CalPERS

Monthly Update – Investment Controls



Items Completed Under Delegated Authority

Program Area	Name of Investment	Commitment (million)	Initial Commitment Date	Complies with Delegation Number	New or Additional Commitment
(I ODOL E OLLIT)	CalPERS-managed U.S. Total Market Index 3000 Strategy	\$5,307.00	Dec-1991	INV-19-04	Additional Commitment
Global Equity	CalPERS-managed International Developed Large/Mid Index Strategy	\$4,808.00	May-2005	INV-19-04	Additional Commitment
	CalPERS-managed Emerging Markets Large/Mid Index Strategy	\$3,672.00	Oct-2008	INV-19-04	Additional Commitment
(=10001 Faility)	CalPERS-managed Emerging Markets Small Index Strategy	\$422.00	Nov-2012	INV-19-04	Additional Commitment
(Flobal Faulty	CalPERS-managed International Developed Small Index Strategy	\$7.00	Aug-2008	INV-19-04	Additional Commitment
Global Fixed Income	Columbia	\$205.00	Jun-2018	INV-19-05	Additional Commitment

Unsolicited Investment Proposal Activity Proposal Status by Asset Class for the Month of September 2019

Start of Month Proposals

New Proposals During the Month

Reinstated Proposal During Month

Decisions During the Month

End of Month Proposals

	Private As	sset Classes	•	Public Asset Classes				
Private Equity	Forestland	Infrastructure	Real Estate	Opportunistic	Global Equities	Commodities	Global Fixed Income	Total
13	0	3	7	0	0	0	1	24
4	0	2	1	0	2	0	1	10
0	0	0	0	0	0	0	0	0
1	0	1	4	0	0	0	1	7
16	0	4	4	0	2	0	1	27

Status Details

		Private Asset Classes			Public Asset Classes				
Status	Private Equity	Forestland	Infrastructure	Real Estate	Opportunistic	Global Equities	Commodities	Global Fixed Income	Total
Start of Month Proposals									
Submitted	6	0	0	7	0	0	0	1	14
Screening	0	0	2	0	0	0	0	0	2
Due Diligence	4	0	1	0	0	0	0	0	5
Approved	3	0	0	0	0	0	0	0	3
Subtotal	13	0	3	7	0	0	0	1	24
New Proposals During the Month									
Subtotal	4	0	2	1	0	2	0	1	10
Reinstated Proposals During Month									
Subtotal	0	0	0	0	0	0	0	0	0
Decisions During the Month									
Committed	0	0	0	0	0	0	0	0	0
Declined	1	0	1	4	0	0	0	1	7
Failed to Materialize	0	0	0	0	0	0	0	0	0
Referred	0	0	0	0	0	0	0	0	0
Subtotal	1	0	1	4	0	0	0	1	7
End of Month Proposals									
Submitted	1	0	1	0	0	0	0	0	2
Screening	8	0	2	4	0	2	0	1	17
Due Diligence	3	0	1	0	0	0	0	0	4
Approved	4	0	0	0	0	0	0	0	4
Subtotal	16	0	4	4	0	2	0	1	27

Policy Exceptions

Exceptions to Policy

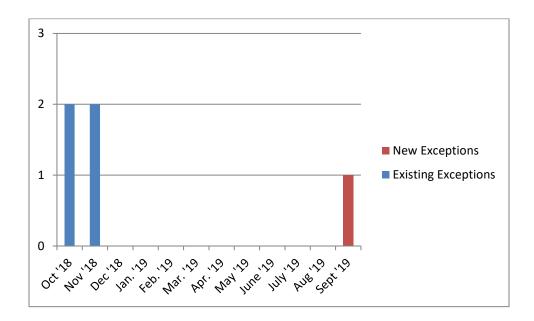
According to policy requirements, the following is a summary of investment policy exceptions reported by the program areas.

The following program areas had no exceptions to report:

- Global Equity
- Global Fixed Income
- Investment Risk and Performance
- Investment Servicing Division
- Opportunistic Strategies
- Private Equity
- Real Assets
- Sustainable Investment Program

The following program area reported an exception:

• Trust Level Portfolio Management



Policy Exceptions

New:

Program Area or Asset Class	Event Date	Resolution Date	Policy	Exception Description	Event Description and Resolution (expected) or Next Steps
TLPM	9/4/2019	TBD	Total Fund – Leverage section	Breach of Leverage limits	A transfer decision, at the Total Fund level, to shift GE's Low Liquidity Enhanced Return (LLER) program assets to the Treasury segment of GFI as a means of reducing funding-source risk and overall cost resulted in a policy break at the GFI program level. Although the leverage calculation for the GFI program, at 11.2%, exceeded the 10% program-level sublimit contained in policy at the time, there was in fact no change to the leverage profile of the Total Fund, which remained at roughly 4% and well below the newly established Total Fund leverage limits of 20%. Staff is currently working on PRPs to create a more holistic Total Fund leverage analysis framework to facilitate optimal management of leverage for the Total Fund with the concurrence of Wilshire.

Policy Exceptions

Existing:

Program Area or Asset Class	Event Date	Resolution Date	Policy	Exception Description	Event Description and Resolution (expected) or Next Steps
No items to					
report					

DISCLOSURE OF CLOSED SESSION ACTION ITEMS – FOR THE PERIOD ENDED SEPTEMBER 30, 2019

Investment Committee Closed Session	Agenda Item	Investment Committee Action and Item Status	Vote	
	Global Fixed Income Benchmark Strategic	Action: Adoption of the proposed GFI benchmark structure updates and to change the policy dates to reflect an effective date of July 1, 2019. An electronic roll-call vote was taken in the June IC Meeting. The motion passed	Roll call vote result below: Committee Member	Vote
	Implementation	was taken in the June IC Meeting. The motion passed. Summary of Debate: An extensive discussion was conducted on the changes to the GFI benchmark.	Name/Designee Name	Yes, Abstain, No
			Margaret Brown	YES
			Lisa Middleton	YES
		Rationale for Nondisclosure:	David Miller	YES
		Disclosure at this time would impair the System's investment and asset allocation transition management	Eraina Ortega	YES
		objectives.	Lynn Paquin	YES
		Anticipated Disclosure Date:	Jason Perez	YES
		Upon completion of INVO's implementation of the Board's approved strategic asset allocation targets which is	Mona Pasquil Rogers	YES
		expected to extend through Fiscal Year 2019-20 or later.	Ramon Rubalcava	YES
			Matt Saha	YES
			Teresa Taylor	YES

Investment Transaction Summary

Sep-19								
			Total Fund - Pเ	Total Fund - Public Markets				
	Public Equity (\$)	Income (\$)	Inflation (\$)	ARS (\$)	Liquidity (\$)	TLPM (\$)		
Beginning Market Value	187,088,524,400.98	107,767,810,407.13	(2,501.08)	179,976,843.22	4,366,073,583.76	10,594,914,118.87		
+ Purchases	28,028,501,927.09	23,427,399,209.62	-	-	4,199,404,310.65	29,818,501,918.99		
- Sales	(37,491,918,798.51)	(20,642,035,292.47)	-	(440,734.87)	(3,374,151,226.37)	(36,972,428,157.90)		
+ Unitized Fund	-	-	-	-	-			
Purchases								
- Unitized	-	-	-	-	-	-		
Fund Sales								
+/- Other Changes in MV	13,525,941,551.22	1,740,549,391.42	2,501.53	1,965,903.08	(2,163,328,351.01)	1,455,209,094.61		
Ending Market Value	191,151,049,080.78	112,293,723,715.70	0.45	181,502,011.43	3,027,998,317.03	4,896,196,974.57		

		Total Fund - Private Markets		
	Private Equity (\$)	Real Estate (\$)	Forestland (\$)	Infrastructure (\$)
Beginning Market Value	26,351,319,336.41	36,010,068,131.08	1,314,883,151.88	4,762,267,555.11
+ Contributions	303,525,799.62	98,790,995.00	-	35,933,776.00
- Distributions	(455,933,089.12)	(516,606,758.00)	(5,818,729.00)	(60,304,161.00)
+ Unitized Fund Purchases	-	-	-	-
- Unitized Fund Sales	-	-	-	-
+/- Other Changes in MV	122,434,067.46	553,460,776.99	1,340,830.62	(29,961,497.57)
Ending Market Value	26,321,346,114.37	36,145,713,145.07	1,310,405,253.51	4,707,935,672.53

Note: Numbers will not tie exactly to the Asset Allocation/Performance categories due to classification differences.

Investment Transaction Summary

	Total Public Markets (\$)	Total Private Markets (\$)	Total Fund (\$)
Beginning Market Value	309,997,296,852.87	68,438,538,174.48	378,435,835,027.35
+ Contributions	85,473,807,366.35	438,250,570.62	85,912,057,936.97
- Distributions	(98,480,974,210.12)	(1,038,662,737.12)	(99,519,636,947.24)
+ Unitized Fund Purchases	-	-	-
- Unitized Fund Sales	-	-	-
+/- Other Changes in MV	14,560,340,090.85	647,274,177.50	15,207,614,268.35
Ending Market Value	311,550,470,099.96	68,485,400,185.48	380,035,870,285.43

Note: Numbers will not tie exactly to the Asset Allocation/Performance categories due to classification differences.

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Program	Quarter	Pool Name	Consultant	Start Date	End Date	Project Name	LOE Amount (\$)	Expenditures (as of 9/30/19(\$))	Balance (as of 9/30/19(\$))	Selection Reason / Notes
EXEC	Q1	General Investment Consulting Services Spring- Fed Pool	Meketa Investment Group, Inc. (Contract #2015- 7616)	10/01/17	06/30/20	CalPERS Board Infrastructure Investment Consultant Fiscal Year 2018-2019 and Fiscal Year 2019-2020	\$363,000.00	\$181,500.00	\$181,500.00	Exempt-Board Approval
EXEC	Q1	General Investment Consulting Services Spring- Fed Pool	Meketa Investment Group, Inc. (Contract #2015- 7616)	03/16/17	06/30/20	CalPERS Board Private Equity Investment Consultant Fiscal Year 2018-2019 and Fiscal Year 2019-2020	\$1,900,000.00	\$1,327,500.00	\$572,500.00	Exempt-Board Approval
EXEC	Q1	General Investment Consulting Services Spring- Fed Pool	Meketa Investment Group, Inc. (Contract #2015- 7609)	07/01/19	06/30/20	2019-2020 Back- Up to the General Board Investment Consultant	\$150,000.00	\$37,500.00	\$112,500.00	Exempt-One Contractor
EXEC	Q1	Real Assets Investments Consulting Services Spring- Fed Pool	Duff & Phelps (Contract #2014- 7433)	07/31/19	06/30/20	Investment Valuation Services	\$350,000.00	\$-	\$350,000.00	Exempt-Critical Timeframe, One Contractor
EXEC	Q1	Specialty Investment Consulting Spring Fed Pool	Propoint Technology, Inc. (Contract #2015- 7700)	08/15/19	06/30/20	Total Portfolio Management Decision Framework	\$90,000.00	\$-	\$90,000.00	Best Practice (Bid Request)
						Total for INVO Executive	\$2,853,000.00	\$1,546,500.00	\$1,306,500.00	

Spring-Fed Pool Contract Status Quarterly Report

July 1, 20)19 – Sep	otember	30, 2019
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Program	Quarter	Pool Name	Consultant	Start Date	End Date	Project Name	LOE Amount (\$)	Expenditures (as of 9/30/19(\$))	Balance (as of 9/30/19(\$))	Selection Reason / Notes
Global Equity	Q1	Specialty Investment Consulting Services Spring- Fed Pool	Garland Associates, Inc. (Contract #2015- 7677)	02/12/19	11/30/19	2019 Proxy Solicitations	\$300,000.00	\$-	\$300,000.00	Exempt-Critical Timeframe; Previous Entity
						Total for Global Equity	\$300,000.00	\$	\$300,000.00	
Investment Servicing Division	Q1	Specialty Investment Consulting Services Spring- Fed Pool	Propoint Technology, Inc. (Contract #2015- 7700)	09/18/17	12/31/19	Collaboration Advisory and Business Process Improvement Services	\$39,732.00	\$24,010.00	\$15,722.00	Exempt-Known Contractor
Investment Servicing Division	Q1	IT Spring-Fed Pool	Persell Design Group, LLC (Contract #2015- 7968)	12/15/17	06/30/20	Section 508 Compliance Readiness Assessment	\$135,240.00	\$11,040.00	\$124,200.00	Exempt-Known Contractor
Investment Servicing Division	Q1	Specialty Investment Consulting Services Spring Fed Pool	Propoint Technology, Inc. (Contract #2015- 7700)	02/27/18	12/31/19	Mitsubishi Financial Group (MUFG) Business Analyst	\$403,125.00	\$342,000.00	\$61,125.00	Best Practice (Bid Request)
Investment Servicing Division	Q1	Specialty Investment Consulting Services Spring Fed Pool	Propoint Technology, Inc. (Contract #2015- 7700)	03/12/18	12/31/19	INVO Data Strategy	\$387,000.00	\$274,437.50	\$112,562.50	Best Practice (Bid Request)

Spring-Fed Pool Contract Status Quarterly Report

July 1	, 2019 –	Septem	ber 30,	, 2019
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Program	Quarter	Pool Name	Consultant	Start Date	End Date	Project Name	LOE Amount (\$)	Expenditures (as of 9/30/19(\$))	Balance (as of 9/30/19(\$))	Selection Reason / Notes
Investment Servicing Division	Q1	Specialty Investment Consulting Services Spring Fed Pool	Propoint Technology, Inc. (Contract #2015- 7700)	05/04/18	12/31/19	Artemis Transition to Maintenance & Operations and Public Markets Coordination Project	\$294,000.00	\$231,910.00	\$62,090.00	Best Practice (Bid Request)
Investment Servicing Division	Q1	IT Spring-Fed Pool	Propoint Technology, Inc. (Contract #2015- 7700)	07/01/18	06/30/20	Charles River Upgrade and Artemis Production Support	\$490,000.00	\$280,840.00	\$209,160.00	Best Practice (Bid Request)
Investment Servicing Division	Q1	IT Spring-Fed Pool	Propoint Technology, Inc. (Contract #2015- 7700)	09/06/18	12/31/19	Technology Management Unit Experienced Business Analyst	\$335,400.00	\$222,365.00	\$113,035.00	Best Practice (Bid Request)
Investment Servicing Division	Q1	IT Spring-Fed Pool	Propoint Technology, Inc. (Contract #2015- 7700)	11/01/18	06/30/20	INVO Salesforce Development, User Interface Enhancement and Support	\$412,500.00	\$192,062.50	\$220,437.50	Best Practice (Bid Request)
Investment Servicing Division	Q1	IT Spring-Fed Pool	MSys International Inc. (Contract #2015- 7977)	11/01/18	10/31/19	INVO Enhanced Management Reporting Development and Support Senior Programmer	\$198,000.00	\$159,489.00	\$38,511.00	Best Practice (Bid Request)

Spring-Fed Pool Contract Status Quarterly Report

July 1, 2019 – September 30, 2019	July 1.	. 2019 –	 September 	30.	2019
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Program	Quarter	Pool Name	Consultant	Start Date	End Date	Project Name	LOE Amount (\$)	Expenditures (as of 9/30/19(\$))	Balance (as of 9/30/19(\$))	Selection Reason / Notes
Investment Servicing Division	Q1	Specialty Investment Consulting Spring Fed Pool	Propoint Technology, Inc. (Contract #2015- 7700)	12/10/18	12/31/19	Multi-Asset Trading Platform Project Support	\$135,000.00	\$95,445.00	\$39,555.00	Best Practice (Bid Request)
Investment Servicing Division	Q1	IT Spring-Fed Pool	Pyramid Technical Consultants, Inc. (Contract #2015- 7862)	01/01/19	12/31/19	Investment Technology Services-Public Markets 2	\$310,552.20	\$206,365.95	\$104,186.25	Best Practice (Bid Request)
Investment Servicing Division	Q1	IT Spring-Fed Pool	SRI Infotech, Inc. (Contract #2015- 7864)	01/01/19	12/31/19	AREIS Maintenance & Support 2	\$241,440.00	\$141,720.00	\$99,720.00	Best Practice (Bid Request)
Investment Servicing Division	Q1	Specialty Investment Consulting Spring Fed Pool	Propoint Technology, Inc. (Contract #2015- 7700)	03/22/19	06/30/20	MUFG for Real Assets Project Manager	\$351,086.40	\$302,231.25	\$48,855.15	Best Practice (Bid Request)
Investment Servicing Division	Q1	Specialty Investment Consulting Spring Fed Pool	Propoint Technology, Inc. (Contract #2015- 7700)	05/07/19	06/30/20	INVO Data Strategy Project Manager	\$270,000.00	\$37,462.50	\$232,537.50	Best Practice (Bid Request)
Investment Servicing Division	Q1	IT Spring-Fed Pool	Jlynn Consulting (Contract #2015- 7852)	05/14/19	06/30/20	Investment Technology Services-Global Equity 2	\$230,000.00	\$59,225.00	\$170,775.00	Best Practice (Bid Request)

Program	Quarter	Pool Name	Consultant	Start Date	End Date	Project Name	LOE Amount (\$)	Expenditures (as of 9/30/19(\$))	Balance (as of 9/30/19(\$))	Selection Reason / Notes
Investment Servicing Division	Q1	IT Spring-Fed Pool	SPS Consulting Services, LLC (Contract #2018-8416)	05/20/19	06/30/20	INVO Cloud Enhancements and Advisory	\$270,000.00	\$27,337.50	\$242,662.50	Best Practice (Bid Request)
Investment Servicing Division	Q1	IT Spring-Fed Pool	Trinity Technology Group, Inc. (Contract #2015-7859)	05/20/19	06/30/20	IDaP Application Development and Support 2	\$198,000.00	\$34,848.00	\$163,152.00	Best Practice (Bid Request)
Investment Servicing Division	Q1	IT Spring-Fed Pool	Propoint Technology, Inc. (Contract #2015-7874)	05/20/19	06/30/20	INVO Salesforce Application Development and System Support 2	\$520,000.00	\$88,400.00	\$431,600.00	Best Practice (Bid Request)
Investment Servicing Division	Q1	IT Spring-Fed Pool	Trinity Technology Group, Inc. (Contract #2015-7859)	05/24/19	06/30/20	INVO SharePoint Architecture Support 2	\$78,000.00	\$2,160.00	\$75,840.00	Best Practice (Bid Request)
						Total for Investment Servicing Division	\$5,299,075.60	\$2,733,349.20	\$2,565,726.40	
Opportunistic Strategies/ Sustainable Investments	Q1	General Investment Consulting Services Spring- Fed Pool	Mosaic Investment Advisors Inc. (Contract #2015-7614)	04/11/19	06/30/20	Equity Brokerage Services	\$200,000.00	\$75,000.00	\$125,000.00	Exempt- Known Contractor
						Total for Opportunistic Strategies	\$200,000.00	\$75,000.00	\$125,000.00	

Program	Quarter	Pool Name	Consultant	Start Date	End Date	Project Name	LOE Amount (\$)	Expenditures (as of 9/30/19(\$))	Balance (as of 9/30/19(\$))	Selection Reason / Notes
Private Equity	Q1	General Investment Consulting Services Spring- Fed Pool	Mercer Alternatives Limited (Contract #2015-7604)	05/16/19	10/31/19	Market Mapping	\$150,000.00	\$-	\$150,000.00	Best Practice (Bid Request)
Private Equity	Q1	Strategic Business Services Spring- Fed Pool	David Morris Enterprises, LLC (Contract #2018-8436)	05/29/19	12/31/19	Private Equity Organizational and Leadership Development	\$70,000.00	\$-	\$70,000.00	Exempt- Critical Timeframe; One Contractor
Private Equity	Q1	General Investment Consulting Services Spring- Fed Pool	Callan LLC (Contract #2015-7615)	08/28/19	06/30/20	Project Nahl	\$60,000.00	\$ -	\$60,000.00	Best Practice (Bid Request)
						Total for Private Equity	\$280,000.00	\$	\$280,000.00	
Private Asset Analytics	Q1	Specialty Audits Spring-Fed Pool		05/02/19	04/30/20	Conrad Real Estate Data Validations 2019- 2020	\$90,000.00	\$-	\$90,000.00	Exempt- Critical Timeframe; Previous Entity
Private Asset Analytics	Q1	Specialty Audits Spring-Fed Pool	KPM & Associates LLP (Contract #2017-8313)	05/02/19	04/30/20	KPM Real Estate Data Validations 2019-2020	\$90,000.00	\$11,278.00	\$78,722.00	Exempt- Critical Timeframe; Previous Entity
Real Assets	Q1	Real Assets Investments Consulting Services Spring- Fed Pool	Bard Consulting LLC (Contract #2014-7427)	06/03/19	06/30/20	Project Bayou	\$25,000.00	\$25,000.00	\$-	Best Practice (Bid Request)

Program	Quarter	Pool Name	Consultant	Start Date	End Date	Project Name	LOE Amount (\$)	Expenditures (as of 9/30/19(\$))	Balance (as of 9/30/19(\$))	Selection Reason / Notes
Real Assets	Q1	Specialty Investment Consulting Services Spring- Fed Pool	Wilcox, Miller & Nelson (Contract #2015-7679)	06/03/19	06/30/20	Project Hoosier	\$50,000.00	\$50,000.00	\$ -	Best Practice (Bid Request)
Real Assets	Q1	Real Assets Investments Consulting Services Spring- Fed Pool	RCLCO (Contract #2014-7440)	06/25/19	06/30/20	Project Double Play	\$68,000.00	\$34,000.00	\$34,000.00	Exempt- Critical Timeframe; One Contractor
Real Assets	Q1	General Investment Consulting Services Spring- Fed Pool	Callan LLC (Contract #2015-7615)	07/01/19	06/30/20	Harbert Evaluation and Restructure	\$80,000.00	\$80,000.00	\$-	Exempt- Known Contractor
Real Assets	Q1	Consulting Services Spring- Fed Pool	Bard Consulting, LLC (Contract #2014-7427)	07/01/19	06/30/20	2019-2020 Residential Monitoring	\$300,000.00	\$16,775.00	\$283,225.00	Exempt- Known Contractor
Real Assets	Q1	Real Assets Investments Consulting Services Spring- Fed Pool	,	07/01/19	06/30/20	2019-2020 Retail Investment Portfolio	\$300,000.00	\$131,950.00	\$168,050.00	Exempt- Known Contractor
Real Assets	Q1	Real Assets Investments Consulting Services Spring- Fed Pool	Pavilion Alternatives Group, Inc. (Contract #2014-7435)	07/01/19	06/30/20	2019-2020 Real Assets Support Program	\$100,000.00	\$-	\$100,000.00	Exempt- Known Contractor

Program	Quarter	Pool Name	Consultant	Start Date	End Date	Project Name	LOE Amount (\$)	Expenditures (as of 9/30/19(\$))	Balance (as of 9/30/19(\$))	Selection Reason / Notes
Real Assets	Q1	Real Assets Investments Consulting Services Spring- Fed Pool	Crosswater Realty Advisors, LLC (Contract #2014-7431)	07/29/19	06/30/20	2019-2020 Housing Manager Evaluation	\$75,000.00	\$21,387.50	\$53,612.50	Exempt- Known Contractor
Real Assets	Q1	Real Assets Investments Consulting Services Spring- Fed Pool	Bard Consulting, LLC (Contract #2014-7427)	09/04/19	06/30/20	Fee Restructuring	\$75,000.00	\$-	\$75,000.00	Exempt- Critical Timeframe; Previous Entity
						Total for Real Assets	\$1,253,000.00	\$370,390.50	\$882,609.50	
						Grand Total Investment Office	\$10,185,075.60	\$4,725,239.70	\$5,459,835.90	

Investment Policy Administrative Changes

No administrative changes were processed during the quarter ended September 30, 2019.