil prices, a flattening yield curve, declining consumer confidence and a subdued housing market contributed to negative investor sentiment at year-end.

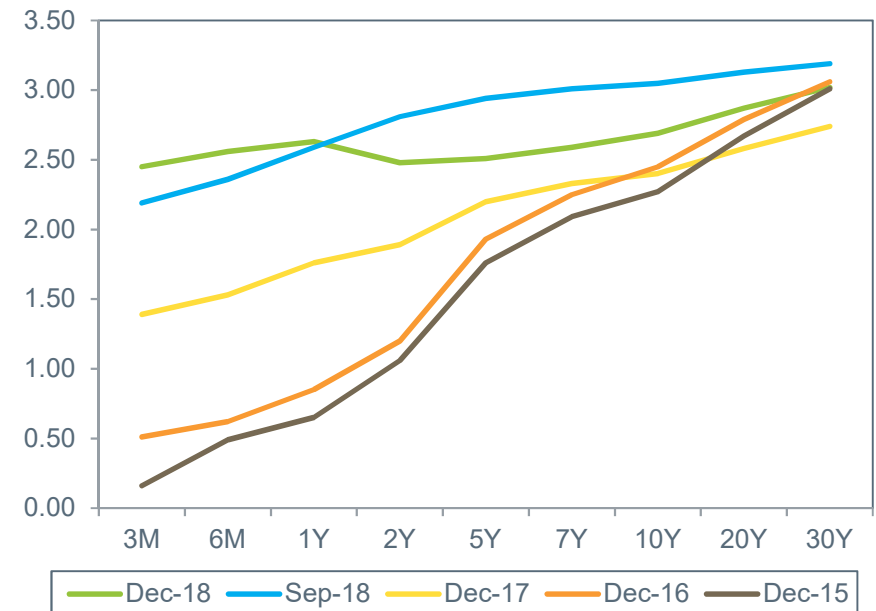
Economic Indicators	Dec-18	Sep-18	Dec-17	Dec-15	20 Yr
Federal Funds Rate (%)	2.40 ▲	2.18	1.33	0.20	1.94
Breakeven Infl. - 1 Yr (%)	-2.84 ▼	1.18	0.85	0.85	N/A
Breakeven Infl. - 10 Yr (%)	1.71 ▼	2.14	1.98	1.58	N/A
CPI YoY (Headline) (%)	1.9 ▼	2.3	2.1	0.7	2.2
Unemployment Rate (%)	3.9 ▲	3.7	4.1	5.0	5.9
Real GDP YoY (%)	N/A	3.0	2.5	2.0	2.2
PMI - Manufacturing	54.3 ▼	59.5	59.4	48.4	52.8
USD Total Wtd Idx	91.79 ▲	90.11	87.47	94.25	86.26
WTI Crude Oil per Barrel (\$)	45.4 ▼	73.3	60.4	37.0	60.1
Gold Spot per Oz (\$)	1,282 ▲	1,193	1,303	1,061	879

Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	-13.52	-4.38	-4.38	8.49	13.12
Russell 2000	-20.20	-11.01	-11.01	4.41	11.97
MSCI EAFE (Net)	-12.54	-13.79	-13.79	0.53	6.32
MSCI EAFE SC (Net)	-16.05	-17.89	-17.89	3.06	10.51
MSCI Emg Mkts (Net)	-7.47	-14.58	-14.58	1.65	8.02
Bloomberg US Agg Bond	1.64	0.01	0.01	2.52	3.48
ICE BofAML 3 Mo US T-Bill	0.56	1.87	1.87	0.63	0.37
NCREIF ODCE (Gross)	1.76	8.35	8.35	10.41	7.00
FTSE NAREIT Eq REIT (TR)	-6.73	-4.62	-4.62	7.90	12.12
HFRI FOF Comp	-4.85	-3.92	-3.92	1.42	3.13
Bloomberg Cmtty (TR)	-9.41	-11.25	-11.25	-8.80	-3.78

Key Economic Indicators



Treasury Yield Curve (%)



Annual Asset Class Performance

As of December 31, 2018

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Best ↑ <															

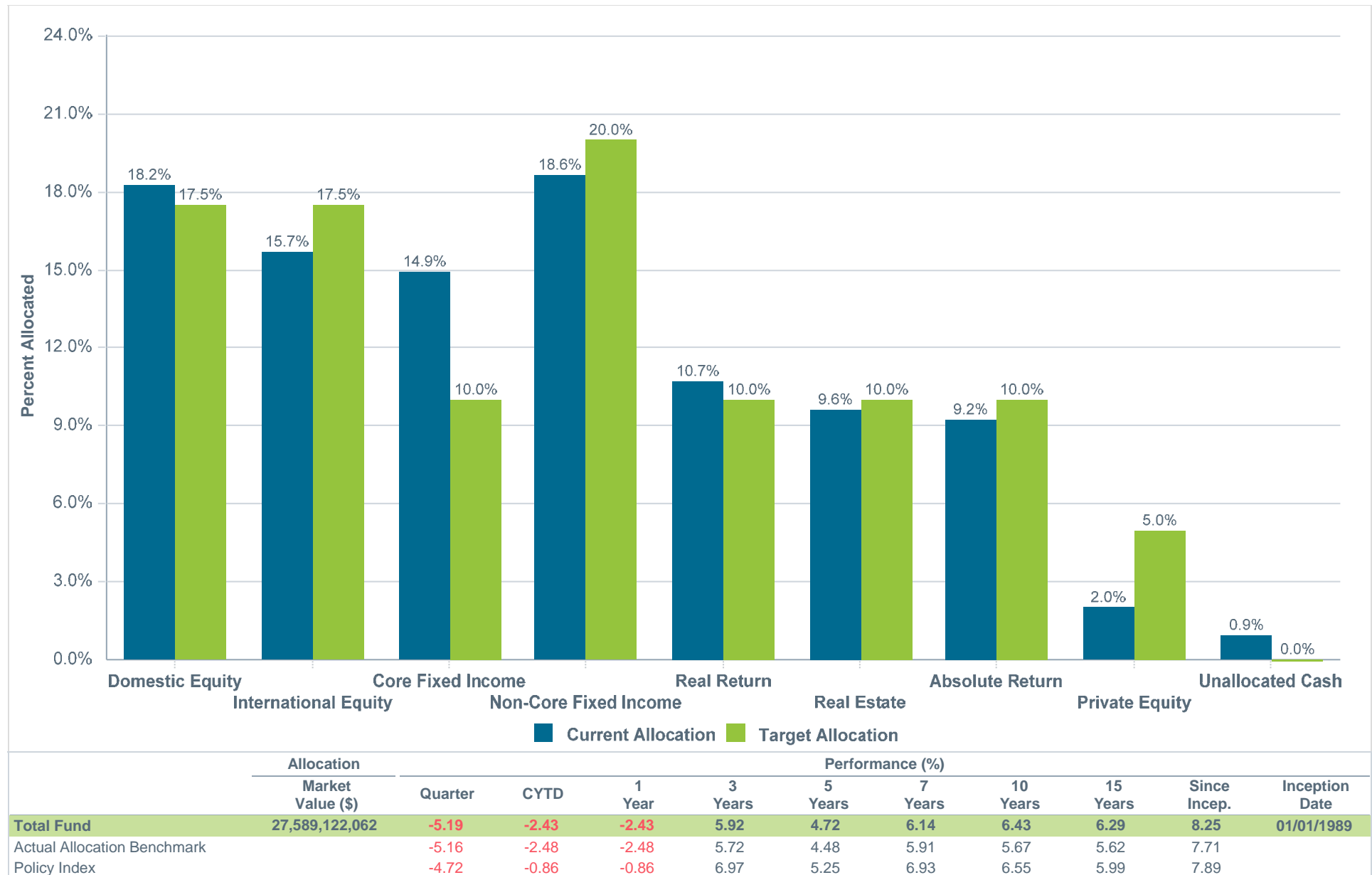
NCREIF ODCE (Gross) performance is reported quarterly; performance is shown N/A in interim-quarter months.

TMRS Total Fund



TMRS Asset Allocation and Performance

As of December 31, 2018



Performance shown is net of fees and provided by State Street. Performance is annualized for periods greater than one year. Please see Supplemental Report Addendum for custom benchmark definitions.

Asset Class Composite Performance (Net)

As of December 31, 2018

	Allocation		Performance (%)									
	Market Value (\$)	%	Quarter	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	15 Years	Since Incep.	Inception Date
Total Fund	27,589,122,062	100.00	-5.19	-2.43	-2.43	5.92	4.72	6.14	6.43	6.29	8.25	01/01/1989
Actual Allocation Benchmark			-5.16	-2.48	-2.48	5.72	4.48	5.91	5.67	5.62	7.71	
Global Equity	9,356,576,560	33.91	-13.79	-10.28	-10.28	6.76	4.78	9.10	9.72	N/A	4.61	02/01/2008
Global Equity Benchmark			-13.20	-9.69	-9.69	7.00	4.85	9.15	9.73	N/A	4.61	
Domestic Equity	5,032,367,339	18.24	-14.85	-6.39	-6.39	8.43	7.40	12.01	12.87	N/A	7.66	02/01/2008
Russell 3000 Index			-14.30	-5.24	-5.24	8.97	7.91	12.46	13.18	7.89	7.94	
International Equity	4,324,207,302	15.67	-12.52	-14.74	-14.74	4.45	1.28	5.47	6.05	N/A	1.09	02/01/2008
International Equity Benchmark			-11.88	-14.76	-14.76	4.39	0.85	5.07	5.71	4.34	0.76	
Core Fixed Income	4,112,445,961	14.91	1.41	0.02	0.02	2.24	2.61	2.26	3.66	4.65	7.41	01/01/1989
Fixed Income Benchmark			1.64	0.01	0.01	2.06	2.52	2.10	2.91	4.03	6.89	
Non-Core Fixed Income	5,142,471,000	18.64	0.11	2.37	2.37	5.80	N/A	N/A	N/A	N/A	4.32	10/01/2014
Non-Core Fixed Income Benchmark			0.24	2.65	2.65	5.08	N/A	N/A	N/A	N/A	3.53	
Real Return	2,960,142,172	10.73	-3.88	-4.30	-4.30	3.41	1.69	2.05	N/A	N/A	2.67	02/01/2011
Real Return Benchmark			-3.45	-3.81	-3.81	4.36	2.43	1.98	4.10	4.27	2.98	
Real Estate	2,651,660,893	9.61	2.69	10.62	10.62	11.17	12.93	11.40	N/A	N/A	11.40	01/01/2012
Real Estate Benchmark			2.08	8.67	8.67	8.76	10.71	11.17	5.57	8.28	11.17	
Absolute Return	2,551,179,669	9.25	-1.04	1.51	1.51	4.36	N/A	N/A	N/A	N/A	3.88	08/01/2014
Absolute Return Benchmark			-3.15	-0.96	-0.96	1.53	2.01	3.09	3.16	2.98	1.47	
Private Equity	556,735,919	2.02	3.38	39.18	39.18	19.20	N/A	N/A	N/A	N/A	19.20	01/01/2016
Private Equity Benchmark			3.38	39.18	39.18	19.20	N/A	N/A	N/A	N/A	19.20	
TMRS Unallocated Cash	257,909,888	0.93	0.50	1.65	1.65	0.98	0.79	0.59	0.45	N/A	0.51	06/01/2008
FTSE 30 Day T-Bill Index			0.56	1.82	1.82	0.94	0.57	0.42	0.31	1.19	0.35	

Performance shown is net of fees and provided by State Street. Performance is annualized for periods greater than one year. Market value for the Global Equity Composite includes assets held in the Transition Account. Real Estate and Private Equity fund returns are calculated by Private Edge. Private Real Estate fund returns are lagged 1 quarter. Inception dates shown for Real Estate and Private Equity composite represent the first full quarter following initial funding. Inception dates for all other composites represents the first full month following initial funding. Please see Supplemental Report Addendum for custom benchmark definitions.

Total Fund Performance vs. Peers

As of December 31, 2018

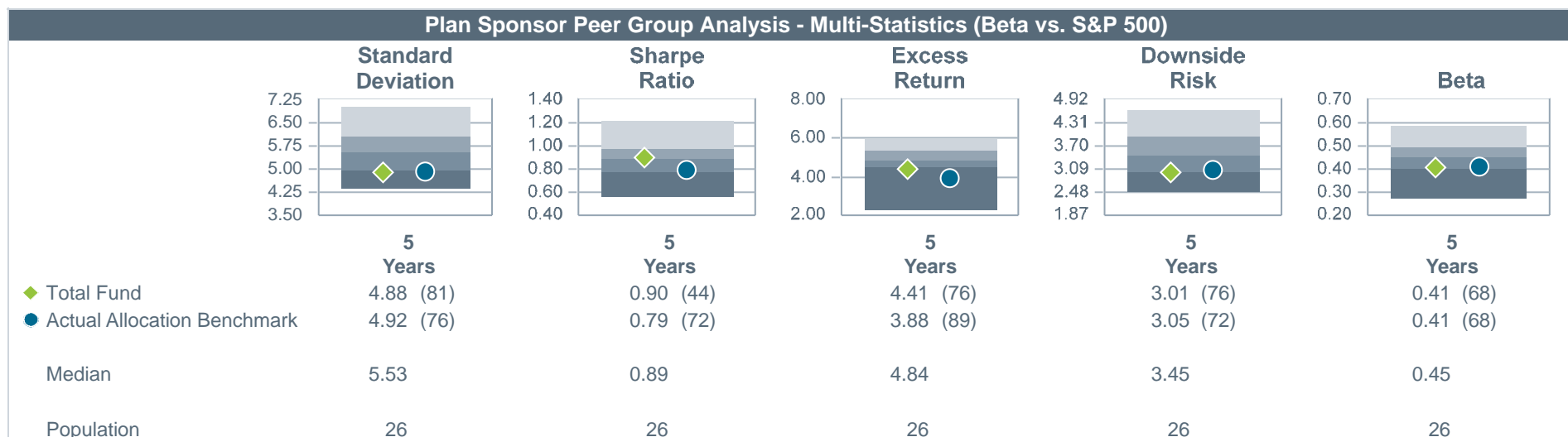
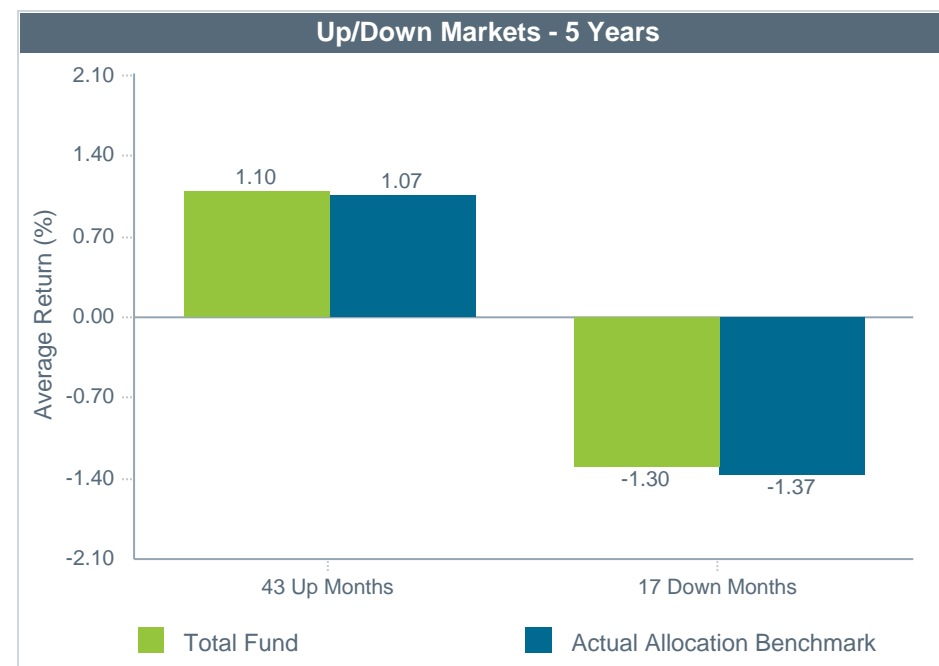
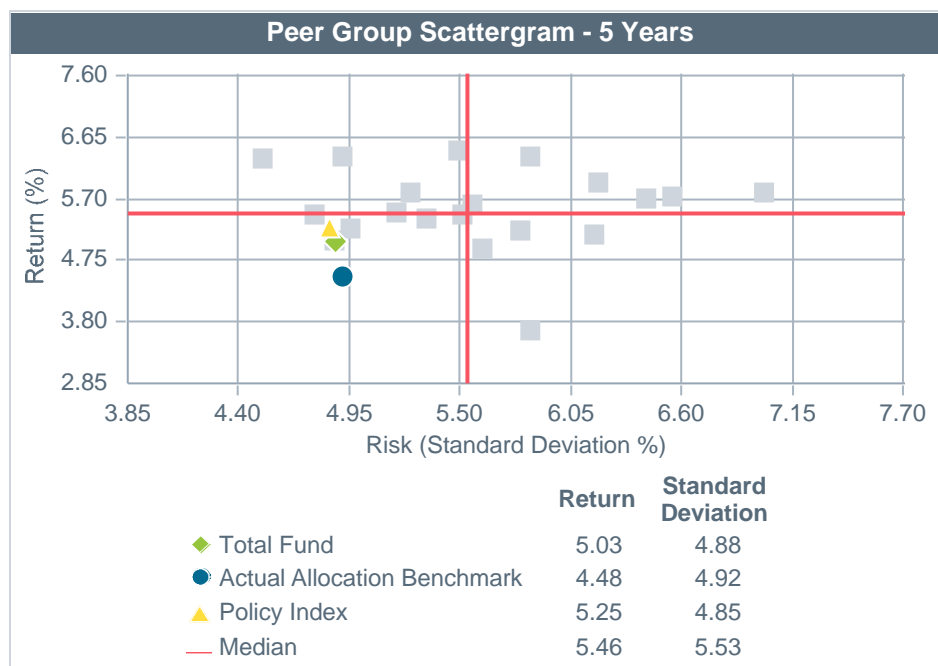
While performance relative to other systems is not an objective of the TMRS fund given the wide range in investment objectives and different benefit plan structures, it is generally of interest to be aware of the performance of other public pension systems.



The Total Fund is ranked against a universe of Public Plans > \$10B. Performance shown is gross of fees, as of 12/31/2018. Please see Supplemental Report Addendum for custom benchmark definitions.

Total Fund vs. All Public Funds > \$10B-Total Fund

As of December 31, 2018



Performance shown is gross of fees. Calculations based on monthly periodicity. Parenthesis contain percentile ranks. Please see Supplemental Report Addendum for custom benchmark definitions.

TMRS Asset Class Composites

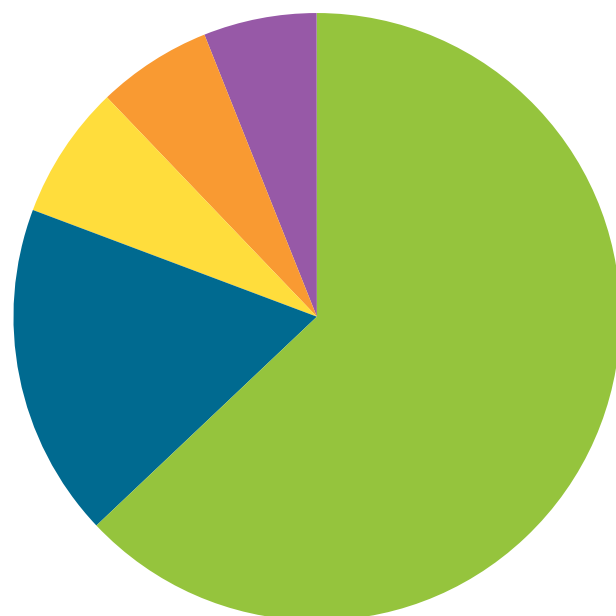


Domestic Equity Performance & Allocation

As of December 31, 2018

Asset Allocation by Manager

\$5,031,553,532



Market Value (\$)	Allocation (%)
3,167,936,735	62.96
894,501,109	17.78
358,645,227	7.13
307,407,464	6.11
303,774,385	6.04

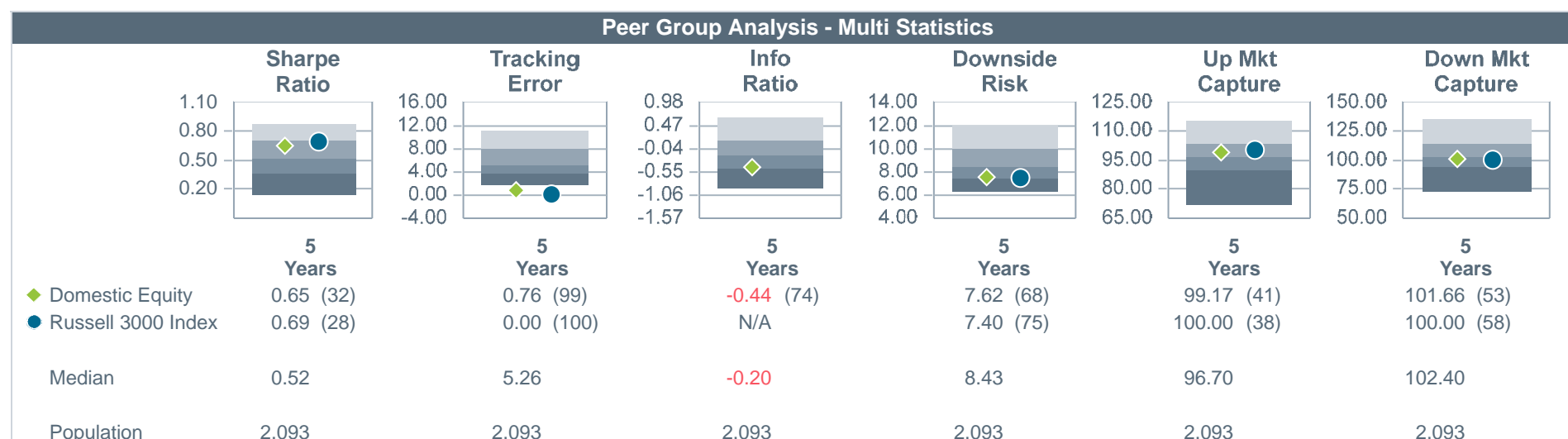
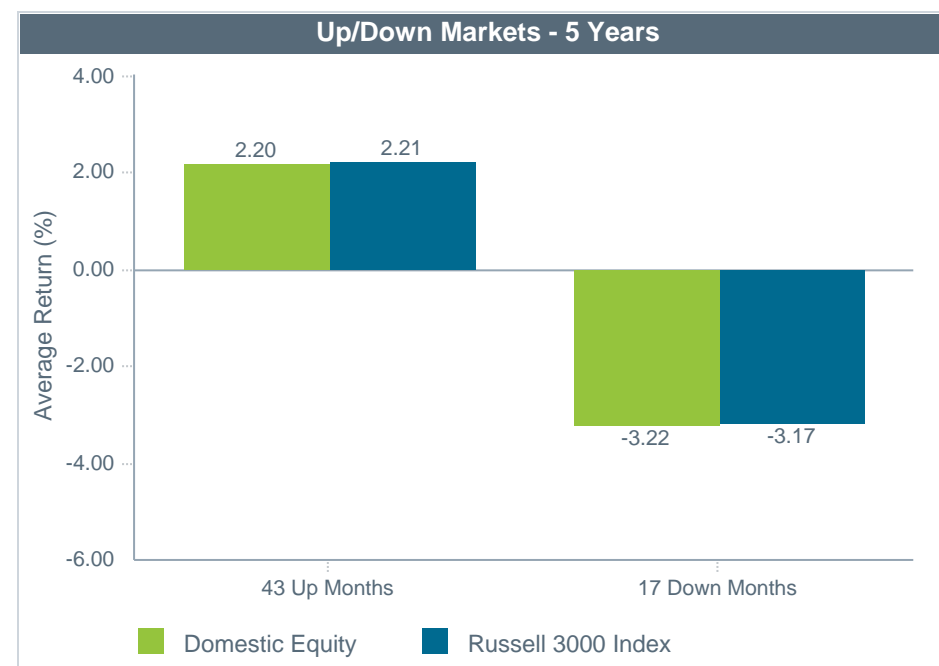
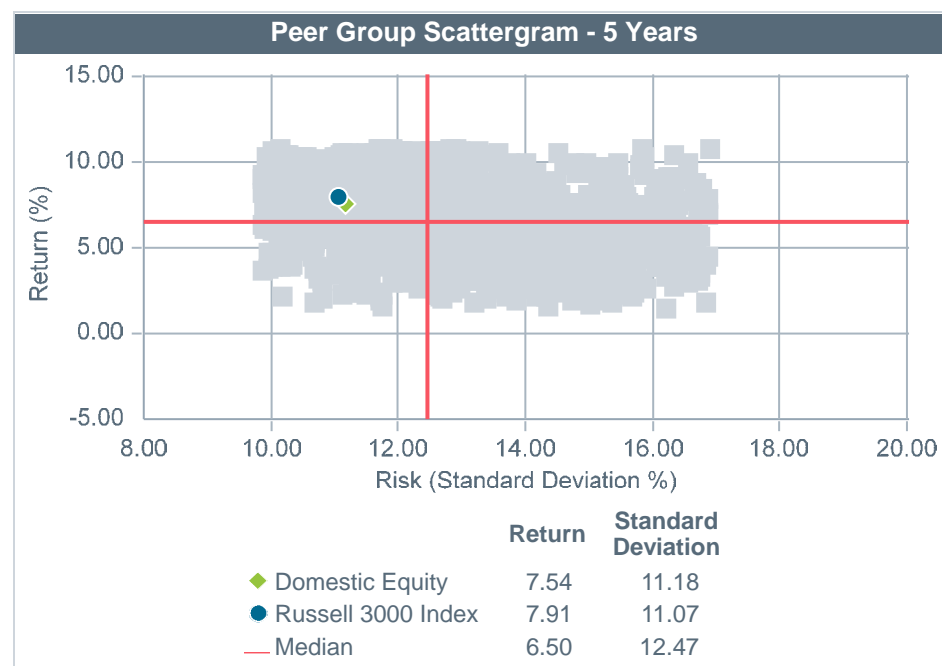
Comparative Performance

	1 Quarter	CYTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015	2014	2013	Since Incep.	Inception Date
Domestic Equity	-14.85	-6.39	-6.39	8.43	7.40	12.87	20.33	13.17	-0.42	12.54	33.16	7.66	02/01/2008
Russell 3000 Index	-14.30	-5.24	-5.24	8.97	7.91	13.18	21.13	12.74	0.48	12.56	33.55	7.94	
Difference	-0.55	-1.15	-1.15	-0.54	-0.51	-0.31	-0.80	0.43	-0.90	-0.02	-0.39	-0.28	

Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. Total Domestic Equity market value excludes Citigroup Global Markets, Inc. In December 2018, Sasco U.S. Contrarian Value (SA), Epoch U.S. Choice (SA), The Boston Company Mid Cap Opp Value (SA), and The Boston Company Small Cap Opp Value (SA) were terminated. These accounts held negative balances at quarter end and are currently in the process of liquidation. Proceeds were re-invested in UBS US Equity Min Volatility Index (CF) and NT Collective Russell 3000 Index NL (CF).

Domestic Equity vs. IM U.S. Equity

As of December 31, 2018



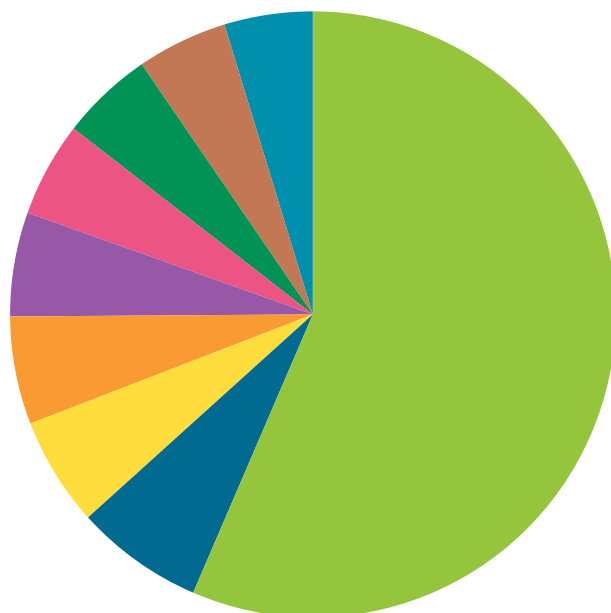
Performance shown is gross of fees. Calculations based on monthly periodicity. Parenthesis contain percentile ranks.

International Equity Performance and Allocation

As of December 31, 2018

Asset Allocation by Manager

\$4,324,207,302



	Market Value (\$)	Allocation (%)
NT Daily Collective ACW Ex US IMI Non-Lending (CF)	2,441,621,707	56.46
UBS World Ex US Min Volatility NL (CF)	296,198,202	6.85
Wasatch International Small Cap Growth (SA)	251,764,948	5.82
State Street Russell RAFI Gbl Ex US Index NL (CF)	248,836,020	5.75
Wellington International Small Cap Opp (SA)	240,030,556	5.55
Acadian Emerging Markets (SA)	219,182,875	5.07
Wellington International Horizons (SA)	213,088,674	4.93
William Blair Emerging Markets (SA)	209,422,399	4.84
Lazard International Equity Plus (SA)	204,061,921	4.72

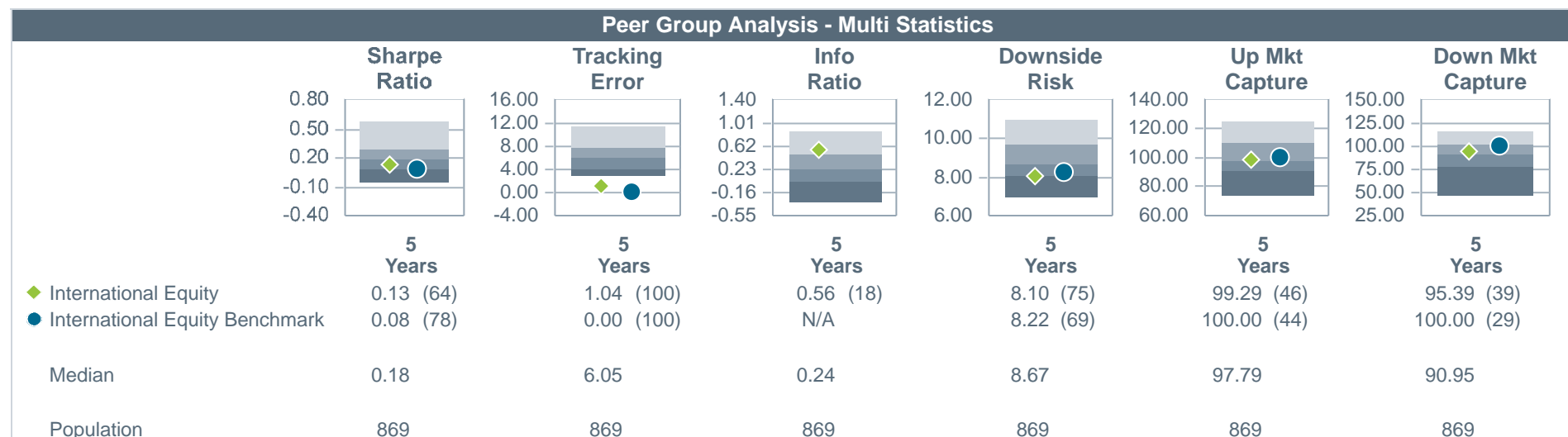
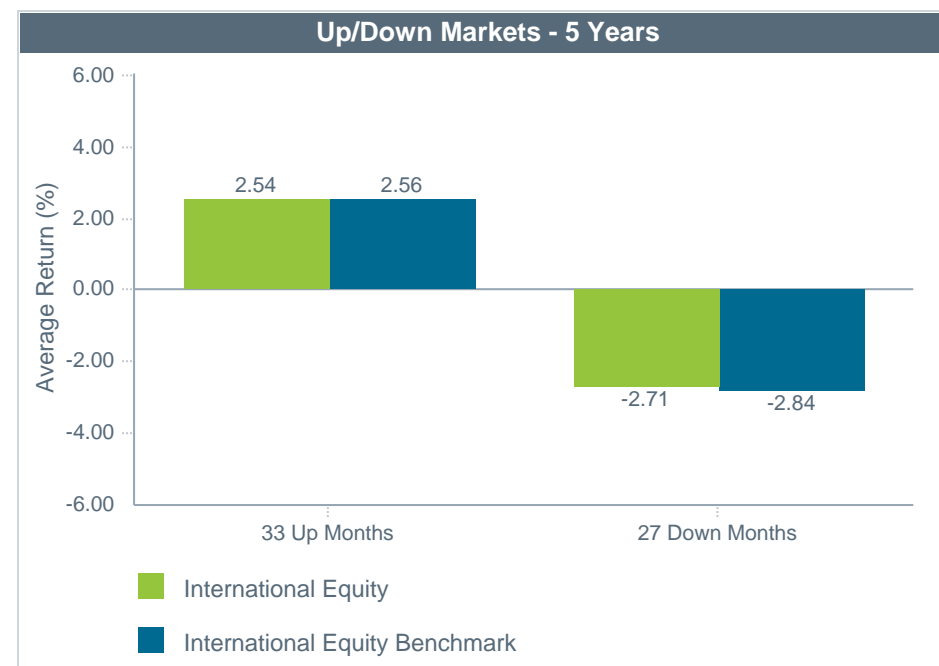
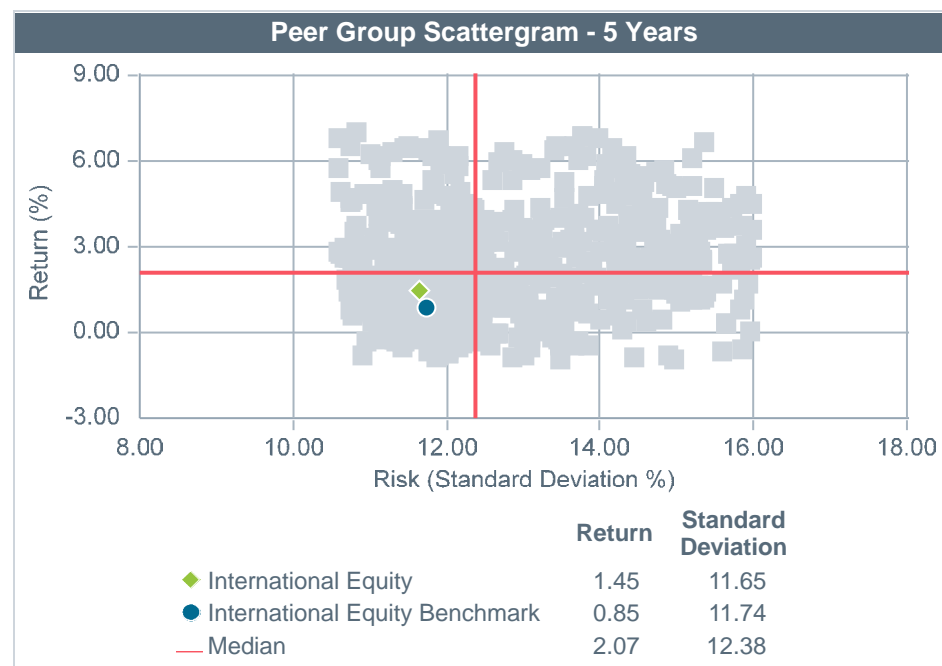
Comparative Performance

	1 Quarter	CYTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015	2014	2013	Since Incep.	Inception Date
International Equity	-12.52	-14.74	-14.74	4.45	1.28	6.05	29.12	3.50	-3.41	-3.16	16.28	1.09	02/01/2008
International Equity Benchmark	-11.88	-14.76	-14.76	4.39	0.85	5.71	27.81	4.41	-4.60	-3.89	15.82	0.76	
Difference	-0.64	0.02	0.02	0.06	0.43	0.34	1.31	-0.91	1.19	0.73	0.46	0.33	

Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. Please see Supplemental Report Addendum for custom benchmark definitions.

International Equity vs. IM International Equity

As of December 31, 2018



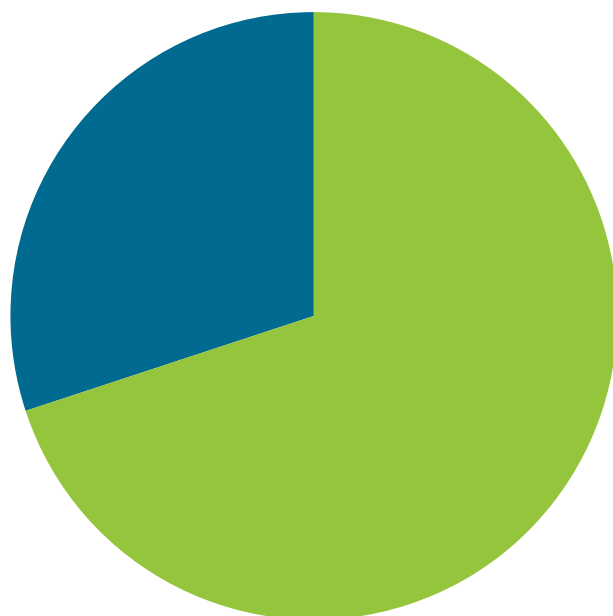
Performance shown is gross of fees. Calculations based on monthly periodicity. Parenthesis contain percentile ranks. Please see Supplemental Report Addendum for custom benchmark definitions.

Core Fixed Income Performance and Allocation

As of December 31, 2018

Asset Allocation by Manager

\$4,112,445,961



BlackRock, Inc. Core (SA)

PIMCO Core Plus Fixed Income (SA)

Market Value
(\$)

2,876,397,488

1,236,048,473

Allocation
(%)

69.94

30.06

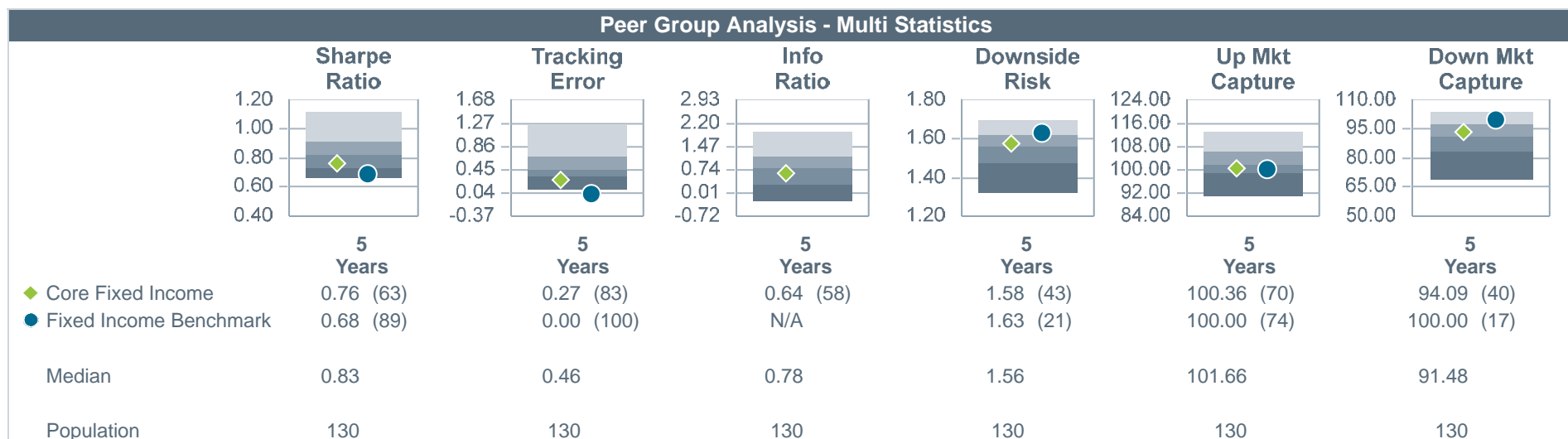
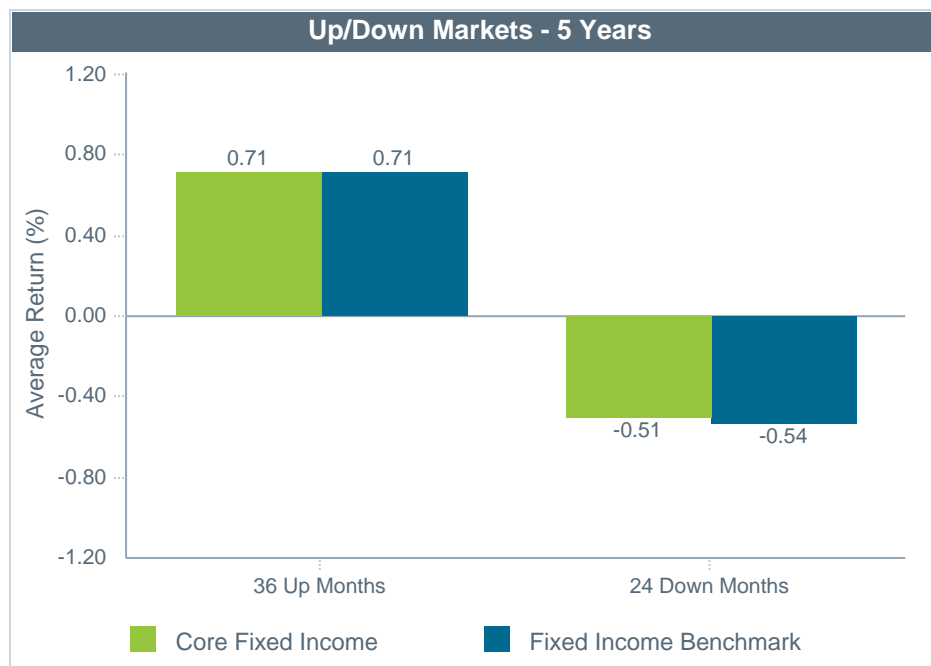
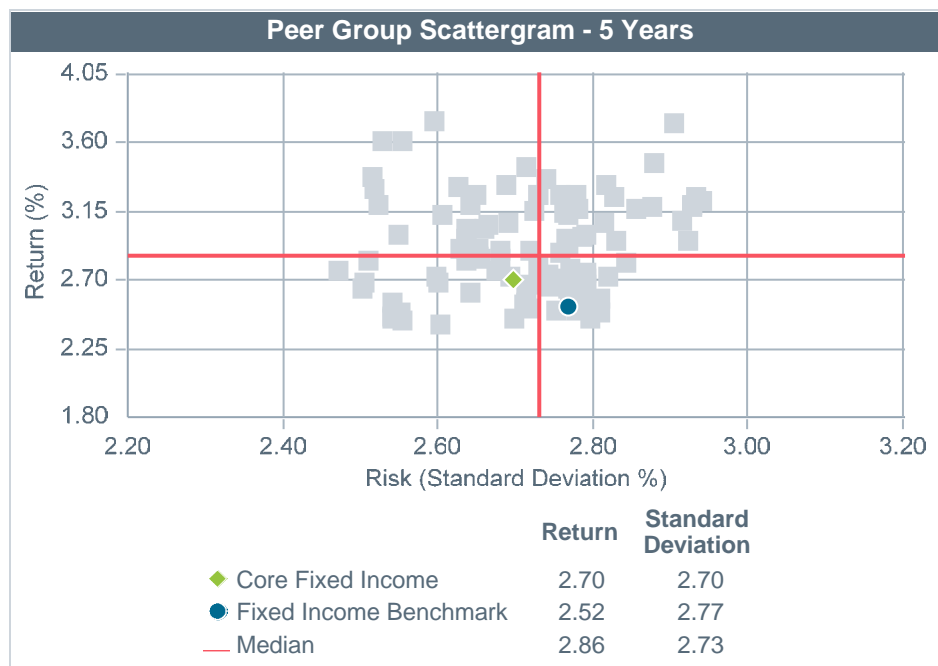
Comparative Performance

	1 Quarter	CYTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015	2014	2013	Since Incep.	Inception Date
Core Fixed Income	1.41	0.02	0.02	2.24	2.61	3.66	3.83	2.89	0.72	5.69	-2.01	7.41	01/01/1989
Fixed Income Benchmark	1.64	0.01	0.01	2.06	2.52	2.91	3.54	2.65	0.55	5.97	-2.02	6.89	
Difference	-0.23	0.01	0.01	0.18	0.09	0.75	0.29	0.24	0.17	-0.28	0.01	0.52	

Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. Please see Supplemental Report Addendum for custom benchmark definitions.

Core Fixed Income vs. IM U.S. Broad Market Core Fixed Income

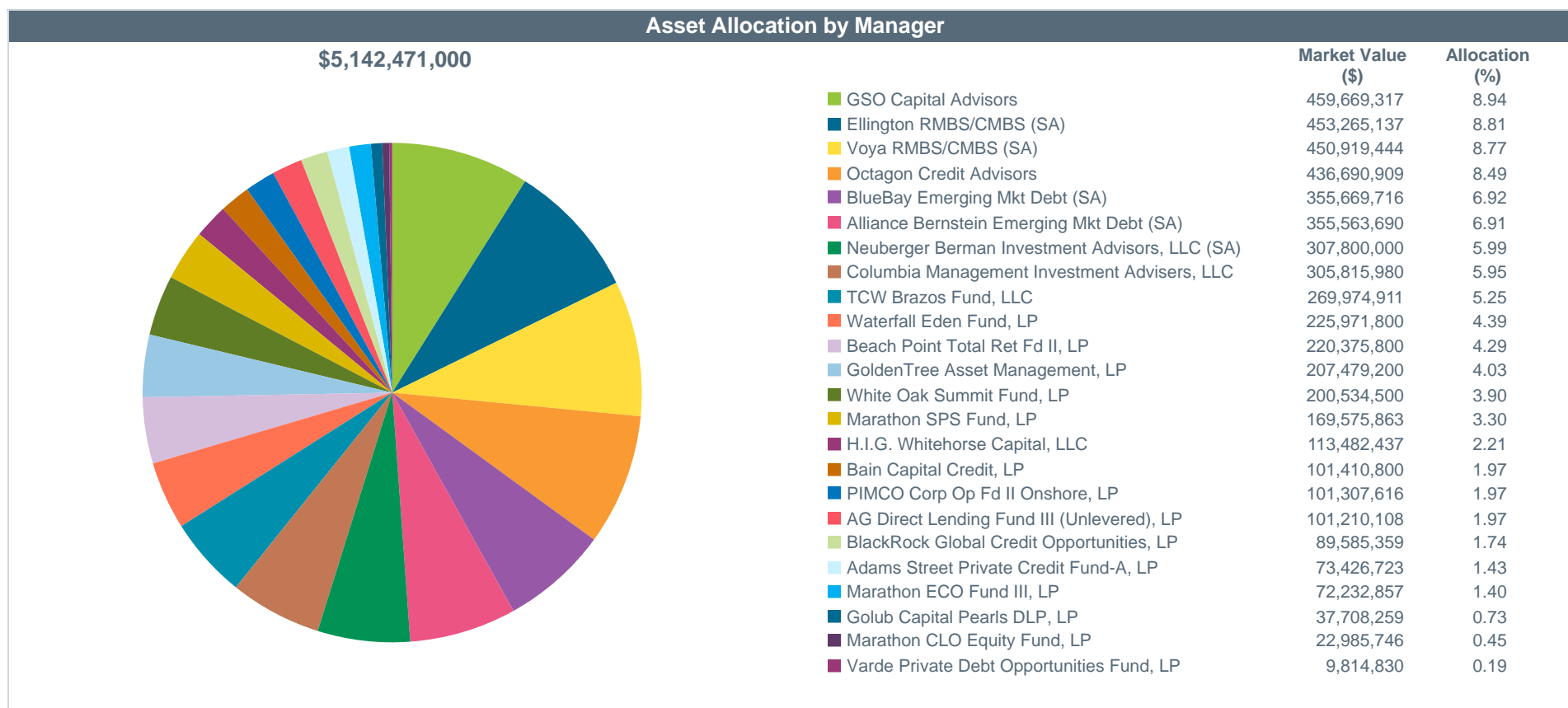
As of December 31, 2018



Performance shown is gross of fees. Calculations based on monthly periodicity. Parenthesis contain percentile ranks. Please see Supplemental Report Addendum for custom benchmark definitions.

Non-Core Fixed Income Performance & Allocation

As of December 31, 2018



Comparative Performance													
	1 Quarter	CYTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015	2014	2013	Since Incep.	Inception Date
Non-Core Fixed Income	0.11	2.37	2.37	5.80	N/A	N/A	7.49	7.62	0.37	N/A	N/A	4.32	10/01/2014
Non-Core Fixed Income Benchmark	0.24	2.65	2.65	5.08	N/A	N/A	5.50	7.14	-0.87	N/A	N/A	3.53	
Difference	-0.13	-0.28	-0.28	0.72	N/A	N/A	1.99	0.48	1.24	N/A	N/A	0.79	

Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. Please see Supplemental Report Addendum for custom benchmark definitions.

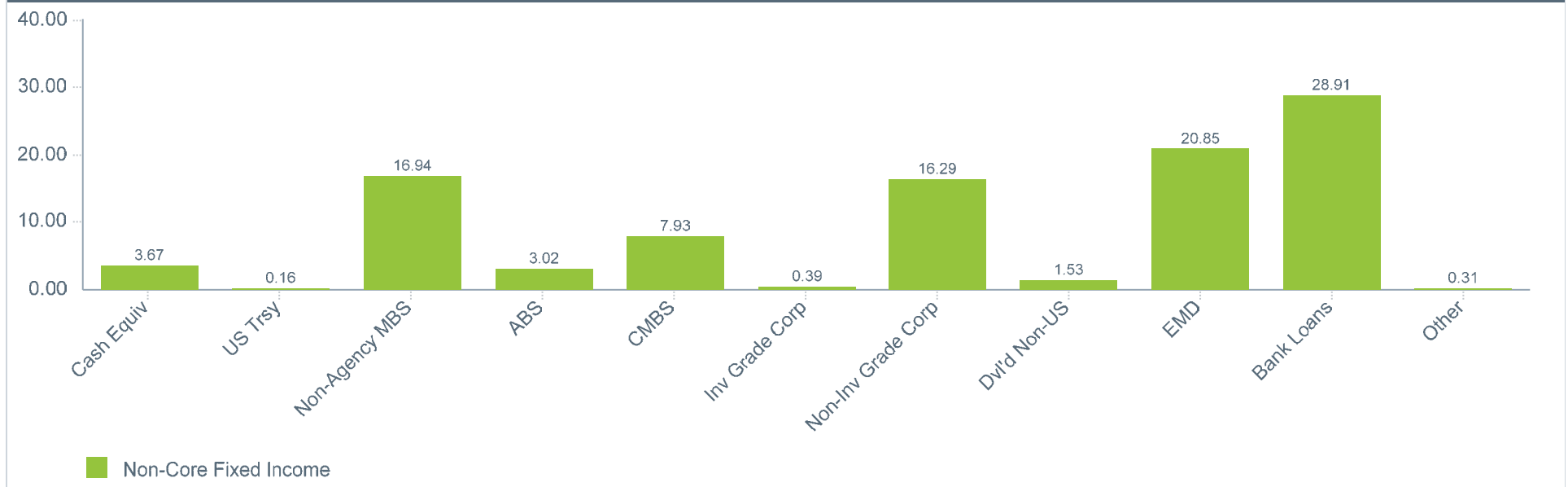
Non-Core Fixed Income

As of December 31, 2018

Portfolio Characteristics

	Portfolio
Effective Duration	2.48
Spread Duration	2.75
Avg. Maturity	8.32
Avg. Quality	B1
Yield To Maturity (%)	7.15
Coupon Rate (%)	5.30
Current Yield (%)	6.16

Sector Distribution (%)



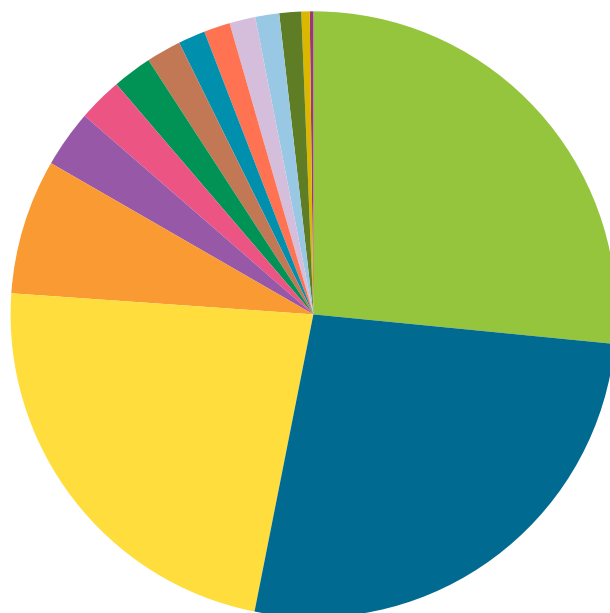
Bond characteristics exclude Private and Opportunistic Credit. Allocation to "Other" consists of interest rate derivatives, derivative offsets, accrued interest, and accrued fees.

Real Return Performance and Allocation

As of December 31, 2018

Asset Allocation by Manager

\$2,960,142,172



	Market Value (\$)	Allocation (%)
Cohen & Steers Real Asset	786,342,233	26.56
Nuveen Real Asset Income	785,948,023	26.55
Colchester Global Inflation Linked Bond (SA)	680,513,124	22.99
Chickasaw Capital Management, LLC	213,381,385	7.21
Brookfield Infrastructure Partner Fund III	90,487,050	3.06
Orion Mine Finance Fund II	69,665,832	2.35
Amerra Agriculture Fund III	62,411,015	2.11
MTP Energy Opportunities Fund II	54,961,064	1.86
Sprott Resource Lending Fund, LP	42,707,702	1.44
Blue Sky Strategic Australian Agriculture Fund	41,476,334	1.40
NGP Natural Resources XII	41,097,335	1.39
I Squared Global Infrastructure Fund II	37,596,516	1.27
Actis Energy IV, LP	34,519,305	1.17
Stonepeak Infrastructure Fund III, LP	13,166,952	0.44
Orion Mine Finance Co-Fund II	5,868,303	0.20
*MTP Energy Opportunities Fund III	-	0.00
*Orion Mineral Royalty Fund, LP	-	0.00
*InstarAGF Essential Infrastructure Fund II	-	0.00
*InstarAGF Essential Infrastructure Co-Fund II	-	0.00
*GIP Capital Solutions	-	0.00
*GIP Capital Solutions Co-Invest	-	0.00
*GIP Spectrum Fund	-	0.00
*Sprott Resource Lending II	-	0.00

Comparative Performance

	1 Quarter	CYTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015	2014	2013	Since Incep.	Inception Date
Real Return	-3.88	-4.30	-4.30	3.41	1.69	N/A	8.04	6.95	-5.71	4.28	-4.22	2.67	02/01/2011
Real Return Benchmark	-3.45	-3.81	-3.81	4.36	2.43	4.10	9.91	7.51	-4.70	4.08	-4.84	2.98	
Difference	-0.43	-0.49	-0.49	-0.95	-0.74	N/A	-1.87	-0.56	-1.01	0.20	0.62	-0.31	

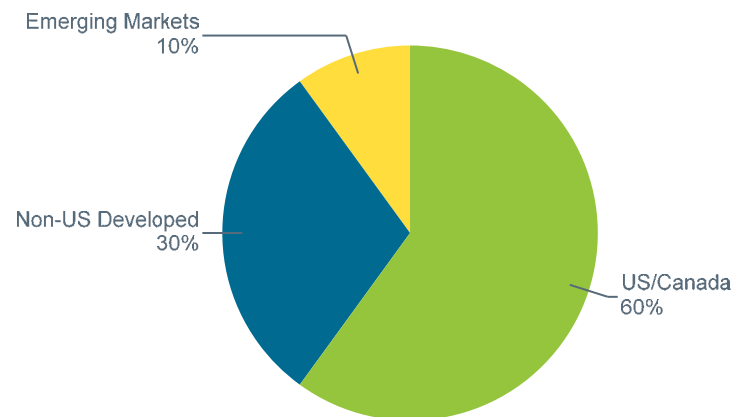
Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. Please see Supplemental Report Addendum for custom benchmark definitions. *Represents approved investments that have not been funded and/or are pending legal documents.



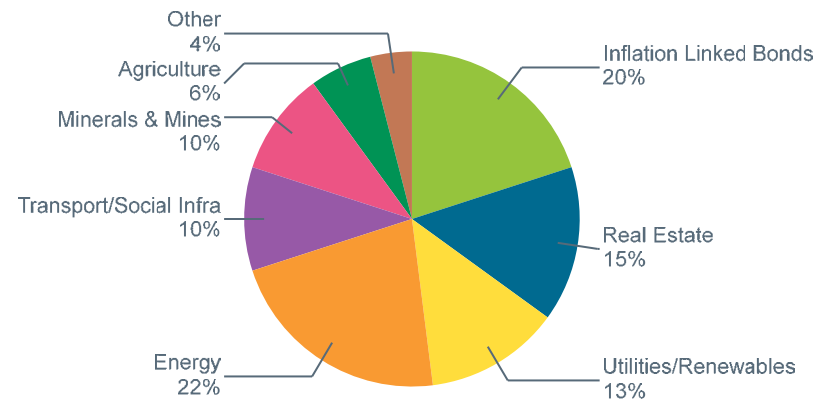
Real Return Portfolio Diversification

As of December 31, 2018

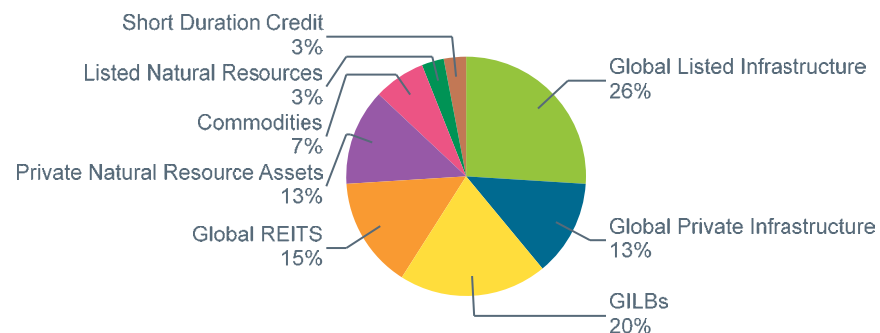
Portfolio Exposure by Geography



Portfolio Exposure by Sector



Portfolio Exposure by Asset Type



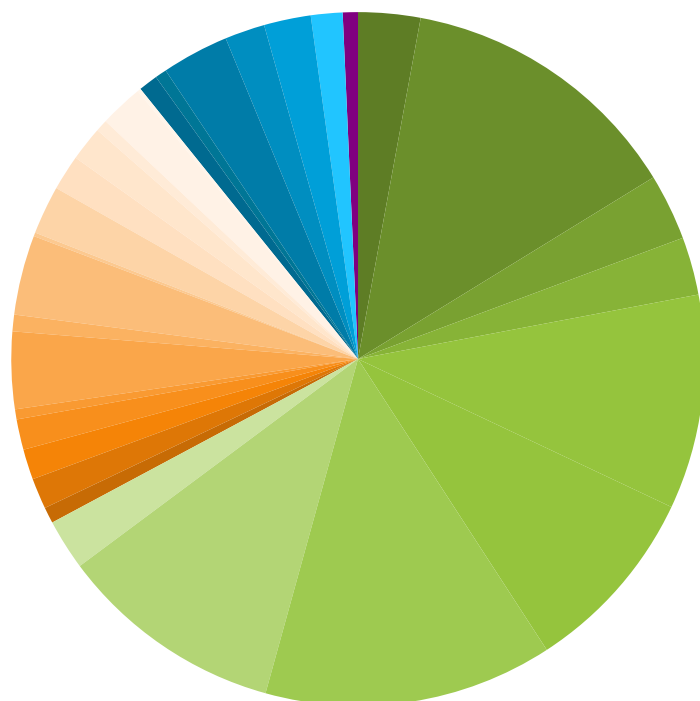
Allocations may not sum up to 100% exactly due to rounding. Allocation information is provided by TMRS and is as of 06/30/2018.

Real Estate Performance and Allocation

As of December 31, 2018

Asset Allocation by Manager

\$2,651,660,893



	Market Value (\$)	Allocation (%)
Abacus Core Income Fund, LP	76,886,873	2.90
BlackStone Property Partners	353,553,910	13.33
H/2 CP Core RE Debt Fund, LP	81,992,325	3.09
H/2 CP, LP	71,653,588	2.70
Harrison St. Real Estate	264,861,565	9.99
INVESCO Advisers, Inc.	233,678,230	8.81
Stockbridge Smart Markets Fund, LP	357,026,512	13.46
USAA Eagle Real Estate Fund, LP	279,239,750	10.53
Walton St Real Estate Debt Fund	62,652,679	2.36
Abacus IV	19,778,237	0.75
Abacus Multi-Family Partners III, LP	38,186,860	1.44
Alcion RE Part Fund III-B, LP	37,499,713	1.41
DivcoWest V	37,814,307	1.43
Greenfield Acquisition Partners VI, LP	12,340,502	0.47
Greenfield Acquisition Partners VII, LP	95,280,275	3.59
IC Berkeley Partners IV, LP	20,529,047	0.77
Madison Realty Capital Debt Fund IV, LP	98,621,478	3.72
Miller Global Fund VII	4,575,952	0.17
Rubenstein Properties Fund II	59,902,828	2.26
Rubenstein Properties Fund III	43,945,734	1.66
Stockbridge Value Fund, LLC	26,075	0.00
Stockbridge Value Fund II, LP	42,696,428	1.61
Stockbridge Value Fund III, LP	14,725,425	0.56
Torchlight Debt Opp Fund V, LP	53,575,200	2.02
Torchlight Debt Opp Fund VI, LP	4,302,671	0.16
European Property Inv Special	23,822,666	0.90
Kildare European Partners II	14,247,686	0.54
Lubert-Adler Fund VII	83,022,221	3.13
Moorfield Real Estate III	49,496,227	1.87
TPG Real Estate Part II, LP	57,961,608	2.19
*TPG Real Estate Partners III, LP	-	0.00
*Tristan European Property Inv Sp Opp 5 SCSP	-	0.00
Walton St Real Estate Fund VII	39,132,214	1.48
Transwestern Strategic Relationship	18,632,106	0.70

Comparative Performance

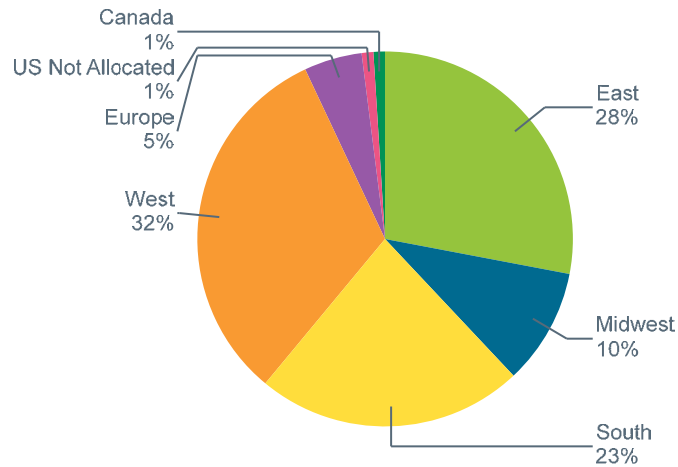
	1 Quarter	CYTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015	2014	2013	Since Incep.	Inception Date
Real Estate	2.69	10.62	10.62	11.17	12.93	N/A	10.56	12.33	12.97	18.36	10.31	11.40	01/01/2012
Real Estate Benchmark	2.08	8.67	8.67	8.76	10.71	5.57	7.65	9.97	15.00	12.40	13.04	11.17	
Difference	0.61	1.95	1.95	2.41	2.22	N/A	2.91	2.36	-2.03	5.96	-2.73	0.23	

Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. Please see Supplemental Report Addendum for custom benchmark definitions. Abacus Multi-Family Partners II, LP was liquidated in December 2018. The market value for Stockbridge Value Fund, LLC represents residual assets in liquidation. *Represents approved investments that have not been funded and/or are pending legal documents. Green = Core, Orange = Value, Blue = Opportunistic, Purple = Multi-Strat

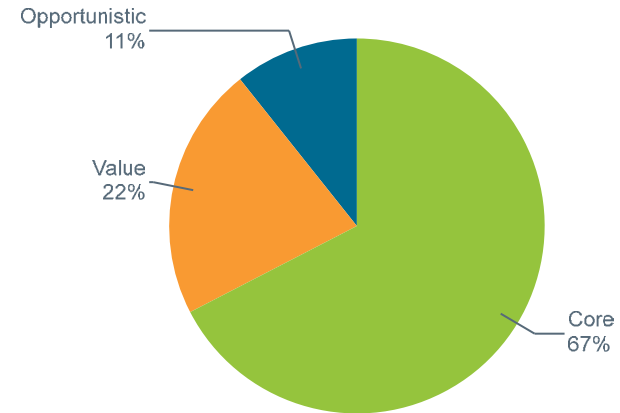
Real Estate Portfolio Diversification

As of December 31, 2018

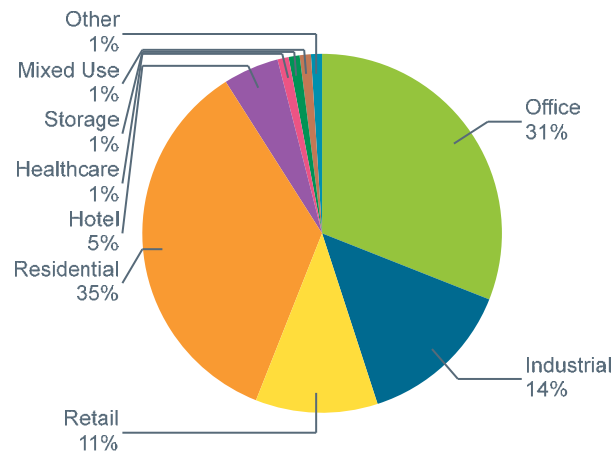
Portfolio Exposure by Geography



Portfolio Exposure by Sector



Portfolio Exposure by Property Type



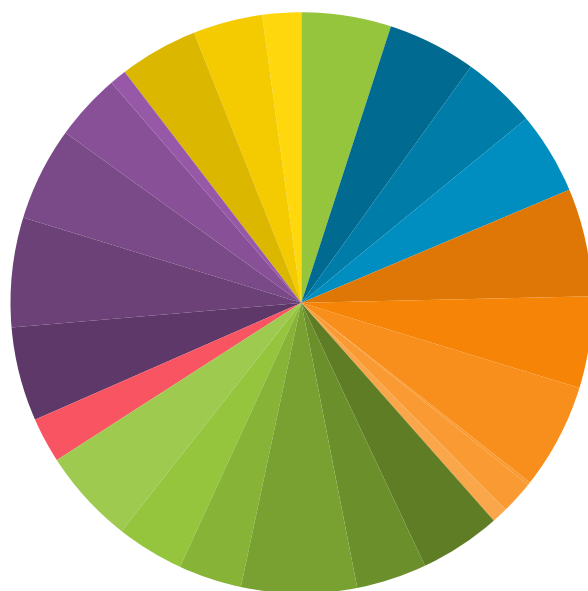
Allocations may not sum up to 100% exactly due to rounding. Allocation information is provided by TMRS on a 3 month lag and is as of 09/30/2018.

Absolute Return Performance and Allocation

As of December 31, 2018

Asset Allocation by Manager

\$2,551,179,669



	Market Value (\$)	Allocation (%)
Blackstone Treaty Oak Fund, LP	127,153,366	4.98
L/S Equity Manager 1	125,478,870	4.92
L/S Equity Manager 2	106,540,830	4.18
L/S Equity Manager 3	116,282,080	4.56
Credit Manager 1	153,223,440	6.01
Credit Manager 2	129,989,040	5.10
Credit Manager 3	149,571,415	5.86
Credit Manager 4	4,573,128	0.18
Credit Manager 5	46,405,595	1.82
Credit Manager 6	22,698,160	0.89
Relative Value Manager 1	115,304,865	4.52
Relative Value Manager 2	99,735,300	3.91
Relative Value Manager 3	163,627,650	6.41
Relative Value Manager 4	89,723,523	3.52
Relative Value Manager 5	95,805,810	3.76
Relative Value Manager 6	135,000,000	5.29
Event Driven Manager 1	64,162,380	2.52
Global Macro Manager 1	133,527,500	5.23
Global Macro Manager 2	155,419,350	6.09
Global Macro Manager 3	132,868,800	5.21
Global Macro Manager 4	95,400,900	3.74
Global Macro Manager 5	23,683,548	0.93
Multi-Strat Manager 1	111,508,500	4.37
Multi-Strat Manager 2	98,631,064	3.87
Multi-Strat Manager 3	54,864,554	2.15
*Multi-Strat Manager 4	-	0.00

Comparative Performance

	1 Quarter	CYTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015	2014	2013	Since Incep.	Inception Date
Absolute Return	-1.04	1.51	1.51	4.36	N/A	N/A	11.72	0.22	3.34	N/A	N/A	3.88	08/01/2014
Absolute Return Benchmark	-3.15	-0.96	-0.96	1.53	2.01	3.16	7.11	-1.34	0.79	4.72	8.61	1.47	
Difference	2.11	2.47	2.47	2.83	N/A	N/A	4.61	1.56	2.55	N/A	N/A	2.41	
Blackstone Treaty Oak Fund, LP	0.39	3.96	3.96	4.55	N/A	N/A	9.19	0.66	3.34	N/A	N/A	4.00	08/01/2014
Absolute Return Benchmark	-3.15	-0.96	-0.96	1.53	2.01	3.16	7.11	-1.34	0.79	4.72	8.61	1.47	
Difference	3.54	4.92	4.92	3.02	N/A	N/A	2.08	2.00	2.55	N/A	N/A	2.53	
Absolute Return Direct Composite	-1.21	1.07	1.07	4.50	N/A	N/A	12.51	0.35	N/A	N/A	N/A	4.50	01/01/2016
Absolute Return Benchmark	-3.15	-0.96	-0.96	1.53	2.01	3.16	7.11	-1.34	0.79	4.72	8.61	1.53	
Difference	1.94	2.03	2.03	2.97	N/A	N/A	5.40	1.69	N/A	N/A	N/A	2.97	

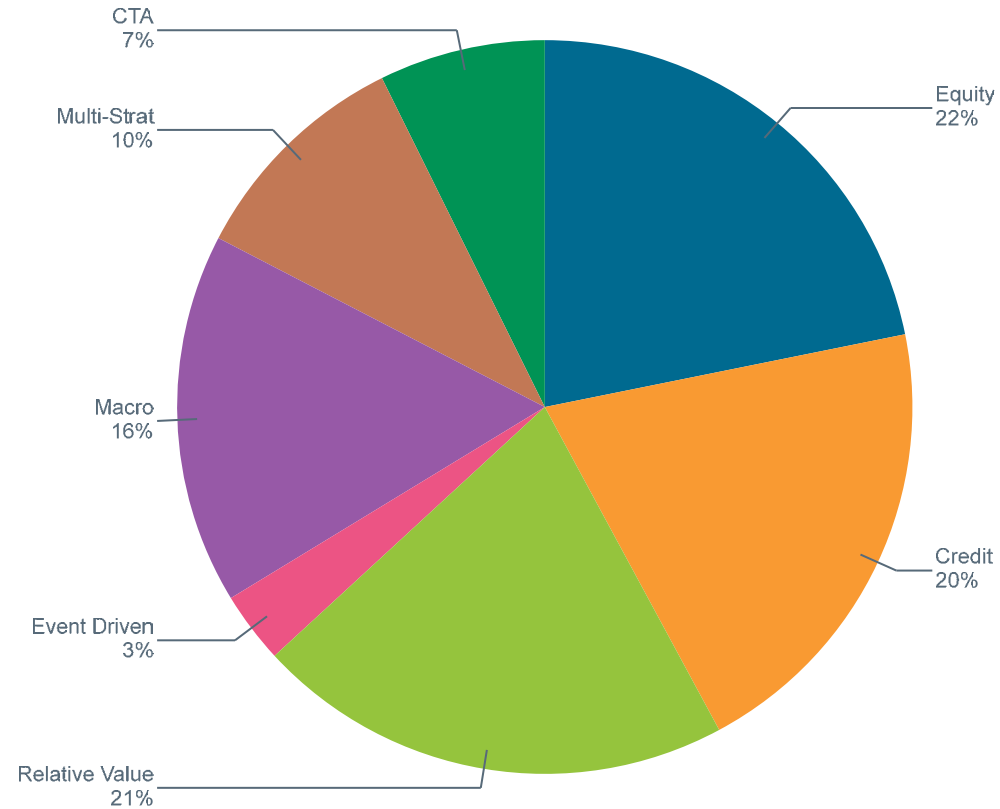
Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. Please see Supplemental Report Addendum for custom benchmark definitions. *Represents approved investments that have not been funded and/or are pending legal documents.



Absolute Return Strategy Exposures

As of December 31, 2018

Direct Portfolio Manager Exposures



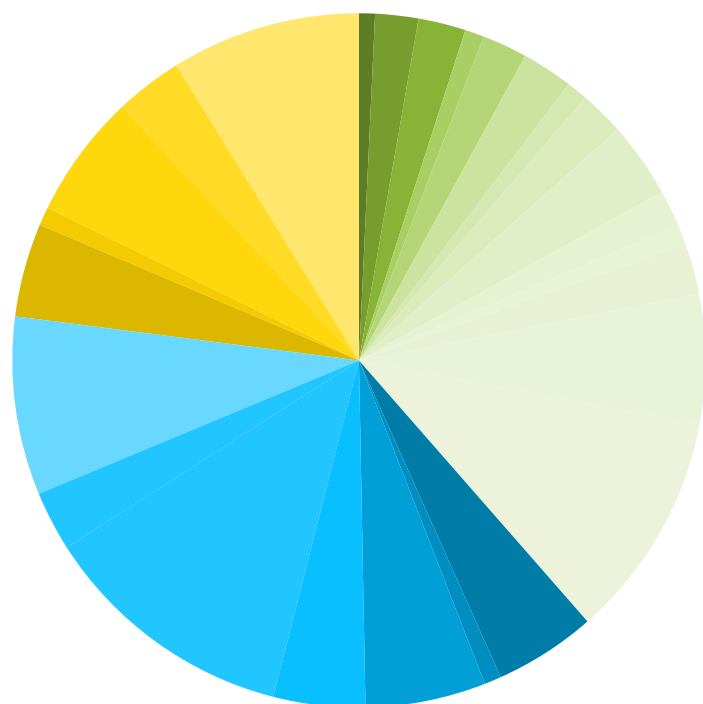
Allocations shown may not sum up to 100% exactly due to rounding. Allocation information is provided by TMRS on a 3 month lag and is as of 09/30/2018. The BlackStone Treaty Oak Fund is in the process of winding down the portfolio.

Private Equity Performance and Allocation

As of December 31, 2018

Asset Allocation by Manager

\$556,735,919



	Market Value (\$)	Allocation (%)
Altaris Constellation Partners IV, LP	4,140,390	0.74
Altaris Health Partners IV, LP	11,187,778	2.01
*Arcline Capital Partners	-	0.00
Capital Partners Private Equity Income Fund III, LP	12,317,286	2.21
*CapVest Equity Partners IV SCSp	-	0.00
*Dunes Point Capital Fund II, LP	-	0.00
GTCR Fund XII, LP	4,985,798	0.90
Harvest Partners VII	11,725,676	2.11
H.I.G. Capella	13,236,763	2.38
H.I.G. Strategic Partners Fund	5,490,237	0.99
Incline Equity IV	11,611,636	2.09
Kainos Capital Partners II	19,539,188	3.51
Marlin Equity V, LP	9,466,585	1.70
Marlin Heritage II, LP	5,250,489	0.94
One Rock Capital Partners II, LP	13,180,746	2.37
*Providence Equity Partners VIII, LP	-	0.00
Searchlight Capital II	33,454,296	6.01
*Reverence Capital Partners II	-	0.00
Tritium I, LP	58,988,138	10.60
*Tritium II, LP	-	0.00
*FGN 2018 Partner Fund	-	0.00
Foundry Group Next Fund, LP	26,440,223	4.75
Foundry Group Next 2018, LP	4,394,262	0.79
FTV V	31,248,971	5.61
*Main Post Growth Capital II, LP	-	0.00
Mercato Partners Growth III, LP	23,833,321	4.28
Providence Strategic Growth II	66,652,358	11.97
Providence Strategic Growth III, LP	15,473,482	2.78
*Providence Strategic Growth IV	-	0.00
Udata Partners V, LP	46,209,141	8.30
*Udata Partners VI	-	0.00
Carlyle Energy Mezzanine Fund II	24,236,270	4.35
GSO COF III Co-investment Fund, LP	4,806,212	0.86
GSO Capital Opportunities Fund III, LP	32,285,251	5.80
H.I.G. Bayside Fund IV	17,374,728	3.12
*LightBay Investment Partners, LP	-	0.00
*TPG Opportunities Partners IV, LP	-	0.00
TSSP Adjacent Opportunities Fund III	49,206,694	8.84
*TSSP Adjacent Opportunities (D), LP	-	0.00

Comparative Performance

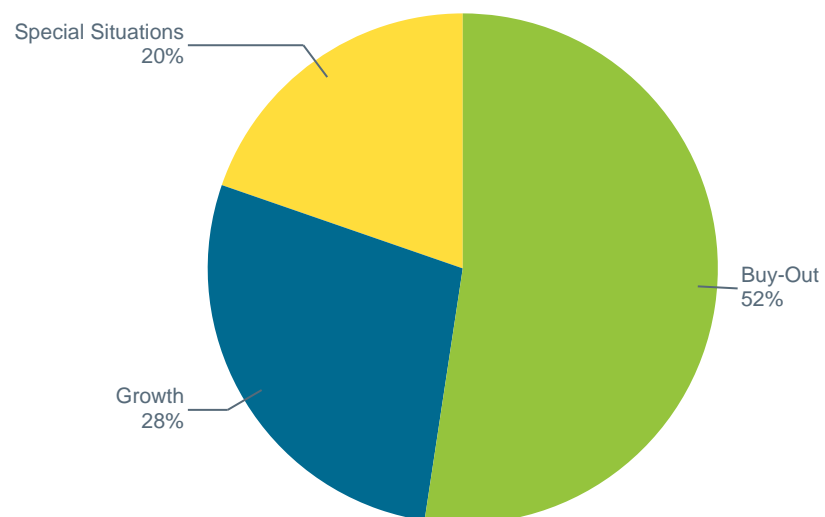
	1 Quarter	CYTD	1 Year	3 Years	5 Years	10 Years	2017	2016	2015	2014	2013	Since Incep.	Inception Date
Private Equity	3.38	39.18	39.18	19.20	N/A	N/A	19.69	1.68	N/A	N/A	N/A	19.20	01/01/2016
Private Equity - Buy Out	2.77	26.96	26.96	18.99	N/A	N/A	7.09	23.91	N/A	N/A	N/A	18.99	01/01/2016
Private Equity - Venture/Growth	5.37	58.25	58.25	N/A	N/A	N/A	34.71	N/A	N/A	N/A	N/A	26.98	07/01/2016
Private Equity - Special Situations	0.38	15.17	15.17	N/A	N/A	N/A	12.52	N/A	N/A	N/A	N/A	10.44	04/01/2016

Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. *Represents approved investments that have not been funded and/or are pending legal documents. Green = Buy-Out, Blue = Growth, Yellow = Special Situations.

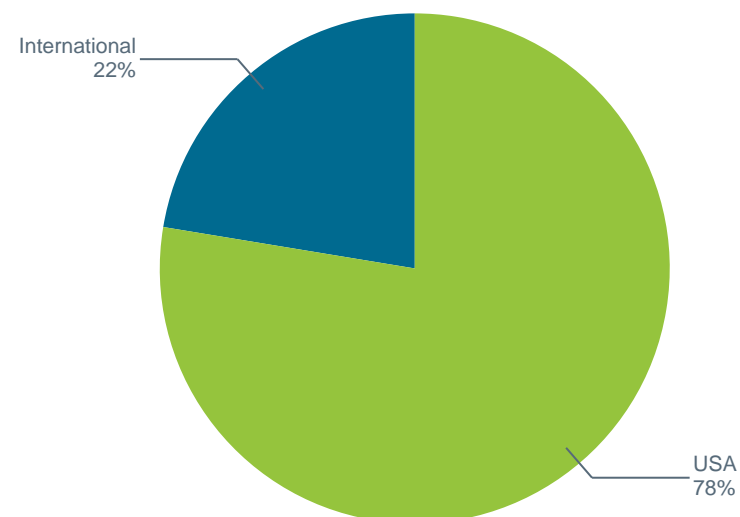
Private Equity Strategic Allocation

As of December 31, 2018

Private Equity Strategy Diversification by Commitment



Private Equity Geographic Diversification by Commitment



Policy Strategy Ranges

Control/Buy-out	40% to 75%
Venture/Growth/Minority	10% to 40%
Special Situations/Opportunistic	5% to 35%

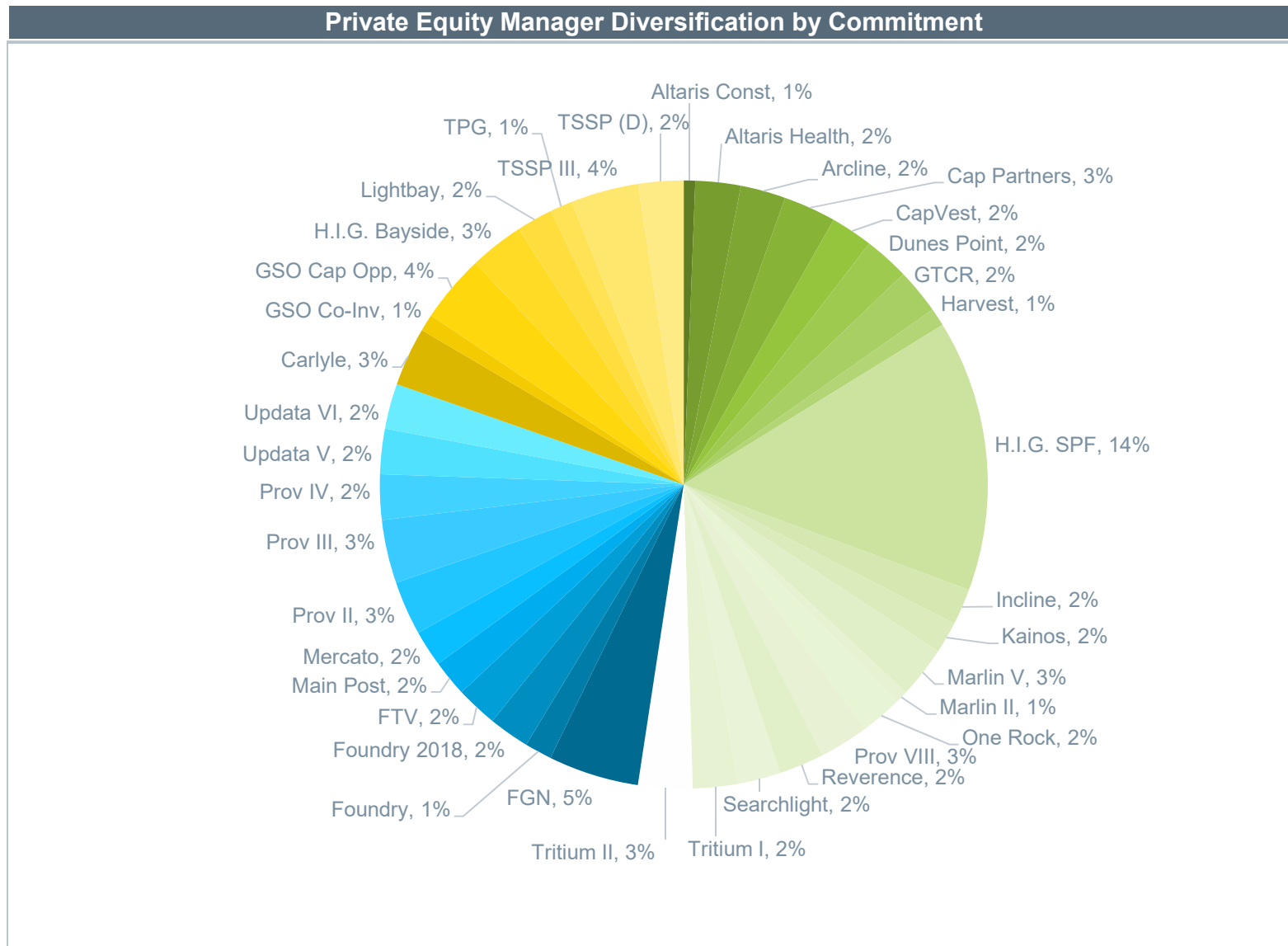
Policy Geography Ranges

No less than 75% in USA
No more than 25% in International

Allocations may not sum up to 100% exactly due to rounding. Allocation information is provided by TMRS on a 3 month lag and is as of 09/30/2018.

Private Equity Strategic Allocation

As of December 31, 2018



Policy Guidelines

No more than 35% with any one investment manager

No more than 25% in any one investment vehicle

PORTLAND

CHICAGO

NEW YORK

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