

June 30, 2018



**Public School Teachers Pension &  
Retirement Fund of Chicago  
Private Equity Performance Report**

**Investment Measurement Service  
Quarterly Review**

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## Table of Contents

### June 30, 2018

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<b>Total Portfolio</b>	
Portfolio Profile and Financial Performance	2
Portfolio Diversification	3
<b>Individual Manager Diversification Table</b>	4
<b>Manager Vehicle-Level Performance</b>	7
<b>Individual Managers</b>	
Developed Manager Program	
Adams Street Partners	12
Pantheon Ventures	13
HarbourVest Partners	14
Mesirow Financial Private Equity	15
Direct Developed Manager Program	
KKR	16
Emerging Manager Program	
Muller & Monroe	17
Hispania Capital Partners	18
Pharos Capital Group	19
Palladium Equity Partners	20
ICV Partners	21
SynCom Venture Partners	22
RLJ Equity Partners	23
NMS Capital	24
<b>Private Equity Terms and Glossary</b>	26
<b>Callan Research/Education</b>	31
<b>Disclosures</b>	34

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## CTPF Total Portfolio

### Period ended June 30, 2018

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#### Private Equity Allocation Overview

CTPF's Private Equity Portfolio was initiated in 1996 and currently utilizes 13 managers across approximately 67 individual investment vehicles. Five of the firms are fund-of-funds providers and eight are direct partnership managers. CTPF's private equity portfolio also consists of two program mandates or initiatives: 1) a developed manager program that focuses on established managers that invest globally, and 2) an emerging manager program that targets minority and women-owned business enterprise managers and developing managers in Illinois and the Midwest region. CTPF has a well-developed, mature portfolio that is highly diversified. In this report, the Total Private Equity Portfolio is reviewed followed by reviews of the individual managers. Fund-of-funds managers are listed first followed by direct partnership managers. Within each category the managers are listed chronologically by initial year of investment.

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**June 30, 2018**

#### Summary

Vintage Years	23 in 1996-2018
# Total Partnerships	2,857
# Active Partnerships	2,206
# Liquidated Partnerships	651

#### Changes in Value

Capital Commitments (Since Inception)	\$1,026,670,283
Paid-In Capital (Since Inception)	\$765,968,065
Uncalled Capital (Since Inception)	\$261,790,319
% Paid-In	74.61%
Distributed Capital (Since Inception)	\$856,335,194
Net Asset Value	\$311,644,874
<b>Total Realized and Unrealized Value</b>	<b>\$1,167,980,068</b>

#### Ratios and Performance

Distributions to Paid-In Capital (DPI)	1.12x
Residual Value to Paid-In Capital (RVPI)	0.41x
Total Value to Paid-In Capital (TVPI)	1.52x
Quartile Ranking	2 <sup>nd</sup>

#### Additional Performance Metrics

Distribution Rate, as % of Beginning NAV	3.35%
Unrealized Gain/(Loss), Dollars	\$10,413,605
Unrealized Gain/(Loss), %	3.49%

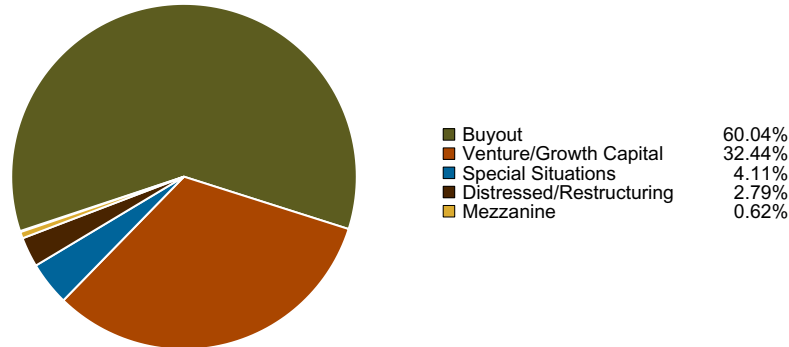
The private equity portfolio was 2.8% of the CTPF Total Portfolio as of June 30, 2018, against a target asset allocation of 5%.

Total portfolio financial figures represent cash flows through the reporting quarter-end. The valuations represent a majority of NAVs from the reporting quarter (current values) with a minority of values from the prior quarter (lagged values). Quartile rankings against the All Private Equity, All Regions Thomson/Cambridge Database.

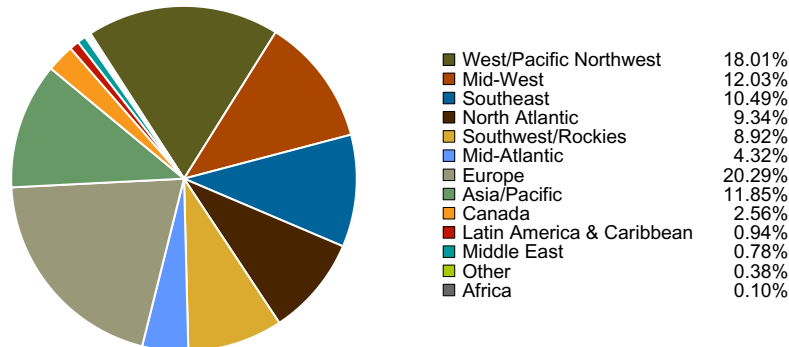
**Portfolio Exposure Mix  
Total Private Equity  
Period Ended June 30, 2018**

The follow charts provide information on the portfolio mix with regards to Strategy, Geographic Region, and Industry.

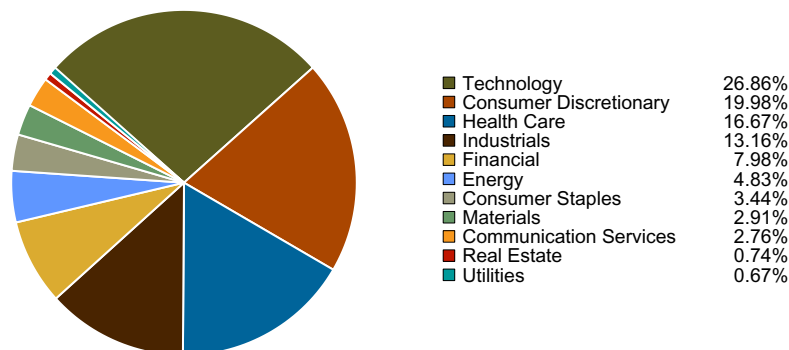
**Strategy Mix by Net Asset Value**



**Geographic Mix by Net Asset Value**



**Industry Mix by Net Asset Value**



Individual Manager Diversification  
Table

## Portfolio Breakdown Period Ended June 30, 2018

The table below summarizes managers' breakdown by Strategy, Domestic & Global Geography and Industry.

	ASP	HVP	MPE	PV	Total Private Equity
<b>Strategy</b>					
Buyout	55%	65%	52%	53%	60%
Venture/Growth Capital	35%	34%	39%	33%	32%
Distressed/Restructuring	5%	0%	1%	1%	3%
Special Situations	5%	1%	5%	11%	4%
Mezzanine	0%	0%	3%	2%	1%
<b>Domestic &amp; Global Geography</b>					
West/Pacific Northwest	19%	14%	24%	3%	18%
Southwest/Rockies	11%	5%	8%	0%	9%
Mid-West	9%	8%	13%	1%	12%
North Atlantic	7%	5%	17%	1%	9%
Southeast	5%	6%	11%	3%	10%
Mid-Atlantic	4%	8%	0%	0%	4%
Europe	24%	29%	15%	44%	20%
Asia/Pacific	16%	19%	3%	23%	12%
Canada	3%	2%	5%	0%	3%
Latin America & Caribbean	1%	1%	2%	0%	1%
Middle East	1%	1%	1%	0%	1%
Africa	0%	1%	0%	0%	0%
Other	0%	1%	0%	5%	0%
<b>Industry</b>					
Technology	27%	29%	39%	29%	27%
Consumer Discretionary	18%	19%	25%	16%	20%
Industrials	16%	12%	11%	13%	13%
Health Care	12%	16%	10%	16%	17%
Financial	10%	11%	5%	5%	8%
Energy	7%	2%	3%	5%	5%
Communication Services	4%	1%	3%	2%	3%
Materials	4%	3%	1%	6%	3%
Real Estate	1%	0%	1%	1%	1%
Utilities	1%	1%	0%	1%	1%
Consumer Staples	0%	6%	2%	6%	3%

## Portfolio Breakdown Period Ended June 30, 2018

The table below summarizes managers' breakdown by Strategy, Domestic & Global Geography and Industry.

	M2	Hispania	Pharos	Palladium	ICV	Syncom	RLJ Equity Partners	NMS Capital	KKR	Total Private Equity
<b>Strategy</b>										
Venture/Growth Capital	68%	42%	27%	0%	0%	100%	0%	0%	0%	32%
Buyout	31%	58%	73%	100%	100%	0%	100%	100%	100%	60%
Mezzanine	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Special Situations	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%
Distressed/Restructuring	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%
<b>Domestic &amp; Global Geography</b>										
West/Pacific Northwest	40%	32%	0%	27%	13%	0%	0%	0%	23%	18%
North Atlantic	29%	0%	13%	2%	0%	100%	100%	0%	35%	9%
Mid-West	17%	59%	33%	18%	18%	0%	0%	100%	0%	12%
Mid-Atlantic	7%	9%	17%	16%	0%	0%	0%	0%	0%	4%
Southeast	6%	0%	30%	20%	58%	0%	0%	0%	26%	10%
Southwest/Rockies	1%	0%	7%	18%	11%	0%	0%	0%	0%	9%
Europe	0%	0%	0%	0%	0%	0%	0%	0%	16%	20%
Asia/Pacific	0%	0%	0%	0%	0%	0%	0%	0%	0%	12%
Canada	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%
Latin America & Caribbean	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Middle East	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Other	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Africa	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Industry</b>										
Consumer Discretionary	31%	72%	8%	26%	41%	0%	0%	0%	0%	20%
Technology	26%	0%	21%	0%	11%	0%	0%	0%	23%	27%
Health Care	20%	0%	71%	10%	30%	0%	0%	100%	26%	17%
Industrials	11%	0%	0%	12%	18%	0%	0%	0%	0%	13%
Energy	6%	0%	0%	8%	0%	0%	0%	0%	0%	5%
Financial	6%	0%	0%	19%	0%	0%	0%	0%	9%	8%
Consumer Staples	0%	28%	0%	23%	0%	100%	100%	0%	42%	3%
Materials	0%	0%	0%	2%	0%	0%	0%	0%	0%	3%
Communication Services	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%
Real Estate	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Utilities	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%





## Public School Teachers Pension & Retirement Fund of Chicago Manager Detail as of June 30, 2018

The following table summarizes changes in each manager's aggregated cash flows and valuation information as of June 30, 2018.

Manager	Vintage Year	Capital Commitments (\$000s)	Paid-In Capital (\$000s)	Uncalled Capital (\$000s)	% Paid-In	Distributed Capital (\$000s)	Net Asset Value (\$000s)	DPI	RVPI	TVPI	Net IRR
<b>Developed Manager Program</b>											
1996 BPF Trust	1996-1999	\$4,988	4,869	119	97.61%	9,146	51	1.88x	0.01x	1.89x	14.24%
1998 BPF Trust	1998-2001	\$9,588	9,408	179	98.13%	13,421	201	1.43x	0.02x	1.45x	4.76%
2000 BPF Trust	2000-2003	\$24,628	23,546	1,082	95.61%	38,392	1,578	1.63x	0.07x	1.70x	7.33%
2001 BPF Trust	2001-2004	\$34,669	33,071	1,598	95.39%	55,892	3,471	1.69x	0.10x	1.79x	8.85%
2001 BPF Non-US Trust	2001-2005	\$14,422	13,958	464	96.78%	25,888	927	1.85x	0.07x	1.92x	12.20%
2005 ASP US Fund	2005-2008	\$7,000	6,646	354	94.95%	8,088	2,037	1.22x	0.31x	1.52x	6.85%
2005 ASP Non-US Fund	2005-2008	\$3,000	2,852	148	95.05%	3,138	809	1.10x	0.28x	1.38x	5.14%
2007 ASP Non-US Secondary	2007-2011	\$5,000	4,921	248	98.42%	4,353	2,881	0.88x	0.59x	1.47x	7.10%
2008 ASP US Fund	2008-2012	\$5,000	4,654	346	93.07%	5,231	3,558	1.12x	0.76x	1.89x	15.43%
2008 ASP Non-US Fund	2008-2012	\$14,000	12,786	1,214	91.33%	9,137	11,115	0.71x	0.87x	1.58x	10.72%
2008 ASP Direct Fund	2008	\$1,000	968	32	96.79%	1,371	922	1.42x	0.95x	2.37x	15.63%
2009 ASP Co-Invest II	2009	\$10,000	9,170	830	91.70%	14,900	5,736	1.62x	0.63x	2.25x	26.35%
2010 ASP US Fund	2010-2014	\$10,000	8,810	1,190	88.10%	5,325	9,065	0.60x	1.03x	1.63x	14.34%
2010 ASP Developed Non-US	2010-2014	\$6,000	5,253	747	87.55%	3,078	4,588	0.59x	0.87x	1.46x	11.69%
2010 ASP Emerging Non-US	2010-2014	\$2,000	1,736	264	86.80%	434	2,309	0.25x	1.33x	1.58x	12.32%
2010 ASP Direct Fund	2010	\$2,000	1,893	107	94.66%	1,915	1,367	1.01x	0.72x	1.73x	13.10%
2011 ASP US Fund	2011-2014	\$10,000	8,695	1,305	86.95%	4,218	9,192	0.49x	1.06x	1.54x	13.80%
2011 ASP Developed Non-US	2011-2014	\$6,000	4,713	1,287	78.55%	2,561	4,392	0.54x	0.93x	1.48x	12.59%
2011 ASP Emerging Non-US	2011-2014	\$2,000	1,703	297	85.15%	488	2,263	0.29x	1.33x	1.62x	13.79%
2011 ASP Direct Fund	2011	\$2,000	1,824	176	91.18%	1,652	1,706	0.91x	0.94x	1.84x	16.51%
2012 ASP Global Secondary 5	2012-2017	\$30,000	22,959	7,041	76.53%	7,888	19,074	0.34x	0.83x	1.17x	6.49%
2012 ASP Global Fund	2012-2015	\$15,000	10,821	4,179	72.14%	1,678	13,452	0.16x	1.24x	1.40x	11.05%
2013 ASP Global Fund	2013-2016	\$25,000	17,750	7,250	71.00%	2,079	21,646	0.12x	1.22x	1.34x	11.34%
2014 ASP Global Fund	2014-2016	\$20,000	13,660	6,340	68.30%	1,527	15,935	0.11x	1.17x	1.28x	12.32%
2014 Co-Investment Fund III	2014	\$10,000	8,122	1,878	81.22%	665	9,824	0.08x	1.21x	1.29x	19.30%
2015 ASP US Fund	2015-2017	\$11,000	4,719	6,281	42.90%	1,476	4,833	0.31x	1.02x	1.34x	35.43%
2015 ASP International Fund	2015-2017	\$7,000	3,129	3,871	44.70%	595	3,576	0.19x	1.14x	1.33x	41.37%
2015 Direct Venture/Growth Fund	2015	\$2,000	1,351	649	67.53%	0	1,598	0.00x	1.18x	1.18x	15.33%
2016 ASP US SMB Fund	2016-2018	\$15,000	750	14,250	5.00%	0	445	0.00x	0.59x	0.59x	(40.65%)
2016 ASP Venture Innovation	2016-2018	\$10,000	1,455	8,545	14.55%	0	1,296	0.00x	0.89x	0.89x	(20.27%)
<b>Total ASP</b>		<b>\$318,295</b>	<b>246,193</b>	<b>72,271</b>	<b>77.35%</b>	<b>224,535</b>	<b>159,848</b>	<b>0.91x</b>	<b>0.65x</b>	<b>1.56x</b>	<b>9.71%</b>
Pantheon USA III	1998-2000	\$35,000	34,230	770	97.80%	38,255	319	1.12x	0.01x	1.13x	1.90%
Pantheon USA IV	2000-2005	\$35,000	34,370	630	98.20%	54,285	623	1.58x	0.02x	1.60x	10.20%
Pantheon Europe II	2000-2004	\$18,665	18,289	377	97.98%	33,625	79	1.84x	0.00x	1.84x	18.30%
Pantheon Asia V	2006-2011	\$5,000	4,588	412	91.75%	4,748	2,635	1.03x	0.57x	1.61x	9.40%
Pantheon Europe VI	2007-2013	\$8,710	8,078	631	92.75%	8,149	4,592	1.01x	0.57x	1.58x	9.60%
Pantheon Global Annual Series 2014	2014-2018	\$30,000	7,782	22,218	25.94%	0	9,083	0.00x	1.17x	1.17x	10.20%
Pantheon Select Fd	2017	\$25,000	425	24,575	1.70%	0	253	0.00x	0.60x	0.60x	
<b>Total Pantheon</b>		<b>\$157,375</b>	<b>107,761</b>	<b>49,614</b>	<b>68.47%</b>	<b>139,061</b>	<b>17,583</b>	<b>1.29x</b>	<b>0.16x</b>	<b>1.45x</b>	<b>7.60%</b>

## Public School Teachers Pension & Retirement Fund of Chicago Manager Detail as of June 30, 2018

The following table summarizes changes in each manager's aggregated cash flows and valuation information as of June 30, 2018.

Manager	Vintage Year	Capital Commitments (\$000s)	Paid-In Capital (\$000s)	Uncalled Capital (\$000s)	% Paid-In	Distributed Capital (\$000s)	Net Asset Value (\$000s)	DPI	RVPI	TVPI	Net IRR
HVP Partnerships 6	1999-2005	\$40,000	39,200	800	98.00%	49,871	592	1.27x	0.02x	1.29x	3.60%
HVP Buyouts 6	1999-2003	\$60,000	57,300	2,700	95.50%	105,458	432	1.84x	0.01x	1.85x	12.00%
HVP Dover VIII	2012-2016	\$16,000	14,160	1,840	88.50%	14,322	7,675	1.01x	0.54x	1.55x	22.80%
HVP HIPEP VII	2014-2017	\$20,000	10,450	9,550	52.25%	1,145	12,305	0.11x	1.18x	1.29x	16.70%
HVP Venture Capital X	2015-2018	\$9,000	3,442	5,558	38.25%	170	4,185	0.05x	1.22x	1.27x	26.60%
HVP Buyouts X	2015-2018	\$21,000	3,780	17,220	18.00%	393	5,075	0.10x	1.34x	1.45x	31.30%
<b>Total HVP</b>		<b>\$166,000</b>	<b>128,332</b>	<b>37,668</b>	<b>77.31%</b>	<b>171,359</b>	<b>30,263</b>	<b>1.34x</b>	<b>0.24x</b>	<b>1.57x</b>	<b>8.90%</b>
Mesirow Partnerships I	1999-2002	\$40,000	40,000	0	100.00%	44,977	2,193	1.12x	0.05x	1.18x	2.60%
Mesirow Partnerships II	2001-2006	\$45,000	45,000	0	100.00%	80,009	7,901	1.78x	0.18x	1.95x	12.40%
Mesirow Partnerships IV	2006-2011	\$20,000	18,900	1,100	94.50%	21,203	10,954	1.12x	0.58x	1.70x	10.40%
Mesirow Partnerships V	2006-2011	\$20,000	17,300	2,700	86.50%	13,804	17,966	0.80x	1.04x	1.84x	16.70%
Mesirow Fd VII A PE	2017	\$16,250	1,219	15,031	7.50%	0	1,134	0.00x	0.93x	0.93x	NM
Mesirow Fd VII B PE	2017	\$8,750	1,225	7,525	14.00%	0	1,433	0.00x	1.17x	1.17x	NM
Mesirow Partnerships VIII	2001	\$5,000	5,000	0	100.00%	10,111	0	2.02x	0.00x	2.02x	22.30%
Mesirow Partnerships IX	2005	\$10,000	9,550	450	95.50%	4,653	663	0.49x	0.07x	0.56x	(7.00%)
Mesirow Partnerships X	2009	\$30,000	29,100	900	97.00%	63,253	9,604	2.17x	0.33x	2.50x	24.40%
<b>Total Mesirow</b>		<b>\$195,000</b>	<b>167,294</b>	<b>27,706</b>	<b>85.79%</b>	<b>238,010</b>	<b>51,848</b>	<b>1.42x</b>	<b>0.31x</b>	<b>1.73x</b>	<b>9.40%</b>
<b>Total Developed Manager Program</b>		<b>\$836,670</b>	<b>649,580</b>	<b>187,259</b>	<b>77.64%</b>	<b>772,964</b>	<b>259,543</b>	<b>1.19x</b>	<b>0.40x</b>	<b>1.59x</b>	
<b>Direct Developed Manager Program</b>											
KKR Americas Fd XII	2017	\$25,000	3,532	21,468	14.13%	0	3,691	0.00x	1.04x	1.04x	NM
<b>Total Direct Developed Manager Program</b>		<b>\$25,000</b>	<b>3,532</b>	<b>21,468</b>	<b>14.13%</b>	<b>0</b>	<b>3,691</b>	<b>0.00x</b>	<b>1.04x</b>	<b>1.04x</b>	
<b>Emerging Manager Program</b>											
M2 Illinois	2003-2007	\$25,000	25,000	0	100.00%	18,874	0	0.75x	0.00x	0.75x	(2.54%)
M2 PEFOF (Developing)	2006-2010	\$10,000	9,659	430	96.59%	12,124	2,470	1.26x	0.26x	1.51x	9.10%
<b>Total Muller &amp; Monroe</b>	<b>2003-2010</b>	<b>\$35,000</b>	<b>34,659</b>	<b>430</b>	<b>99.03%</b>	<b>30,998</b>	<b>2,470</b>	<b>0.89x</b>	<b>0.07x</b>	<b>0.97x</b>	<b>1.42%</b>
Hispania I	2003	\$5,000	5,000	0	100.00%	916	0	0.18x	0.00x	0.18x	NM
Hispania II	2009	\$10,000	9,592	408	95.92%	13,941	2,720	1.45x	0.28x	1.74x	22.40%
<b>Total Hispania</b>	<b>2003&amp;2009</b>	<b>\$15,000</b>	<b>14,592</b>	<b>408</b>	<b>97.28%</b>	<b>14,857</b>	<b>2,720</b>	<b>1.02x</b>	<b>0.19x</b>	<b>1.20x</b>	<b>5.85%</b>
Pharos II-A	2005	\$7,500	7,500	0	100.00%	4,792	4,878	0.64x	0.65x	1.29x	3.76%
Pharos III	2013	\$15,000	10,200	4,800	68.00%	1,212	11,955	0.12x	1.17x	1.29x	9.60%
<b>Total Pharos</b>	<b>2005&amp;2013</b>	<b>\$22,500</b>	<b>17,700</b>	<b>4,800</b>	<b>78.67%</b>	<b>6,004</b>	<b>16,833</b>	<b>0.34x</b>	<b>0.95x</b>	<b>1.29x</b>	<b>4.46%</b>

## Public School Teachers Pension & Retirement Fund of Chicago Manager Detail as of June 30, 2018

The following table summarizes changes in each manager's aggregated cash flows and valuation information as of June 30, 2018.

Manager	Vintage Year	Capital Commitments (\$000s)	Paid-In Capital (\$000s)	Uncalled Capital (\$000s)	% Paid-In	Distributed Capital (\$000s)	Net Asset Value (\$000s)	DPI	RVPI	TVPI	Net IRR
Palladium III	2005	\$7,500	8,253	75	110.04%	13,352	1,157	1.62x	0.14x	1.76x	11.85%
Palladium IV	2014	\$10,000	8,179	1,823	81.79%	4,361	7,354	0.53x	0.90x	1.43x	15.31%
<b>Total Palladium</b>	<b>2005&amp;2014</b>	<b>\$17,500</b>	<b>16,432</b>	<b>1,898</b>	<b>93.90%</b>	<b>17,713</b>	<b>8,511</b>	<b>1.08x</b>	<b>0.52x</b>	<b>1.60x</b>	<b>12.53%</b>
ICV II	2006	\$7,500	7,288	212	97.17%	12,289	1,398	1.69x	0.19x	1.88x	13.09%
ICV III	2013	\$10,000	9,407	593	94.07%	1,480	10,736	0.16x	1.14x	1.30x	8.64%
ICV IV	2017	\$20,000	1,643	18,357	8.22%	0	1,736	0.00x	1.06x	1.06x	NM
<b>Total ICV</b>	<b>2006&amp;2013&amp;2017</b>	<b>\$37,500</b>	<b>18,338</b>	<b>19,162</b>	<b>48.90%</b>	<b>13,769</b>	<b>13,870</b>	<b>0.75x</b>	<b>0.76x</b>	<b>1.51x</b>	<b>12.34%</b>
Syncom Venture PE	2006	\$7,500	7,495	5	99.93%	30	1,415	0.00x	0.19x	0.19x	(15.50%)
RLJ Equity Partners	2016	\$15,000	1,880	13,120	12.53%	0	1,104	0.00x	0.59x	0.59x	NM
NMS Capital	2017	\$15,000	1,760	13,240	11.73%	0	1,487	0.00x	0.85x	0.85x	NM
<b>Total Emerging Manager Program</b>		<b>\$165,000</b>	<b>112,856</b>	<b>53,064</b>	<b>68.40%</b>	<b>83,371</b>	<b>48,412</b>	<b>0.74x</b>	<b>0.43x</b>	<b>1.17x</b>	
<b>Total Private Equity</b>		<b>\$1,026,670</b>	<b>765,968</b>	<b>261,790</b>	<b>74.61%</b>	<b>856,335</b>	<b>311,645</b>	<b>1.12x</b>	<b>0.41x</b>	<b>1.52x</b>	



## Adams Street Partners Period Ended June 30, 2018

### Organization History

Adams Street Partners (ASP) is an independent, 100% employee-owned firm. The firm was started in 1972 as the private equity division of Brinson Partners, which was subsequently purchased by UBS. ASP became independent in 2008. ASP is a large global private equity manager with over 130 employees. The firm is headquartered in Chicago with additional offices located in Palo Alto, London and Singapore.

### Private Equity Allocation Overview

The firm has managed assets for CTPF since 1996. CTPF's ASP portfolio is mature, spanning nearly 20 years of commitments across more than 28 vehicles.

	June 30, 2018	Quarter Change	March 31, 2018
<b>Summary</b>			
Vintage Years	23 in 1996-2018		23 in 1996-2018
# Total Partnerships	1,910	7	1,903
# Active Partnerships	1,574	3	1,571
# Liquidated Partnerships	336	4	332
<b>Changes in Value</b>			
Capital Commitments	\$318,295,218	-	\$318,295,218
Paid-In Capital	\$246,192,770	\$3,643,000	\$242,549,770
Uncalled Capital	\$72,271,044	\$(3,643,000)	\$75,914,044
% Paid-In	77.35%	1.14%	76.20%
Distributed Capital	\$224,534,572	\$2,167,085	\$222,367,487
Net Asset Value	\$159,848,053	\$7,663,996	\$152,184,057
<b>Total Realized and Unrealized Value</b>	<b>\$384,382,625</b>	<b>\$9,831,081</b>	<b>\$374,551,544</b>
<b>Ratios and Performance</b>			
Distributions to Paid-In Capital (DPI)	0.91x	(0.00)x	0.92x
Residual Value to Paid-In Capital (RVPI)	0.65x	0.02x	0.63x
Total Value to Paid-In Capital (TVPI)	1.56x	0.02x	1.54x
Quartile Ranking	2 <sup>nd</sup>		2 <sup>nd</sup>
Net IRR	9.71%	0.11%	9.60%
<b>Additional Performance Metrics</b>			
Distribution Rate, as % of Beginning NAV		1.42%	
Unrealized Gain/(Loss), Dollars		\$6,188,081	
Unrealized Gain/(Loss), %		4.07%	

ASP states that the financial figures represent cash flows and valuations (NAVs) through the reporting quarter end. Quartile rankings against the All Private Equity, All Regions Thomson/Cambridge Database.

## Pantheon Ventures Period Ended June 30, 2018

### Organization History

Pantheon Ventures (PV) is a subsidiary of Affiliated Manager Group (AMG). The firm was started in 1982 as the private equity division of GT Management, subsequently became independent in 1988, become a subsidiary of Russell Investments in 2004 and was sold to PV management and AMG in 2010. PV is a large global private equity manager with over 220 employees. The firm is headquartered in London with additional offices located in San Francisco, New York and Hong Kong.

### Private Equity Allocation Overview

PV has managed assets for CTPF since 1998. CTPF has invested six vehicles across four of PV's products: 1) U.S. III and U.S. IV are vehicles investing in a diversified strategy mix of U.S. domiciled partnerships; 2) Europe II and Europe VI are vehicles investing in a diversity of European private equity funds (primarily buyouts); 3) Asia V which focuses on partnerships in across the Pacific Basin; and 4) Global Annual Fund 2014, which spans all geographies. CTPF's portfolio is relatively mature spanning more than 18 years of commitments.

	June 30, 2018	Quarter Change	March 31, 2018
<b>Summary</b>			
Vintage Years	19 in 1998-2018		19 in 1998-2018
# Total Partnerships	246	5	241
# Active Partnerships	130	-	130
# Liquidated Partnerships	116	5	111
<b>Changes in Value</b>			
Capital Commitments	\$157,375,065	\$24,945,860	\$132,429,205
Paid-In Capital	\$107,760,945	\$1,148,333	\$106,612,611
Uncalled Capital	\$49,614,121	\$23,797,527	\$25,816,594
% Paid-In	68.47%	(12.03%)	80.51%
Distributed Capital	\$139,061,136	\$776,288	\$138,284,848
Net Asset Value	\$17,583,424	\$996,819	\$16,586,605
<b>Total Realized and Unrealized Value</b>	<b>\$156,644,560</b>	<b>\$1,773,107</b>	<b>\$154,871,453</b>
<b>Ratios and Performance</b>			
Distributions to Paid-In Capital (DPI)	1.29x	(0.01)x	1.30x
Residual Value to Paid-In Capital (RVPI)	0.16x	0.01x	0.16x
Total Value to Paid-In Capital (TVPI)	1.45x	0.00x	1.45x
Quartile Ranking	3 <sup>rd</sup>		2 <sup>nd</sup>
Net IRR	7.60%	-	7.60%
<b>Additional Performance Metrics</b>			
Distribution Rate, as % of Beginning NAV		4.68%	
Unrealized Gain/(Loss), Dollars		\$624,774	
Unrealized Gain/(Loss), %		3.77%	

PV's financial figures represent cash flows through the reporting quarter-end. The valuations represent a majority of NAVs from the reporting quarter (current values) with a minority of values from the prior quarter (lagged values). Quartile rankings against the All Private Equity, All Regions Thomson/Cambridge Database.

## HarbourVest Partners Period Ended June 30, 2018

### Organization History

HarbourVest Partners (HVP) is an independent, 100% employee-owned firm. The firm was started in 1982 as the private equity division of Hancock Insurance and subsequently became independent in 1997. HVP is a large global private equity manager with over 350 employees. The firm is headquartered in Boston with additional offices in London, Hong Kong, and Tokyo. HVP seeks to build portfolios by investing in high growth industries via partnerships with proven performance. Globally, they look for countries with strong fundamentals and seek meetings with numerous partnership providers to identify top management teams.

### Private Equity Allocation Overview

HarbourVest Partners (HVP) has managed assets for CTPF since 1999. The six HVP funds in which CTPF has invested are: Buyout VI and X investing primarily in middle-market and large buyout partnerships; Partnerships VI and Venture X investing primarily in venture capital partnerships; HIPEP VII investing in international partnerships; and Dover VIII investing in secondary purchases of private equity partnerships. CTPF's investments in the 1999 HVP Partnerships VI (venture capital) and Buyouts VI fund-of-funds are mature and liquidating. CTPF's investments in the vintage 2012 Dover VIII secondary fund and the 2015 Venture X and Buyouts X fund-of-funds are investing. CTPF's strategic commitments have been 78% U.S. and 12% international primaries, and 10% secondaries. The target strategy mix across all the commitments is approximately 30% venture capital and 70% buyouts.

	June 30, 2018	Quarter Change	March 31, 2018
<b>Summary</b>			
Vintage Years	12 in 1999-2018		12 in 1999-2018
# Total Partnerships	431	6	425
# Active Partnerships	292	6	286
# Liquidated Partnerships	139	-	139
<b>Changes in Value</b>			
Capital Commitments	\$166,000,000	-	\$166,000,000
Paid-In Capital	\$128,332,500	\$1,935,000	\$126,397,500
Uncalled Capital	\$37,667,500	\$(1,935,000)	\$39,602,500
% Paid-In	77.31%	1.17%	76.14%
Distributed Capital	\$171,358,626	\$475,072	\$170,883,554
Net Asset Value	\$30,262,775	\$3,133,990	\$27,128,785
<b>Total Realized and Unrealized Value</b>	<b>\$201,621,401</b>	<b>\$3,609,062</b>	<b>\$198,012,339</b>
<b>Ratios and Performance</b>			
Distributions to Paid-In Capital (DPI)	1.34x	(0.02)x	1.35x
Residual Value to Paid-In Capital (RVPI)	0.24x	0.02x	0.21x
Total Value to Paid-In Capital (TVPI)	1.57x	0.00x	1.57x
Quartile Ranking	2nd		2nd
Net IRR	8.90%	0.10%	8.80%
<b>Additional Performance Metrics</b>			
Distribution Rate, as % of Beginning NAV		1.75%	
Unrealized Gain/(Loss), Dollars		\$1,674,062	
Unrealized Gain/(Loss), %		6.17%	

HVP states that financial figures represent cash flows and valuations (NAVs) through the reporting quarter end. Quartile rankings against the All Buyouts & Venture Capital, US Thomson/Cambridge Database.



## Mesirow Financial Private Equity Period Ended June 30, 2018

### Organization History

Mesirow Financial Private Equity (MPE) is the private equity division of Mesirow Financial an independent, 100% employee-owned diversified financial services. MPE was started in 1982 to manage direct private equity partnerships and began a fund-of-funds product in 1998. MPE is a boutique in character focusing primarily on U.S. and European partnerships. MPE has over 40 employees including dedicated support personnel. The private equity team is located in Mesirow Financial's Chicago headquarters.

### Private Equity Allocation Overview

CTPF has invested in seven vehicles across both of MPE's products as follows: 1) the four fund-of-funds vehicles invest in a diversified strategy mix of U.S. domiciled partnerships, with a moderate exposure to Western European partnerships; and 2) three co-investment funds that make select direct company investment alongside institutional private equity partnerships (primarily those invested in by the MPE fund-of-funds vehicles). CTPF's MPE portfolio is mature spanning more than 17 years of commitments across seven vehicles.

	June 30, 2018	Quarter Change	March 31, 2018
<b>Summary</b>			
Vintage Years	16 in 1999-2017		16 in 1999-2017
# Total Partnerships	234	3	231
# Active Partnerships	175	1	174
# Liquidated Partnerships	59	2	57
<b>Changes in Value</b>			
Capital Commitments	\$195,000,000	-	\$195,000,000
Paid-In Capital	\$167,293,750	\$406,250	\$166,887,500
Uncalled Capital	\$27,706,250	\$(406,250)	\$28,112,500
% Paid-In	85.79%	0.21%	85.58%
Distributed Capital	\$238,009,752	\$3,158,813	\$234,850,939
Net Asset Value	\$51,848,254	\$(876,410)	\$52,724,664
<b>Total Realized and Unrealized Value</b>	<b>\$289,858,006</b>	<b>\$2,282,403</b>	<b>\$287,575,603</b>
<b>Ratios and Performance</b>			
Distributions to Paid-In Capital (DPI)	1.42x	0.02x	1.41x
Residual Value to Paid-In Capital (RVPI)	0.31x	(0.01)x	0.32x
Total Value to Paid-In Capital (TVPI)	1.73x	0.01x	1.72x
Quartile Ranking	2 <sup>nd</sup>		2 <sup>nd</sup>
Net IRR	9.40%	-	9.40%
<b>Additional Performance Metrics</b>			
Distribution Rate, as % of Beginning NAV		5.99%	
Unrealized Gain/(Loss), Dollars		\$1,876,153	
Unrealized Gain/(Loss), %		3.56%	

MPE states that financial figures represent cash flows and valuations (NAVs) through the reporting quarter end. Quartile rankings against the All Private Equity, All Regions Thomson/Cambridge Database.

## KKR Americas Fd XII Period Ended June 30, 2018

### Organization History

Established in 1976, Kohlberg Kravis Roberts & Co. (KKR) is a global alternative asset manager. Led by founders, Henry R. Kravis and George R. Roberts. KKR specializes in large, complex buyouts. Today, the firm sponsors and manages funds on behalf of third-party investors and the firm makes investments in private equity and fixed income through their asset management platform.

### Private Equity Allocation Overview

CTPF's 2018 KKR investment is in its investment period. Geographically, the portfolio plans to focus nationwide within the U.S. and has an allowance to invest a portion of its capital in international companies.

	June 30, 2018	Quarter Change	March 31, 2018
<b>Summary</b>			
Vintage Year	2017		2017
# Total Partnerships	1	1	0
# Active Partnerships	1	1	0
# Liquidated Partnerships	0	-	0
<b>Changes in Value</b>			
Capital Commitments	\$25,000,000	-	\$25,000,000
Paid-In Capital	\$3,532,458	\$3,532,458	\$0
Uncalled Capital	\$21,467,542	\$(3,532,458)	\$25,000,000
% Paid-In	14.13%	14.13%	0.00%
Distributed Capital	\$0	-	\$0
Net Asset Value	\$3,690,660	\$3,690,660	\$0
<b>Total Realized and Unrealized Value</b>	<b>\$3,690,660</b>	<b>\$3,690,660</b>	<b>\$0</b>
<b>Ratios and Performance</b>			
Distributions to Paid-In Capital (DPI)	0.00x	-	0.00x
Residual Value to Paid-In Capital (RVPI)	1.04x	-	-
Total Value to Paid-In Capital (TVPI)	1.04x	-	-
Quartile Ranking	1st		
<b>Additional Performance Metrics</b>			
Distribution Rate, as % of Beginning NAV		-	
Unrealized Gain/(Loss), Dollars		\$158,202	
Unrealized Gain/(Loss), %		-	

Financial figures represent cash flows and valuations (NAVs) through the reporting quarter-end. Quartile rankings against the All Buyouts, All Regions Thomson/Cambridge Database.

## Muller & Monroe Period Ended June 30, 2018

### Organization History

Muller & Monroe (M2) is a minority-owned business enterprise that was formed in 1999. The boutique private equity firm is located in Chicago and has nine professionals with additional support staff. The firm has two fund-of-funds products.

### Private Equity Allocation Overview

CTPF has invested in both products that M2 offers. One fund focuses on minority/women-led managers and mid-west based/mid-west focused managers. The second fund represents M2's core strategy of investing in smaller/newer lower middle market fund managers. CTPF's M2 portfolio is maturing, with the MWBE/Mid-west vehicle committing from 2003-2007 and the second lower middle market vehicle committing from 2006-2010. The M2 portfolios are predominantly small buyout-oriented with modest exposures in venture capital and debt-related partnerships. Geographically, the partnerships are all U.S. domiciled. Company exposure is national, but with a majority exposure in the Mid-West and Central states regions due to the geographic restrictions in the first fund. The portfolio has broad industry exposure with slightly larger concentrations than the global developed manager program products.

	June 30, 2018	Quarter Change	March 31, 2018
<b>Summary</b>			
Vintage Years	8 in 2003-2010		8 in 2003-2010
# Total Partnerships	23	-	23
# Active Partnerships	23	-	23
# Liquidated Partnerships	0	-	0
<b>Changes in Value</b>			
Capital Commitments	\$35,000,000	-	\$35,000,000
Paid-In Capital	\$34,658,869	\$15,394	\$34,643,475
Uncalled Capital	\$430,399	\$(15,394)	\$445,793
% Paid-In	99.03%	0.04%	98.98%
Distributed Capital	\$30,998,086	\$237,074	\$30,761,012
Net Asset Value	\$2,469,983	\$(260,596)	\$2,730,579
<b>Total Realized and Unrealized Value</b>	<b>\$33,468,069</b>	<b>\$(23,522)</b>	<b>\$33,491,591</b>
<b>Ratios and Performance</b>			
Distributions to Paid-In Capital (DPI)	0.89x	0.01x	0.89x
Residual Value to Paid-In Capital (RVPI)	0.07x	(0.01)x	0.08x
Total Value to Paid-In Capital (TVPI)	0.97x	(0.00)x	0.97x
Quartile Ranking	4th		4th
Net IRR	1.42%	-	1.42%
<b>Additional Performance Metrics</b>			
Distribution Rate, as % of Beginning NAV		8.68%	
Unrealized Gain/(Loss), Dollars		\$(38,916)	
Unrealized Gain/(Loss), %		(1.43%)	

M2 states that financial figures represent cash flows and valuations (NAVs) through the reporting quarter end. Quartile rankings against the All Buyouts & Venture Capital, US Thomson/Cambridge Database.

## Hispania Capital Partners Period Ended June 30, 2018

### Organization History

Hispania is a minority-owned business enterprise that was formed in 2003. The boutique firm is located in Chicago and has seven professionals with additional support staff. Hispania manages direct investment partnerships (not fund-of-funds). The firm demographically targets companies that are strategically targeting the U.S. Hispanic market for growth and/or are Hispanic-owned or managed. Hispania makes growth equity or buyout investments in lower-middle market companies in the U.S. and Puerto Rico. Hispania focuses on the business services, consumer products, education and health care services industry sectors.

### Private Equity Allocation Overview

CTPF has invested in two Hispania partnerships. Hispania's first 2003 fund was liquidated, and the second 2009 fund is developing. The majority of the capital has gone to growth equity, with a small portion in control buyouts. Geographically, the portfolio is concentrated in the U.S. East and Mid-West. Industry exposure is primarily health care and consumer/retail.

	June 30, 2018	Quarter Change	March 31, 2018
<b>Summary</b>			
Vintage Years	2003,2009		2003,2009
# Total Partnerships	2	-	2
# Active Partnerships	1	-	1
# Liquidated Partnerships	1	-	1
<b>Changes in Value</b>			
Capital Commitments	\$15,000,000	-	\$15,000,000
Paid-In Capital	\$14,592,393	-	\$14,592,393
Uncalled Capital	\$407,607	-	\$407,607
% Paid-In	97.28%	-	97.28%
Distributed Capital	\$14,857,322	-	\$14,857,322
Net Asset Value	\$2,720,372	\$(19,015)	\$2,739,387
<b>Total Realized and Unrealized Value</b>	<b>\$17,577,694</b>	<b>\$(19,015)</b>	<b>\$17,596,709</b>
<b>Ratios and Performance</b>			
Distributions to Paid-In Capital (DPI)	1.02x	-	1.02x
Residual Value to Paid-In Capital (RVPI)	0.19x	(0.00)x	0.19x
Total Value to Paid-In Capital (TVPI)	1.20x	(0.00)x	1.21x
Quartile Ranking	4 <sup>th</sup>		3 <sup>rd</sup>
Net IRR	5.85%	-	5.85%
<b>Additional Performance Metrics</b>			
Distribution Rate, as % of Beginning NAV		0.00%	
Unrealized Gain/(Loss), Dollars		\$(19,015)	
Unrealized Gain/(Loss), %		(0.69%)	

Hispania's financial figures represent cash flows and capital account information through the reporting quarter end. Quartile rankings against the All Buyouts, US Thomson/Cambridge Database.

## Pharos Capital Group Period Ended June 30, 2018

### Organization History

Pharos is a minority-owned business enterprise that was formed in 2005. The boutique firm is headquartered in Dallas, with offices in Nashville and Baltimore. Pharos has 13 professionals with additional support staff. Pharos manages direct investment partnerships (not fund-of-funds). The firm targets companies in underserved markets that have less competition and lower pricing by employing ethnic demographic and geographic considerations. Pharos focuses on later-stage equity fundings for internal growth, acquisitions, leveraged buyouts, management buyouts, or recapitalizations across industry sectors, with particular emphasis on healthcare, business services, and technology.

### Private Equity Allocation Overview

CTPF's 2005 investment in Pharos II-A is mature and the 2013 investment in Pharos III is investing. The majority of the capital has gone to growth equity, with a smaller portion in control buyouts. Geographically, the portfolio is predominantly in the South East, followed by the Mid-west with other representations nationally. Health care and computer hardware/electronics are the largest industry categories.

	June 30, 2018	Quarter Change	March 31, 2018
<b>Summary</b>			
Vintage Years	2005,2013		2005,2013
# Total Partnerships	2	-	2
# Active Partnerships	2	-	2
# Liquidated Partnerships	0	-	0
<b>Changes in Value</b>			
Capital Commitments	\$22,500,000	-	\$22,500,000
Paid-In Capital	\$17,700,000	\$150,000	\$17,550,000
Uncalled Capital	\$4,800,000	\$(150,000)	\$4,950,000
% Paid-In	78.67%	0.67%	78.00%
Distributed Capital	\$6,003,906	\$70,068	\$5,933,838
Net Asset Value	\$16,833,369	\$1,166,687	\$15,666,682
<b>Total Realized and Unrealized Value</b>	<b>\$22,837,275</b>	<b>\$1,236,755</b>	<b>\$21,600,520</b>
<b>Ratios and Performance</b>			
Distributions to Paid-In Capital (DPI)	0.34x	0.00x	0.34x
Residual Value to Paid-In Capital (RVPI)	0.95x	0.06x	0.89x
Total Value to Paid-In Capital (TVPI)	1.29x	0.06x	1.23x
Quartile Ranking	4 <sup>th</sup>		3 <sup>rd</sup>
Net IRR	4.46%	(0.24%)	4.70%
<b>Additional Performance Metrics</b>			
Distribution Rate, as % of Beginning NAV		0.45%	
Unrealized Gain/(Loss), Dollars		\$1,086,755	
Unrealized Gain/(Loss), %		6.94%	

Pharos's financial figures represent cash flows and capital account information through the reporting quarter end. Quartile rankings against the All Buyouts, US Thomson/Cambridge Database.

## Palladium Equity Partners Period Ended June 30, 2018

### Organization History

Palladium is a minority-owned business enterprise that was formed in 1997. The boutique firm is headquartered in New York, with an office in Los Angeles. Palladium has 25 professionals with additional support staff. Palladium manages direct investment partnerships (not fund-of-funds). The firm has a particular focus investing in companies that are well-positioned to capitalize on the fast-growing U.S. Hispanic market. Palladium provides equity capital to companies seeking to grow, restructure or provide liquidity for shareholders. Industries targeted include business services, financial services, consumer/retail, food/restaurants, healthcare, manufacturing, and media.

### Private Equity Allocation Overview

CTPF's 2005 Palladium investment is mature and the 2012 fund is developing. The manager focuses on buyout transactions. The portfolio companies are all in the U.S. and are geographically diverse. Business/financial services and consumer/retail are the two largest industry categories.

	June 30, 2018	Quarter Change	March 31, 2018
<b>Summary</b>			
Vintage Years	2005,2014		2005,2014
# Total Partnerships	2	-	2
# Active Partnerships	2	-	2
# Liquidated Partnerships	0	-	0
<b>Changes in Value</b>			
Capital Commitments	\$17,500,000	-	\$17,500,000
Paid-In Capital	\$16,432,083	\$837,427	\$15,594,656
Uncalled Capital	\$1,898,153	\$(30,690)	\$1,928,843
% Paid-In	93.90%	4.79%	89.11%
Distributed Capital	\$17,712,655	\$3,130,193	\$14,582,462
Net Asset Value	\$8,511,456	\$(2,855,789)	\$11,367,245
<b>Total Realized and Unrealized Value</b>	<b>\$26,224,111</b>	<b>\$274,404</b>	<b>\$25,949,707</b>
<b>Ratios and Performance</b>			
Distributions to Paid-In Capital (DPI)	1.08x	0.14x	0.94x
Residual Value to Paid-In Capital (RVPI)	0.52x	(0.21)x	0.73x
Total Value to Paid-In Capital (TVPI)	1.60x	(0.07)x	1.66x
Quartile Ranking	3 <sup>rd</sup>		2 <sup>nd</sup>
Net IRR	12.53%	(0.05%)	12.58%
<b>Additional Performance Metrics</b>			
Distribution Rate, as % of Beginning NAV		27.54%	
Unrealized Gain/(Loss), Dollars		\$(563,023)	
Unrealized Gain/(Loss), %		(4.95%)	

Palladium states that financial figures represent cash flows and valuations (NAVs) through the reporting quarter end. Quartile rankings against the All Buyouts, US Thomson/Cambridge Database.

## ICV Partners Period Ended June 30, 2018

### Organization History

ICV is a minority business enterprise that was formed in 1998 as Inner City Ventures. The firm has offices in New York and Atlanta. ICV has 13 professionals with additional support staff. ICV manages direct investment partnerships (not fund-of-funds). The firm values ethnic diversity and emphasizes investments where it can build MBEs of scale. ICV focuses on corporate divestitures and management buyouts, family successions and recapitalizations seeking to invest equity of 45% to 55% of the transaction value. Industry specialties include manufacturing, consumer goods and services, business services, food and beverage, commercial services, and health care.

### Private Equity Allocation Overview

CTPF's 2006 ICV investment is mature and the 2013 fund is developing. The manager focuses primarily on buyout transactions. Geographically, the portfolio is predominantly in the South East, with representation on other regions. The industry sectors include business services and consumer/retail.

	June 30, 2018	Quarter Change	March 31, 2018
<b>Summary</b>			
Vintage Years	3 in 2006-2017		2006,2013
# Total Partnerships	3	1	2
# Active Partnerships	3	1	2
# Liquidated Partnerships	0	-	0
<b>Changes in Value</b>			
Capital Commitments	\$37,500,000	\$20,000,000	\$17,500,000
Paid-In Capital	\$18,338,308	\$1,643,187	\$16,695,121
Uncalled Capital	\$19,161,692	\$18,356,813	\$804,879
% Paid-In	48.90%	(46.50%)	95.40%
Distributed Capital	\$13,769,218	-	\$13,769,218
Net Asset Value	\$13,870,441	\$1,286,095	\$12,584,346
<b>Total Realized and Unrealized Value</b>	<b>\$27,639,659</b>	<b>\$1,286,095</b>	<b>\$26,353,564</b>
<b>Ratios and Performance</b>			
Distributions to Paid-In Capital (DPI)	0.75x	(0.07)x	0.82x
Residual Value to Paid-In Capital (RVPI)	0.76x	0.00x	0.75x
Total Value to Paid-In Capital (TVPI)	1.51x	(0.07)x	1.58x
Quartile Ranking	3 <sup>rd</sup>		2 <sup>nd</sup>
Net IRR	12.34%	(0.44%)	12.78%
<b>Additional Performance Metrics</b>			
Distribution Rate, as % of Beginning NAV		0.00%	
Unrealized Gain/(Loss), Dollars		\$(357,092)	
Unrealized Gain/(Loss), %		(2.84%)	

ICV states that financial figures represent cash flows and valuations (NAVs) through the reporting quarter end. Quartile rankings against the All Buyouts, US Thomson/Cambridge Database.

## SynCom Venture Partners Period Ended June 30, 2018

### Organization History

Syndicated Communications Inc. (SynCom) was formed in 1977 with a mission to diversify the ownership of media in the United States. Today SynCom is a minority-owned business enterprise that focuses on venture capital investments of \$5 to \$15 million in companies along their growth curves. The boutique firm is located in Silver Springs, MD, and has 13 professionals with additional support staff. SynCom manages direct investment partnerships (not fund-of-funds). The firm seeks to support entrepreneurship within underserved communities. SynCom targets primarily early-stage investments in next-generation rapidly growing companies in the digital media, mobile technology, and web based services sectors.

### Private Equity Allocation Overview

CTPF's 2006 Syncom investment is maturing. All of the capital has gone to venture capital investments. The portfolio is geographically diverse within the U.S. with the largest weighting in the West. The portfolio is entirely composed on investments in the media/communications and software/internet industry sectors.

	June 30, 2018	Quarter Change	March 31, 2018
<b>Summary</b>			
Vintage Year	2006		2006
# Total Partnerships	1	-	1
# Active Partnerships	1	-	1
# Liquidated Partnerships	0	-	0
<b>Changes in Value</b>			
Capital Commitments	\$7,500,000	-	\$7,500,000
Paid-In Capital	\$7,494,923	-	\$7,494,923
Uncalled Capital	\$5,077	-	\$5,077
% Paid-In	99.93%	-	99.93%
Distributed Capital	\$29,921	-	\$29,921
Net Asset Value	\$1,415,222	\$(80,089)	\$1,495,311
<b>Total Realized and Unrealized Value</b>	<b>\$1,445,143</b>	<b>\$(80,089)</b>	<b>\$1,525,232</b>
<b>Ratios and Performance</b>			
Distributions to Paid-In Capital (DPI)	0.00x	-	0.00x
Residual Value to Paid-In Capital (RVPI)	0.19x	(0.01)x	0.20x
Total Value to Paid-In Capital (TVPI)	0.19x	(0.01)x	0.20x
Quartile Ranking	4 <sup>th</sup>		4 <sup>th</sup>
Net IRR	(15.50%)	-	(15.50%)
<b>Additional Performance Metrics</b>			
Distribution Rate, as % of Beginning NAV		0.00%	
Unrealized Gain/(Loss), Dollars		\$(80,089)	
Unrealized Gain/(Loss), %		(5.36%)	

SynCom states that financial figures represent cash flows and valuations (NAVs) through the reporting quarter end. Quartile rankings against the All Venture Capital, US Thomson/Cambridge Database.



## RLJ Equity Partners Period Ended June 30, 2018

### Organization History

RLJ is a minority business enterprise that was formed in 2006 by Robert Johnson and The Carlyle Group. Mr. Johnson is head of The RLJ Companies, a diverse set of business interests, including RLJ Equity Partners. He was the founder and Chairman of Black Entertainment Television (BET). The firm is located in Bethesda, MD. RLJ has 13 professionals with additional support staff. RLJ manages direct investment partnerships (not fund-of-funds). RLJ focuses on buyouts, recapitalizations, growth equity, and add-on acquisitions of companies with total valuations of \$50 million to \$500 million. RLJ employs an Executive Network of senior operating managers including the former President of the National Minority Supplier Development Council. The firm and Executive Network specialized in RLJ's focus-industry sectors of aerospace/defense/automotive/transportation, consumer and retail, business services, general industrial, and media/telecommunications.

### Private Equity Allocation Overview

CTPF's 2017 RLJ investment is in its investment period. Geographically, the portfolio plans to focus nationwide within the U.S. and has an allowance to invest a portion of its capital in international companies.

	June 30, 2018	Quarter Change	March 31, 2018
<b>Summary</b>			
Vintage Year	2016		2016
# Total Partnerships	1	-	1
# Active Partnerships	1	-	1
# Liquidated Partnerships	0	-	0
<b>Changes in Value</b>			
Capital Commitments	\$15,000,000	-	\$15,000,000
Paid-In Capital	\$1,879,500	\$(563,140)	\$2,442,640
Uncalled Capital	\$13,120,500	\$563,140	\$12,557,360
% Paid-In	12.53%	(3.75%)	16.28%
Distributed Capital	\$0	-	\$0
Net Asset Value	\$1,103,546	\$(625,479)	\$1,729,025
<b>Total Realized and Unrealized Value</b>	<b>\$1,103,546</b>	<b>\$(625,479)</b>	<b>\$1,729,025</b>
<b>Ratios and Performance</b>			
Distributions to Paid-In Capital (DPI)	0.00x	-	0.00x
Residual Value to Paid-In Capital (RVPI)	0.59x	(0.12)x	0.71x
Total Value to Paid-In Capital (TVPI)	0.59x	(0.12)x	0.71x
Quartile Ranking	4 <sup>th</sup>		4 <sup>th</sup>
<b>Additional Performance Metrics</b>			
Distribution Rate, as % of Beginning NAV		0.00%	
Unrealized Gain/(Loss), Dollars		\$(62,339)	
Unrealized Gain/(Loss), %		(3.61%)	

Financial figures represent cash flows and valuations (NAVs) through the reporting quarter-end. Quartile rankings against the All Buyouts, US Thomson/Cambridge Database.

## NMS Capital Period Ended June 30, 2018

### Organization History

New MainStream Capital (NMS) is a private investment firm specializing in strategic equity investments of lower middle market companies with an emphasis on sustainable growth trends. The Firm's formation and heritage date back to the spin-out of a group of portfolio companies from the Goldman Sachs Merchant Banking Division in 2010.

### Private Equity Allocation Overview

CTPF's 2017 NMS Capital investment is in its investment period. Geographically, the portfolio plans to focus nationwide within the U.S. and has an allowance to invest a portion of its capital in international companies.

	June 30, 2018	Quarter Change	March 31, 2018
<b>Summary</b>			
Vintage Year	2017		2017
# Total Partnerships	1	-	1
# Active Partnerships	1	-	1
# Liquidated Partnerships	0	-	0
<b>Changes in Value</b>			
Capital Commitments	\$15,000,000	-	\$15,000,000
Paid-In Capital	\$1,759,566	\$(146,818)	\$1,906,384
Uncalled Capital	\$13,240,434	\$146,818	\$13,093,616
% Paid-In	11.73%	(0.98%)	12.71%
Distributed Capital	\$0	-	\$0
Net Asset Value	\$1,487,319	\$(220,766)	\$1,708,085
<b>Total Realized and Unrealized Value</b>	<b>\$1,487,319</b>	<b>\$(220,766)</b>	<b>\$1,708,085</b>
<b>Ratios and Performance</b>			
Distributions to Paid-In Capital (DPI)	0.00x	-	0.00x
Residual Value to Paid-In Capital (RVPI)	0.85x	(0.05)x	0.90x
Total Value to Paid-In Capital (TVPI)	0.85x	(0.05)x	0.90x
Quartile Ranking	4 <sup>th</sup>		3 <sup>rd</sup>
<b>Additional Performance Metrics</b>			
Distribution Rate, as % of Beginning NAV		0.00%	
Unrealized Gain/(Loss), Dollars		\$(73,948)	
Unrealized Gain/(Loss), %		(4.33%)	

Financial figures represent cash flows and valuations (NAVs) through the reporting quarter-end. Quartile rankings against the All Buyouts, US Thomson/Cambridge Database.



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## Private Equity Terms and Glossary

### General Terms

**Private Equity:** Refers to equity and equity-related investments in companies that are not quoted on the stock exchange. Investments are typically illiquid in nature. Ownership is typically accessed through limited partnership interests.

**Vintage Year:** The year in which a private equity partnership makes its first investment.

**J Curve Effect:** A common phenomenon associated with a developing private equity program where the return during the first several years can be moderately negative prior to larger positive returns developing (hence the “J” representation). The actual curve is depicted by plotting the return generated by a private equity fund against time (from inception to termination). In the early years of a developing program the payment of management fees out of drawn down capital does not produce an equivalent book value. Consequently, a private equity fund will initially show a negative return. For more detailed information on the “J-Curve Effect” ask to see Callan’s Whitepaper on the topic.

### Cash Flow and Valuation Definitions

**Commitment:** The amount of a limited partner’s obligation to a private equity fund.

**Capital Contribution:** The amount of the commitment that has been called by the general partner for company investments and also fees and expenses. Capital contributed is also referred to as paid-in capital.

**Recycling/Reinvestment and Recalable Cash Flows:** Private equity vehicles are usually characterized by the prohibition (unless stipulated by agreement) to reinvest proceeds or allow redemptions. This means that unless otherwise agreed to, private equity funds must distribute proceeds from investments to limited partners and cannot reinvest that capital. In some cases, distributions are “recalable”, that is, after the fund distributes proceeds to its investors, it can draw down the same capital again, which makes it possible for the fund to draw capital in excess of its total committed capital.

Distributions include both recalable and non-recalable distributions. This means that a recalable distribution must be treated as an actual distribution and, if and when that distribution is called again, it must be treated as additional paid-in capital but must not reduce unfunded commitments or change cumulative committed capital.

It should be noted that recalable distributions have an impact on the metric calculations. For example, this recalable feature means that cumulative paid-in capital can be higher than cumulative committed capital. It also means that, all other things being equal, the DPI, RVPI, and TVPI multiples will be lower for funds with recalable distributions as the denominator will be increased. It also means that the PIC multiple (paid-in capital to cumulative committed capital) will be higher for funds with recalable distributions, all other things being equal. *(Source: GIPS Guidance Statement on Private Equity, January 2011)*

**Distribution:** The returns of cash or securities that an investor in a private equity fund receives.

**Market Value or Net Asset Value (NAV):** The carrying value of the investments as determined by the general partner of a partnership in accordance with a limited partnership’s valuation policy.

### Major Components

#### Venture Capital

- **Seed Capital** – An initial investment funding a start-up company’s initial activities, such as business plan development, initial management and employee hiring, prototype development, and product beta testing

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## Private Equity Terms and Glossary

- **Series A** – first round of institutional investment capital
  - **Series B** – second round of institutional investment capital
  - **Series C** – third round of institutional investment capital (*Source: VCExperts*)
- **Early Stage** – Funding a company typically subsequent to its seed stage that has a founding or core senior management team, has proven its concept or completed its beta test, has minimal revenues, and no positive earnings or cash flows. (*Source: VCExperts*)
  - **Later Stage** – Financing for the expansion of a company that is producing, shipping its product, and increasing its sales volume. Later stage funds often provide the financing to help a company achieve critical mass in order to position its shareholders for an exit event (e.g., an IPO or strategic sale of the company). (*Source: VCExperts*)

### Buyouts / Corporate Finance

- **Leveraged Buyout** – The acquisition of a company using a combination of equity and borrowed funds. Generally the target company's assets act as the collateral for the loans taken out by the acquiring group. The acquiring group then repays the loan from the cash flow of the acquired company. For example, a group of investors may borrow funds, using the assets of the company as collateral, in order to take ownership of a company. (*Source: VCExperts*)
- **Management Buyout** – A private equity firm will often provide financing to enable current operating management to acquire a significant stake in the business they manage, along with the private equity firm providing significant equity and arranging other financing. (*Source: VCExperts*)
- **Categorizations of Buyout Funds by Fund Size:**

Small Buyout	(\$0 to \$1 billion)
Medium Buyout	(\$1 billion to \$3 billion)
Large Buyout	(\$3 billion to \$7 billion)
Mega Buyout	(\$7 billion +)

**Mezzanine (Subordinated Debt):** An investment strategy that involves providing capital or financing that is below the senior debt and above the equity in terms of liquidation priority. Mezzanine is analogous to private high yield debt and typically includes preferred stock and warrants. The majority of return is provided through coupon payments and equity rights typically increase the return. Mezzanine debt is commonly structured as part of a Buyout transaction.

**Distressed Debt:** Investing in corporate bonds of companies that have either filed for bankruptcy or appear likely to do so in the near future. The strategy of distressed debt involves first becoming a major creditor of the target company by buying up a company's bonds at a deep discount to par. Securing a position as a key creditor allows for influence regarding the plan for reorganization of the company. In the event of liquidation distressed debt investors have a senior position to the equity holders for priority of repayment and normally recover the full par value of debt securities. Usually a reorganization allows the company to avoid or emerge from bankruptcy protection. In some instances distressed debt firms convert the debt obligations to equity in the company, and gain majority control of the newly capitalized business. (*Source: VCExperts*)

**Secondary Investing:** There is a private equity secondary market where investors in private equity funds can privately negotiate the sale of their interest(s) to a new buyer. Secondary funds are vehicles which buy (invest in)

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## Private Equity Terms and Glossary

secondary partnership interests purchased from pre-existing investors. Usually secondary purchases are made at a discount to the partnerships' stated valuation.

**Fund-of-Funds:** A vehicle established to invest in a diversified portfolio of private equity partnerships over a period of several vintage years. The underlying partnerships in turn invest the capital in companies. Investing in fund-of-funds can help spread the risk of investing in private equity because they invest the capital in a variety of funds and provide diversification by general partner, industry, geography, time and strategy. Fund-of-funds are specialist private equity investors and have existing relationships with general partner firms. Fund-of-funds may be able to provide investors with a route to investing in partnerships that would otherwise not be available to them. (*Source: VCExperts*)

### Performance Metrics

**DPI** = Distributions as a ratio of (divided by) paid-in capital (notionally a DPI ratio of 0.60 means that 60 cents has been distributed back to investors for every dollar contributed).

**RVPI** = Residual Value (NAV) as a ratio of (divided by) paid-in capital (notionally a RVPI ratio of 0.70 means that the remaining investment(s) is currently valued at 70 cents for every dollar contributed).

**TVPI** = Total Value (Distributions + Net Asset Value) as a ratio of (divided by) paid-in capital. Notionally a TVPI ratio of 1.30 means that the investment has created a total gain of 30 cent for every dollar contributed. TVPI is composed of both returned capital and residual value (e.g., DPI of 0.60 + RVPI of 0.70 = TVPI of 1.30).

**Public Market Equivalent (PME) TVPI:** A TVPI calculated by applying the called capital and distributed capital of the private equity investment as an equivalent purchase and sale of the chosen benchmark. The calculated net asset value (NAV) is then used to calculate the benchmark's RVPI, which is subsequently added to the investors actual DPI to get a benchmark TVPI. The figure is intended to evaluate the investor's total value if they had moved money in and out of the chose benchmark instead of the partnership.

**Internal Rate of Return (IRR):** The CFA Institute GIPS approved methodology to calculate return performance of private equity investments. The IRR calculates the rate of return since inception (implied interest rate earned) of an investment based on the amount and timing of capital contributions (money invested), distributions (money returned from investments), and the current unrealized value of investments. The IRR is a capital- or dollar-weighted calculation and accounts for the timing and size of flows. IRR differs from the time-weighted return (TWR) calculation employed with equity and fixed income investments, where a series of interim period (e.g., quarterly) returns are linked together in an equal-weighted manner to derive a percentage return unaffected by cash flows.

**Public Market Equivalent (PME) IRR:** An internal rate of return (IRR) calculated by applying the called capital and distributed capital of the private equity investment as an equivalent purchase and sale of the chosen benchmark. The calculated net asset value (NAV) is then used to calculate the benchmark's IRR. The figure is intended to evaluate the investor's return if they had moved money in and out of the chose benchmark instead of the partnership.

**Cash Yield:** Quarter's Distributed capital change divided by the quarter's beginning Net Asset Value. It values the percentage of realized appreciation/depreciation embedded in the NAV. For example, a cash yield of 5% means every dollar of residual value (NAV) has paid 5 cents to the investor this quarter.

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## Private Equity Terms and Glossary

**\$ Unrealized Appreciation/ Depreciation** = Quarter's Total Value change minus the quarter's Distribution capital change minus the quarter's Paid-In capital change. The dollar amount values the unrealized appreciation/depreciation embedded in the Net Asset Value.

**% Unrealized Appreciation/ Depreciation** = Unrealized Appreciation/ Depreciation in dollars divided by the quarter's starting Net Asset Value. It values the percentage of unrealized appreciation/depreciation embedded in the NAV. For example, unrealized appreciation of 2% means every dollar of residual value (NAV) has a gain of 2 cents that has yet to be paid to investors.

**\$ Total Valuation Change** = Quarter's Distributed capital change minus the quarter's Paid-In capital during the quarter plus the quarter's change in Net Asset Value. It values the total dollar amount of both realized and unrealized gains/ losses that the investor received over the quarter.

**% Total Valuation Change** = Total Valuation Change in dollars divided by the quarter's starting Net Asset Value. It values the percentage of both realized and unrealized gains/ losses that the investor received over the quarter. For example, total valuation change of 4% means every dollar of residual value (NAV) has a gain of 4 cents of which a portion has and a portion has not been paid to investors.

### Database Metrics

**Pooled IRR:** An IRR calculation that treats a database of multiple private equity partnerships (such as Thomson Reuters/Cambridge) as a single portfolio. The initial flow in the calculation represents the total market value of the database (if any). The subsequent cash inflows and outflows are incorporated, and the final cash flow is the ending valuation of the database holdings.

**TVPI Quartile:** Drawn from a database of multiple private equity partnerships, the quartile is a breakpoint return that separates the partnerships' TVPIs in a selected sample into 25% increments ranked from highest to lowest, e.g. 1<sup>st</sup> quartile is the highest 25% performing funds. Members may be separated into by specific vintage years and strategies.

**IRR Quartile:** Drawn from a database of multiple private equity partnerships, the quartile is a breakpoint return that separates the partnerships' IRRs in a selected sample into 25% increments ranked from highest to lowest, e.g. 1<sup>st</sup> quartile is the highest 25% performing funds. Members may be separated into by specific vintage years and strategies.





## Research and Educational Programs

The Callan Institute provides research to update clients on the latest industry trends and carefully structured educational programs to enhance the knowledge of industry professionals. Visit [www.callan.com/library](http://www.callan.com/library) to see all of our publications, and [www.callan.com/blog](http://www.callan.com/blog) to view our blog “Perspectives.” For more information contact Corry Walsh at 312.346.3536 / [institute@callan.com](mailto:institute@callan.com).

## New Research from Callan’s Experts



**Handle With Extreme Care: Callan’s Take on Cryptocurrencies** | In this paper, author Mark Wood provides a brief overview of cryptocurrencies and addresses primary considerations for potential investors.

He describes why Callan does not currently recommend our clients allocate to cryptocurrency investment strategies, and where we see the greatest future potential in this space.

**Risk Parity: Silver Bullet or a Bridge Too Far?** | In this chapter from the CFA Institute’s book “Multi-Asset Strategies: The Future of Investment Management,” Callan’s Greg Allen describes risk parity strategies, a category of investment strategies in which capital is allocated across asset classes so that each contributes an equal amount of volatility to the portfolio’s total volatility.

**China A-Shares: Key Issues for Investors to Consider** | China is opening up its securities markets to more non-Chinese institutional investors. In particular, expanded access to China A-shares creates new opportunities for investors. But investing in China presents a set of risks that range from the country’s slowing GDP growth to stock trading suspensions. Although China A-shares present an attractive opportunity, implementation is challenged by a shallow manager universe and high fees.

**June 2018 Regional Workshop Summary: Governance Alpha** | Investment committees face complex challenges overseeing institutional investment funds. They must navigate myriad laws and regulations, select the right managers and strategies, monitor their portfolios, and ensure their funds can deliver the returns needed for their beneficiaries. Governance describes the policies and practices established to guide these decisions. What if implementing the

astute governance required to meet these challenges also resulted in better portfolio performance? At this workshop, Callan experts described the most effective institutional fund governance practices and explored new research that connects strong plan governance with performance (i.e., governance alpha), and reviewed how investment managers fit into this framework.

## Quarterly Periodicals

**Private Markets Trends** | This newsletter offers the latest data on activity in private equity fundraising, buyouts, venture capital, and returns for this asset class.

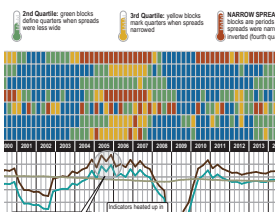
**Market Pulse Flipbook** | A quarterly market reference guide covering investment and fund sponsor trends in the U.S. economy, U.S. and non-U.S. equities and fixed income, alternatives, and defined contribution.

**Capital Market Review** | This quarterly publication provides analysis and a broad overview of the economy and public and private market activity each quarter across a wide range of asset classes.

**Active vs. Passive Report** | This series of charts maps active managers alongside relevant benchmarks over the last two decades.

**Real Estate Indicators: Too Hot to Touch or Cool Enough to Handle?** | Callan’s Real Assets Consulting group identifies seven indicators—based on spreads in real estate and fixed income markets—that, combined with

an understanding of prevailing market dynamics, have helped signal when the institutional real estate market is overheated or cooled.



## Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: [www.callan.com/library/](http://www.callan.com/library/)

Callan's **October Regional Workshops** will be held on October 16 in New York and October 18 in Atlanta. Please visit the Events page on our website ([www.callan.com/events/](http://www.callan.com/events/)) for additional information.

Callan's **2019 National Conference** will be held January 28-30, 2019. Mark your calendars for this upcoming event!

**For more information about events, please contact Barb Gerraty: 415.274.3093 / [gerraty@callan.com](mailto:gerraty@callan.com)**

## The Center for Investment Training Educational Sessions

The Center for Investment Training, better known as the "Callan College," provides a foundation of knowledge for industry professionals who are involved in the investment decision-making process. It was founded in 1994 to provide clients and non-clients alike with basic- to intermediate-level instruction. Our next sessions are:

### Introduction to Investments

*Chicago, October 2-3, 2018*

*Atlanta, October 23-24, 2018*

This program familiarizes fund sponsor trustees, staff, and asset management advisers with basic investment theory, terminology, and practices. It lasts one-and-a-half days and is designed for individuals who have less than two years of experience with asset-management oversight and/or support responsibilities. Tuition for the Introductory "Callan College" session is \$2,350 per person. Tuition includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

### Customized Sessions

The "Callan College" is equipped to customize a curriculum to meet the training and educational needs of a specific organization. These tailored sessions range from basic to advanced and can take place anywhere—even at your office.

**Learn more at [www.callan.com/events/callan-college-intro](http://www.callan.com/events/callan-college-intro) or contact Kathleen Cunnie: 415.274.3029 / [cunnie@callan.com](mailto:cunnie@callan.com)**

## Education: By the Numbers

**525** Attendees (on average) of the Institute's annual National Conference

**50+** Unique pieces of research the Institute generates each year

**3,700** Total attendees of the "Callan College" since 1994

**1980** Year the Callan Institute was founded



**"Research is the foundation of all we do at Callan, and sharing our best thinking with the investment community is our way of helping to foster dialog to raise the bar across the industry."**

Greg Allen, CEO and CRO



## List of Callan's Investment Manager Clients

Confidential – For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor and disclose potential conflicts on an on-going basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g. attending and educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance Department.

Manager Name
Acadian Asset Management LLC
AEGON USA Investment Management
Affiliated Managers Group, Inc.
Alcentra
AllianceBernstein
Allianz Global Investors
Allianz Life Insurance Company of North America
American Century Investments
Apollo Global Management
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Atlanta Capital Management Co., LLC
Aviva Investors Americas
AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
BlackRock
BMO Global Asset Management
BNP Paribas Asset Management
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
BrightSphere Investment Group (FKA Old Mutual Asset)
Brown Brothers Harriman & Company
Cambiar Investors, LLC
Capital Group
Carillon Tower Advisers
CastleArk Management, LLC
Causeway Capital Management
Chartwell Investment Partners

Manager Name
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Threadneedle Investments
Columbus Circle Investors
Credit Suisse Asset Management
DePrince, Race & Zollo, Inc.
Deutsche Asset Management
Diamond Hill Capital Management, Inc.
Dimensional Fund Advisors LP
Doubleline
Duff & Phelps Investment Management Co.
EARNEST Partners, LLC
Eaton Vance Management
Epoch Investment Partners, Inc.
Fayez Sarofim & Company
Federated Investors
Fidelity Institutional Asset Management
Fiera Capital Corporation
First Eagle Investment Management, LLC
First Hawaiian Bank Wealth Management Division
Fisher Investments
Franklin Templeton
Fred Alger Management, Inc.
GAM (USA) Inc.
Global Evolution USA
GlobeFlex Capital, L.P.
GMO
Goldman Sachs Asset Management
Green Square Capital LLC
Guggenheim Investments
GW&K Investment Management
Harbor Capital Group Trust
Hartford Funds
Hartford Investment Management Co.

Manager Name
Heitman LLC
Henderson Global Investors
Hotchkis & Wiley Capital Management, LLC
HSBC Global Asset Management
Income Research + Management, Inc.
Insight Investment Management Limited
Intech Investment Management, LLC
Invesco
Investec Asset Management
Ivy Investments
J.P. Morgan
Janus Henderson Investors
Jennison Associates LLC
Jensen Investment Management
Jobs Peak Advisors
KeyCorp
Lazard Asset Management
Legal & General Investment Management America
Lincoln National Corporation
LMCG Investments, LLC
Longview Partners
Loomis, Sayles & Company, L.P.
Lord Abbett & Company
Los Angeles Capital Management
LSV Asset Management
MacKay Shields LLC
Macquarie Investment Management (MIM)
Manulife Asset Management
McKinley Capital Management, LLC
MFS Investment Management
MidFirst Bank
Mondrian Investment Partners Limited
Montag & Caldwell, LLC
Morgan Stanley Investment Management
Mountain Lake Investment Management LLC
MUFG Union Bank, N.A.
Natixis Investment Managers
Neuberger Berman
Newton Investment Management
Nikko Asset Management Co., Ltd.
Northern Trust Asset Management
Nuveen Investments, Inc.
OFI Global Asset Management
O'Shaughnessy Asset Management, LLC
P/E Investments
Pacific Investment Management Company
Pathway Capital Management
Peregrine Capital Management, Inc.
Perkins Investment Management

Manager Name
PGIM
PGIM Fixed Income
PineBridge Investments
Pioneer Investments
PNC Capital Advisors, LLC
Principal Global Investors
Private Advisors, LLC
Putnam Investments, LLC
QMA
RBC Global Asset Management
Regions Financial Corporation
Robeco Institutional Asset Management, US Inc.
Rockefeller & Co., Inc.
Rothschild Asset Management, Inc.
Russell Investments
Santander Global Facilities
Schroder Investment Management North America Inc.
Smith Graham & Co. Investment Advisors, L.P.
Smith Group Asset Management
South Texas Money Management, Ltd.
Standard Life Investments Limited
State Street Global Advisors
Stone Harbor Investment Partners, L.P.
Sun Life Investment Management
T. Rowe Price Associates, Inc.
The Boston Company Asset Management, LLC
The London Company
The TCW Group, Inc.
Thompson, Siegel & Walmsley LLC
Thornburg Investment Management, Inc.
Tri-Star Trust Bank
UBS Asset Management
VanEck
Velanne Asset Management Ltd.
Versus Capital Group
Victory Capital Management Inc.
Virtus Investment Partners, Inc.
Vontobel Asset Management, Inc.
Voya
WCM Investment Management
WEDGE Capital Management
Wellington Management Company, LLP
Wells Capital Management
Western Asset Management Company
Westfield Capital Management Company, LP
Westwood Holdings Group
William Blair & Company