



D A L L A S  
**POLICE & FIRE**  
PENSION SYSTEM



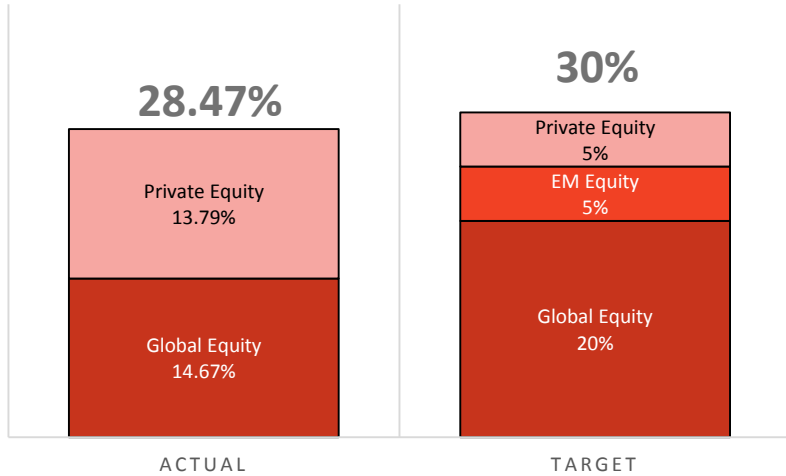
June 30, 2017  
Board Monthly Investment Reports

# Asset Allocation vs. Target

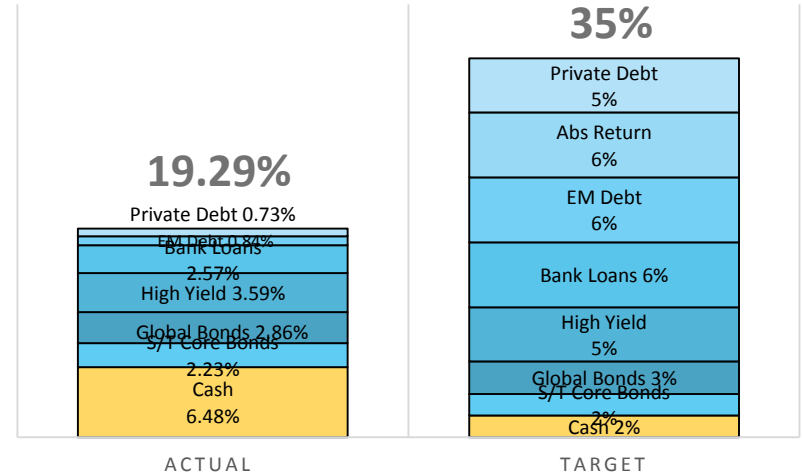
June 30, 2017

	Actual			Target	Target Range		
	\$ (M)	Gross %	Net %	\$ (M)	Low	%	High
<b>EQUITY</b>							
Global Equity	329.01	14.67%	14.94%	440.43	10%	20%	23%
Emerging Market Equity	-	0.00%	0.00%	110.11	0%	5%	8%
Private Equity	309.28	13.79%	14.04%	110.11	4%	5%	15%
<b>TOTAL EQUITY</b>	<b>638.29</b>	<b>28.47%</b>	<b>28.98%</b>	<b>660.64</b>	<b>20%</b>	<b>30%</b>	<b>40%</b>
<b>FIXED INCOME</b>							
Short Term Core Bonds	49.99	2.23%	2.27%	44.04	0%	2%	5%
Global Bonds	64.24	2.86%	2.92%	66.06	0%	3%	6%
High Yield	80.39	3.59%	3.65%	110.11	2%	5%	8%
Bank Loans	57.66	2.57%	2.62%	132.13	3%	6%	9%
Emerging Market Debt	18.73	0.84%	0.85%	132.13	0%	6%	9%
Absolute Return & Structured Credit	-	0.00%	0.00%	132.13	0%	6%	9%
Private Debt	16.29	0.73%	0.74%	110.11	2%	5%	7%
<b>TOTAL FIXED INCOME</b>	<b>287.29</b>	<b>12.81%</b>	<b>13.05%</b>	<b>726.71</b>	<b>15%</b>	<b>33%</b>	<b>38%</b>
<b>GLOBAL ASSET ALLOCATION (GAA)</b>							
Risk Parity	78.95	3.52%	3.59%	110.11	2%	5%	8%
GTAA	22.22	0.99%	1.01%	66.06	0%	3%	6%
Absolute Return	36.89	1.65%	1.68%	44.04	0%	2%	5%
<b>TOTAL GAA</b>	<b>138.06</b>	<b>6.16%</b>	<b>6.27%</b>	<b>220.21</b>	<b>5%</b>	<b>10%</b>	<b>15%</b>
<b>REAL ASSETS</b>							
Liquid Real Assets	-	0.00%	0.00%	66.06	0%	3%	6%
Natural Resources	252.48	11.26%	11.46%	110.11	3%	5%	10%
Infrastructure	237.99	10.61%	10.81%	110.11	3%	5%	10%
Real Estate	542.83	24.21%	24.65%	264.26	10%	12%	25%
<b>TOTAL REAL ASSETS</b>	<b>1,033.29</b>	<b>46.08%</b>	<b>46.92%</b>	<b>550.54</b>	<b>20%</b>	<b>25%</b>	<b>45%</b>
<b>CASH</b>	<b>145.22</b>	<b>6.48%</b>	<b>6.59%</b>	<b>44.04</b>	<b>0%</b>	<b>2%</b>	<b>5%</b>
<b>GROSS INVESTMENT ASSETS</b>	<b>2,242.15</b>	<b>100%</b>	<b>101.82%</b>				
<b>DPFP DEBT</b>	<b>(40.00)</b>		<b>-1.82%</b>	<b>-</b>	<b>0%</b>	<b>0%</b>	<b>15%</b>
<b>NET ASSET VALUE</b>	<b>2,202.15</b>		<b>100%</b>				

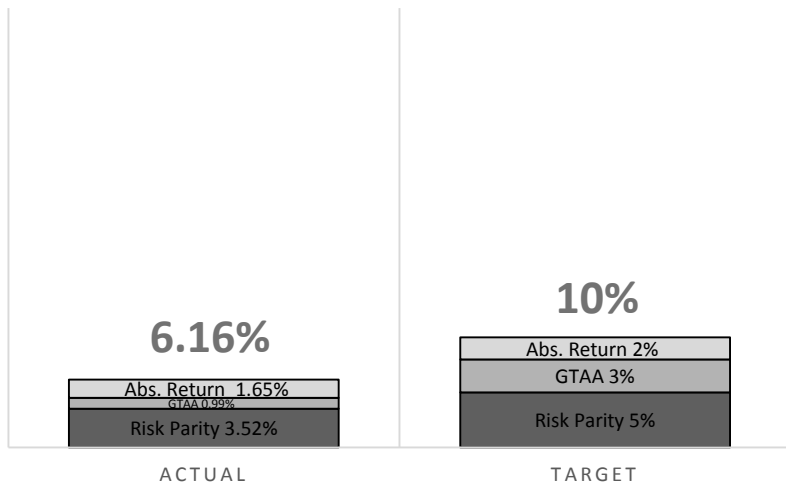
## EQUITY



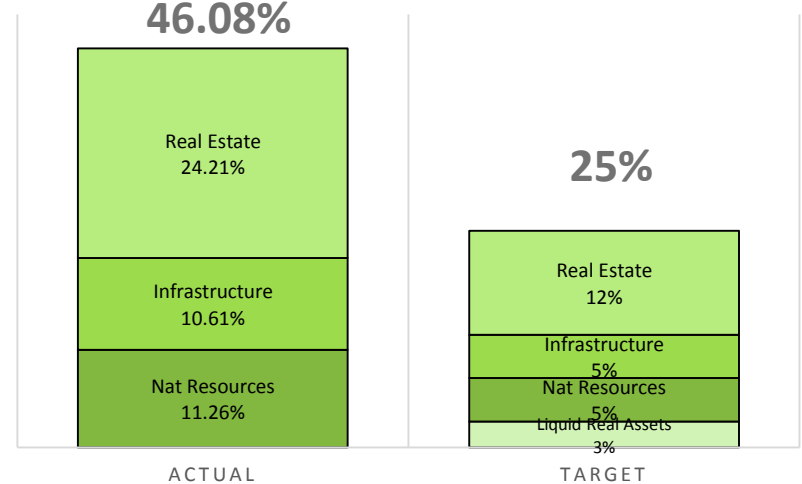
## FIXED INCOME & CASH



## GLOBAL ASSET ALLOCATION

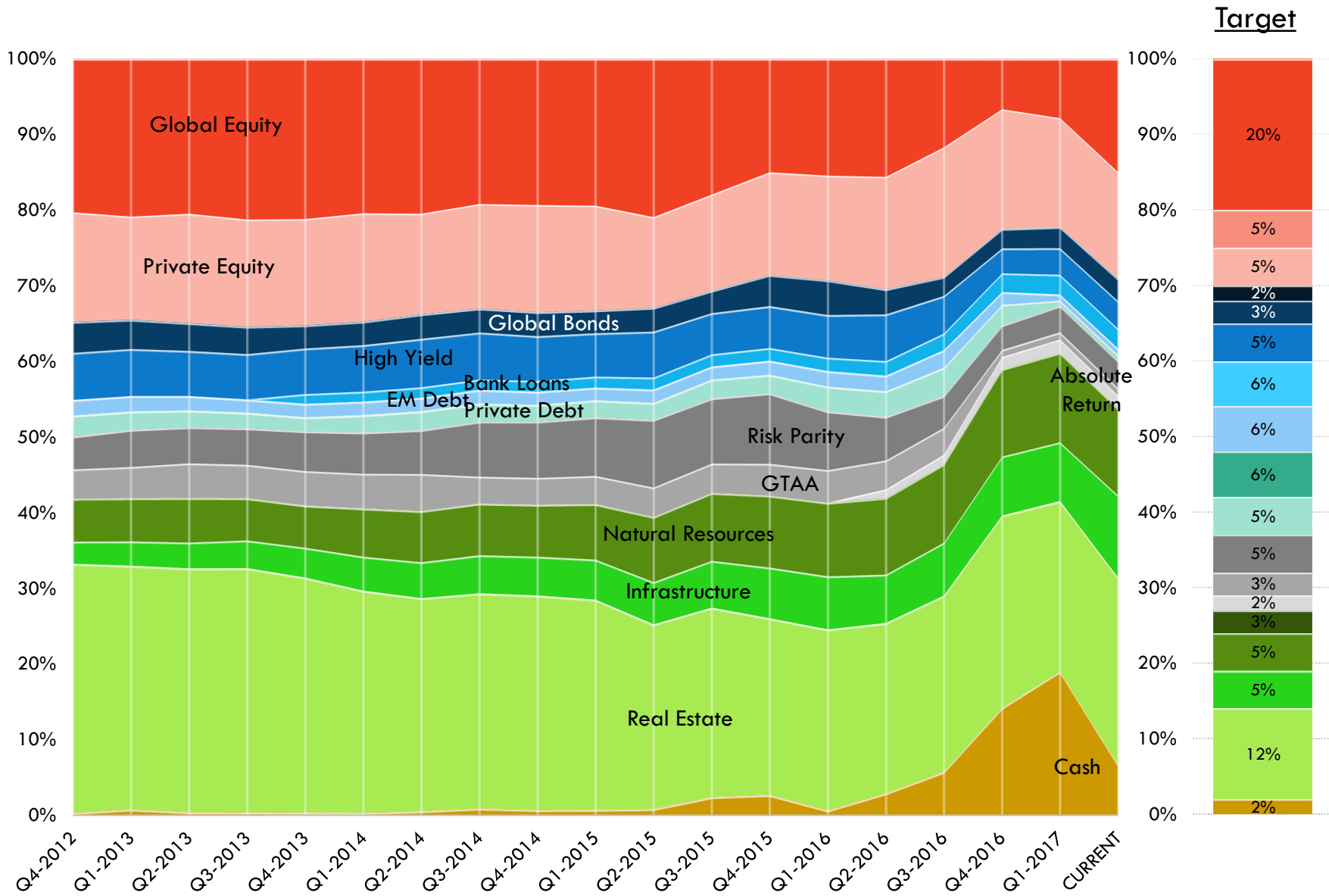


## REAL ASSETS



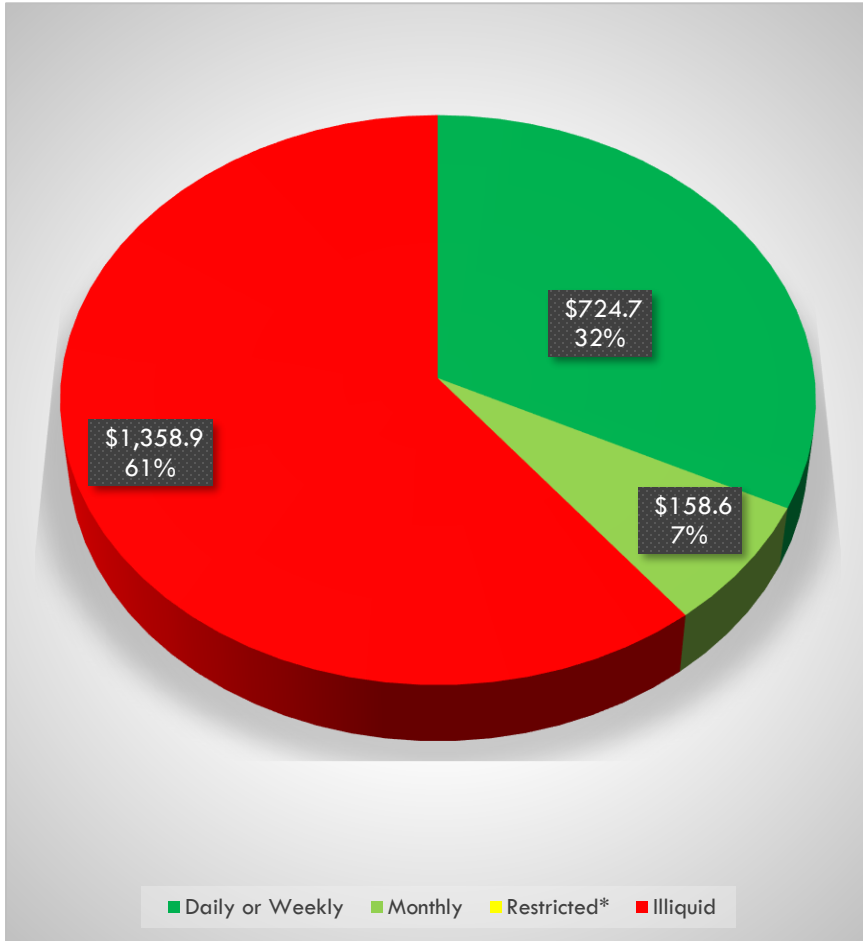
# Asset Allocation History (Quarterly)

June 30, 2017

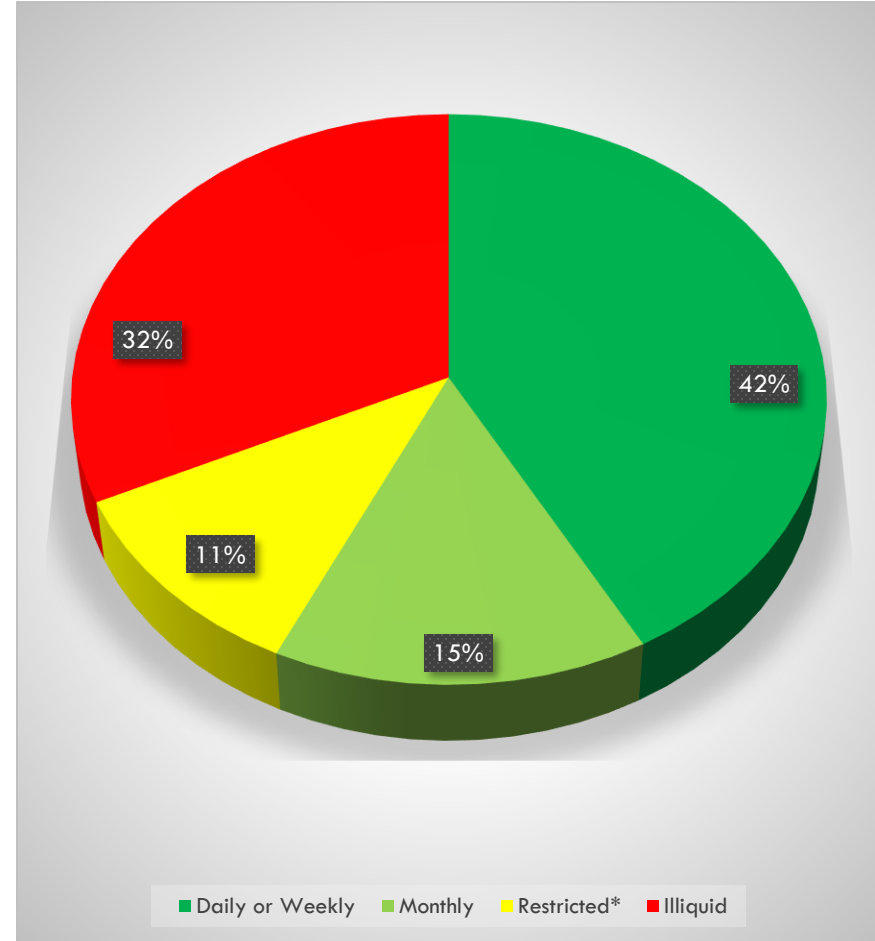


In Millions

## ACTUAL – GROSS INVESTMENT ASSETS



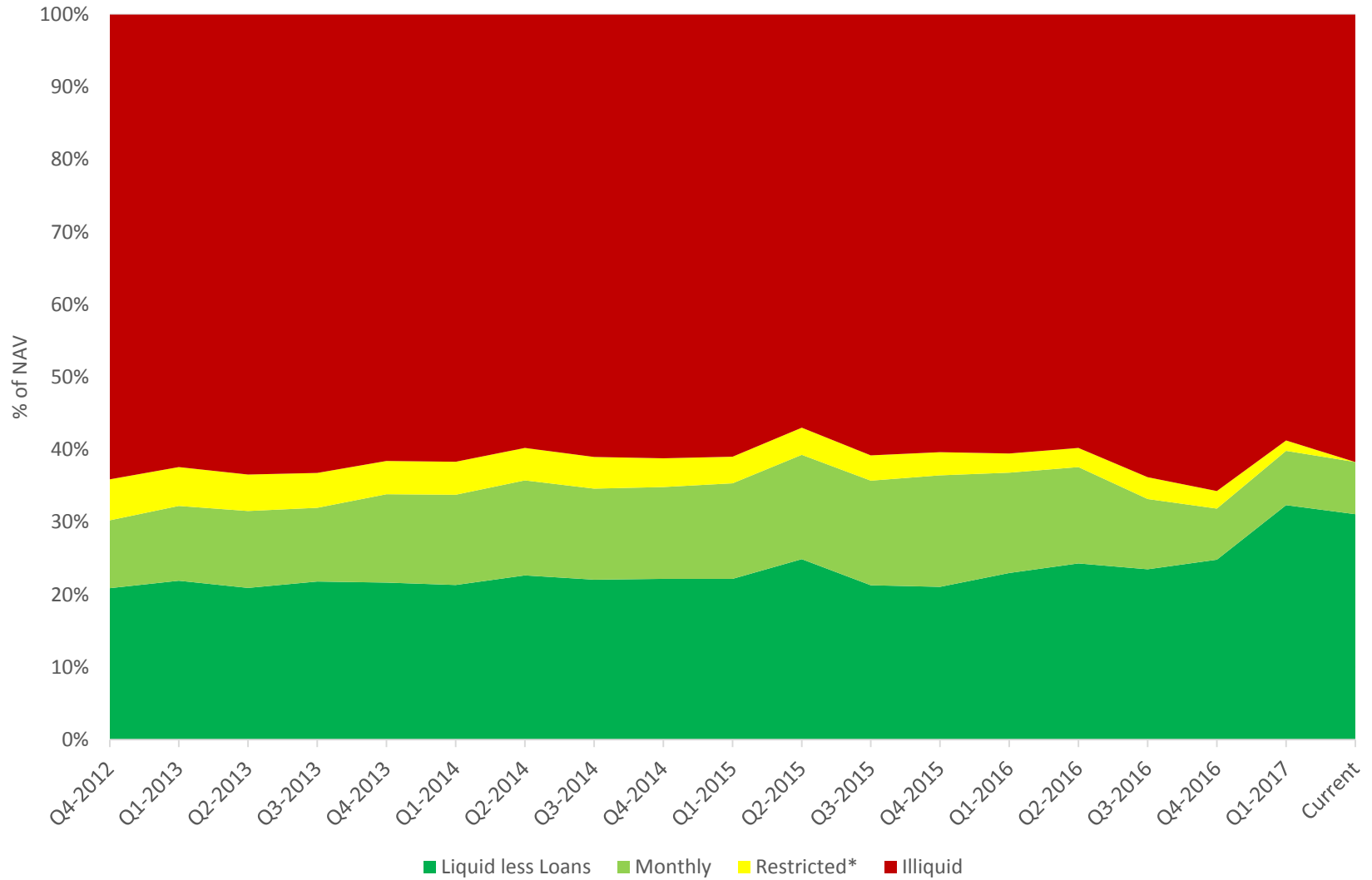
## BASED ON TARGET ASSET ALLOCATION



\* - Assets can be redeemed between monthly and annual basis often with gating, lock-ups or notice of more than 30 days required.

# Liquidity History- As Percentage (Quarterly)

June 30, 2017



\* - Assets can be redeemed between monthly and annual basis often with gating, lock-ups or notice of more than 30 days required.

Fund	Vintage	Asset Class	Total Commitment	Unfunded Capital
JPM AIRRO	2008	Infra	37,000,000	1,150,000
JPM AIRRO II <sup>1</sup>	2013	Infra	40,000,000	32,563,999
JPM Maritime	2009	Infra	50,000,000	1,782,433
Hudson Clean Energy Partners	2009	PE	25,000,000	-
Huff Energy Fund	2006	PE	100,000,000	119,979
Industry Ventures	2016	PE	5,000,000	3,875,000
Lone Star Growth Capital	2006	PE	16,000,000	16,000,000
Lone Star Opportunities Fund V	2012	PE	75,000,000	18,750,000
Riverstone	2016	Private Debt	10,000,000	2,706,213
<b>TOTAL PRIVATE PORTFOLIO</b>				<b>\$ 76,947,624</b>

Real Estate Debt Obligations	Maturity	Total Commitment	Outstanding Balance
Commitment to repay RCH debt <sup>2</sup>	12/31/2017	111,111,111	100,000,000

1 - JP Morgan notified DPFP that they have elected to terminate the investment period of the AIRRO II fund. Capital can only be called in specific situations such as for follow-on capital, fund expenses and fees. DPFP expects that only a small portion of the unfunded will actually be called by the manager.

2 - DPFP has a capital commitment obligation to repay \$100m of RCH company level debt, which matures on December 31, 2017, but could be called if DPFP net plan assets drop below \$1.75 billion. Total commitment includes overcollateralization required by bank under the loan agreement.

<b>TOTAL CAPITAL CALLS &amp; CONTRIBUTIONS</b>	<b>\$40,424,343</b>
--	---------------------

**Outflows over \$1 m**

Bank of America - Revolver	Revolver pay-off	\$30,000,000
Bank of America - Term	Principal payment	\$10,000,000

<b>TOTAL DISTRIBUTIONS</b>	<b>\$42,245,365</b>
----------------------------	---------------------

**Inflows over \$1 m**

Clarion	1210 S. Lamar sale loan proceeds	\$10,352,194
CDK	CDK MFF sale	\$9,982,500
Forest Investment	Huggin Oak sale	\$7,763,953
Hancock	Sale proceeds	\$7,027,669
Clarion	1210 S. Lamar equity proceeds	\$4,669,406

\* Excludes funding, redemptions and distributions from public equity and public fixed income separate accounts



Staff funded new investments with the below managers in June. These new investments were approved by the Board in 2016, but had not yet been funded due to liquidity constraints.

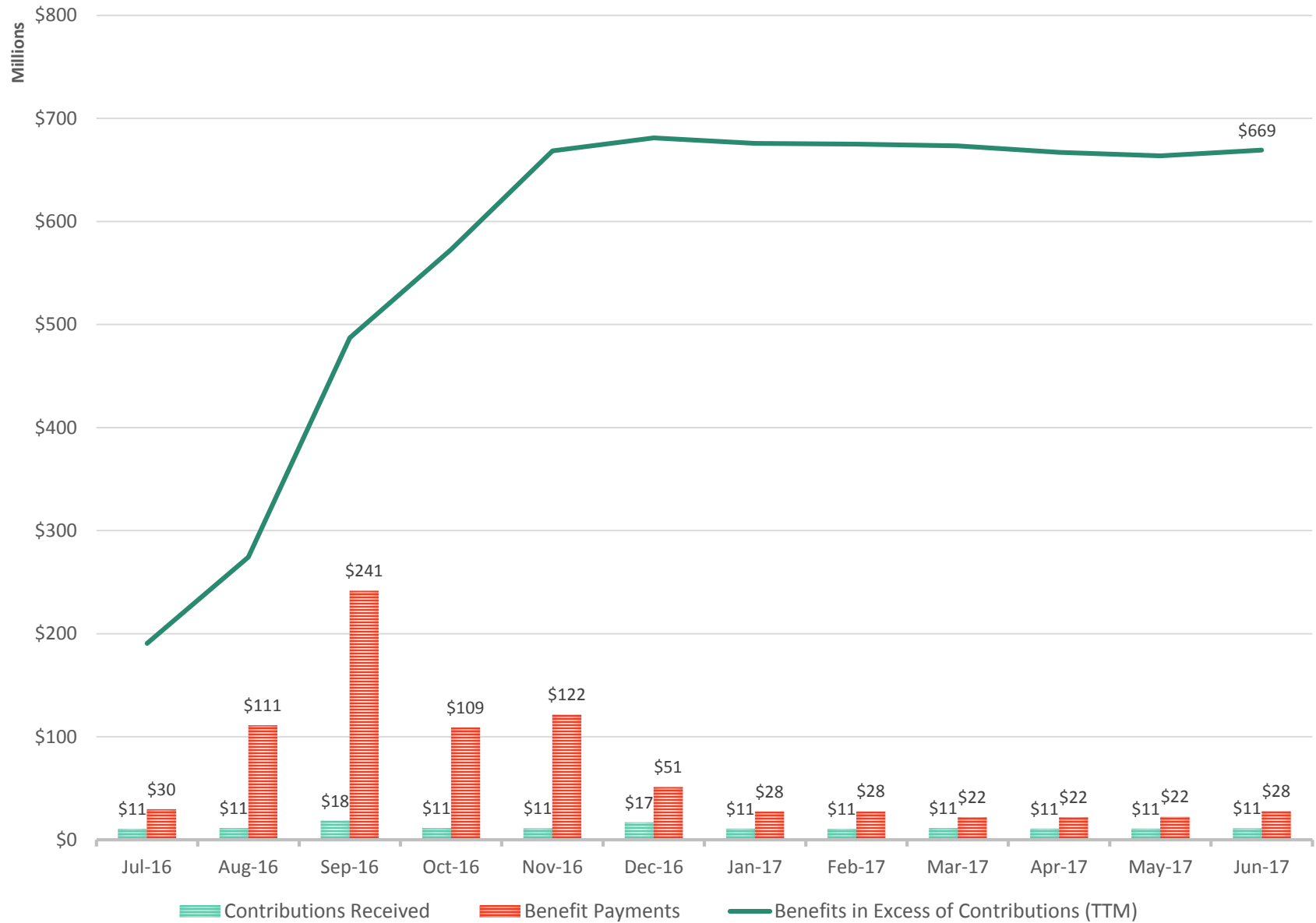
<b>Manager</b>	<b>Asset Category</b>	<b>Asset Class</b>	<b>Amount</b>
Income Research + Management	Fixed Income	Short-Term Core Bonds	\$50,000,000
Boston Partners	Equity	Global Equity	\$70,000,000
Manulife	Equity	Global Equity	\$70,000,000

Staff and NEPC have discussed and recommend making the below manager level benchmark changes. Several manager benchmarks were changed with the updated asset allocation and Investment Policy Statement Policy in 2016. The proposed changes would measure a manager against their stated benchmark, if they have one, or against the asset class benchmark where they do not.

Manager	Current Benchmark	New Benchmarks	Rationale
<b>Loomis Sayles</b>	70% BofA ML HY / 30% JPM EMBI Plus	Barclays Global High Yield	70/30 benchmark was designed by previous consultant and Loomis does not manage to it. Change to the asset class benchmark
<b>Bridgewater All Weather</b>	60% MSCI ACWI/40% BC Global Agg (1/1/16 to present) linked with 91 T-Bill + 6% (inception to 1/1/16)	91 T-Bill + 7%	Change to strategy's stated benchmark
<b>Putnam</b>	60% MSCI ACWI/40% BC Global Agg (1/1/16 to present) linked with CPI + 5% (inception to 1/1/16)	60% MSCI World/40% Citi WGBI	Change to strategy's stated benchmark
<b>GMO</b>	60% MSCI ACWI/40% BC Global Agg (1/1/16 to present) linked with CPI + 5% (inception to 1/1/16)	CPI +5%	Change to strategy's stated benchmark
<b>Bridgewater Pure Alpha</b>	HFRX Absolute Return (1/1/16 to present) linked with 91 T-Bill + 6% (inception to 1/1/16)	HFRX Absolute Return	Strategy does not have stated benchmark, so changing to asset class benchmark

# Trailing 12-month Funding Gap

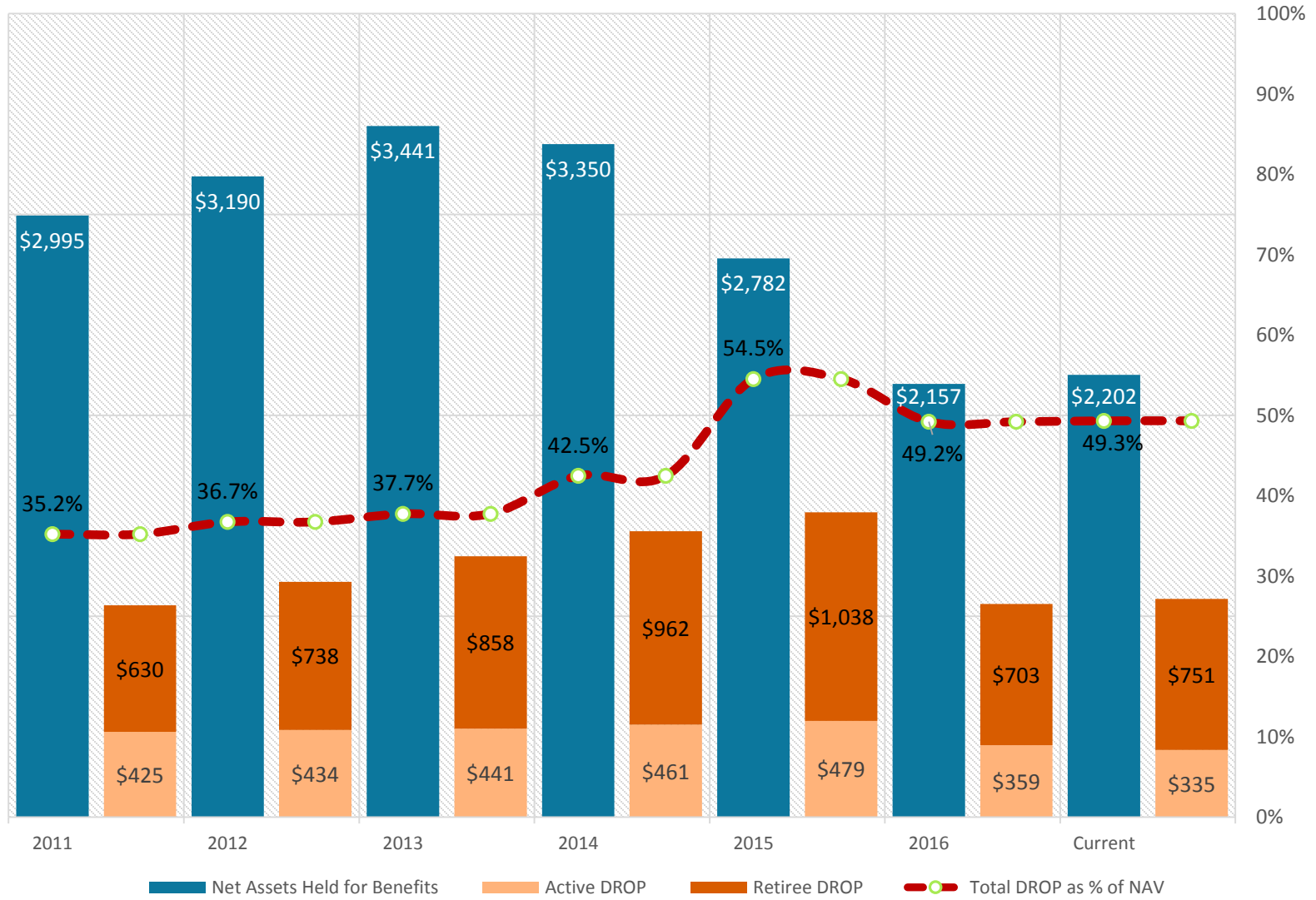
June 30, 2017



# DROP Balance as % of NAV

June 30, 2017

In Millions



# Monthly Asset Class Benchmark Returns

June 30, 2017

Asset Class	Benchmark	Month	QTD	YTD	1 Year	3 Year	5 Year
Global Equity	MSCI-ACWI	0.50	4.45	11.82	19.42	5.39	11.14
Emerging Markets	MSCI EM Equity	1.07	6.38	18.60	24.17	1.44	4.33
US Equity	S&P 500	0.62	3.09	9.34	17.90	9.61	14.63
US Small Cap	Russell 2000	3.46	2.46	4.99	24.60	7.36	13.70
US All Cap	Russell 3000	0.90	3.02	8.93	18.51	9.10	14.58
US Treasury	Barclays 1-3 YR	(0.08)	0.19	0.46	(0.11)	0.70	0.64
Global Bonds	BC Global Agg	(0.09)	2.60	4.41	(2.18)	(0.35)	0.78
High Yield	Barclays Global HY	0.17	3.19	6.46	11.89	3.73	7.13
Bank Loans	S&P Leveraged Loan Index	(0.40)	0.03	1.17	6.64	3.77	3.96
EM Debt (USD)	JPM EMBI	(0.14)	2.24	6.19	6.04	5.38	5.72
EM Govt. Bonds (Local)	JPM GBI-EM	0.46	3.62	10.36	6.41	(2.80)	(0.67)
Public Infrastructure	S&P Global Infrastructure	(0.07)	5.95	14.37	12.71	3.50	9.67
Commodities	Dow Jones UBS Commodity	(0.19)	(3.00)	(5.26)	(6.50)	(14.81)	(9.25)
Public Real Estate	Wilshire REIT	2.65	1.42	0.23	(5.26)	4.47	5.33
Private Real Estate	NCREIF Property	0.00	0.00	1.55	5.14	9.53	10.10





**Dallas Police and Fire Pension System - Net of Fees -Public Managers**  
**Equity**  
**As of June 2017**

Name	Market Value	Allocation	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year	Inception Date
Dallas Police And Fire Group Trust	2,202,265,170	100.00	5.36	6.44	6.77	10.47	(1.40)	2.39		01-Jan-1995
<b>Global Equity</b>	<b>328,853,539</b>	<b>14.93</b>	<b>0.17</b>	<b>6.39</b>	<b>14.75</b>	<b>21.49</b>	<b>6.59</b>	<b>12.02</b>		<b>01-Jul-2009</b>
MSCI ACWI			0.50	4.45	11.82	19.42	5.39	11.14		
<i>Excess Return</i>			(0.33)	1.93	2.93	2.07	1.20	0.88		
Boston Partners Global Investors Inc	69,937,749	3.18	(0.17)							01-Jun-2017
Manulife Asset Management LLC	69,841,187	3.17	(0.43)							01-Jun-2017
MSCI ACWI			0.50							
<i>Excess Return</i>			(0.92)							
OFI	90,628,369	4.12	1.42	8.43	18.78	30.93	7.07	13.82		01-Sep-2007
MSCI ACWI			0.50	4.45	11.82	19.42	5.39	11.14		
<i>Excess Return</i>			0.92	3.97	6.96	11.51	1.68	2.68		
Walter Scott and Partners	98,247,755	4.46	(0.60)	4.95	11.90	13.97	5.96	10.39		01-Dec-2009
MSCI ACWI			0.50	4.45	11.82	19.42	5.39	11.14		
<i>Excess Return</i>			(1.10)	0.49	0.08	(5.45)	0.57	(0.75)		
Pyramis Global Advisors (Fidelity)	106,676	0.00								01-Apr-2002
RREEF REIT	91,803	0.00								01-Jan-1999

Performance shown is net of manager fees



**Dallas Police and Fire Pension System - Net of Fees -Public Managers**  
**Fixed Income**  
**As of June 2017**

Name	Market Value	Allocation	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year	Inception Date
Dallas Police And Fire Group Trust	2,202,265,170	100.00	5.36	6.44	6.77	10.47	(1.40)	2.39		01-Jan-1995
<b>Fixed Income</b>	<b>287,557,915</b>	<b>13.06</b>	<b>0.73</b>	<b>2.30</b>	<b>1.08</b>	<b>5.30</b>				<b>01-Jan-2016</b>
Fixed Income Blended			0.06	2.00	4.68	7.56				
Excess Return			0.67	0.30	(3.60)	(2.26)				
<b>Global Bonds</b>	<b>64,385,624</b>	<b>2.92</b>	<b>1.79</b>	<b>3.82</b>	<b>8.55</b>	<b>3.58</b>				<b>01-Jan-2016</b>
Bloomberg Barclays Global Aggregate			(0.09)	2.60	4.41	(2.18)				
Excess Return			1.88	1.22	4.15	5.76				
Brandywine Investment Management	64,385,624	2.92	1.79	3.82	8.55	3.58	0.55	2.45		01-Jan-2005
Bloomberg Barclays Global Aggregate Index			(0.09)	2.60	4.41	(2.18)	(0.35)	0.78	3.69	
Excess Return			1.88	1.22	4.15	5.76	0.90	1.68		
Short Term Core Bonds	49,988,023	2.27	(0.05)							01-Jun-2017
Income Research + Management	49,988,023	2.27	(0.05)							01-Jun-2017
Barclays 1-3 Year Treasury Index			(0.08)							
Excess Return			0.03							
<b>High Yield</b>	<b>80,512,107</b>	<b>3.66</b>	<b>1.26</b>	<b>2.89</b>	<b>6.77</b>	<b>17.15</b>				<b>01-Jan-2016</b>
Bloomberg Barclays Global High Yield			0.17	3.19	6.46	11.89				
Excess Return			1.10	(0.30)	0.30	5.25				
Loomis Sayles Global Opportunity	80,512,107	3.66	1.26	2.89	6.87	17.76	3.50	7.60		01-Nov-1998
70% Merrill High Yield / 30% JPM Emerging Markets			0.00	2.17	5.31	10.56	4.55	6.40	7.44	
Excess Return			1.27	0.71	1.56	7.20	(1.05)	1.20		
<b>Bank Loans</b>	<b>57,655,597</b>	<b>2.62</b>	<b>0.17</b>	<b>1.03</b>	<b>2.62</b>	<b>9.11</b>				<b>01-Jan-2016</b>
S&P Leverage Loan			(0.04)	0.03	1.17	6.64				

Performance shown is net of manager fees



**Dallas Police and Fire Pension System - Net of Fees -Public Managers**  
**Fixed Income**  
**As of June 2017**

Name	Market Value	Allocation	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year	Inception Date
<i>Excess Return</i>			0.21	1.00	1.44	2.47				
Loomis Sayles Senior Floating Rate and Fixed Income Trust	57,655,597	2.62	0.17	1.03	2.62	9.11	3.65			01-Nov-2013
S&P Leveraged Loan Index			(0.04)	0.03	1.17	6.64	3.77			
<i>Excess Return</i>			0.21	1.00	1.44	2.47	(0.13)			
<b>EM Debt</b>	<b>18,725,273</b>	<b>0.85</b>	<b>(1.56)</b>	<b>0.40</b>	<b>8.55</b>	<b>11.87</b>				<b>01-Jan-2016</b>
EM Debt Blended			0.16	2.93	8.26	6.26				
<i>Excess Return</i>			(1.72)	(2.53)	0.28	5.61				
Ashmore Emerging Markets Local Currency Bond Fund	18,725,273	0.85	(1.56)	0.40	8.32	5.62	(3.45)	(1.06)		01-Mar-2011
JP Morgan GBI-EM Global Diversified			0.46	3.62	10.36	6.41	(2.80)	(0.67)		
<i>Excess Return</i>			(2.02)	(3.22)	(2.04)	(0.79)	(0.65)	(0.39)		

Performance shown is net of manager fees





## Dallas Police and Fire Pension System - Net of Fees -Public Managers

Asset Allocation  
As of June 2017

Name	Market Value	Allocation	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year	Inception Date
Dallas Police And Fire Group Trust	2,202,265,170	100.00	5.36	6.44	6.77	10.47	(1.40)	2.39		01-Jan-1995
<b>Global Asset Allocation (GAA)</b>	<b>138,058,609</b>	<b>6.27</b>	<b>0.41</b>	<b>0.38</b>	<b>3.78</b>	<b>10.73</b>	<b>2.87</b>	<b>4.42</b>		<b>01-Jul-2007</b>
GAA Blended			0.23	3.11	7.29	8.62	2.86	6.02	3.36	
Excess Return			0.18	(2.73)	(3.51)	2.12	0.01	(1.60)		
<b>Absolute Return</b>	<b>36,890,529</b>	<b>1.68</b>	<b>0.00</b>	<b>(3.91)</b>	<b>(3.48)</b>	<b>21.21</b>				<b>01-Jun-2016</b>
HFRX Absolute Return Index			0.10	0.72	1.38	1.93				
Excess Return			(0.10)	(4.63)	(4.85)	19.28				
Bridgewater-Pure Alpha Major Markets	36,890,529	1.68	0.00	(3.91)	(3.47)	21.21	4.92	7.77		01-Aug-2011
<b>Risk Parity</b>	<b>78,952,767</b>	<b>3.59</b>	<b>0.34</b>	<b>1.59</b>	<b>6.12</b>	<b>8.44</b>				<b>01-Jan-2016</b>
MSCI ACWI 60%/Bloomberg Barclays Global Aggregate 40%			0.26	3.71	8.81	10.33				
Excess Return			0.07	(2.12)	(2.68)	(1.89)				
Bridgewater All Weather	41,860,708	1.90	0.00	1.85	5.52	7.14	2.66	4.56		01-May-2007
Putnam Total Return	37,092,059	1.68	0.72	1.30	6.90	9.01	1.90	4.95		01-Dec-2009
<b>GTAA</b>	<b>22,215,313</b>	<b>1.01</b>	<b>1.38</b>	<b>3.67</b>	<b>8.77</b>	<b>8.98</b>				<b>01-Jan-2016</b>
MSCI ACWI 60%/Bloomberg Barclays Global Aggregate 40%			0.26	3.71	8.81	10.33				
Excess Return			1.12	(0.04)	(0.04)	(1.35)				
GMO	22,215,313	1.01	1.38	3.67	8.77	8.98	1.47	5.26		01-May-2007

Performance shown is net of manager fees

## Disclaimer

Copyright © 2014 JPMorgan Chase & Co. All rights reserved.

This report is provided exclusively for the purpose of assisting the customer in monitoring the investment performance of its accounts. J.P. Morgan is providing a reporting service to the customer to assist it in the management of the accounts and, in doing so, is not acting in a fiduciary capacity for the accounts. J.P. Morgan has no responsibility for the selection, monitoring or termination of any investment manager with respect to any of the accounts. The reports are not intended to be considered the rendering of investment advice or in any way to influence any investment decisions or the selection of any investment managers for the accounts. The customer assumes sole responsibility for its use of the reports.

This report contains information that is the property of J.P. Morgan and/or its content providers, and is intended for use by the investment officers of our institutional clients. J.P. Morgan makes no warranty, express or implied, concerning the accuracy or completeness of this information and the information in this report should not be relied on in substitution for the exercise of independent judgment by any recipient. This report may not be copied, published, or used in whole or in part with third-parties for any purposes other than expressly authorized by J.P. Morgan.

The information furnished in this report may contain data obtained from third-party sources that J.P. Morgan believes to be reliable. However, J.P. Morgan makes no warranty, express or implied, concerning the accuracy or completeness of third-party data. Where J.P. Morgan relies on accounting, pricing and associated security data – or instructions for what accounts comprise composites – by the customer or its third party administrators, J.P. Morgan takes no responsibility for the accuracy of such information.

Third-party data is the intellectual property of those vendors and is subject to restrictions contained in the licenses, which J.P. Morgan cannot unilaterally change. If the third party supplier adds additional restrictions to data use, J.P. Morgan shall use reasonable efforts to notify the customer of such changes in writing. Customer's continued use of the report after receipt of notice shall constitute customer's acceptance of the revised usage provision.

The information contained in this report may be subject to change from time to time without prior notice to the Customer, for reasons including, but not limited to, the subsequent restating of accounting information or index returns.

The information furnished in this report does not constitute the provision of 'financial product advice' as defined under the Corporations Act 2001 (Cth) and does not take into account the financial situation, needs or objectives of individuals in Australia.

The information furnished in this report is available in New Zealand solely to persons who are wholesale clients for the purposes of the Financial Advisers Act 2008. If you do not meet this criterion, you are not entitled to this report.

J.P. Morgan shall not be liable to the customer or any other person for any direct or indirect liability, loss, claim, cost, damage, penalty, fine, obligation or expense of any kind whatsoever suffered or incurred by, or asserted against, the customer or any other person howsoever arising, whether in tort (including negligence), in contract or under statute, directly or indirectly from, or in connection with, the use of this report or report information, for any trading decision.

The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property and a service mark of Morgan Stanley Capital International, Inc. ("MSCI") and Standard's, a division of The McGraw-Hill Companies, Inc. ("S&P") and is licensed for use by The JPMorgan Chase & Co. and its wholly owned subsidiaries.

Neither MSCI, S&P, nor any other party involved in making or compiling the GICS or any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability and fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of their affiliates or any third party involved in making or compiling the GICS or any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

Standard and Poor's including its subsidiary corporations ("S&P") is a division of the McGraw-Hill Companies, Inc. Reproduction of S&P Index Alerts in any form is prohibited except with the prior written permission of S&P. Because of the possibility of human or mechanical error by S&P sources, S&P, or others, S&P does not guarantee the accuracy, adequacy, completeness or availability of any information and is not responsible for any errors or omissions or for the results obtained from the use of such information. S&P gives not express or implied warranties, including, but not limited to, any warranties or merchantability or fitness for a particular purpose or use. In no event shall S&P be liable for any indirect, special or consequential damages in connection with subscriber's or others' use of S&P Index Alerts.

The recipient of the credit ratings data (in any format other than locked, non-manipulable on-screen display) must ensure that a valid and fully paid license with the relevant credit ratings agency is in existence as at the time of receipt and throughout the period during which recipient retains or uses such credit ratings data.

This may contain information obtained from third parties, including ratings from credit ratings agencies such as Standard & Poor's. Reproduction and distribution of third party content in any form is prohibited except with the prior written permission of the related third party. Third party content providers do not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. THIRD PARTY CONTENT PROVIDERS GIVE NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. THIRD PARTY CONTENT PROVIDERS shall not be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs OR LOSSES CAUSED BY NEGLIGENCE) in connection with any use of THEIR CONTENT, INCLUDING ratings. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.

Neither JPMorgan Chase & Co nor any of its affiliates, subsidiaries, or third party suppliers ("JPMorgan") accepts any liability for any losses, costs, claims, damages, liabilities or expenses (including, without limitation, loss of profits) (collectively, "Losses") which the recipient may incur as a result of its use of the data or its failure to hold a valid and fully paid license with the relevant credit rating agencies.<sup>SM</sup>

Copyright MSCI 2014. Unpublished. All Rights Reserved. This information may only be used for your internal use, may not be reproduced or disseminated in any form and may not be used to create any financial instruments or products or any indices. This information is provided on an "as is" basis and the user of this information assumes the entire risk of any use it may make or permit to be made of this information. Neither MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information makes any express or implied warranties or representations with respect to such information or the results to be obtained by the use thereof, and MSCI, its affiliates and each such other person hereby expressly disclaim all warranties (including, without limitation, all warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information have any liability for any direct, indirect, special, incidental, punitive, consequential or any other damages (including, without limitation, lost profits) even if notified of, or if it might otherwise have anticipated, the possibility of such damages.

FTSE® is a trade mark of London Stock Exchange Plc and The Financial Times Limited and is used by FTSE under license. All rights in the FTSE Indices vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE Indices or underlying data.

The Industry Classification Benchmark is a joint product of FTSE International Limited and Dow Jones & Company, Inc. and has been licensed for use. "FTSE" is a trade and service mark of London Stock Exchange and The Financial Times Limited. "Dow Jones" and "DJ" are trade and service marks of Dow Jones Inc. FTSE and Dow Jones & Company do not accept any liability to any person for any loss or damage arising out of any error or omission in the ICB.

The Dow Jones Wilshire Indexes<sup>SM</sup> are calculated, distributed and marketed by Dow Jones & Company, Inc. pursuant to an agreement between Dow Jones and Wilshire and have been licensed for use. All content of the Dow Jones Wilshire Indexes<sup>SM</sup> © 2011 Dow Jones & Company, Inc. and Wilshire Associates Incorporated.

Frank Russell Company ("FRC") is the source and owner of the Russell Index data contained or reflected in this material and all trademarks and copyrights related thereto. The presentation may contain confidential information and unauthorized use, disclosure, copying, dissemination or redistribution is strictly prohibited. This is a USER presentation of the Russell Index data. Frank Russell Company is not responsible for the formatting or configuration of this material or for any inaccuracy in USER's presentation thereof.

The Merrill Lynch Indices are used with permission. Copyright 2011, Merrill Lynch, Pierce, Fenner & Smith Incorporated. All rights reserved. The Merrill Lynch Indices may not be copied, used, or distributed without Merrill Lynch's prior written approval. Merrill Lynch does not guarantee the quality, accuracy and/or completeness of the Merrill Lynch indices or any data included therein or derived therefrom and shall not be liable to any third party in connection with their use.

© UBS 2011. All rights reserved. The name UBS Global Convertible Bond Index and the names of the related UBS AG sub-indices (together the "UBS Indices") are proprietary to UBS AG ("UBS"). UBS and MACE Advisers Ltd (the UBS Global Convertible Bond Index Calculation Agent) are together the "Index Parties".<sup>SM</sup>

© IPD (Investment Property Databank Ltd.) 2011 All rights conferred by law of copyright, by virtue of international copyright conventions and all other intellectual property laws are reserved by IPD. No part of the Mercer / IPD Australian Pooled Property Fund Index - Wholesale Core may be reproduced or transmitted, in any form or by any means, without the prior written consent of IPD. This index is neither appropriate nor authorized by IPD for use as a benchmark for portfolio or manager performance, or as the basis for any business decision. IPD gives no warranty or representation that the use of this information will achieve any particular result for you. Neither Mercer nor IPD has any liability for any losses, damages, costs or expenses suffered by any person as a result of any reliance on this information.

The NZX indices referred to in this report are the property of NZX Limited ("NZX"). Any adaptation, reproduction or transmittance of the data or contents of the NZX indices in any form or by any means other than for private use is prohibited without the prior written permission of NZX. NZX and its affiliates, directors, officers, agents or employees do not make any warranty of any kind, either express or implied, as to the accuracy of the content of the NZX indices or fitness for a particular purpose or use. NZX hereby disclaims all liability to the maximum extent permitted by law in relation to the NZX indices. Neither NZX, its subsidiary companies, nor their directors, officers, agents or employees shall, under any circumstances, be liable to any person for any direct, indirect, consequential,



## Disclaimer

incidental, special or punitive damages, howsoever arising (whether in negligence or otherwise), out of or in connection with the content, any omission from the content, any use of the content or any actions taken or reliance by any person thereon.

Barclays Capital is the source of its respective indices. DAX indices are registered trademarks of Deutsche Borse AG. Fixed income risk characteristics provided by BlackRock Solutions. Trust Universe Comparison Service ® and TUCS ®.

Citigroup is the source of its respective indices. © TSX Copyright 2014 TSX Inc. All Rights Reserved. Hang Seng Indexes Company Limited is the source of its respective indices.

The calculation of Value-at-Risk requires numerous assumptions that should be kept in mind when interpreting it. These limitations include but are not limited to the following: VaR measures may not appropriately convey the magnitude of sudden and unexpected extreme events, historical data that forms the basis of VaR may fail to predict content and future market volatility, and our VaR methodology does not fully reflect the effects of market illiquidity (the inability to sell or hedge a position over a relatively long period) and does not incorporate credit risk events that may affect its value.

The information furnished in this report may be based in part on services provided by Algorithmics (U.S.), Inc. and/or its affiliates ("Algorithmics"). Algorithmics does not make any express or implied warranty or representation regarding its services or contributions to this report, including any warranty of originality, accuracy, completeness, merchantability or fitness for a particular purpose, nor shall its services or contributions to this report be construed as providing any financial advice, auditing, accounting, appraisal, regulatory or compliance services. Algorithmics is not responsible for the data or assumptions that are processed through Algorithmics' services nor can Algorithmics guarantee the accuracy or validity of data received from third parties that enables the service to generate the information contained in this report. In no event shall Algorithmics have any liability for any direct, indirect, special, punitive, consequential or any other damages arising out or relating to its services or contributions to this report, or your reliance thereon. By accepting this report, the recipient is agreeing to the foregoing limitations on Algorithmics' responsibility and liability.

Please review this report carefully. The contents of this report will be considered correct and the recipient will be taken to have read, accepted and acknowledged the correctness and accuracy of this report, if no error is reported by the recipient within 3 business days of the issue of this report.