

CalPERS
Emerging Manager Five-Year Plan
Portfolio Management Work Stream

Emerging Manager
Exposure and Cost Report

Targeted Investment Programs

June 2014

Table of Contents

Section 1	Executive Summary	3
Section 2	Introduction	6
Section 3	Emerging Manager Exposure, Cost and Staff Time	8
Section 4	Emerging Manager Exposure, Cost and Staff Time by Asset Class	11
Section 5	Report Observations	14
Section 6	Data Collection and Analysis Methodology	16
Section 7	Emerging Manager Definitions	20

Section 1

EXECUTIVE SUMMARY

The Emerging Manager Program Exposure and Cost Report (Report) provides information on the exposure, cost and staff time associated with emerging manager investment initiatives in CalPERS investment portfolio as of June 30, 2013. The information regarding emerging managers encompasses CalPERS investments made through direct relationships and fund of fund advisors, including underlying funds in fund of funds. The Report presents and compares emerging manager data in the combined relevant asset classes including Targeted Investment Programs and the individual asset classes.

Update on CalPERS Emerging Manager Investments

CalPERS has significant assets under management with emerging managers as a result of many years of investment with emerging managers. This commitment has been across almost all asset classes and covers direct mandates including fund of fund advisors, as well as underlying funds in fund of funds investment vehicles. CalPERS investments with emerging managers as of June 30, 2013 were as follows:

- Of CalPERS 1,105 external managers, 393 or 35.6% of all external managers met CalPERS definition of an emerging manager.
 - Emerging managers represent 19.7% of the direct manager count; and 48.9% of the manager count in underlying fund of funds.
- Of CalPERS \$84.3 billion in externally managed net asset value, \$12.0 billion dollars or 14.2% is invested with emerging managers.
- Costs associated with emerging manager program investments totaled \$201.6 million or 15.6%.
- Across the relevant asset classes consisting of Absolute Return Strategies (ARS), Global Equity, Private Equity and Real Estate, as well as Targeted Investment Programs emerging manager programs accounted for 8.2% of staff time.

Trend of CalPERS Emerging Manager Investment

CalPERS first reported its exposure to emerging managers in the *Emerging and Diverse Manager Data Report* which provided information as of June 30, 2012. We can now compare year over year exposure to emerging managers from June 30, 2012 to June 30, 2013. The comparison found a net increase of 22 emerging managers over the prior reporting period.

Report Observations

The costs for emerging manager investments are more expensive on a net asset value basis compared to total asset class costs. More specifically, base fees are generally higher for emerging managers compared to established managers.

A key finding of this Report is the incremental increase in cost that CalPERS pays in order to meet the objectives for investment with emerging managers. CalPERS objectives for investing in emerging manager programs is to generate appropriate risk adjusted investment returns by identifying early state funds with strong potential for success; accessing investment opportunities that may otherwise be overlooked; and cultivating the next generation of portfolio management talent.

The main reasons for the incremental cost increase associated with emerging manager strategies are as follows:

- There are two layers of fees associated with fund of funds that are often employed for emerging manager strategies. Staff generally does not have the capacity or specific skill set related to management and oversight of emerging managers. Therefore, CalPERS utilizes fund of funds to access platforms of staff that have specialized expertise in identifying, mentoring, and developing emerging managers.
- Emerging manager investments are by definition small and do not have fee efficiencies that many larger investments have. Larger funds have established platforms, more assets under management, residual fee streams from prior investments, and CalPERS negotiates proportionately lower fees per dollar of capital committed to the fund. In comparison, emerging managers may have start-up costs, expenses to establish operation platforms, little or no residual fee streams from prior investments and smaller allocations of capital that do not allow for economy of scale compared to larger investment strategies.

Other staff observations include:

- Emerging managers represented a significant percentage of the total number of external managers in the portfolio.
- The relatively high number of emerging managers had a comparatively small net asset value. This is consistent with new managers with small capital allocations.
- The vast majority of CalPERS emerging manager exposure, 305 of the 393 relationships, lied within fund of funds structures.
- Management fees represented the bulk of the emerging manager program cost, which is consistent with the balance of the portfolio.

- Estimated staff time was significantly lower in proportion to the exposure and NAV with emerging managers. This is consistent with the use of fund of fund vehicles and third party advisors that are often used in emerging manager strategies.

Section 2

INTRODUCTION

CalPERS has a legacy of leadership and innovation in emerging manager investment strategies. We have been investing with emerging managers directly and through fund of funds for more than 20 years.

At CalPERS, emerging managers are generally defined as newly formed or relatively small firms. Each CalPERS asset class has emerging manager definitions based on assets under management and/or length of track record. An overview of current CalPERS Emerging Manager Programs and definitions across asset classes can be found in Section 7 of this Report.

Our objective for investing in emerging manager programs is to generate appropriate risk adjusted investment returns by identifying early stage funds with strong potential for success; accessing unique investment opportunities that may otherwise be overlooked; and cultivating the next generation of external portfolio management talent.

Investing with emerging and diverse managers is consistent with CalPERS Investment Beliefs. CalPERS adopted 10 *Investment Beliefs* (<http://www.calpers.ca.gov/eip-docs/about/pubs/board-offsite.pdf> - Attachment 2) in September 2013, which are intended to provide a basis for strategic management of the investment portfolio, inform organizational priorities, and ensure alignment between the Board and CalPERS staff. In particular, the following Investment Beliefs underpin the work in the Five-Year Plan.

- *Investment Belief 3: CalPERS investment decisions may reflect wider stakeholder views, provided they are consistent with its fiduciary duty to members and beneficiaries.*
 - As a public agency, CalPERS has many stakeholders who express opinions on investment strategy or ask CalPERS to engage on an issue. CalPERS preferred means of responding to issues raised by stakeholders is engagement.
- *Investment Belief 8: Costs matter and need to be effectively managed.*
 - Transparency of the total costs to manage the CalPERS portfolio is required of CalPERS business partners and itself.

The Investment Beliefs are not a checklist to be applied to every decision. They are a guide for making decisions that often require balancing multiple, inter-related decision factors. They provide context for CalPERS actions, reflect CalPERS values, and acknowledge CalPERS responsibility to sustain its ability to pay benefits for generations.

CalPERS is committed to equality of access and opportunity for our investment managers. We seek to provide equality of access for investment managers by establishing an internet-based investment proposal submittal process (<http://www.calpers.ca.gov/investmentproposals>) and by applying consistent decision criteria for investment proposals. We are also committed to open communication of our investment exposures, costs, strategies, and criteria for making investment decisions.

Consistent with Senate Bill 294 (Price) enacted in 2011, CalPERS has adopted the *Emerging Manager Five-Year Plan - Pathway to the Future* (<http://www.calpers.ca.gov/eip-docs/about/pubs/emerging-manager-five-year-plan.pdf>). Implementation of the Plan objectives is through ten work streams centered on two major areas: Portfolio Management and External Outreach. The first Portfolio Management work stream outlined in the Plan requires CalPERS to establish performance, cost and diversity of the existing emerging manager investments portfolio.

CalPERS dedication to investing with emerging managers is also demonstrated through the inclusion of the Emerging Manager Five-Year Plan in the *CalPERS 2013-15 Business Plan* (<http://www.calpers.ca.gov/eip-docs/about/strategic-business/2015-business-plan.pdf>) and the *Investment Office 2013-2015 Roadmap*. Both are strategic plans that detail the key priorities and initiatives of the CalPERS enterprise broadly and the Investment Office.

In March 2013, CalPERS Investment Office completed the *Emerging and Diverse Manager Data Report* (<http://www.calpers.ca.gov/eip-docs/about/pubs/data-report.pdf>) that established CalPERS exposures to emerging and diverse managers. This Report establishes the cost of emerging manager programs, thereby completing the first work stream in the Emerging Manager Five-Year Plan.

The Report identifies and examines external investment manager fees, internal personnel expenses, consultant, travel and external outreach expenses associated with the cost of managing emerging manager program investments. Consistent with our commitment to open communication, this report provides our Emerging Manager Programs investment exposures as of June 30, 2013, and cost expenditures over the course of Fiscal Year 2012-13.

Section 3

EMERGING MANAGER EXPOSURE, COST AND STAFF TIME

This Report outlines the number, net asset values, cost and estimated staff time associated with emerging manager investments. The Report compares emerging manager data to: 1) combined relevant asset classes consisting of ARS, Global Equity, Private Equity and Real Estate, as well as Targeted Investment Programs; and 2) individual asset classes (found in Section 4 of this Report). Information is as of June 30, 2013.

Emerging Manager Data Compared to the Relevant Asset Classes

Staff compiled data on CalPERS exposure, costs and staff time associated with emerging manager programs in the four relevant assets classes, ARS, Global Equity, Private Equity and Real Estate, as well as Targeted Investment Programs.

Count of EM's	NAV	Cost	Est. Staff Time
393	\$12.0B	\$201.6M	20,935 Hours
35.6%	14.2%	15.6%	8%

This Report provides updated and new information related to CalPERS investment exposures with emerging managers in the externally managed portfolio.

Externally Managed Portfolio	Emerging Manager Investments
1,105 External Managers - \$84.3B	393 External Managers - \$12.0B
447 Direct Managers - \$76.2B	88 Direct Managers - \$7.0B
624 Fund of Fund Advisors and Underlying Funds - \$8.1 B	305 Underlying funds in Fund of Funds - \$5.0B

CalPERS has significant assets under management with emerging managers as a result of many years of investment with emerging managers. This commitment has been across almost all asset classes and covers direct mandates including fund of fund advisors, as well as underlying funds in fund of funds investment vehicles.

The following are key metrics regarding investment exposure with emerging managers:

- Of CalPERS 1,105 external managers, 393 or 35.6% of all external managers met CalPERS definition of an emerging manager.
 - Emerging managers represent 19.7% of the direct manager count; and 48.9% of managers in underlying fund of funds manager count.
- Of CalPERS \$84.3 billion in externally managed net asset value, \$12 billion dollars or 14.2% is invested with emerging managers.
- Costs associated with emerging manager program investments totaled \$201.6 million or 15.6%.
- Emerging manager programs accounted for an estimated 8% of staff time across relevant asset classes and Targeted Investment Programs.

Trends of Emerging Manager Exposure

CalPERS first reported its exposure to emerging managers in the Emerging and Diverse Manager Data Report in March 2013. All data presented in that report was as of June 30, 2102. We can now compare year over year exposure to emerging managers from June 30, 2012 to June 30, 2013.

	As of June 30, 2012	As of June 30, 2013
Total External Managers	1,103	1,105
Total Emerging Managers	371 or 34%	393 or 35.6%
Externally Managed NAV	\$80.4B	\$84.3B
Emerging Manager NAV	\$10.6B or 13%	\$12B or 14.2%
Underlying funds in FoF	\$4.1B or 5%	N/A included above

Highlights from the year over year comparison include:

- A net increase of two external managers over the prior reporting period.
- A net increase of 22 emerging managers over the prior reporting period.
- Externally managed net asset value (NAV) increased by \$3.9 billion over the prior reporting period.
- Staff is not able to make a direct year over year comparison of emerging manager NAV due to change in reporting methodology.¹

¹ See Section 6 Data Collection and Analysis Methodology for explanation of different methodology used in data collected through June 30, 2012 in the Emerging and Diverse Manager Data Report March 2013.

Emerging Manager Cost

As with CalPERS established managers, costs of investment with emerging managers varies by asset class and strategy. Staff analyzed three main categories of cost: management and performance fees, personnel costs, and ancillary costs such as consultants and travel. Management fee data generally excludes partnership formation and company level expenses, as well as carried interest in Private Equity.

EM Cost	Management Fee	Personnel	Other
\$201.6M	\$199.3M	\$1.1M	\$1.2M
15.6%	16.4%	5.6%	2.3%

- The data analysis quantified costs associated with emerging manager program investments at \$201.6 million or 15.6%.
- Of the four relevant asset classes, emerging manager management fees were \$199.3 million, which represented 16.4% of the externally managed investment management fees of all four asset classes.
 - Total base fees paid to emerging managers in direct relationships were 56 basis points higher than total base fees paid to direct external managers from the four asset classes.
 - Total base fees paid to emerging managers in fund of funds relationships were 32 basis points lower than the total base fees paid to the fund of funds vehicles in the four asset classes. The lower cost is due to relatively high exposure to lower cost Global Equity emerging manager fund of funds, while the balance of the fund of funds are in higher cost in ARS and Private Equity asset classes.
- Personnel cost across the four relevant asset classes and Targeted Investment Programs were \$1.1 million which represented 5.6% of the personnel cost.
- The costs of consultants, travel and other ancillary expenses of emerging manager investments was \$1.2 million or 2.3%.

Estimated Staff Time Required for Emerging Manager Investments

Information regarding staff time associated with emerging manager investments is as follows:

- Emerging manager investments accounted for a total of 20,935 staff hours, or an estimated 8% of staff time across the four relevant asset classes and Targeted Investment Programs.

Section 4

EMERGING MANAGER EXPOSURE, COST AND STAFF TIME BY ASSET CLASS

This section of the Report provides information on the exposure, cost and staff time of emerging manager investment initiatives in CalPERS investment portfolio by asset class. All percentages compare emerging manager data to the asset class. In this section of the Report cost information is provided for fees and personnel. Ancillary costs such as travel and consultants are not included. The following are the Report observations by asset class regarding emerging manager exposure, fees, personnel and staff time.

Absolute Return Strategies

Count	NAV	Fees	Personnel	Staff Time
67 Managers	\$819 million	\$33 million	\$146,607	2,392 Hours
47.5%	15.7%	20.3%	9.7%	16%

- The ARS total portfolio had 19 external managers, including eight fund of funds advisors, with a total of approximately \$5.2 billion in total external net asset value. One direct external manager with approximately \$221 million of net asset value met the asset class definition of emerging manager at the time of CalPERS investment.
- There were a total of 122 underlying managers in fund of funds with a net asset value of \$1.6 billion, including 66 emerging managers with approximately \$598 million of net asset value.
- Total fees for investment management and performance, both directly and indirectly as a pass-through by fund of fund advisors for emerging managers totaled \$33 million or 20.3%.
- Emerging manager program personnel expenses totaled \$146,607 or 9.7% of asset class personnel costs.
- Eight staff members assigned to this asset class allocated 2,392 hours or approximately 16% of total staff time was dedicated to the management of the emerging manager program.

Global Equity

Count	NAV	Fees	Personnel	Staff Time
36 Managers	\$4.2 billion	\$37.9 million	\$335,145	4,576 Hours
54.5%	18%	27.6%	5.4%	6%

- The Global Equity total portfolio had 34 direct external managers including five fund of fund advisors with approximately \$23.2 billion in

total external net asset value. Four direct external managers with approximately \$1.6 billion of net asset value met the asset class definition of emerging manager at the time of CalPERS investment.

- There were a total of 32 external managers underlying in fund of funds with a net asset value of approximately \$2.6 billion, all of whom met the asset class definition of emerging manager at the time of CalPERS investment.
- Total fees for investment management and performance, both directly and indirectly as a pass-through by fund of fund advisors for emerging manager programs totaled \$37.9 million or 27.6%. Investment management fee data excluded:
 - Company level expenses for the Manager Development Program associated with CalPERS equity investment with some emerging managers.
- Emerging manager program personnel expenses totaled \$335,145 or 5.4%.
- Three staff members assigned to this asset class allocated 4,576 hours or an estimated 6% of total staff time was dedicated to management of the emerging manager programs.

Private Equity

Count	NAV	Fees	Personnel	Staff Time
273 Managers	\$6.2 billion	\$116.9 million	\$409,475	3,463 Hours
35.9%	19.3%	24.5%	7.3%	5%

- The Private Equity total portfolio had 300 external managers including 19 fund of funds with a total of \$32.3 billion in total external net asset value. Seventy-two direct external managers with approximately \$4.5 billion of net asset value met the asset class definition of emerging manager at the time of CalPERS investment.
- There were a total of 461 managers underlying in fund of funds with a net asset value of approximately \$4.0 billion, including 201 emerging managers with \$1.8 billion of net asset value.
- Total fees for investment management, both directly and indirectly as a pass-through by fund of fund advisors for emerging managers totaled \$116.9 million or 24.5%. Investment management fee data excluded performance fees and partnership formation and organizational costs.
- Emerging manager program personnel expenses totaled \$409,475 or 7.3%.
- Thirty-eight staff members assigned to this asset class allocated 3,463 hours or an estimated 5% of total staff time was dedicated to management of the emerging manager programs.

Real Estate

Count	NAV	Fees	Personnel	Staff Time
17 Managers	\$761 million	\$11.6 million	\$203,984	2,688 Hours
12.4%	3.2%	2.6%	3.8%	3%

- The Real Estate total portfolio had 128 direct external managers including two fund of funds managing \$23.7 billion in total external net asset value. Eleven direct external managers with approximately \$719 million of net asset value met the asset class definition of emerging manager at the time of CalPERS investment.
- There were a total of six emerging managers underlying in a fund of funds and programmatic joint venture, with a total net asset value of approximately \$42 million.
- Total fees for investment management, both directly and indirectly as a pass-through to fund of fund advisors for emerging managers totaled \$11.6 million or 2.6%.
- Emerging manager program personnel expenses totaled \$203,984 or 3.8%.
- Eighteen staff members assigned to this asset class allocated 2,688 hours or an estimated 3% of total staff time was dedicated to management of the emerging manager programs.

Section 5

REPORT OBSERVATIONS

The costs for emerging manager investments are more expensive on a net asset value basis compared to total asset class costs. More specifically, base fees are generally higher for emerging managers compared to established managers.

A key finding of this Report is the incremental increase in cost that CalPERS pays in order to meet the objectives for investment with emerging managers. CalPERS objectives for investing in emerging manager programs is to generate appropriate risk adjusted investment returns by identifying early state funds with strong potential for success; accessing investment opportunities that may otherwise be overlooked; and cultivating the next generation of portfolio management talent.

The main reasons for the incremental cost increase associated with emerging manager strategies are as follows:

- There are two layers of fees associated with fund of funds that are often employed for emerging manager strategies. Staff generally does not have the capacity or specific skill set related to management and oversight of emerging managers. Therefore, CalPERS utilizes fund of funds to access platforms of staff that have specialized expertise in identifying, mentoring, and developing emerging managers.
- Emerging manager investments are by definition small and do not have fee efficiencies that many larger investments have. Larger funds have established platforms, more assets under management, residual fee streams from prior investments, and CalPERS negotiates proportionately lower fees per dollar of capital committed to the fund. In comparison, emerging managers may have start-up costs, expenses to establish operation platforms, little or no residual fee streams from prior investments and smaller allocations of capital that do not allow for economy of scale compared to larger investment strategies.

Based on a comprehensive review of the data in this Report, staff also reached the following conclusions:

- Emerging managers represent a significant percentage of the total number of external managers in the portfolio.
- The relatively high number of emerging managers has a comparatively small net asset value. This is consistent with new managers with small capital allocations.
- The vast majority of CalPERS emerging manager exposure lies within fund of funds structures. Of the four asset classes, 29 of the 34 fund of funds vehicles invest with emerging managers.
- Management fees represent the bulk of the emerging manager program cost, which is consistent with the balance of the portfolio. As with CalPERS

established managers, costs of investment with emerging managers varies by asset class and strategy.

- Estimated staff time is significantly lower in proportion to the exposure and NAV with emerging managers. This is consistent with the use of fund of fund platforms and third party advisors that are often used in emerging manager strategies.
- Of the total staff members in the Investment Office, 69 or 18.4% of staff allocated a percentage of their time to work on managing emerging manager investments.
- Staff time includes reviewing investment opportunities submitted through the Investment Proposal Tracking System (IPTS). From April 1, 2013 through March 31, 2014, 319 proposals were submitted through IPTS to the four asset classes. Of those proposals, 167 or 52% were from emerging managers.

Asset Class Observations

- The ARS asset class had significant exposure to emerging managers within its portfolio through fund of funds investment structures.
 - Nearly half of the external managers in ARS were emerging managers.
- Global Equity had more than one-third of the total emerging manager asset value.
- Private Equity had the largest number of emerging managers with the largest net asset value of all the asset classes.
 - Private Equity had nearly 70% of the count and more than 50% of the net asset value of emerging manager exposure.
- Real Estate trailed the rest of the asset classes in emerging manager exposure.
 - In 2008, Real Estate launched a significant portfolio restructuring process that resulted in reduction in the number of external managers across the portfolio. The restructuring process also resulted in a reduction in emerging manager exposure. In 2012, Real Estate initiated a new Emerging Manager Program focused on mentoring and developing new and talented emerging managers.

Section 6

DATA COLLECTION AND ANALYSIS METHODOLOGY

The Emerging Manager Program Cost Report is as of June 30, 2013.

The determination of an emerging manager is based on whether the manager met the definition of emerging manager at the time of initial investment. Please see Section 7 Definition of Emerging Manager by asset class.

Emerging manager investments are through direct relationships, fund of funds advisors, as well as mentoring programmatic joint ventures in Real Estate. Fund of funds fall into the following categories:

- Fund of funds that have exposure to emerging managers but are not dedicated emerging manager programs.
- Fund of funds and mentoring programmatic joint ventures in Real Estate that are dedicated to emerging manager programs.

Asset classes with current emerging manager exposure that are included in the Report are: ARS, Global Equity, Private Equity, and Real Estate.

- Global Equity and ARS data is counted by management firms currently in the portfolio. CalPERS contracts with management firms and each strategy of a management firm has the same ownership structure. As the ownership structure remains the same, multiple relationships with the same firm are counted once.
- Private Equity and Real Estate data is counted by individual partnerships based on ownership structure of carried interest. Each partnership has its own structured agreement. Therefore, if a manager has multiple partnerships with CalPERS, each partnership is counted individually.

When counting the number of managers and aggregating net asset value they manage, staff “looked through” all fund of fund structures. Thus, manager counts and associated net asset values reflect managers in direct relationships, fund of fund advisors, and managers in underlying fund of funds.

In March 2013 staff presented the *Emerging and Diverse Manager Data Report* to the Investment Committee. This predecessor report to the Emerging Manager Cost Report used slightly different methodology in tracking investment exposures with fund of funds than the current Report.

Emerging and Diverse Manager Data Report March 2013

The data collected for emerging managers was separated into two categories: 1) Direct Managers including fund of fund Advisors; and 2) Underlying Managers

selected by fund of funds. Fund of fund advisors may invest in emerging and non-emerging managers.

When aggregating net asset value for purposes of reporting performance, staff analyzed the data using two methodologies. The net asset value of the two methodologies cannot be added together, as doing so would result in double counting.

- 1) The net asset value managed by managers in direct relationships with CalPERS which include relationships with fund of fund advisors. In this methodology, if a fund of fund advisors meets the definition of an emerging manager, the entire net asset value of the fund of funds is reported as emerging managers.
- 2) The net asset value managed by managers within fund of fund vehicles. In this methodology, the net asset value is based on the status of each fund underlying the fund of funds meeting CalPERS emerging manager definitions.

Net asset value reported as of June 30, 2012 totaled \$10.6 billion under the heading "Direct and fund of funds" and includes fund of fund advisors that met an emerging manager definition, and \$4.1 billion under the heading "Underlying in fund of funds". These two figures cannot be added because doing so would result in double counting exposure with fund of fund advisors that met an emerging manager definition.

Emerging Manager Exposure and Cost Report June 2014

The data on emerging managers is separated into two categories: 1) Direct Managers excluding fund of fund Advisors; and 2) Underlying Managers Selected by fund of funds. Fund of fund advisors may invest in emerging and non-emerging managers.

When aggregating net asset value for purposes of reporting costs, staff analyzed the data using two methodologies. The net asset value of the two methodologies can be added together.

- 1) Net asset value managed by managers in direct relationships with CalPERS, which exclude relationships with fund of fund advisors. In this methodology, if a fund of fund advisor meets the definition of an emerging manager, the entire assets under management of the fund of funds are not reported as emerging managers.
- 2) Net asset value managed by managers within fund of fund structures. In this methodology, the net asset value is based on the status of each fund underlying the fund of funds being an emerging manager.

Information Sources

Net asset value data is sourced from State Street Bank's official fund account, State Street Private Edge, State Street International Fund Services, and the internally managed Automated Real Estate Investment System database in Real Estate.

Investment management fee expense data for managers in a direct relationship is sourced from K1 partnership statements, augmented by State Street Private Edge data as of December 31, 2013 in Private Equity; State Street International Fund Services, or the internally managed Automated Real Estate Investment System database in Real Estate; CalPERS Financial Office Accounting Records in Global Equity.

Additionally, Investment management fee expense data for underlying managers in a fund of funds relationship is sourced from interim quarterly and annual financial statements and supplemental reports thereto provided by vehicle advisors.

Investment management fee expense data excludes the following information:

- Management fees do not include carried interest profit share for Private Equity Asset Class.
- Other fees
 - Partnership formation and organizational costs in Private Equity.
 - Company level expenses for Manager Development Program in Global Equity associated with CalPERS equity stake in emerging managers.

Internal personnel costs and other costs associated with portfolio management of emerging manager investments is sourced from records maintained by CalPERS Human Resources and Fiscal Services Divisions.

Staff time percentage allocation to emerging manager investments applied to staffing costs is sourced from survey and interview responses by 69 of 367 CalPERS Investment Office staff as of June 30, 2013. Additionally, CalPERS External Affairs Branch provided an allocation of staff time on projects supporting communications and external outreach efforts.

Internal personnel costs and other costs exclude the following direct and indirect interdepartmental budgeted expenses:

- Other staffing costs (e.g. overtime, benefits, non-industrial disability insurance, workers' compensation and unemployment insurance, and miscellaneous expenses)
- General office expenses (e.g. printing, postage, communications devices, data processing services, training, employee recognition program, facilities operations, central administrative services)
- Technology costs (equipment and software)
- Internal and outside counsel services

- Audit services
- Technology costs (equipment, software and consolidated data center)

Section 7

EMERGING MANAGER DEFINITIONS

The definition of emerging manager varies by asset class as illustrated in the chart below as of June 30, 2013.

Asset Class Parameters	Global Equity	ARS	Global Fixed Income	Private Equity			Real Assets
	Fund of Funds	Fund of Funds	Direct	Direct	Fund of Funds		Mentoring Manager
Emerging Manager Program Name	Emerging Manager Fund of Funds	Fund of Emerging Hedge Funds	None	None	Emerging Domestic Private Equity Managers		Real Estate Emerging Managers
Investment Strategy	Long Only - Publicly Traded Securities	Hedge Funds	All	Private Equity	Private Equity - Buyout and Special Situations	Venture Capital	Real Estate Separate Accounts and Commingled Funds
Product Size	No Requirement	< \$1B	No Requirement	No Requirement	< \$1B	< \$500M	No Requirement
Firm AUM	< \$2B	< \$2B	< \$2B	No Requirement	No Requirement	No Requirement	< \$1B
Length of Track Record	No Requirement	No Requirement	No Requirement	First or Second Institutional Fund	First or Second Institutional Fund	First or Second Institutional Fund	First, Second, or Third Separate Account or Institutional Fund
Geographic Focus	No Requirement	No Requirement	No Requirement	No Requirement	Domestic US	Domestic US	Urban California