



INVESTMENT ADVISORY SERVICES

Los Angeles • New York

Alternative Investment Performance  
Merced County Employees' Retirement Association

April 23, 2020

# MCERA Private Equity Capital Budget & Implementation Plan

## 15% fund level target

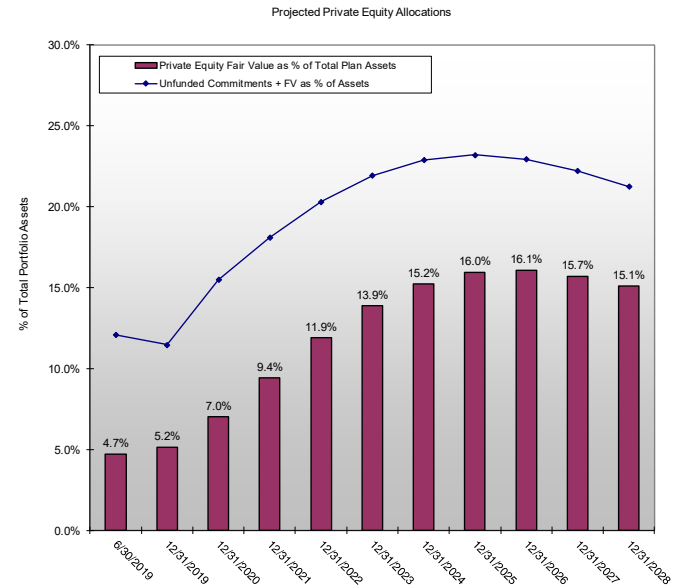
- Annual capital budget target of \$40 million, range of \$30-\$50 million
- Target 4-7 investments, range of \$5-\$15 million per inv; average size of \$8 million per

## Performance comparisons:

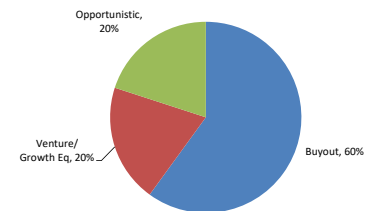
- *Long term investment objective:* Earn a return premium over public equity (Russell 3000 + 3%)
- *Recommended primary asset class benchmark:* Cambridge Associates Global Private Equity & VC Index
- *Recommended fund benchmarks:* Each fund will be compared to the Cambridge Associates strategy universe for the respective vintage years and each vintage year will be compared to Cambridge Associates Global Private Equity & VC Index

## MCERA CY 2019 commitments:

- Summit X – growth capital (VY 2019), \$8 mm
- Genstar IX – mid market buyout (VY 2019), \$8 mm
- Spark Capital VI – early stage VC (VY 2020), \$3 mm
- Spark Capital Growth III – late stage VC (VY 2020), \$6 mm
- Accel-KKR Capital VI – software buyout (VY 2020), \$5 mm
- Cortec VII – lower mid mkt buyout (VY 2019), \$10 mm



## Target Strategy Diversification



	Target	Ranges
Buyout	60%	40-80%
Venture/Growth Eq	20%	10-30%
Opportunistic	20%	10-30%
	100%	

Note: MCERA’s existing private equity portfolio was modeled using vintage year drawdown/return of capital assumptions patterned after historical category averages. Total fund growth of 5.5%.

# MCERA Private Equity Investment Structure & Portfolio Assessment

## Investment structure (15% fund target; 5% invested as of Sep 2019):

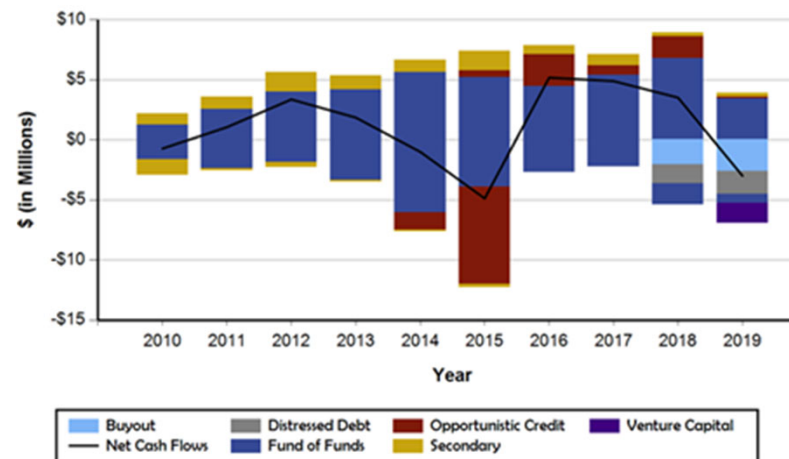
- Current portfolio is barbelled with half of commitments in 2007 & earlier FoFs and half in 2011 & later FoFs
  - Overall portfolio has not met performance expectations; 2011 & later portfolio is still in development with the funds in VY 2017-2019 in their investment period
  - Modest quarterly performance improvement due to VY 2004 fund; contributions & distributions are similar over the past year as the newer portfolios are being built out and FoFs are returning capital
  - Portfolio is diversified by strategy but overall it is in a negative cash flow situation

### Annual Summary

(in thousands)

	Total Partnerships	Total Commitments	(A) Contributions	(B) Distributions	(C) Fair Value	(B+C) Total Value	(B+C-A) Gain/ Loss	Net IRR	Benchmark
September 30, 2018	25	\$99,029	\$62,526	\$51,884	\$39,589	\$91,473	\$28,946	8.47%	10.98%
September 30, 2019	30	\$130,864	\$71,521	\$60,399	\$43,569	\$103,967	\$32,447	8.51%	11.32%
Annual Change	5	\$31,835	\$8,995	\$8,515	\$3,980	\$12,494	\$3,501		

Annual Cash Flow



Note: Net cash flow is the for the respective calendar year.

## MCERA Private Equity Performance – as of Sep 30, 2019

Partnership Name (\$000)	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/ Loss	Net IRR	IRR Bench.	TVPI	TVPI Bench.
<b>Vintage Year 2004</b>													
Invesco Partnership Fund IV, L.P.	Fund of Funds	10,000	2,417	7,898	76%	16,070	188	16,258	8,360	11.77%	7.49%	2.06	1.55
Vintage Year 2004 Total		10,000	2,417	7,898	76%	16,070	188	16,258	8,360	11.77%	7.85%	2.06	1.51
<b>Vintage Year 2005</b>													
ASP 2005 Non-US Fund	Fund of Funds	1,500	74	1,426	95%	1,670	277	1,947	522	4.81%	4.67%	1.37	1.36
ASP 2005 US Fund	Fund of Funds	3,500	177	3,323	95%	4,457	697	5,155	1,831	6.90%	7.50%	1.55	1.57
Pantheon Ventures Euro Fund IV	Fund of Funds	1,092	52	1,278	95%	1,549	115	1,664	386	4.65%	4.67%	1.30	1.36
Pantheon Ventures USA Fund VI	Fund of Funds	3,750	206	3,544	95%	4,811	736	5,547	2,003	6.93%	7.50%	1.57	1.57
Vintage Year 2005 Total		9,842	509	9,570	95%	12,487	1,826	14,313	4,742	6.35%	7.46%	1.50	1.46
<b>Vintage Year 2006</b>													
Pantheon Global Secondary Fund III "B"	Secondary	10,000	540	9,460	95%	9,710	972	10,682	1,222	2.18%	8.56%	1.13	1.42
Vintage Year 2006 Total		10,000	540	9,460	95%	9,710	972	10,682	1,222	2.18%	7.26%	1.13	1.48
<b>Vintage Year 2007</b>													
ASP 2007 Direct Fund	Fund of Funds	450	12	438	97%	745	290	1,035	597	12.09%	10.98%	2.36	1.80
ASP 2007 Non-US Fund	Fund of Funds	1,575	78	1,497	95%	1,613	697	2,311	814	7.68%	7.31%	1.54	1.44
ASP 2007 US Fund	Fund of Funds	2,475	115	2,360	95%	3,245	1,130	4,374	2,014	11.82%	10.98%	1.85	1.80
Vintage Year 2007 Total		4,500	205	4,295	95%	5,603	2,117	7,720	3,425	10.55%	8.91%	1.80	1.58
<b>Vintage Year 2011</b>													
ASP 2011 Direct Fund	Fund of Funds	500	43	457	91%	482	373	855	398	15.09%	16.40%	1.87	1.80
ASP 2011 Emerging Markets Fund	Fund of Funds	500	64	436	87%	156	606	762	326	12.81%	11.09%	1.75	1.63
ASP 2011 Non-US Developed Fund	Fund of Funds	1,500	322	1,178	79%	898	1,012	1,910	732	12.69%	11.09%	1.62	1.63
ASP 2011 US Fund	Fund of Funds	2,500	326	2,175	87%	1,325	2,378	3,703	1,528	14.13%	16.40%	1.70	1.80
Pantheon Asia Fund VI	Fund of Funds	1,000	139	862	86%	369	979	1,348	486	10.66%	11.09%	1.56	1.63
Pantheon Euro Fund VII	Fund of Funds	1,523	219	1,478	86%	944	1,252	2,196	718	9.69%	11.09%	1.49	1.63
Pantheon Ventures USA Fund IX	Fund of Funds	2,000	254	1,746	87%	1,170	1,860	3,030	1,284	13.48%	16.40%	1.74	1.80
Vintage Year 2011 Total		9,523	1,368	8,332	86%	5,344	8,460	13,804	5,472	12.64%	12.98%	1.66	1.68
<b>Vintage Year 2013</b>													
Invesco Partnership Fund VI, L.P.	Fund of Funds	5,000	1,548	3,958	69%	989	6,779	7,768	3,810	17.21%	17.03%	1.96	1.59
Vintage Year 2013 Total		5,000	1,548	3,958	69%	989	6,779	7,768	3,810	17.21%	13.06%	1.96	1.47

Note: The benchmark represents the Cambridge Associates LLC median for the respective strategy and vintage year. At the vintage year level, the Cambridge Associates LLC Global Private Equity & VC<sup>®</sup> median is used for the respective vintage year.

# MCERA Private Equity Performance – as of Sep 30, 2019

Partnership Name (\$000)	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/ Loss	Net IRR	IRR Bench.	TVPI	TVPI Bench.
<b>Vintage Year 2014</b>													
Ocean Avenue Fund II	Fund of Funds	10,000	1,300	8,700	87%	4,147	9,894	14,040	5,340	15.51%	15.01%	1.61	1.48
Raven Asset-Based Opportunity Fund II	Opportunistic Credit	10,000	474	9,526	95%	5,958	3,531	9,489	-37	-0.13%	8.28%	1.00	1.23
<b>Vintage Year 2014 Total</b>		<b>20,000</b>	<b>1,774</b>	<b>18,226</b>	<b>91%</b>	<b>10,104</b>	<b>13,425</b>	<b>23,529</b>	<b>5,303</b>	<b>8.30%</b>	<b>14.92%</b>	<b>1.29</b>	<b>1.51</b>
<b>Vintage Year 2017</b>													
GTCR XII	Buyout	5,000	3,712	1,288	26%	90	1,219	1,309	21	N/M	N/M	1.02	1.13
<b>Vintage Year 2017 Total</b>		<b>5,000</b>	<b>3,712</b>	<b>1,288</b>	<b>26%</b>	<b>90</b>	<b>1,219</b>	<b>1,309</b>	<b>21</b>	<b>N/M</b>	<b>N/M</b>	<b>1.02</b>	<b>1.13</b>
<b>Vintage Year 2018</b>													
Carrick Capital Partners III, L.P.	Buyout	5,000	3,802	1,198	24%	0	1,305	1,305	107	N/M	N/M	1.09	1.01
Cressey & Company Fund VI LP	Buyout	5,000	3,900	1,100	22%	0	1,062	1,062	-38	N/M	N/M	0.97	1.01
Davidson Kempner Long-Term Distressed	Opportunistic Distressed Debt	5,000	1,550	3,450	69%	0	3,682	3,682	232	N/M	N/M	1.07	N/A
<b>Vintage Year 2018 Total</b>		<b>15,000</b>	<b>9,252</b>	<b>5,748</b>	<b>38%</b>	<b>0</b>	<b>6,049</b>	<b>6,049</b>	<b>301</b>	<b>N/M</b>	<b>N/M</b>	<b>1.05</b>	<b>1.00</b>
<b>Vintage Year 2019</b>													
Accel-KKR Capital Partners VI, LP	Buyout	8,000	8,000	0	0%	0	0	0	0	N/M	N/M	N/A	N/A
Accel-KKR Growth Capital Partners III	Buyout	5,000	4,698	302	6%	0	224	224	-78	N/M	N/M	N/A	N/A
Genstar Capital Partners IX, L.P.	Buyout	7,000	6,206	794	11%	0	761	761	-33	N/M	N/M	N/A	N/A
Summit Partners Growth Equity Fund X-A, L.P.	Buyout	8,000	8,000	0	0%	0	0	0	0	N/M	N/M	N/A	N/A
Spark Capital Growth Fund III, L.P.	Venture Capital	6,000	6,000	0	0%	0	0	0	0	N/M	N/M	N/A	N/A
Spark Capital VI, L.P.	Venture Capital	3,000	3,000	0	0%	0	0	0	0	N/M	N/M	N/A	N/A
TCV X, L.P.	Venture Capital	5,000	3,351	1,649	33%	0	1,549	1,549	-100	N/M	N/M	N/A	N/A
<b>Vintage Year 2019 Total</b>		<b>42,000</b>	<b>39,255</b>	<b>2,745</b>	<b>7%</b>	<b>0</b>	<b>2,535</b>	<b>2,535</b>	<b>-210</b>	<b>N/M</b>	<b>N/M</b>	<b>N/A</b>	<b>0.91</b>
<b>Total Portfolio:</b>		<b>130,864</b>	<b>60,581</b>	<b>71,521</b>	<b>54%</b>	<b>60,399</b>	<b>43,569</b>	<b>103,967</b>	<b>32,447</b>	<b>8.51%</b>	<b>11.32%</b>	<b>1.45</b>	
<b>Portfolio Strategy Totals</b>													
Buyout		43,000	38,318	4,682	11%	90	4,572	4,662	-21	N/M		1.00	
Distressed Debt		5,000	1,550	3,450	69%	0	3,682	3,682	232	N/M		1.07	
Fund of Funds		40,175	6,399	34,599	84%	37,441	24,324	61,765	27,166	11.28%		1.79	
Non-US		8,689	949	8,155	89%	7,200	4,939	12,139	3,984	7.54%		1.49	
Opportunistic Credit		10,000	474	9,526	95%	5,958	3,531	9,489	-37	-0.13%		1.00	
Secondary		10,000	540	9,460	95%	9,710	972	10,682	1,222	2.18%		1.13	
Venture Capital		14,000	12,351	1,649	12%	0	1,549	1,549	-100	N/M		N/A	
<b>Total Portfolio:</b>		<b>130,864</b>	<b>60,581</b>	<b>71,521</b>	<b>54%</b>	<b>60,399</b>	<b>43,569</b>	<b>103,967</b>	<b>32,447</b>	<b>8.51%</b>	<b>11.32%</b>	<b>1.45</b>	

Note: The benchmark represents the Cambridge Associates LLC median for the respective strategy and vintage year. At the vintage year level, the Cambridge Associates LLC Global Private Equity & VC<sup>®</sup> median is used for the respective vintage year.

# MCERA Real Estate Capital Budget & Implementation Plan

## 8% fund level target

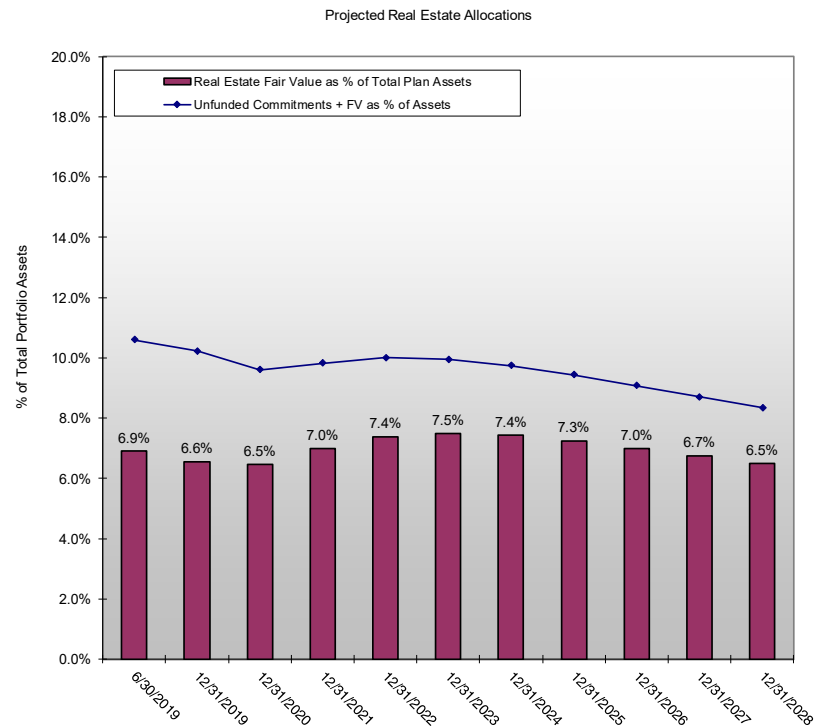
- Annual capital budget target of \$15 million, range of \$10-\$25 million
- Target 2-4 investments, range of \$4-\$7 million per inv
  - Average investment size of \$5 million
  - If an average of 2-4 GP partnership commitments per year, expect a total of 8-16 GP relationships over a 4 year fund raising cycle
- Retain core real estate exposure but lower it to 25% of the portfolio due to current valuations; use REITS as a substitute until funding private real estate investments is needed

## Performance comparisons:

- *Long term investment objective:* Earn a return premium over inflation (CPI-U + 5%)
- *Recommended primary asset class benchmark:* NCREIF NFI-ODCE; revisit over time as the structure of the portfolio changes
- *Recommended fund benchmarks:* Cambridge Associates strategy universe for the respective vintage years and each vintage year will be compared to Cambridge Associates Global Real Estate Index

## MCERA CY 2019 commitments (\$5 mm):

- Rockpoint VI –opportunistic RE (VY 2019)



Note: MCERA’s existing real estate portfolio was modeled using vintage year drawdown/return of capital assumptions patterned after historical averages. Total fund growth rate of 5.5%.

# MCERA Real Estate Investment Structure & Portfolio Assessment

## Real estate investment structure (8% target, 6.9% actual as of Sep 2019)

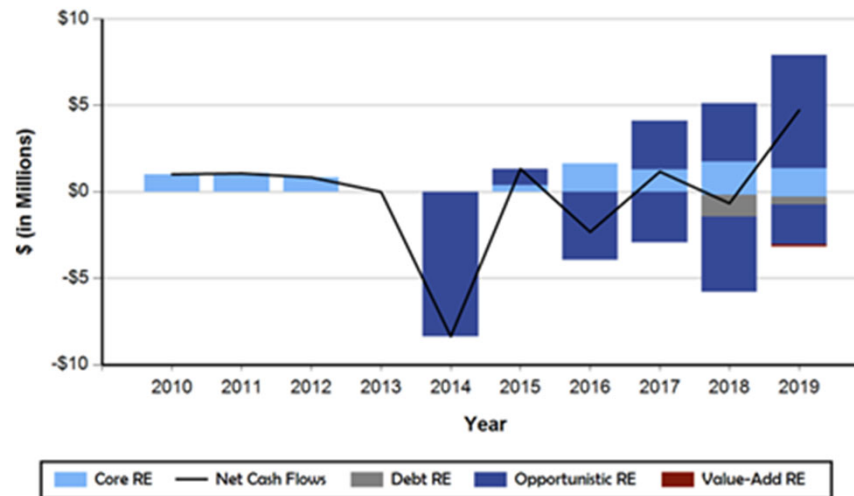
- MCERA invested in 1999 in a private core real estate fund; gains have been re-invested in the fund
- Distributions exceed contributions by \$4 million over the past year as overall RE activity has declined and Greenfield has been making distributions

### Annual Summary

(in thousands)

	Total Partnerships	Total Commitments	(A) Contributions	(B) Distributions	(C) Fair Value	(B+C) Total Value	(B+C-A) Gain/ Loss	Net IRR	Benchmark
September 30, 2018	5	\$53,810	\$35,136	\$26,745	\$60,895	\$87,640	\$52,504	9.33%	8.57%
September 30, 2019	8	\$67,990	\$40,366	\$35,664	\$58,343	\$94,007	\$53,641	9.00%	8.88%
Annual Change	3	\$14,180	\$5,230	\$8,919	-\$2,552	\$6,367	\$1,137		

Annual Cash Flow



Note: Net cash flow is the for the respective calendar year.

# MCERA Real Estate Performance – as of Sep 30, 2019

## Real Estate Portfolio

- MCERA began investing in the UBS Trumbull core real estate fund in 1999 and this represents the bulk of the real estate portfolio
  - Opportunistic funds began being added in 2014 and they are in the early stages of development with the VY 2016 fund now out of its “j-curve”
  - Valuation had modest quarterly gains due to gains in the Taconic portfolio
- Overall performance has met objectives, driven by the core RE fund; opportunistic fund performance is not meaningful

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/ Loss	Net IRR	IRR Bench.	TVPI
<i>(in thousands)</i>												
<b>Vintage Year 1999</b>												
UBS Trumbull Property Fund	Core RE	17,000	0	17,460	100%	22,814	41,038	63,852	46,392	8.84%	10.20%	3.66
Vintage Year 1999 Total		17,000	0	17,460	100%	22,814	41,038	63,852	46,392	8.84%	12.95%	3.66
<b>Vintage Year 2014</b>												
Greenfield Acquisition Partners VII, L.P.	Opportunistic RE	13,000	1,876	12,662	86%	10,070	8,927	18,997	6,335	13.05%	13.08%	1.50
Vintage Year 2014 Total		13,000	1,876	12,662	86%	10,070	8,927	18,997	6,335	13.05%	11.58%	1.50
<b>Vintage Year 2016</b>												
Patron Capital Fund V	Opportunistic RE	12,990	6,117	7,265	53%	2,780	5,476	8,255	990	8.72%	11.25%	1.14
Vintage Year 2016 Total		12,990	6,117	7,265	53%	2,780	5,476	8,255	990	8.72%	11.05%	1.14
<b>Vintage Year 2017</b>												
Carlyle Realty Partners VIII, L.P.	Opportunistic RE	5,000	4,223	778	16%	1	679	680	-98	N/M	N/M	0.87
Vintage Year 2017 Total		5,000	4,223	778	16%	1	679	680	-98	N/M	N/M	0.87
<b>Vintage Year 2018</b>												
Taconic CRE Dislocation Fund II	Debt RE	5,000	3,300	1,700	34%	0	1,873	1,873	173	N/M	N/M	1.10
AG Realty Value Fund X, L.P.	Opportunistic RE	5,000	4,625	375	8%	0	306	306	-69	N/M	N/M	0.82
Vintage Year 2018 Total		10,000	7,925	2,075	21%	0	2,178	2,178	103	N/M	N/M	1.05
<b>Vintage Year 2019</b>												
Rockpoint Real Estate Fund VI, L.P.	Opportunistic RE	5,000	5,000	0	0%	0	-25	-25	-25	N/M	N/M	0.00
Carmel Partners Investment Fund VII, L.P Value-Add RE		5,000	4,874	126	3%	0	69	69	-57	N/M	N/M	0.55
Vintage Year 2019 Total		10,000	9,874	126	1%	0	44	44	-82	N/M	N/M	0.35
<b>Total Portfolio:</b>		<b>67,990</b>	<b>30,015</b>	<b>40,366</b>	<b>56%</b>	<b>35,664</b>	<b>58,343</b>	<b>94,007</b>	<b>53,641</b>	<b>9.00%</b>	<b>8.88%</b>	<b>2.33</b>

Note: The benchmark at the total portfolio level is NCREIF NFI-ODCE . Private real estate benchmark at the fund level is the Cambridge Value Add or Opportunistic RE Indices while the Cambridge Global Real Estate Index at the vintage year level.



# MCERA Real Asset Capital Budget & Implementation Plan

## 5% fund level target

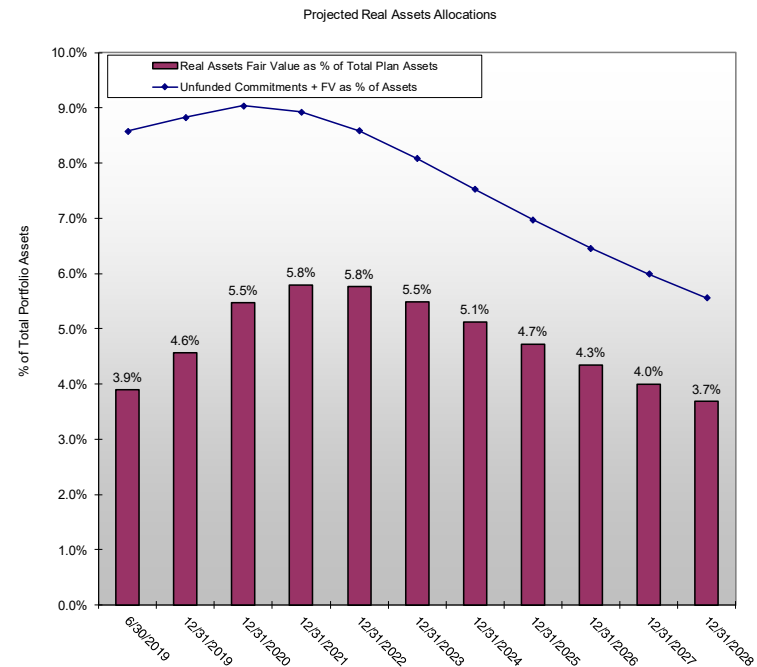
- Annual capital budget target of \$10 million, range of \$5-\$15 million
- Target 2-4 investments, range of \$3-\$7 million per inv
  - Average investment size of \$5 million
  - If an average of 2-4 GP partnership commitments per year, expect a total of 8-16 GP relationships over a 4 year fund raising cycle
- Portfolio targeted to be equally split between infrastructure and energy/natural resource funds

## Performance comparisons:

- *Long term investment objective:* Earn a return premium over inflation (CPI-U + 5%)
- *Recommended primary asset class benchmark:* 50/50 Cambridge Global Infrastructure/Cambridge Energy Upstream & Royalties and Private Energy Index
- *Recommended fund benchmarks:* Each fund will be compared to the Cambridge Associates strategy universe for the respective vintage years and each vintage year will be compared to the 50/50 index

## MCERA CY 2019 commitments (\$5 mm):

- *Tailwater IV* – mid-stream energy (VY 2019)



Note: MCERA’s existing real asset portfolio was modeled using vintage year drawdown/return of capital assumptions patterned after historical category averages. Total fund growth rate of 5.5%.

# MCERA Real Assets Investment Structure & Portfolio Assessment

## Real assets investment structure (5% target, 6.4% actual as of Sep 2019)

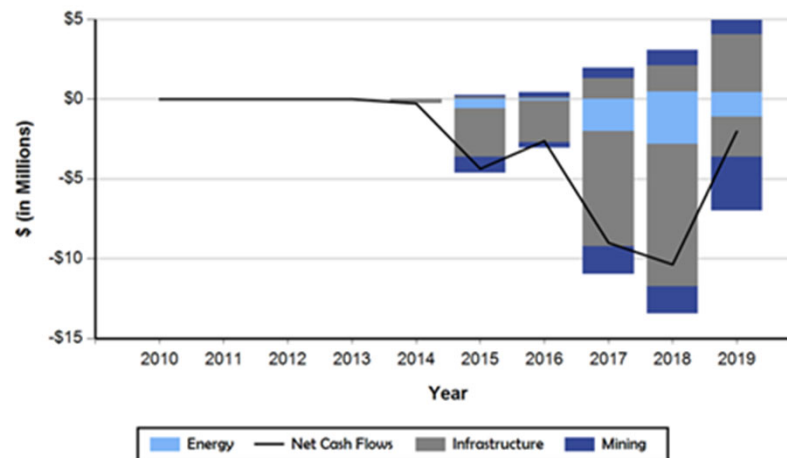
- Program is designed to be equally divided between private infrastructure and natural resource funds along with a public real asset component
- Private fund commitments began in 2014 to infrastructure and 2015 to natural resources
- The overall portfolio is immature with the funds in the early stage of development
  - Contributions exceed distributions by \$6 mm as the newer funds are being built out

### Annual Summary

(in thousands)

	Total Partnerships	Total Commitments	(A) Contributions	(B) Distributions	(C) Fair Value	(B+C) Total Value	(B+C-A) Gain/ Loss	Net IRR	Benchmark
September 30, 2018	9	\$55,500	\$27,666	\$4,517	\$27,599	\$32,117	\$4,451	12.65%	4.03%
September 30, 2019	15	\$69,890	\$39,367	\$10,731	\$36,436	\$47,167	\$7,800	11.91%	0.59%
Annual Change	6	\$14,390	\$11,701	\$6,214	\$8,837	\$15,050	\$3,349		

Annual Cash Flow



Note: Net cash flow is the for the respective calendar year.

# MCERA Real Assets Performance – as of Sep 30, 2019

## Real Asset Portfolio

- MCERA began allocating to real assets in 2014 via direct fund commitments
- Portfolio is in its early stages of development so performance is not meaningful; the energy infrastructure fundshad valuation improvements for the quarter; the VY 2017-19 funds are being built out

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/ Loss	Net IRR	IRR Bench.	TVPI
(in thousands)												
<b>Vintage Year 2014</b>												
KKR Global Infrastructure II	Infrastructure	10,000	533	10,666	95%	2,021	11,289	13,310	2,644	11.00%	10.72%	1.25
<b>Vintage Year 2014 Total</b>		<b>10,000</b>	<b>533</b>	<b>10,666</b>	<b>95%</b>	<b>2,021</b>	<b>11,289</b>	<b>13,310</b>	<b>2,644</b>	<b>11.00%</b>		<b>1.25</b>
<b>Vintage Year 2015</b>												
GSO Energy Select Opportunities Fund	Energy	7,500	3,789	4,167	49%	814	4,336	5,150	984	10.54%	9.96%	1.24
North Haven Infrastructure Partners II LP	Infrastructure	10,000	1,648	10,813	84%	4,521	8,581	13,102	2,289	11.80%	7.22%	1.21
Taurus Mining Finance Fund	Mining	5,000	1,353	4,576	73%	1,859	3,705	5,564	988	15.74%	N/A	1.22
<b>Vintage Year 2015 Total</b>		<b>22,500</b>	<b>6,790</b>	<b>19,555</b>	<b>70%</b>	<b>7,194</b>	<b>16,621</b>	<b>23,815</b>	<b>4,260</b>	<b>12.20%</b>		<b>1.22</b>
<b>Vintage Year 2016</b>												
Taurus Mining Finance Annex Fund	Mining	5,000	1,958	3,660	61%	1,136	3,258	4,394	734	26.73%	N/A	1.20
<b>Vintage Year 2016 Total</b>		<b>5,000</b>	<b>1,958</b>	<b>3,660</b>	<b>61%</b>	<b>1,136</b>	<b>3,258</b>	<b>4,394</b>	<b>734</b>	<b>26.73%</b>		<b>1.20</b>
<b>Vintage Year 2017</b>												
EnCap Energy Capital Fund XI, L.P.	Energy	5,000	3,979	1,021	20%	0	832	832	-188	-18.97%	2.37%	0.82
ISQ Global Infrastructure Fund II	Infrastructure	5,000	3,343	1,949	33%	293	1,855	2,149	200	N/M	N/M	1.10
<b>Vintage Year 2017 Total</b>		<b>10,000</b>	<b>7,323</b>	<b>2,970</b>	<b>27%</b>	<b>293</b>	<b>2,688</b>	<b>2,981</b>	<b>11</b>	<b>0.50%</b>		<b>1.00</b>
<b>Vintage Year 2018</b>												
EnCap Flatrock Midstream IV, L.P.	Energy	3,000	2,167	911	28%	78	982	1,061	150	N/M	N/M	1.16
KKR Global Infrastructure Investors III	Infrastructure	5,000	3,985	1,015	20%	9	968	977	-38	N/M	N/M	N/A
<b>Vintage Year 2018 Total</b>		<b>8,000</b>	<b>6,152</b>	<b>1,926</b>	<b>23%</b>	<b>87</b>	<b>1,951</b>	<b>2,038</b>	<b>112</b>	<b>N/M</b>		<b>1.06</b>
<b>Vintage Year 2019</b>												
Global Energy & Power Infrastructure Fund III	Energy	5,000	4,507	493	10%	0	562	562	69	N/M	N/M	1.14
Ardian Infrastructure Fund V	Infrastructure	4,390	4,293	97	2%	0	73	73	-23	N/M	N/M	N/A
<b>Vintage Year 2019 Total</b>		<b>9,390</b>	<b>8,800</b>	<b>590</b>	<b>6%</b>	<b>0</b>	<b>635</b>	<b>635</b>	<b>46</b>	<b>N/M</b>		<b>1.08</b>
<b>Vintage Year 2020</b>												
Tailwater Energy Fund IV, LP	Energy	5,000	5,000	0	0%	0	-6	-6	-6	N/M	N/M	0.00
<b>Vintage Year 2020 Total</b>		<b>5,000</b>	<b>5,000</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>-6</b>	<b>-6</b>	<b>-6</b>	<b>N/M</b>		<b>0.00</b>
<b>Total Portfolio:</b>		<b>69,890</b>	<b>36,556</b>	<b>39,367</b>	<b>48%</b>	<b>10,731</b>	<b>36,436</b>	<b>47,167</b>	<b>7,800</b>	<b>11.91%</b>	<b>0.59%</b>	<b>1.20</b>
<b>Portfolio Strategy Totals</b>												
Energy		20,500	14,935	6,098	27%	893	6,145	7,037	939	8.39%		1.15
Infrastructure		25,000	6,165	22,494	75%	6,551	20,838	27,389	4,895	11.18%		1.22
Non-US		24,390	15,455	10,775	37%	3,288	9,453	12,741	1,966	18.72%		1.18
<b>Total Portfolio:</b>		<b>69,890</b>	<b>36,556</b>	<b>39,367</b>	<b>48%</b>	<b>10,731</b>	<b>36,436</b>	<b>47,167</b>	<b>7,800</b>	<b>11.91%</b>	<b>0.59%</b>	<b>1.20</b>

Note: Benchmark is 50% S&P Natural Resources and 50% S&P Infrastructure. Benchmarks for individual funds are the respective Cambridge strategy benchmark.

# MCERA Hedge Fund Performance – as of Jan 31, 2020

Equity oriented managers have been the best performers over the past year

Fund	Market Value	Actual %	Jan	QTD	YTD	Returns 1 Year	3 Year	5 Year	Incep	Std Dev	Sharpe Ratio	Incep Date
<b>Market Neutral</b>												
KLS Diversified Fund LP	9,167,065	5.4%	0.84%	0.84%	0.84%	-0.43%	-	-	1.29%	3.93%	-0.21	Oct-17
Laurion Capital, Ltd.	5,427,838	3.2%	1.60%	1.60%	1.60%	6.98%	-	-	5.32%	4.89%	0.61	Jul-18
Market Neutral - HF Total	14,594,903	8.7%	1.12%	1.12%	1.12%	2.20%	-	-	3.29%	3.16%	0.34	Oct-17
HFRI Relative Value (Total) Index			0.55%	0.55%	0.55%	5.55%	-	-	3.65%	2.82%	0.50	Oct-17
<b>Credit/Distressed</b>												
Silver Point Capital Fund, L.P.	12,602,845	7.5%	2.10%	2.10%	2.10%	5.58%	-	-	2.50%	4.87%	0.07	Dec-17
Credit/Distressed - HF Total	12,602,845	7.5%	2.10%	2.10%	2.10%	5.58%	-	-	2.50%	4.87%	0.07	Dec-17
HFRI ED: Distressed/Restructuring Index			1.11%	1.11%	1.11%	1.03%	-	-	1.67%	4.23%	-0.12	Dec-17
<b>Event Driven</b>												
Taconic Opportunity Fund L.P.	10,466,591	6.2%	0.32%	0.32%	0.32%	4.63%	-	-	3.99%	1.49%	1.12	Dec-18
Event Driven - HF Total	10,466,591	6.2%	0.32%	0.32%	0.32%	4.63%	-	-	3.99%	1.49%	1.12	Dec-18
HFRI Event-Driven (Total) Index			-0.17%	-0.17%	-0.17%	4.07%	-	-	4.15%	4.84%	0.39	Dec-18
<b>Equity Long/Short</b>												
Archipelago Partners, L.P.	12,431,596	7.4%	-0.30%	-0.30%	-0.30%	10.50%	-	-	5.76%	7.00%	0.52	Sep-17
First Eagle International Value Fund, LP	45,000,000	26.7%	0.00%	0.00%	0.00%	-	-	-	0.00%	-	-	Jan-20
GQG Partners International Equity Fund	45,074,718	26.7%	0.17%	0.17%	0.17%	-	-	-	0.17%	-	-	Jan-20
Marshall Wace Funds LP - MW Eureka (US) Fund	3,414,839	2.0%	0.58%	0.58%	0.58%	11.47%	-	-	6.16%	5.21%	0.74	Dec-17
Equity Long/Short - HF Total	105,921,153	62.8%	0.06%	0.06%	0.06%	10.90%	-	-	6.13%	6.11%	0.65	Sep-17
HFRI Equity Hedge (Total) Index			-0.85%	-0.85%	-0.85%	7.27%	-	-	3.93%	7.18%	0.27	Sep-17
<b>Global Macro-Discretionary</b>												
Graham Absolute Return Trading Ltd.	7,602,455	4.5%	-0.12%	-0.12%	-0.12%	5.08%	-	-	3.56%	6.63%	0.23	Sep-17
Global Macro-Discretionary - HF Total	7,602,455	4.5%	-0.12%	-0.12%	-0.12%	5.08%	-	-	3.56%	6.63%	0.23	Sep-17
HFRI Macro (Total) Index			0.62%	0.62%	0.62%	6.66%	-	-	1.76%	4.77%	-0.07	Sep-17
<b>Global Macro-Systematic</b>												
Winton Fund Limited	6,227,525	3.7%	-0.10%	-0.10%	-0.10%	5.29%	-	-	2.10%	7.13%	0.01	Nov-17
Global Macro-Systematic - HF Total	6,227,525	3.7%	-0.10%	-0.10%	-0.10%	5.29%	-	-	2.10%	7.13%	0.01	Nov-17
HFRI Macro (Total) Index			0.62%	0.62%	0.62%	6.66%	-	-	1.41%	4.74%	-0.15	Nov-17
<b>Multi-Strategy</b>												
Sculptor Domestic Partners II, L.P.	11,158,792	6.6%	2.58%	2.58%	2.58%	15.33%	9.11%	6.73%	6.74%	5.71%	0.95	Jul-14
Multi-Strategy - HF Total	11,158,792	6.6%	2.58%	2.58%	2.58%	15.33%	9.11%	6.73%	6.74%	5.71%	0.95	Jul-14
HFRI Relative Value (Total) Index			0.55%	0.55%	0.55%	5.55%	3.75%	3.96%	3.40%	2.78%	0.75	Jul-14
MCERA Hedge Fund Portfolio	168,574,265	100.0%	0.48%	0.48%	0.48%	6.56%	5.87%	3.78%	3.95%	4.06%	0.66	Jul-14
<b>Benchmarks</b>												
HFRI Fund of Funds Composite Index			0.62%	0.62%	0.62%	6.27%	3.73%	2.45%	2.44%	3.61%	0.33	Jul-14
<b>Market Indices</b>												
Libor3Month			0.15%	0.15%	0.15%	2.21%	2.00%	1.43%	1.30%	0.25%	-	Jul-14
Bloomberg Barclays US Aggregate Bond Index			1.92%	1.92%	1.92%	9.66%	4.63%	3.02%	3.44%	3.06%	0.70	Jul-14
Bloomberg Barclays US High Yield Bond Index			0.03%	0.03%	0.03%	9.39%	5.86%	6.00%	4.94%	5.29%	0.70	Jul-14
S&P 500 TR			-0.04%	-0.04%	-0.04%	21.68%	14.54%	12.37%	11.59%	11.55%	0.90	Jul-14
MSCI AC World Index Free - Net			-1.10%	-1.10%	-1.10%	16.04%	11.03%	8.51%	6.91%	11.39%	0.53	Jul-14
MSCI EAFE - Net			-2.09%	-2.09%	-2.09%	12.10%	7.76%	5.12%	2.87%	11.95%	0.19	Jul-14
MSCI EMF (Emerging Markets Free) - Net			-4.66%	-4.66%	-4.66%	3.81%	7.88%	4.48%	2.60%	15.65%	0.16	Jul-14

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