## Board Meeting - Investment Report

#### Fire and Police Pension Association of Colorado - Preliminary Net Investment Performance as of December 2019 (%)

							Annualized							
						<u> </u>					Benchmark		-	
	Assets (Mil)	% of Fund	Dec 19	3 Month	YTD-19	<u>1 Yr</u>	<u>3 Yr</u>	<u>5 Yr</u>	<u> 10 Yr</u>	Inception	Inception	Incpt. Date	Sharpe Ratio	
Total Fund	5,547.1	100.0%												
Long-Term Pool (Gross Fees)			1.74	4.47	15.59	15.59	10.69	8.16	9.17	9.66		Jan 1980	1.90	
Long-Term Pool (Net Fees without Overlays)			1.72	4.29	14.39	14.39	9.59	7.14	8.36				1.66	
Long-Term Pool (Net Fees w / Overlays)	4,165.2	75.1%	1.70	4.29	14.72	14.72	9.70	7.24	8.41	9.36		Jan 1980	1.69	
Long-Term Pool - Implementation Benchmark			1.45	3.33	13.06	13.06	8.12	6.22	7.49				1.27	
Long-Term Pool - Policy Benchmark			1.65	3.99	14.52	14.52	9.58	7.13	8.44				1.45	
Long-Term Pool - Policy Benchmark - Modified							8.73	6.51					1.35	
Glide-Path Pool (with Overlays)	1,365.6	24.6%	0.91	2.48						3.52		Jul 2019		
Glide-Path Pool - Policy Benchmark			0.85	2.18										
Short-Term Pool (no Overlays)	16.3	0.3%	0.41	1.13						2.74		Jul 2019		
Short-Term Pool - Policy Benchmark			0.32	1.08										
Cash	250.7	4.5%	0.14	0.46	2.30	2.30	1.83	1.21	0.64	1.58	1.31	Mar 2003		
3-Month US T-Bill			0.14	0.46	2.25	2.25	1.65	1.05	0.56					
Long-Term Pool	122.2	2.2%												
Glide-Path Pool	57.3	1.0%												
Short-Term Pool	1.4	0.0%												
Russell Overlay - LTP	32.5	0.6%										Dec 2013		
Russell Overlay - GPP	14.9	0.3%										Aug 2019		
BNP FX Overlay	18.1	0.3%										Sep 2016		
Mesirow FX Overlay	4.2	0.1%										Sep 2018		
Global Public Equity	1,769.4	31.9%	3.72	9.15	25.95	25.95	12.84	8.92	9.45	8.12	9.30	Mar 2003	0.98	
MSCI ACWI IMI w/US Gross			3.57	9.13	26.75	26.75	12.43	8.71	9.23					
Global Equity	1,199.9	21.6%	3.06	8.59	26.83	26.83	13.63	9.09		9.98		Oct 2010	1.07	
MSCI World w/US Gross			3.03	8.66	28.14	28.14	12.97	9.13						
DE Shaw World	160.5	2.9%	2.87	8.72	24.68	24.68				5.20	8.85	Sep 2018	N/A	
SSGA MSCI World	777.6	14.0%	3.04	8.64						9.97	10.02	May 2019	N/A	
Walter Scott	205.5	3.7%	3.53	8.58	30.76	30.76	18.19	12.61		12.14	10.48	Oct 2010	1.37	
WMQS Global Equity	55.5	1.0%	2.17	8.09	24.20	24.20				6.84	10.41	Jun 2018	N/A	
LIC Familian	149.7	2.7%												
US Equity	149.7	2.1%												
Mellon SP 600	78.5	1.4%	3.00	8.22	22.87	22.87				-3.39	-3.78	Sep 2018	N/A	
S&P Smallcap 600 Index			2.99	8.21	22.78	22.78								
Neumeier Poma	71.3	1.3%	3.57	6.72	20.71	20.71				2.45	2.76	Oct 2018	N/A	
MSCI USA Small Cap			2.63	8.67	27.38	27.38								
Non-US Equity	184.0	3.3%												
Driehaus Intl Small Cap	91.4	1.6%	4.28	11.48	30.76	30.76	15.73	10.61		8.57	5.38	Apr 2011	1.11	
MSCI AC World Ex USA Small Growth Net			4.85	11.19	24.61	24.61	10.82	7.67				•		
Kabouter Intl SMID Cap	91.0	1.6%	2.84	8.07	21.93	21.93				4.21	4.56	Oct 2018	N/A	
MSCI World Ex US SMid Cap			3.79	10.33	25.39	25.39								
Emerging Markets Equity	235.8	4.3%	7.64	12.81	19.90	19.90	13.59	6.94	4.56	3.12	3.04	Jul 2007	0.81	
MSCI Emerging Markets Index Net			7.46	11.84	18.42	18.42	11.57	5.65	3.86					
Baillie Gifford Emerging Markets	71.9	1.3%	8.24	12.99	28.11	28.11	18.40	9.47	5.93	13.21	11.13	Nov 2002	1.03	
Numeric EM Core	91.7	1.7%	7.30	13.65	16.60	16.60	11.12			15.43	14.03	Mar 2016	0.65	
SSGA EM Enhanced	72.2	1.3%	7.49	11.58	16.86	16.86	11.75			11.66	11.23	Jul 2016	0.75	

## Board Meeting - Investment Report

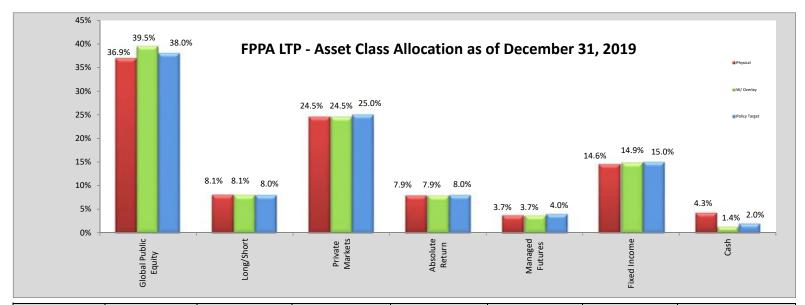
#### Fire and Police Pension Association of Colorado - Preliminary Net Investment Performance as of December 2019 (%)

							Annualized								
								Senchmark   Inception   Incept. Date   Senchmark   Inception   Incept. Date   Senchmark   Inception   Incept. Date   Senchmark   Inception   Incept. Date   Sence   Sence							
		% of Fund	<u>Dec 19</u>	3 Month	YTD-19	<u>1 Yr</u>	<u>3 Yr</u>		<u>10 Yr</u>				Sharpe Ratio		
Equity Long/Short	417.4	7.5%	0.91	3.78	17.25	17.25	9.13			7.83	5.28	Feb 2012	1.24		
HFRI Equity Hedge Index			2.54	5.71	13.74	13.74	6.16	4.56							
AKO Capital	60.4	1.1%	1.03	3.33	19.99	19.99	13.55	10.02		10.23	5.85	Jul 2012	1.49		
Castine Partners II	43.2	0.8%	1.89	5.00						7.93	5.73	Apr 2019	N/A		
Hitchwood Capital	2.6	0.0%	0.00	0.00	-0.79	-0.79	6.96	2.83		3.79	4.33	Oct 2014	0.63		
Palestra Capital	71.4	1.3%	-1.21	1.12	23.04	23.04				10.03	4.55	Aug 2017	N/A		
Sachem Head	50.1	0.9%	0.38	7.61	22.03	22.03	8.86			6.37	5.99	Jan 2016	0.76		
Rivulet Capital	64.0	1.2%	2.26	3.24	16.97	16.97	12.23			10.91	6.24	Sep 2016	2.42		
Southpoint	77.3	1.4%	1.23	5.17	25.59	25.59	11.49	9.51		9.05	5.01	Apr 2012	1.32		
Yiheng Capital	43.5	0.8%	1.57	3.93	18.92	18.92				18.92	13.74	Jan 2019	N/A		
		24.40/	0.11	0.44	0.44	0.44	2.00	0.00	4.04			1 1000	4.05		
Fixed Income	1,171.1	21.1%	0.14	0.41	8.41	8.41				6.05	5.50	Jan 1993	1.05		
Barclays US Aggregate Bond Index	100.1	2.53/	-0.07	0.18	8.72	8.72	4.03	3.05	3.82	6.07	7.00				
Garcia Hamilton	198.4	3.6%	-0.28	-0.09	7.29	7.29				6.07	7.30	Aug 2018	N/A		
Barclays US Aggregate Bond Index			-0.07	0.18	8.72	8.72									
Loomis Sayles Core	225.7	4.1%	-0.03	0.18	8.76	8.76				3.94	3.87	Aug 2017	N/A		
Barclays US Aggregate Bond Index			-0.07	0.18	8.72	8.72									
Manulife	135.4	2.4%	0.72	1.23	10.55	10.55				2.97	1.66	May 2014	0.82		
Barclays Multiverse			0.70	0.64	7.13	7.13	4.40								
Privest	49.8	0.9%	-0.01	0.41	9.74	9.74	5.20			4.92	3.46	Feb 2011	1.24		
Barclays US Aggregate Bond Index			-0.07	0.18	8.72	8.72	4.03	3.05							
Prudential ABS Return	145.9	2.6%	1.11	1.93	7.58	7.58	4.91			3.70	3.79	Feb 2015	1.85		
UFI Blended Benchmark			0.99	1.25	8.55	8.55	4.16								
SSGA BC Aggregate	415.9	7.5%	-0.08	0.14	8.72	8.72	4.07	3.06		3.11	3.09	June 2014	0.83		
Barclays US Aggregate Bond Index			-0.07	0.18	8.72	8.72	4.03	3.05							
Managed Futures	155.5	2.8%	-1.77	-3.08	10.36	10.36	2.04	-0.12		2.16	1.21	Jan 2014	0.09		
Managed Futures Benchmark			-0.55	-3.89	9.23	9.23	0.35	-0.88							
AHL Pure	53.7	1.0%	-0.18	-6.22	2.40	2.40	0.58			-1.03	-0.12	Jun 2016	0.01		
Graham Tactical Trend	52.5	0.9%	-3.15	-0.36	23.38	23.38	2.99	0.22		4.11	3.17	Mar 2014	0.16		
Key Trends 15	49.3	0.9%	-2.00	-2.36	16.37	16.37				3.27	2.03	Sep 2017	N/A		
	.5.5	2.370									00		,,,		

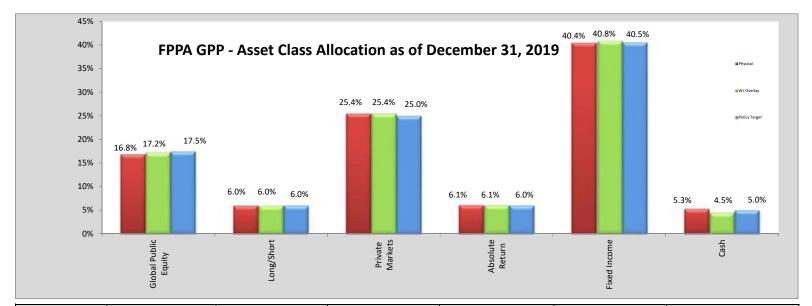
## Board Meeting - Investment Report

#### Fire and Police Pension Association of Colorado - Preliminary Net Investment Performance as of December 2019 (%)

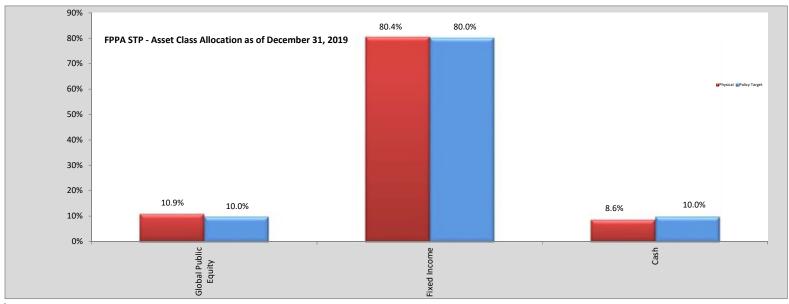
							Annualized							
											Benchmark			
	Assets (Mil)	% of Fund	Dec 19	3 Month	YTD-19	<u>1 Yr</u>	<u>3 Yr</u>	<u>5 Yr</u>	<u>10 Yr</u>	<u>Inception</u>	<u>Inception</u>	Incpt. Date	Sharpe Ratio	
Absolute Return	412.8	7.4%	3.13	5.05	6.49	6.49	4.59	3.88		3.20	2.56	Jan 2011	0.78	
HFRI FoF Diversified Index			1.35	2.55	7.88	7.88	3.70	2.26						
Alphadyne Global Rates	59.1	1.1%	3.14	11.21	32.16	32.16	20.55	15.02		13.90	1.12	Sep 2011	2.80	
AQR Delta II	28.9	0.5%	1.10	-2.53	-9.17	-9.17	-7.17	-2.14		-0.05	4.07	Jul 2013	-1.54	
AQR SPF	17.6	0.3%	-3.17	-3.42	-8.59	-8.59	-4.03	-1.19		1.97	4.07	Jul 2013	-0.75	
Autonomy Global Macro	41.1	0.7%	8.11	10.59	-5.47	-5.47	5.44	8.72		7.39	1.12	Mar 2011	0.31	
Citadel Kensington	53.1	1.0%	2.26	4.56	18.46	18.46				13.64	2.80	Jul 2017	N/A	
KCL Capital	39.0	0.7%	3.35	4.67	2.59	2.59				8.66	0.49	Mar 2018	N/A	
НВК	14.8	0.3%	1.44	1.28	4.04	4.04	3.84			3.53	3.26	Feb 2015	0.69	
Hudson Bay Arbitrage	35.0	0.6%	1.14	1.99	8.56	8.56				7.06	2.59	Oct 2017	N/A	
Hudson Bay Multistrategy	32.2	0.6%	1.42	1.99	7.85	7.85				6.17	3.70	Nov 2018	N/A	
Nantahala Capital II	37.3	0.7%	11.53	15.64						6.49	2.73	May 2019	N/A	
Pharo Macro	55.0	1.0%	1.08	1.35	5.23	5.23	7.84	6.90		6.44	1.67	Apr 2014	0.92	
Private Markets	1,370.1	24.7%	0.09	0.93	5.98	5.98	11.87	10.69	13.40	10.87		Mar 2003	2.28	
Private Markets Benchmark			0.04	0.13	4.46	4.46	10.36	9.11						
Private Capital	778.5	14.0%	-0.02	2.03	7.65	7.65	15.96	14.39	15.71	12.01		Jan 1988	2.35	
Private Capital Benchmark			0.00	0.00	8.19	8.19	13.76	11.87						
Real Assets	348.0	6.3%	0.07	-1.95	2.88	2.88	6.25	2.08		3.56		Oct 2010	0.68	
Real Assets Benchmark			0.15	0.46	-1.90	-1.90	5.90	0.51						
Real Estate	243.6	4.4%	0.51	1.84	5.38	5.38	7.31	8.31	11.70	7.75		Jan 1982	2.74	
Real Estate Benchmark			0.00	0.00	3.71	3.71	7.04	8.41						
Core Real Estate	152.0	2.7%												
Glide-Path Pool (Legacy) - Private Capital Glide-Path Pool (Legacy) - Real Assets	195.6 90.0	3.5% 1.6%												
Glide-Path Pool (Legacy) - Real Estate	22.7	0.4%												



	Globa	l Public Equity	Long/Short	Private Markets	Absolute Return	N	Managed Futures	Fixed Income	Cash
Physical	\$	1,538.06	\$ 335.96	\$ 1,022.55	\$ 329.73	\$	155.54	\$ 606.37	\$ 177.03
Overlay	\$	105.95	\$ -	\$ -	\$	\$		\$ 14.33	\$ (120.28)
Total	\$	1,644.01	\$ 335.96	\$ 1,022.55	\$ 329.73	\$	155.54	\$ 620.70	\$ 56.75
Policy Target	\$	1,582.79	\$ 333.22	\$ 1,041.31	\$ 333.22	\$	166.61	\$ 624.78	\$ 83.30
Difference	\$	(44.73)	\$ 2.74	\$ (18.76)	\$ (3.49)	\$	(11.07)	\$ (18.42)	\$ 93.72



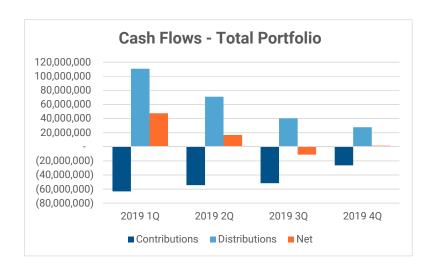
	Global	Public Equity	Long/Short	Private Markets	Absolute Return	Fixed Income	Cash
Physical	\$	229.60	\$ 81.48	\$ 347.53	\$ 83.09	\$ 551.67	\$ 72.23
Overlay	\$	5.35	\$ -	\$ -	\$ -	\$ 5.33	\$ (10.68)
Total	\$	234.95	\$ 81.48	\$ 347.53	\$ 83.09	\$ 557.00	\$ 61.55
Policy Target	\$	238.98	\$ 81.94	\$ 341.40	\$ 81.94	\$ 553.07	\$ 68.28
Difference	\$	(9.38)	\$ (0.46)	\$ 6.13	\$ 1.15	\$ (1.40)	\$ 3.95



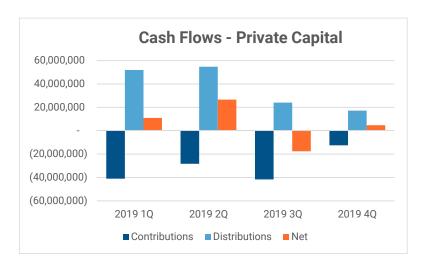
	Global Public Equity	Fixed Income	Cash
Physical	\$ 1.78	\$ 13.07	\$ 1.40
Policy Target	\$ 1.62	\$ 13.00	\$ 1.62
Difference	\$ 0.15	\$ 0.07	\$ (0.22)

# Fire and Police Pension Association of Colorado

**Quarterly Cash Flow - Illiquid Alternatives** 



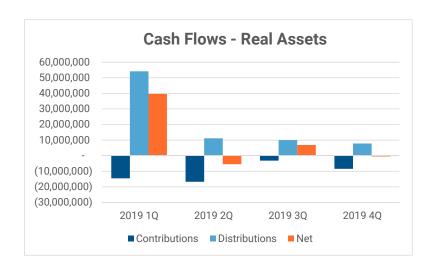
	Ţ	otal Illiquid Alte	rnative Portfolio		
	2019 1Q	2019 2Q	2019 3Q	2019 4Q	Total
Contributions	(63,172,795)	(54,255,281)	(51,570,427)	(26,241,755)	(195,240,258)
Distributions	110,712,036	71,032,407	40,527,703	27,804,636	250,076,781
Net	47,539,241	16,777,125	(11,042,724)	1,562,880	54,836,523



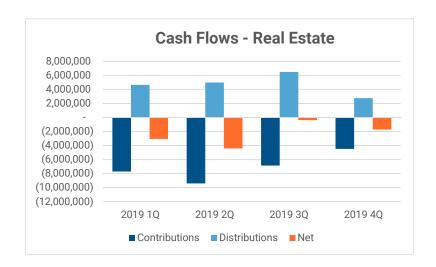
		Private Capi	tal Portfolio		
	2019 1Q	2019 2Q	2019 3Q	2019 4Q	Total
Contributions	(40,954,369)	(28,243,536)	(41,607,425)	(12,439,746)	(123,245,076)
Distributions	51,931,410	54,803,720	23,998,727	17,190,455	147,924,312
Net	10,977,041	26,560,184	(17,608,697)	4,750,709	24,679,236

## Fire and Police Pension Association of Colorado

**Quarterly Cash Flow - Illiquid Alternatives** 



		Real Asset	s Portfolio		
	2019 1Q	2019 2Q	2019 3Q	2019 4Q	Total
Contributions	(14,504,092)	(16,612,976)	(3,100,139)	(8,321,162)	(42,538,369)
Distributions	54,134,543	11,238,181	10,041,386	7,859,652	83,273,763
Net	39,630,452	(5,374,795)	6,941,247	(461,510)	40,735,393



		Real Estate	e Portfolio		
	2019 1Q	2019 2Q	2019 3Q	2019 4Q	Total
Contributions	(7,714,333)	(9,398,769)	(6,862,863)	(4,480,847)	(28,456,812)
Distributions	4,646,082	4,990,506	6,487,590	2,754,528	18,878,706
Net	(3,068,251)	(4,408,264)	(375,273)	(1,726,319)	(9,578,107)

**Comparative Performance** Fire & Police Association of Colorado - Self Directed Plans As of December 31, 2019

Comparative Performance	g	T	^-	rn.	\	YTD 1 YR 2 YR		۵,	/D	4.	/D		/D		46	VP				
International Equity	M	TH	Q1	R	Υ	D	1 \	YR	2 \	/R	3 \	/R	4 \	rR	5 <b>\</b>	'R	7 \	/R	10	YR
Invesco Oppenheimer Developing Markets (ODVIX)	5.69	(75)	11.88	(30)	24.53	(25)	24.53	(25)	4.81	(9)	14.13	(15)	12.40	(18)	6.62	(23)	5.29	(16)	N/A	
MSCI Emerging Markets (Net) Index	7.46	(21)	11.84	(31)	18.44	(61)	18.44	(61)	0.58	(44)	11.57	(39)	11.48	(31)	5.61	` '	3.26	(48)	3.68	(50
IM Emerging Markets Equity (MF) Median	6.80	(= . )	11.03	(0.)	20.06	(0.)	20.06	(0.)	-0.01	( )	10.62	(00)	10.44	(0.)	5.13	( )	3.18	( .0)	3.67	(00)
Fidelity International Small Cap Opp (FSCOX)	4.19	(50)	12.47	(23)	30.47	(13)	30.47	(13)	6.46	(9)	15.85	(6)	11.67	(11)	11.60	(9)	11.80	(6)	12.01	(5)
MSCI AC World ex USA Small Cap (Net)	4.93	(20)	11.01	(49)	22.42	(74)	22.42	(74)	0.07	(55)	9.65	(70)	8.18	(49)	7.04	(64)	7.09	(77)	6.92	(86)
IM International SMID Cap Growth Equity (MF) Median	4.14		10.97		24.57		24.57		0.48		11.49		7.99		7.76		7.96		8.30	
American Funds EuroPacific Growth (RERGX)	4.30	(48)	10.09	(42)	27.40	(20)	27.40	(20)	4.12	(20)	12.45	(23)	9.48	(31)	7.41	(19)	7.73	(16)	6.73	(23)
MSCI AC World ex USA (Net)	4.33	(47)	8.92	(62)	21.51	(55)	21.51	(55)	2.11	(40)	9.87	(50)	8.50	(42)	5.51	(50)	5.44	(51)	4.97	(57)
IM International Equity (MF) Median	4.22	, ,	9.60	. ,	21.99	. ,	21.99		1.19		9.86		7.91	, ,	5.48	, ,	5.48	. ,	5.25	
Vanguard Total Intl Stock Index (VTIAX)	4.23	(24)	9.01	(38)	21.51	(45)	21.51	(45)	1.97	(36)	9.87	(22)	8.55	(11)	5.85	(28)	5.62	(54)	N/A	
Vanguard Spliced Total International Stock Index	4.43	(17)	9.26	(31)	21.80	(37)	21.80	(37)	1.98	(35)	9.84	(23)	8.53	(12)	5.84	(29)	5.81	(46)	5.13	(51)
IM International Core Equity (MF) Median	3.56	(**)	8.63	()	21.25	(01)	21.25	()	1.08	(00)	8.76	()	6.90	( /	5.16	(==)	5.70	(10)	5.14	(-,
American Funds New Perspective (RNPGX)	3.67	(19)	10.15	(11)	30.48	(6)	30.48	(6)	11.01	(1)	16.79	(1)	12.96	(2)	11.45	(1)	12.40	(1)	11.15	(1)
MSCI AC World Index (Net)	3.52	(29)	8.95	(41)	26.60	(34)	26.60	(34)	7.09	(34)	12.44	(34)	11.28	( <del>2</del> )	8.41	(1)	9.73	(56)	8.79	(52)
IM Global Core Equity (MF) Median	3.05	(23)	8.59	(+1)	25.31	(34)	25.31	(04)	6.22	(34)	11.49	(34)	10.35	(21)	7.83	(31)	9.86	(30)	8.90	(32)
	0.00		0.00		20.01		20.01		0.22		11.10		10.00		7.00		0.00		0.00	
Domestic Equity		(==)		(4.5)		(00)		(00)		(22)		(=a)		(10)		(0.0)		(4.5)		
Hood River Small Cap Growth (HRSMX)	1.87	(50)	10.07	(49)	25.48	(62)	25.48	(62)	8.72	(63)	12.98	(59)	13.42	(48)	11.02	(29)	15.20	(13)	14.99	(10)
Russell 2000 Growth Index	2.29	(31)	11.39	(35)	28.48	(47)	28.48	(47)	7.95	(69)	12.49	(63)	12.20	(66)	9.34	(58)	13.08	(51)	13.01	(49)
IM U.S. Small Cap Growth Equity (MF) Median	1.85		9.99		27.70		27.70		10.44		13.82		13.28		9.81		13.09		12.96	
BNYM Small Cap Value (STSVX)	3.68	(37)	8.75	(32)	24.51	(21)	24.51	(21)	6.81	(4)	8.04	(5)	12.24	(11)	8.32	(8)	11.00	(14)	11.16	(14)
Russell 2000 Value Index	3.50	(44)	8.49	(37)	22.39	(38)	22.39	(38)	3.27	(23)	4.77	(30)	10.95	(20)	6.99	(22)	10.13	(25)	10.56	(31)
IM U.S. Small Cap Value Equity (MF) Median	3.35		8.11		21.36		21.36		0.82		3.31		8.67		5.23		9.16		9.97	
Artisan Mid Cap (APHMX)	1.27	(61)	7.26	(52)	38.45	(16)	38.45	(16)	15.42	(25)	17.17	(43)	12.44	(75)	10.36	(65)	13.25	(63)	14.00	(27)
Russell Midcap Growth Index	1.17	(64)	8.17	(37)	35.47	(38)	35.47	(38)	13.59	(39)	17.36	(40)	14.77	(33)	11.60	(40)	14.81	(30)	14.24	(24)
IM U.S. Mid Cap Growth Equity (MF) Median	1.45	( )	7.45	,	34.41	` '	34.41	, ,	12.87	,	16.58	,	13.78	,	11.16	,	13.69	( )	13.14	
JHancock Disciplined Value Mid Cap (JVMRX)	2.67	(79)	6.31	(67)	30.28	(12)	30.28	(12)	5.48	(35)	8.78	(22)	10.39	(33)	8.69	(5)	13.34	(2)	N/A	
Russell Midcap Value Index	3.04	(54)	6.36	(66)	27.06	(34)	27.06	(34)	5.57	(34)	8.10	(34)	10.96	(21)	7.62	(27)	12.00	(15)	12.41	(14)
IM U.S. Mid Cap Value Equity (MF) Median	3.11	(01)	6.80	(00)	25.15	(01)	25.15	(01)	4.16	(01)	6.47	(01)	9.57	(21)	6.15	(21)	10.58	(10)	10.71	( ,
Fidelity Growth Company (FGCKX)	2.94	(37)	14.64	(2)	38.52	(7)	38.52	(7)	15.04	(47)	21.94	(17)	17.78	(4)	15.74	(2)	18.48	(2)	16.83	(1)
Russell 1000 Growth Index	3.02	(31)	10.62	(27)	36.39	(21)	36.39	(21)	15.90	(33)	20.49	(40)	16.98	(11)	14.63	(19)	16.92	(14)	15.22	(11)
IM U.S. Large Cap Growth Equity (MF) Median	2.79		9.69		33.38		33.38		14.88		19.87		15.02		13.22		15.61		13.85	
Vanguard Total Stock Market Index (VITSX)	2.87	(52)	9.01	(41)	30.81	(40)	30.81	(40)	11.38	(35)	14.55	(40)	14.08	(24)	11.21	(27)	14.34	(22)	13.43	(13)
Vanguard Spliced Total Stock Market Index	2.87	(52)	9.00	(42)	30.84	(40)	30.84	(40)	11.39	(35)	14.56	(39)	14.09	(24)	11.21	(27)	14.35	(22)	13.44	(13)
IM U.S. Large Cap Core Equity (MF) Median	2.88		8.71		29.62		29.62		10.32		13.95		12.96		10.29		13.31		12.22	

Returns for periods greater than one year are annualized. Returns are expressed as percentages.

Comparative Performance
Fire & Police Association of Colorado - Self Directed Plans
As of December 31, 2019

	M.	MTH		ΓR	Υ٦	ΓD	1 \	/R	2 \	/R	3 \	ΥR	<b>4</b> Y	/R	5 \	/R	7 Y	′R	10 `	YR
American Beacon Large Cap Value (AADEX)	2.86	(39)	8.27	(39)	29.67	(18)	29.67	(18)	6.83	(59)	10.14	(47)	11.57	(37)	7.80	(54)	11.72	(46)	11.21	(37)
Russell 1000 Value Index	2.75	(46)	7.41	(54)	26.54	(45)	26.54	(45)	7.74	(42)	9.68	(56)	11.55	(38)	8.29	(40)	12.20	(27)	11.80	(20)
IM U.S. Large Cap Value Equity (MF) Median	2.71		7.54		26.04		26.04		7.33		9.94		11.02		7.91		11.60		10.77	
Target Date Funds																				
Vanguard Instl Trgt Retire 2065 Instl (VSXFX)	3.03	(46)	8.01	(34)	25.15	(40)	25.15	(40)	7.40	(30)	N/A		N/A		N/A		N/A		N/A	
Vanguard Target 2065 Composite Index	3.12	(29)	8.15	(32)	25.37	(33)	25.37	(33)	7.53	(23)	N/A		N/A		N/A		N/A		N/A	
IM Mixed-Asset Target 2055 (MF) Median	3.01		7.76		24.80		24.80		6.78		11.23		10.53		7.92		9.68		9.19	
Vanguard Instl Trgt Retire 2060 Instl (VILVX)	3.07	(35)	8.04	(33)	25.13	(40)	25.13	(40)	7.36	(31)	11.86	(31)	11.12	(22)	N/A		N/A		N/A	
Vanguard Target 2060 Composite Index	3.12	(29)	8.15	(32)	25.37	(33)	25.37	(33)	7.53	(23)	12.01	(24)	11.29	(15)	8.66	(19)	10.67	(10)	N/A	
IM Mixed-Asset Target 2055 (MF) Median	3.01		7.76		24.80		24.80		6.78		11.23		10.53		7.92		9.68		9.19	
Vanguard Instl Trgt Retire 2055 Instl (VIVLX)	3.06	(39)	8.03	(34)	25.06	(42)	25.06	(42)	7.36	(31)	11.87	(30)	11.13	(22)	N/A		N/A		N/A	
Vanguard Target 2055 Composite Index	3.12	(29)	8.15	(32)	25.37	(33)	25.37	(33)	7.53	(23)	12.01	(24)	11.29	(15)	8.66	(19)	10.67	(10)	N/A	
IM Mixed-Asset Target 2055 (MF) Median	3.01		7.76		24.80		24.80		6.78		11.23		10.53		7.92		9.68		9.19	
Vanguard Instl Trgt Retire 2050 Instl (VTRLX)	3.04	(32)	8.02	(31)	25.05	(38)	25.05	(38)	7.34	(30)	11.85	(28)	11.12	(21)	N/A		N/A		N/A	
Vanguard Target 2050 Composite Index	3.12	(25)	8.15	(28)	25.37	(30)	25.37	(30)	7.53	(22)	12.01	(19)	11.29	(14)	8.66	(15)	10.67	(7)	10.25	(8)
IM Mixed-Asset Target 2050 (MF) Median	2.95		7.61		24.67		24.67		6.68		11.11		10.46		7.83		9.49		9.30	
Vanguard Instl Trgt Retire 2045 Instl (VITLX)	3.07	(25)	8.02	(30)	25.07	(34)	25.07	(34)	7.35	(29)	11.86	(24)	11.12	(18)	N/A		N/A		N/A	
Vanguard Target 2045 Composite Index	3.12	(21)	8.15	(27)	25.37	(28)	25.37	(28)	7.53	(23)	12.01	(18)	11.29	(11)	8.66	(15)	10.67	(7)	10.25	(7)
IM Mixed-Asset Target 2045 (MF) Median	2.93		7.53		24.61		24.61		6.75		11.10		10.38		7.80		9.41		9.23	
Vanguard Instl Trgt Retire 2040 Instl (VIRSX)	2.81	(40)	7.40	(33)	23.93	(42)	23.93	(42)	7.18	(29)	11.52	(25)	10.83	(19)	N/A		N/A		N/A	
Vanguard Target 2040 Composite Index	2.87	(33)	7.50	(30)	24.19	(36)	24.19	(36)	7.34	(24)	11.67	(20)	10.99	(14)	8.43	(15)	10.51	(6)	10.14	(9)
IM Mixed-Asset Target 2040 (MF) Median	2.76		7.09		23.63		23.63		6.58		10.74		10.06		7.51		9.09		9.00	
Vanguard Instl Trgt Retire 2035 Instl (VITFX)	2.54	(48)	6.68	(37)	22.56	(41)	22.56	(41)	7.01	(28)	10.91	(27)	10.27	(22)	N/A		N/A		N/A	
Vanguard Target 2035 Composite Index	2.59	(37)	6.79	(30)	22.76	(36)	22.76	(36)	7.16	(24)	11.05	(22)	10.42	(19)	8.03	(17)	10.02	(7)	9.78	(9)
IM Mixed-Asset Target 2035 (MF) Median	2.53		6.46		22.26		22.26		6.39		10.30		9.66		7.29		8.74		8.76	
Vanguard Instl Trgt Retire 2030 Instl (VTTWX)	2.27	(33)	6.02	(28)	21.14	(30)	21.14	(30)	6.81	(23)	10.28	(18)	9.70	(18)	N/A		N/A		N/A	
Vanguard Target 2030 Composite Index	2.31	(29)	6.07	(27)	21.34	(26)	21.34	(26)	6.96	(17)	10.41	(16)	9.83	(14)	7.62	(11)	9.41	(6)	9.31	(9)
IM Mixed-Asset Target 2030 (MF) Median	2.17		5.52		20.08		20.08		6.04		9.44		8.93		6.76		7.99		8.29	
Vanguard Instl Trgt Retire 2025 Instl (VRIVX)	1.99	(35)	5.25	(28)	19.67	(17)	19.67	(17)	6.61	(14)	9.63	(8)	9.11	(8)	N/A		N/A		N/A	
Vanguard Target 2025 Composite Index	2.04	(32)	5.36	(24)	19.93	(12)	19.93	(12)	6.73	(9)	9.76	(6)	9.24	(5)	7.20	(2)	8.78	(5)	8.83	(6)
IM Mixed-Asset Target 2025 (MF) Median	1.84		4.71		18.18		18.18		5.64		8.58		8.19		6.16		7.24		7.87	
Vanguard Instl Trgt Retire 2020 Instl (VITWX)	1.73	(36)	4.47	(27)	17.69	(23)	17.69	(23)	6.18	(12)	8.76	(9)	8.33	(10)	N/A		N/A		N/A	
Vanguard Target 2020 Composite Index	1.74	(35)	4.55	(22)	17.87	(20)	17.87	(20)	6.30	(9)	8.88	(7)	8.45	(8)	6.62	(4)	8.05	(3)	8.26	(2)
IM Mixed-Asset Target 2020 (MF) Median	1.55		3.90		15.97		15.97		5.23		7.52		7.25		5.46		6.45		7.03	

Returns for periods greater than one year are annualized. Returns are expressed as percentages.

**Comparative Performance** Fire & Police Association of Colorado - Self Directed Plans

As of December 31, 2019

Vanguard Instl Trgt Retire 2015 Instl (VITVX)	MTH		QTR		YTD		1 YR		2 YR		3 YR		4 YR		5 YR		7 YR		10 YR	
	1.24	(77)	3.27	(75)	14.88	(62)	14.88	(62)	5.61	(22)	7.54	(28)	7.22	(39)	N/A		N/A		N/A	
Vanguard Target 2015 Composite Index	1.29	(73)	3.34	(71)	15.09	(55)	15.09	(55)	5.73	(18)	7.65	(25)	7.34	(36)	5.78	(25)	6.96	(12)	7.39	(15)
IM Mixed-Asset Target 2015 (MF) Median	1.56	, ,	3.83	. ,	15.30	` '	15.30	` '	5.24	, ,	7.13	, ,	7.06	, ,	5.30	, ,	6.28	, ,	6.88	, ,
Vanguard Instl Trgt Retire Inc Instl (VITRX)	1.03	(60)	2.66	(51)	13.20	(53)	13.20	(53)	5.34	(20)	6.39	(37)	6.12	(39)	N/A		N/A		N/A	
Vanguard Target Income Composite Index	1.06	(56)	2.72	(42)	13.41	(50)	13.41	(50)	5.44	(17)	6.51	(31)	6.22	(34)	4.97	(23)	5.23	(27)	5.97	(22)
IM Mixed-Asset Target Today (MF) Median	1.15		2.67		13.32		13.32		4.63		5.94		5.79		4.24		4.29		5.17	
Fixed Income																				
MacKay Shields High Yield CIT	1.72	(59)	2.69	(33)	14.20	(37)	14.20	(37)	6.19	(6)	N/A		N/A		N/A		N/A		N/A	
ICE BofAML High Yield Master II	2.09	(31)	2.59	(41)	14.39	(32)	14.39	(32)	5.73	(15)	6.31	(11)	9.00	(5)	6.13	(8)	5.78	(11)	7.50	(8)
IM U.S. High Yield Bonds (MF) Median	1.81		2.47		13.50		13.50		4.83		5.50		7.44		4.94		4.76		6.55	
Pimco Global Bond (PIGLX)	2.07	(5)	2.55	(5)	6.67	(82)	6.67	(82)	1.29	(93)	3.86	(59)	3.96	(50)	2.41	(52)	1.30	(69)	3.63	(33)
Bloomberg Barclays Global Aggregate	0.58	(55)	0.49	(64)	6.84	(78)	6.84	(78)	2.74	(64)	4.27	(43)	3.72	(61)	2.31	(58)	1.35	(67)	2.48	(73)
IM Global Fixed Income (MF) Median	0.70		0.68		8.12		8.12		3.11		4.04		3.96		2.44		1.70		3.00	
Dodge & Cox Income (DODIX)	0.28	(7)	0.85	(5)	9.73	(19)	9.73	(19)	4.59	(11)	4.52	(11)	4.79	(3)	3.69	(7)	3.50	(3)	4.43	(13)
Blmbg. Barc. U.S. Aggregate Index	-0.07	(56)	0.18	(51)	8.72	(52)	8.72	(52)	4.27	(26)	4.03	(38)	3.68	(48)	3.05	(36)	2.72	(38)	3.75	(55)
IM U.S. Broad Market Core Fixed Income (MF) Median	-0.05		0.18		8.75		8.75		4.00		3.88		3.65		2.89		2.56		3.83	
Vanguard Total Bond Market Index (VBTIX)	-0.14	(69)	0.03	(71)	8.73	(51)	8.73	(51)	4.27	(27)	4.03	(38)	3.67	(49)	3.01	(40)	2.67	(41)	3.70	(58)
Vanguard Splc Blmbg. Barc. US Agg Flt Adj (N)	-0.09	(61)	0.14	(59)	8.87	(48)	8.87	(48)	4.30	(24)	4.08	(35)	3.74	(44)	3.07	(34)	2.73	(36)	3.78	(55)
IM U.S. Broad Market Core Fixed Income (MF) Median	-0.05		0.18		8.75		8.75		4.00		3.88		3.65		2.89		2.56		3.83	
Cash																				
Wells Fargo Stable Value	0.20		0.59		2.25		2.25		2.10		1.95		1.84		1.75		1.64		1.81	
Ryan 3 Yr GIC Master Index	0.20		0.61		2.38		2.38		2.17		1.98		1.83		1.70		1.51		1.80	
Fidelity Money Market Government (FIGXX)	0.13	(23)	0.41	(22)	2.09	(21)	2.09	(21)	1.90	(23)	1.52	(23)	1.20	(21)	0.96	(22)	0.69	(22)	0.49	(22)
90 Day U.S. Treasury Bill	0.14	(5)	0.46	(5)	2.28	(5)	2.28	(5)	2.08	(9)	1.67	(11)	1.31	(11)	1.05	(12)	0.76	(11)	0.56	(11)
IM U.S. Taxable Money Market (MF) Median	0.11		0.37		1.90		1.90		1.72		1.33		0.99		0.81		0.58		0.41	