



INVESTMENT ADVISORY SERVICES

Los Angeles • New York

Alternative Investment Performance  
Merced County Employees' Retirement Association

June 2020

# MCERA Private Equity Capital Budget & Implementation Plan

## 15% fund level target

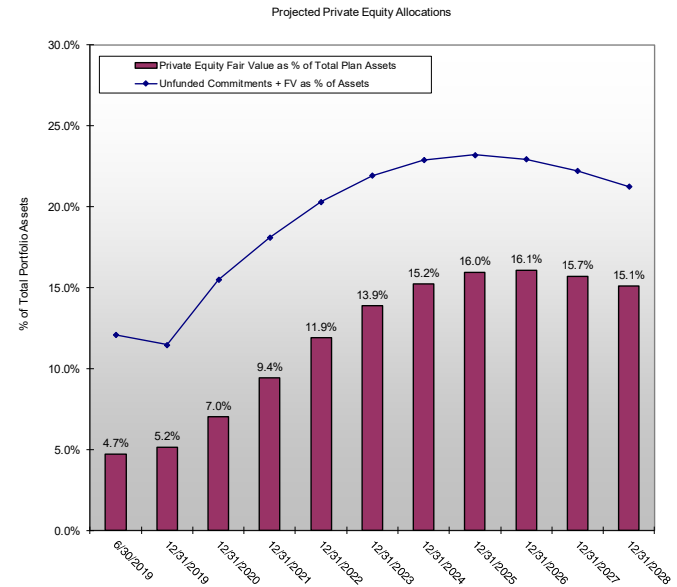
- Annual capital budget target of \$40 million, range of \$30-\$50 million
- Target 4-7 investments, range of \$5-\$15 million per inv; average size of \$8 million per

## Performance comparisons:

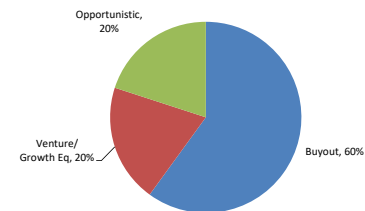
- *Long term investment objective:* Earn a return premium over public equity (Russell 3000 + 3%)
- *Recommended primary asset class benchmark:* Cambridge Associates Global Private Equity & VC Index
- *Recommended fund benchmarks:* Each fund will be compared to the Cambridge Associates strategy universe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

## MCERA CY 2020 commitments:

- Summit Ventures V – venture capital (VY 2020), \$5 mm
- Silver Point Specialty Credit II – corporate lending (VY 2019), \$8 mm
- Thoma Bravo Discover III – software buyouts (VY 2020), \$8 mm
- Marlin Heritage Europe II – European mid-mkt buyout (VY 2020), \$8 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

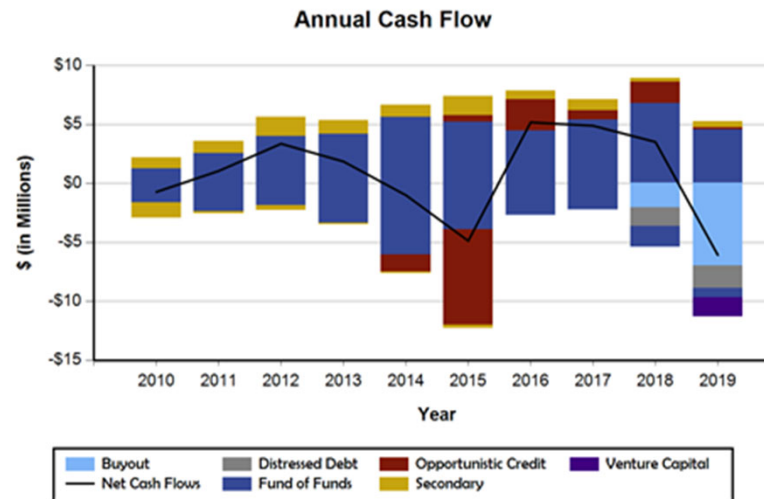
## Investment structure (15% fund target; 5.1% invested as of Dec 2019):

- 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 2011 funds; contributions exceed distributions by \$6 million 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
December 31, 2018	25	\$99,016	\$64,600	\$56,471	\$37,562	\$94,034	\$29,434	8.41%	10.74%
December 31, 2019	31	\$140,937	\$75,915	\$61,712	\$47,255	\$108,967	\$33,052	8.46%	11.45%
Annual Change	6	\$41,921	\$11,315	\$5,241	\$9,693	\$14,933	\$3,618		



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

# MCERA Private Equity Performance – as of Dec 31, 2019

Partnership Name (\$000)	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C)		(C+D) Total Value	(C+D-B) Gain/ Loss	Net IRR	IRR Bench.	TVPI
						Cumulat. Dist.	(D) Fair Value					
<b>Vintage Year 2004</b>												
Invesco Partnership Fund IV, L.P.	Fund of Funds	10,000	2,417	7,898	76%	16,195	63	16,258	8,360	11.76%	7.04%	2.06
<b>Vintage Year 2004 Total</b>		10,000	2,417	7,898	76%	16,195	63	16,258	8,360	11.76%	7.75%	2.06
<b>Vintage Year 2005</b>												
ASP 2005 Non-US Fund	Fund of Funds	1,500	74	1,426	95%	1,670	287	1,957	531	4.85%	5.44%	1.37
ASP 2005 US Fund	Fund of Funds	3,500	177	3,323	95%	4,457	733	5,191	1,867	6.96%	7.29%	1.56
Pantheon Ventures Euro Fund IV	Fund of Funds	1,122	48	1,283	96%	1,584	84	1,668	385	4.63%	5.44%	1.30
Pantheon Ventures USA Fund VI	Fund of Funds	3,750	206	3,544	95%	4,867	538	5,405	1,861	6.59%	7.29%	1.53
<b>Vintage Year 2005 Total</b>		9,872	505	9,576	95%	12,579	1,641	14,221	4,644	6.24%	7.40%	1.49
<b>Vintage Year 2006</b>												
Pantheon Global Secondary Fund III "B"	Secondary	10,000	540	9,460	95%	9,860	721	10,581	1,121	2.02%	N/A	1.12
<b>Vintage Year 2006 Total</b>		10,000	540	9,460	95%	9,860	721	10,581	1,121	2.02%	7.25%	1.12
<b>Vintage Year 2007</b>												
ASP 2007 Direct Fund	Fund of Funds	450	12	438	97%	771	292	1,062	624	12.27%	10.97%	2.42
ASP 2007 Non-US Fund	Fund of Funds	1,575	78	1,497	95%	1,663	678	2,342	845	7.79%	7.30%	1.56
ASP 2007 US Fund	Fund of Funds	2,475	115	2,360	95%	3,328	1,086	4,414	2,054	11.84%	10.97%	1.87
<b>Vintage Year 2007 Total</b>		4,500	205	4,295	95%	5,762	2,056	7,818	3,523	10.62%	8.95%	1.82
<b>Vintage Year 2011</b>												
ASP 2011 Direct Fund	Fund of Funds	500	43	457	91%	492	406	899	442	15.75%	13.95%	1.97
ASP 2011 Emerging Markets Fund	Fund of Funds	500	64	436	87%	166	637	804	368	13.43%	11.40%	1.84
ASP 2011 Non-US Developed Fund	Fund of Funds	1,500	322	1,178	79%	929	1,058	1,987	808	13.22%	11.40%	1.69
ASP 2011 US Fund	Fund of Funds	2,500	326	2,175	87%	1,542	2,268	3,810	1,635	14.32%	13.95%	1.75
Pantheon Asia Fund VI	Fund of Funds	1,000	129	872	87%	392	983	1,375	502	10.52%	11.40%	1.58
Pantheon Euro Fund VII	Fund of Funds	1,565	225	1,478	86%	1,011	1,284	2,294	817	10.37%	11.40%	1.55
Pantheon Ventures USA Fund IX	Fund of Funds	2,000	212	1,788	89%	1,350	1,782	3,132	1,344	13.50%	13.95%	1.75
<b>Vintage Year 2011 Total</b>		9,565	1,322	8,384	86%	5,881	8,419	14,300	5,917	12.94%	12.74%	1.71
<b>Vintage Year 2013</b>												
Invesco Partnership Fund VI, L.P.	Fund of Funds	5,000	1,548	3,958	69%	1,182	6,587	7,768	3,810	16.37%	11.54%	1.96
<b>Vintage Year 2013 Total</b>		5,000	1,548	3,958	69%	1,182	6,587	7,768	3,810	16.37%	12.58%	1.96

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 Dec 31, 2019

Partnership Name (\$000)	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat.		(C) Cumulat.		(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/ Loss	IRR Net IRR	IRR Bench.	TVPI
				Cont.	% Drawn	Dist.	Value						
<b>Vintage Year 2014</b>													
Ocean Avenue Fund II	Fund of Funds	10,000	1,300	8,700	87%	4,147	9,911	14,058	5,358	14.78%	N/A	1.62	
Raven Asset-Based Opportunity Fund II	Opportunistic Credit	10,000	474	9,526	95%	6,017	3,172	9,189	-337	-1.19%	8.03%	0.96	
<b>Vintage Year 2014 Total</b>		<b>20,000</b>	<b>1,774</b>	<b>18,226</b>	<b>91%</b>	<b>10,164</b>	<b>13,083</b>	<b>23,247</b>	<b>5,021</b>	<b>7.60%</b>	<b>14.78%</b>	<b>1.28</b>	
<b>Vintage Year 2017</b>													
GTCR XII	Buyout	5,000	3,449	1,551	31%	90	1,638	1,728	178	N/M	N/M	1.11	
<b>Vintage Year 2017 Total</b>		<b>5,000</b>	<b>3,449</b>	<b>1,551</b>	<b>31%</b>	<b>90</b>	<b>1,638</b>	<b>1,728</b>	<b>178</b>	<b>N/M</b>	<b>N/M</b>	<b>1.11</b>	
<b>Vintage Year 2018</b>													
Carrick Capital Partners III, L.P.	Buyout	5,000	3,773	1,227	25%	0	1,346	1,346	118	N/M	N/M	1.10	
Cressey & Company Fund VI LP	Buyout	5,000	3,900	1,100	22%	0	1,191	1,191	91	N/M	N/M	1.08	
Davidson Kempner Long-Term Distressed Opportuni	Distressed Debt	5,000	1,550	3,450	69%	0	3,894	3,894	444	N/M	N/M	1.13	
<b>Vintage Year 2018 Total</b>		<b>15,000</b>	<b>9,223</b>	<b>5,777</b>	<b>39%</b>	<b>0</b>	<b>6,431</b>	<b>6,431</b>	<b>654</b>	<b>N/M</b>	<b>N/M</b>	<b>1.11</b>	
<b>Vintage Year 2019</b>													
Accel-KKR Growth Capital Partners III	Buyout	5,000	4,372	628	13%	0	547	547	-82	N/M	N/M	0.87	
Cortec Group Fund VII, L.P.	Buyout	10,000	7,109	2,891	29%	0	2,864	2,864	-27	N/M	N/M	0.99	
Genstar Capital Partners IX, L.P.	Buyout	7,000	5,378	1,622	23%	0	1,665	1,665	43	N/M	N/M	1.03	
Summit Partners Growth Equity Fund X-A, L.P.	Buyout	8,000	8,000	0	0%	0	-23	-23	-23	N/M	N/M	0.00	
TCV X, L.P.	Venture Capital	5,000	3,351	1,649	33%	0	1,562	1,562	-87	N/M	N/M	0.95	
<b>Vintage Year 2019 Total</b>		<b>35,000</b>	<b>28,210</b>	<b>6,790</b>	<b>19%</b>	<b>0</b>	<b>6,615</b>	<b>6,615</b>	<b>-175</b>	<b>N/M</b>	<b>N/M</b>	<b>N/A</b>	
<b>Vintage Year 2020</b>													
Accel-KKR Capital Partners VI, LP	Buyout	8,000	8,000	0	0%	0	0	0	0	N/M	N/M	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	
Spark Capital VI, L.P.	Venture Capital	3,000	3,000	0	0%	0	0	0	0	N/M	N/M	N/A	
<b>Vintage Year 2020 Total</b>		<b>17,000</b>	<b>17,000</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>N/M</b>	<b>N/M</b>	<b>N/A</b>	
<b>Total Portfolio:</b>		<b>140,937</b>	<b>66,194</b>	<b>75,915</b>	<b>53%</b>	<b>61,713</b>	<b>47,255</b>	<b>108,967</b>	<b>33,052</b>	<b>8.46%</b>	<b>11.45%</b>	<b>1.44</b>	
<b>Portfolio Strategy Totals</b>													
Buyout		53,000	43,981	9,019	17%	90	9,227	9,317	298	N/M		1.03	
Distressed Debt		5,000	1,550	3,450	69%	0	3,894	3,894	444	N/M		1.13	
Fund of Funds		40,175	6,357	34,641	84%	38,330	23,667	61,997	27,356	11.18%		1.79	
Non-US		8,762	940	8,170	89%	7,415	5,011	12,426	4,256	7.77%		1.52	
Opportunistic Credit		10,000	474	9,526	95%	6,017	3,172	9,189	-337	-1.19%		0.96	
Secondary		10,000	540	9,460	95%	9,860	721	10,581	1,121	2.02%		1.12	
Venture Capital		14,000	12,351	1,649	12%	0	1,562	1,562	-87	N/M		N/A	
<b>Total Portfolio:</b>		<b>140,937</b>	<b>66,194</b>	<b>75,915</b>	<b>53%</b>	<b>61,713</b>	<b>47,255</b>	<b>108,967</b>	<b>33,052</b>	<b>8.46%</b>	<b>11.45%</b>	<b>1.44</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

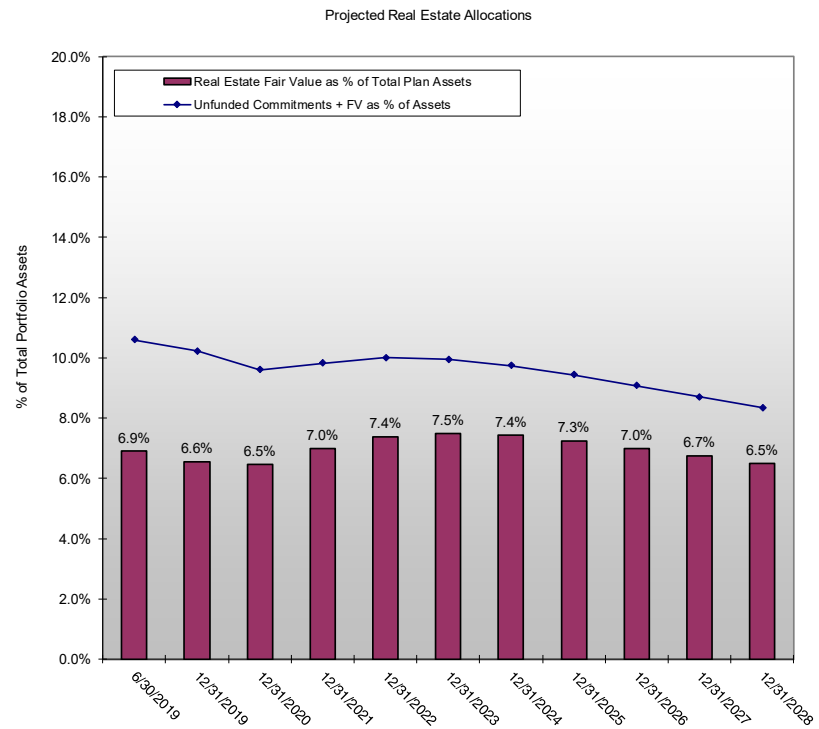
- Annual capital budget target of \$15 million, range of \$10-\$25 million
- Target 2-4 investments, range of \$4-\$7 million per inv
  - Average investment size of \$5 million
  - If an average of 2-4 GP partnership commitments per year, expect a total of 8-16 GP relationships over a 4 year fund raising 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 2020 commitments (\$7 mm):

- *Cerberus Real Estate Debt* – RE debt (VY 2020)



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, 6.5% actual as of Dec 2019)

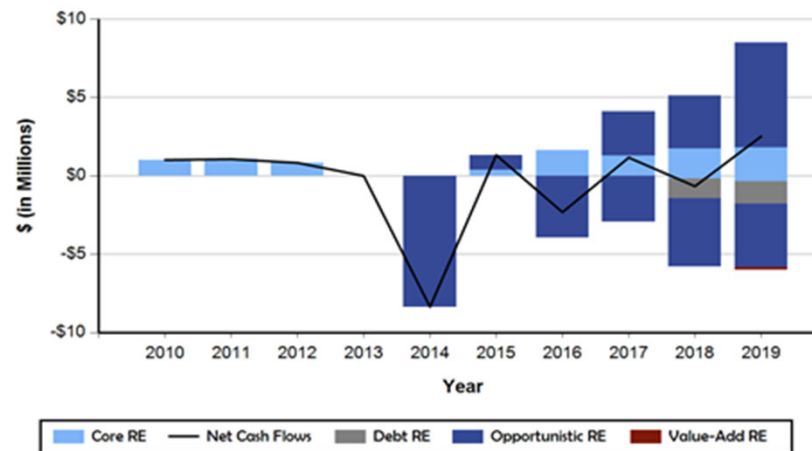
- MCERA invested in 1999 in a private core real estate fund
- Distributions exceed contributions by \$4 million over the past year as overall RE activity has declined

### 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
December 31, 2018	8	\$63,742	\$37,201	\$27,770	\$63,336	\$91,106	\$53,905	9.33%	8.55%
December 31, 2019	8	\$68,352	\$43,193	\$36,283	\$61,673	\$97,956	\$54,764	8.99%	8.85%
Annual Change	0	\$4,610	\$5,992	\$8,513	-\$1,663	\$6,850	\$859		

Annual Cash Flow



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

## MCERA Real Estate Performance – as of Dec 31, 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
  - Valuation had modest quarterly gains
- Overall performance has met objectives, driven by the core RE fund; opportunistic fund performance is not meaningful

Partnership Name (\$000)	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat.		(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B)		IRR Bench.	TVPI
				Cont.	% Drawn				Gain/ Loss	Net IRR		
<b>Vintage Year 1999</b>												
UBS Trumbull Property Fund	Core RE	17,000	0	17,547	100%	23,269	40,603	63,872	46,324	8.77%	10.20%	3.64
<b>Vintage Year 1999 Total</b>		<b>17,000</b>	<b>0</b>	<b>17,547</b>	<b>100%</b>	<b>23,269</b>	<b>40,603</b>	<b>63,872</b>	<b>46,324</b>	<b>8.77%</b>	<b>12.95%</b>	<b>3.64</b>
<b>Vintage Year 2014</b>												
Greenfield Acquisition Partners VII, L.P.	Opportunistic RE	13,000	1,876	12,662	86%	10,171	9,442	19,613	6,952	13.56%	12.25%	1.55
<b>Vintage Year 2014 Total</b>		<b>13,000</b>	<b>1,876</b>	<b>12,662</b>	<b>86%</b>	<b>10,171</b>	<b>9,442</b>	<b>19,613</b>	<b>6,952</b>	<b>13.56%</b>	<b>11.82%</b>	<b>1.55</b>
<b>Vintage Year 2016</b>												
Patron Capital Fund V	Opportunistic RE	13,352	5,425	8,125	59%	2,829	6,675	9,504	1,379	10.64%	11.67%	1.17
<b>Vintage Year 2016 Total</b>		<b>13,352</b>	<b>5,425</b>	<b>8,125</b>	<b>59%</b>	<b>2,829</b>	<b>6,675</b>	<b>9,504</b>	<b>1,379</b>	<b>10.64%</b>	<b>11.50%</b>	<b>1.17</b>
<b>Vintage Year 2017</b>												
Carlyle Realty Partners VIII, L.P.	Opportunistic RE	5,000	4,036	978	19%	14	930	944	-34	-3.97%	7.41%	0.97
<b>Vintage Year 2017 Total</b>		<b>5,000</b>	<b>4,036</b>	<b>978</b>	<b>19%</b>	<b>14</b>	<b>930</b>	<b>944</b>	<b>-34</b>	<b>-3.97%</b>	<b>11.51%</b>	<b>0.97</b>
<b>Vintage Year 2018</b>												
Taconic CRE Dislocation Fund II	Debt RE	5,000	2,350	2,665	53%	0	2,954	2,954	288	N/M	N/M	1.11
AG Realty Value Fund X, L.P.	Opportunistic RE	5,000	3,950	1,037	21%	0	992	992	-45	N/M	N/M	0.96
<b>Vintage Year 2018 Total</b>		<b>10,000</b>	<b>6,300</b>	<b>3,702</b>	<b>37%</b>	<b>0</b>	<b>3,945</b>	<b>3,945</b>	<b>243</b>	<b>N/M</b>	<b>N/M</b>	<b>1.07</b>
<b>Vintage Year 2019</b>												
Rockpoint Real Estate Fund VI, L.P.	Opportunistic RE	5,000	5,000	0	0%	0	-22	-22	-22	N/M	N/M	0.00
Carmel Partners Investment Fund VII, L.P Value-Add RE		5,000	4,820	180	4%	0	101	101	-79	N/M	N/M	0.56
<b>Vintage Year 2019 Total</b>		<b>10,000</b>	<b>9,820</b>	<b>180</b>	<b>2%</b>	<b>0</b>	<b>79</b>	<b>79</b>	<b>-101</b>	<b>N/M</b>	<b>N/M</b>	<b>0.44</b>
<b>Total Portfolio:</b>		<b>68,352</b>	<b>27,458</b>	<b>43,193</b>	<b>60%</b>	<b>36,283</b>	<b>61,673</b>	<b>97,956</b>	<b>54,763</b>	<b>8.99%</b>	<b>8.85%</b>	<b>2.27</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

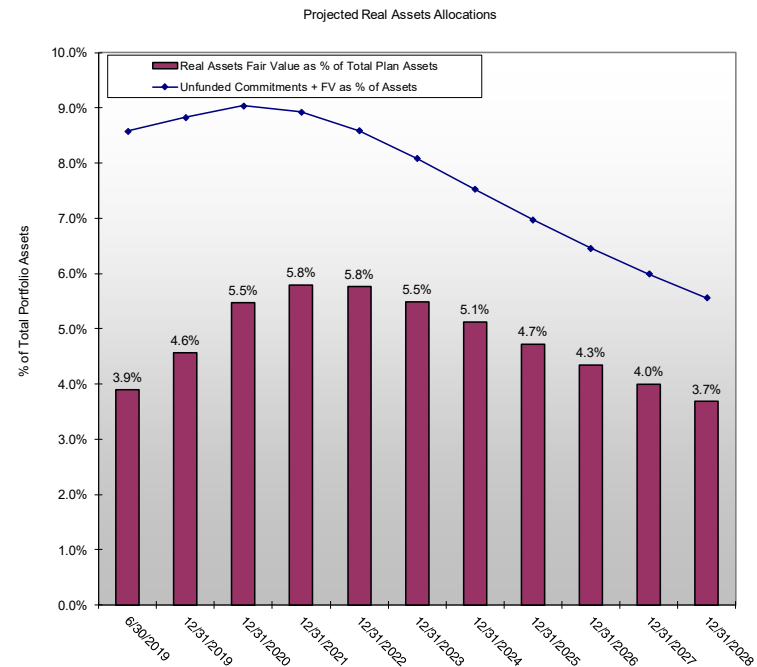
- Annual capital budget target of \$10 million, range of \$5-\$15 million
- Target 2-4 investments, range of \$3-\$7 million per inv
  - Average investment size of \$5 million
  - If an average of 2-4 GP partnership commitments per year, expect a total of 8-16 GP relationships over a 4 year fund raising 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 2020 commitments (\$5 mm):

- None



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, 6.2% actual as of Dec 2019)

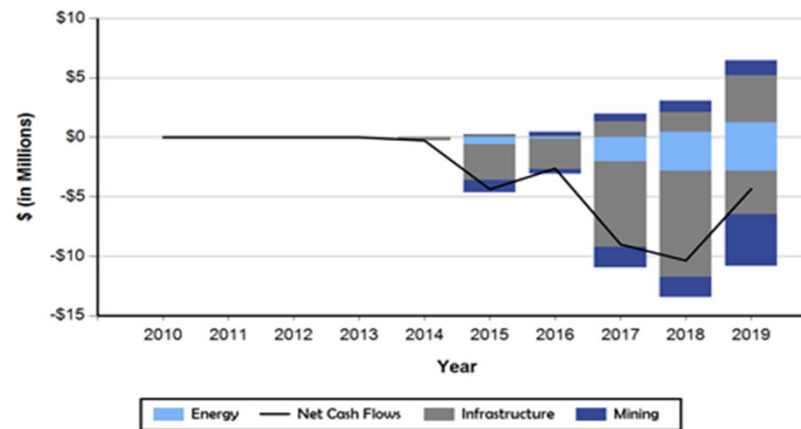
- Program is designed to be equally divided between private infrastructure and natural resource funds along with a public real asset component
- Private fund commitments began in 2014 to infrastructure and 2015 to natural resources
- The overall portfolio is immature with the funds in the early stage of development
  - Contributions exceed distributions by \$4 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
December 31, 2018	12	\$65,500	\$31,972	\$5,360	\$31,249	\$36,608	\$4,636	11.11%	-0.71%
December 31, 2019	12	\$70,426	\$43,180	\$12,222	\$39,640	\$51,862	\$8,683	11.67%	1.78%
Annual Change	0	\$4,926	\$11,208	\$6,862	\$8,391	\$15,254	\$4,047		

Annual Cash Flow



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

## MCERA Real Assets Performance – as of Dec 31, 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 infrastructure funds had valuation improvements for the quarter; the VY 2017-19 funds are being built out

Partnership Name (\$000)	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.		(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/ Loss	Net IRR	IRR Bench.	TVPI
				% Drawn								
<b>Vintage Year 2014</b>												
KKR Global Infrastructure II	Infrastructure	10,000	552	10,685	94%	2,182	11,440	13,622	2,937	10.97%	13.82%	1.27
<b>Vintage Year 2014 Total</b>		<b>10,000</b>	<b>552</b>	<b>10,685</b>	<b>94%</b>	<b>2,182</b>	<b>11,440</b>	<b>13,622</b>	<b>2,937</b>	<b>10.97%</b>		<b>1.27</b>
<b>Vintage Year 2015</b>												
GSO Energy Select Opportunities Fund	Energy	7,500	3,788	4,168	49%	1,592	3,636	5,228	1,060	10.26%	8.22%	1.25
North Haven Infrastructure Partners II LP	Infrastructure	10,000	1,521	10,969	85%	4,596	9,106	13,702	2,733	12.60%	N/A	1.25
Taurus Mining Finance Fund	Mining	5,000	903	4,974	82%	2,026	3,991	6,017	1,043	14.70%	N/A	1.21
<b>Vintage Year 2015 Total</b>		<b>22,500</b>	<b>6,211</b>	<b>20,111</b>	<b>72%</b>	<b>8,214</b>	<b>16,734</b>	<b>24,947</b>	<b>4,836</b>	<b>12.39%</b>		<b>1.24</b>
<b>Vintage Year 2016</b>												
Taurus Mining Finance Annex Fund	Mining	5,000	1,409	4,197	72%	1,318	3,704	5,022	824	23.59%	N/A	1.20
<b>Vintage Year 2016 Total</b>		<b>5,000</b>	<b>1,409</b>	<b>4,197</b>	<b>72%</b>	<b>1,318</b>	<b>3,704</b>	<b>5,022</b>	<b>824</b>	<b>23.59%</b>		<b>1.20</b>
<b>Vintage Year 2017</b>												
EnCap Energy Capital Fund XI, L.P.	Energy	5,000	3,522	1,478	30%	0	1,176	1,176	-301	-24.61%	7.15%	0.80
ISQ Global Infrastructure Fund II	Infrastructure	5,000	2,982	2,387	40%	371	2,286	2,657	269	N/M	N/M	1.11
<b>Vintage Year 2017 Total</b>		<b>10,000</b>	<b>6,505</b>	<b>3,865</b>	<b>35%</b>	<b>371</b>	<b>3,462</b>	<b>3,833</b>	<b>-32</b>	<b>-1.08%</b>		<b>0.99</b>
<b>Vintage Year 2018</b>												
Ardian Infrastructure Fund V	Infrastructure	4,926	4,699	216	5%	0	186	186	-30	N/M	N/M	N/A
EnCap Flatrock Midstream IV, L.P.	Energy	3,000	2,027	1,051	32%	78	1,132	1,211	160	N/M	N/M	1.15
KKR Global Infrastructure Investors III	Infrastructure	5,000	3,557	1,464	29%	21	1,397	1,418	-46	N/M	N/M	N/A
<b>Vintage Year 2018 Total</b>		<b>12,926</b>	<b>10,284</b>	<b>2,730</b>	<b>20%</b>	<b>99</b>	<b>2,715</b>	<b>2,814</b>	<b>84</b>	<b>N/M</b>		<b>1.03</b>
<b>Vintage Year 2019</b>												
Global Energy & Power Infrastructure Fund III	Energy	5,000	4,157	842	17%	39	875	914	72	N/M	N/M	1.09
Tailwater Energy Fund IV, LP	Energy	5,000	4,251	749	15%	0	710	710	-39	N/M	N/M	0.95
<b>Vintage Year 2019 Total</b>		<b>10,000</b>	<b>8,408</b>	<b>1,591</b>	<b>16%</b>	<b>39</b>	<b>1,586</b>	<b>1,625</b>	<b>33</b>	<b>N/M</b>		<b>1.02</b>
<b>Total Portfolio:</b>		<b>70,426</b>	<b>33,369</b>	<b>43,180</b>	<b>53%</b>	<b>12,222</b>	<b>39,640</b>	<b>51,862</b>	<b>8,683</b>	<b>11.67%</b>	<b>1.78%</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 Apr 30, 2020

Fund	Market Value	Actual %	Apr	QTD	YTD	Returns			Incep	Std Dev	Sharpe Ratio	Incep Date
						1 Year	3 Year	5 Year				
<b>Market Neutral</b>												
KLS Diversified Fund LP	7,163,695	8.2%	-5.14%	-5.14%	-21.20%	-22.25%	-	-	-8.05%	11.85%	-0.82	Oct-17
Laurion Capital, Ltd.	10,564,778	12.1%	3.74%	3.74%	20.08%	20.03%	-	-	14.56%	8.31%	1.41	Jul-18
Market Neutral - HF Total	17,728,473	20.2%	-0.04%	-0.04%	-4.87%	-5.69%	-	-	0.56%	5.73%	-0.24	Oct-17
HFRI Relative Value (Total) Index			3.17%	3.17%	-6.42%	-3.93%	-	-	0.45%	6.59%	-0.22	Oct-17
<b>Credit/Distressed</b>												
Silver Point Capital Fund, L.P.	11,446,510	13.1%	0.05%	0.05%	-7.27%	-8.16%	-	-	-1.76%	7.79%	-0.46	Dec-17
Credit/Distressed - HF Total	11,446,510	13.1%	0.05%	0.05%	-7.27%	-8.16%	-	-	-1.76%	7.79%	-0.46	Dec-17
HFRI ED: Distressed/Restructuring Index			3.36%	3.36%	-8.84%	-10.17%	-	-	-2.75%	8.53%	-0.53	Dec-17
<b>Event Driven</b>												
Taconic Opportunity Fund L.P.	11,619,532	13.3%	1.41%	1.41%	-7.80%	-6.38%	-	-	-2.70%	7.88%	-0.57	Dec-18
Event Driven - HF Total	11,619,532	13.3%	1.41%	1.41%	-7.80%	-6.38%	-	-	-2.70%	7.88%	-0.57	Dec-18
HFRI Event-Driven (Total) Index			6.44%	6.44%	-9.32%	-7.52%	-	-	-3.41%	12.95%	-0.36	Dec-18
<b>Equity Long/Short</b>												
Archipelago Partners, L.P.	11,647,893	13.3%	3.64%	3.64%	-6.59%	-1.35%	-	-	2.67%	8.61%	0.11	Sep-17
Marshall Wace Funds LP - MW Eureka (US) Fund	3,270,913	3.7%	2.32%	2.32%	-3.66%	4.07%	-	-	3.64%	6.31%	0.26	Dec-17
Marshall Wace Funds LP - MW Global Opportunities (US) Fund	9,000,000	10.3%	-	-	-	-	-	-	-	-	-	Apr-20
Equity Long/Short - HF Total	23,918,806	27.3%	3.21%	3.21%	-6.08%	-0.34%	-	-	3.07%	7.71%	0.16	Sep-17
HFRI Equity Hedge (Total) Index			6.78%	6.78%	-8.08%	-4.44%	-	-	0.64%	10.53%	-0.08	Sep-17
<b>Global Macro-Discretionary</b>												
Graham Absolute Return Trading Ltd.	6,600,849	7.5%	2.31%	2.31%	-13.28%	-11.55%	-	-	-2.11%	10.14%	-0.36	Sep-17
Global Macro-Discretionary - HF Total	6,600,849	7.5%	2.31%	2.31%	-13.28%	-11.55%	-	-	-2.11%	10.14%	-0.36	Sep-17
HFRI Macro (Total) Index			1.27%	1.27%	-0.10%	2.94%	-	-	1.34%	4.66%	-0.14	Sep-17
<b>Global Macro-Systematic</b>												
Winton Fund Limited	5,458,078	6.2%	0.41%	0.41%	-12.44%	-11.18%	-	-	-3.34%	9.03%	-0.57	Nov-17
Global Macro-Systematic - HF Total	5,458,078	6.2%	0.41%	0.41%	-12.44%	-11.18%	-	-	-3.34%	9.03%	-0.57	Nov-17
HFRI Macro (Total) Index			1.27%	1.27%	-0.10%	2.94%	-	-	0.99%	4.62%	-0.22	Nov-17
<b>Multi-Strategy</b>												
Sculptor Domestic Partners II, L.P.	10,787,500	12.3%	5.41%	5.41%	-0.83%	3.05%	6.82%	5.18%	5.82%	7.02%	0.66	Jul-14
Multi-Strategy - HF Total	10,787,500	12.3%	5.41%	5.41%	-0.83%	3.05%	6.82%	5.18%	5.82%	7.02%	0.66	Jul-14
HFRI Relative Value (Total) Index			3.17%	3.17%	-6.42%	-3.93%	0.88%	1.88%	1.98%	4.83%	0.16	Jul-14
MCERA Hedge Fund Portfolio	87,559,749	100.0%	1.77%	1.77%	-6.84%	-5.04%	2.57%	1.55%	2.44%	5.43%	0.23	Jul-14
<b>Benchmarks</b>												
HFRI Fund of Funds Composite Index			2.67%	2.67%	-5.96%	-3.43%	0.81%	0.57%	1.16%	4.85%	0.00	Jul-14
<b>Market Indices</b>												
Labor3Month			0.05%	0.05%	0.43%	1.86%	2.00%	1.47%	1.30%	0.24%	-	Jul-14
Bloomberg Barclays US Aggregate Bond Index			1.78%	1.78%	4.98%	10.85%	5.18%	3.81%	3.82%	3.14%	0.80	Jul-14
Bloomberg Barclays US High Yield Bond Index			4.51%	4.51%	-8.75%	-4.12%	1.86%	3.44%	3.08%	7.38%	0.27	Jul-14
S&P 500 TR			12.82%	12.82%	-9.29%	0.86%	9.05%	9.13%	9.23%	14.05%	0.61	Jul-14
MSCI AC World Index Free - Net			10.71%	10.71%	-12.94%	-4.96%	4.46%	4.37%	4.30%	13.76%	0.28	Jul-14
MSCI EAFE - Net			6.46%	6.46%	-17.84%	-11.34%	-0.58%	-0.17%	-0.30%	13.79%	-0.05	Jul-14
MSCI EMF (Emerging Markets Free) - Net			9.16%	9.16%	-16.60%	-12.00%	0.57%	-0.10%	0.17%	17.20%	0.02	Jul-14

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