VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

DISABILITY & BUSINESS MEETING

FEBRUARY 25, 2019

AGENDA

Ventura County Employees' Retirement Association PLACE:

Second Floor Boardroom 1190 South Victoria Avenue Ventura, CA 93003

TIME: 9:00 a.m.

Members of the public may comment on any item under the Board's jurisdiction by filling out a speaker form and presenting it to the Clerk. Unless otherwise directed by the Chair, comments related to items on the agenda will be heard when the Board considers that item. Comments related to items not on the agenda will generally be heard at the time designated for Public Comment.

ITEM:

I.	CAL	LL TO ORDER	Master Page No.
II.	APF	PROVAL OF AGENDA	1 – 4
III.	APF	PROVAL OF MINUTES	
	A.	Business Minutes of January 28, 2019.	5 – 13
IV.	COI	NSENT AGENDA	
	A.	Approve Regular and Deferred Retirements and Survivors Continuances for Month of January 2019.	the 14
	B.	Receive and File Report of Checks Disbursed in January 2019.	15 – 18
	C.	Receive and File Budget Summary for FY 2018-19 Month Ending January 31, 2019.	19 – 20
	D.	Receive and File Statement of Fiduciary Net Position, Statement of Charin Fiduciary Net Position, Schedule of Investments, Cash and Cequivalents, and Schedule of Investment Management Fees for the Peending December 31, 2018.	Cash

		OF RETIREMENT FEBRUARY 25, 2019 TY & BUSINESS MEETING	AGENDA PAGE 2
IV.	CO	NSENT AGENDA (continued)	
	E.	Receive and File Statement of Fiduciary Net Position, Statement of Changes in Fiduciary Net Position, Schedule of Investments, Cash and Cash Equivalents, and Schedule of Investment Management Fees for the Period Ending January 31, 2019.	25 – 28
٧.	REG	CEIVE AND FILE PEDNING DISABILITY APPLICATION STATUS REPORT	29 – 63
VI.	INV	ESTMENT MANAGER PRESENTATIONS	
	A.	Receive Annual Investment Presentation from Adams Street, Scott Hazen, and Dave Brett.	64 – 93
VII.	INV	ESTMENT INFORMATION	
		NEPC – Anthony Ferrara. VCERA – Dan Gallagher, Chief Investment Officer.	
	A.	Quarterly Investment Performance Report for Period Ending December 31, 2018. RECOMMENDED ACTION: Receive and file.	94 – 199
	B.	Preliminary Performance Report Month Ending January 31, 2019. RECOMMENDED ACTION: Receive and file.	200 – 210
VIII.	<u>OLI</u>	D BUSINESS	
	A.	Update on Bylaws.	
IX.	NE	W BUSINESS	
	A.	Recommendation to Approve Application for Reinstatement to Active Membership Pursuant to GC 31680 & 31680.5 – Kirkby, Steven A. RECOMMENDED ACTION: Approve.	
		1. Staff Letter.	211
		2. Request from Mr. Kirkby.	212
		3. Offer of Employment.	213 – 214
		4. Medical Clearance.	215
	B.	Request to Engage Segal for Internal Revenue Code (IRC) 415 Limit Calculations in an Amount Not-To-Exceed \$110,000. RECOMMENDED ACTION: Approve.	
		1. Staff Letter.	216
	C.	Mid-Year Budget Update for FY 2018-19. RECOMMENDED ACTION: Approve.	

		OF RETIREMENT FEBRUARY 25, 2019 TY & BUSINESS MEETING	AGENDA PAGE 3
IX.	<u>NE</u>	W BUSINESS (continued)	
		1. Staff Letter by C.F.O., Henry Solis.	217 – 218
		2. Budget Summary.	219 – 220
	D.	VCERA Cost-of-Living Adjustments (COLA) as of April 1, 2019. RECOMMENDED ACTION: Approve.	
		Actuary's Annual COLA Analysis.	221 – 222
	E.	Recommendation for Authorization for Trustee Shapiro to Attend the International Foundation of Employee Benefit Plan (IFEBP), New Trustees Institute – Level I, San Francisco, CA, June 24 - 26, 2019. RECOMMENDED ACTION: Approve.	
		1. Staff Letter.	223
		2. IFEBP New Trustees Institute Brochure.	224 – 235
	F.	Recommendation for Authorization for Chief Technology Officer, Leah Oliver to Attend the Public Retirement Information Systems Management (PRISM) 2019 Conference, Indianapolis, IN, May 12 – 15, 2019. RECOMMENDED ACTION: Approve.	
		1. Staff Letter.	236
		2. 2019 PRISM Preliminary Conference Agenda.	237 – 239
	G.	Request for Authorization for Up to 2 Trustees and C.I.O. to Attend Due Diligence Visits to NEPC and Pantheon. RECOMMENDED ACTION: Approve.	
		Staff Letter by C.I.O., Dan Gallagher.	240
X.	CL	OSED SESSION	
	A.	CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION - Significant exposure to litigation pursuant to Government Code section 54954.9(d)(2): One case.	241 – 245
XI.	INF	ORMATIONAL	
	A.	SACRS 2019 Spring Conference Notice and Preliminary Agenda.	246 – 255
	В.	Reminder from SACRS Regarding Elections for 2019 – 2020.	256 – 258
	C.	CALAPRS Advanced Principles of Pension Management for Trustees.	259 – 262
XII.	PU	BLIC COMMENT	
XIII.	ST	AFF COMMENT	

BOARD OF RETIREMENT DISABILITY & BUSINESS MEETING

FEBRUARY 25, 2019

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XIV. BOARD MEMBER COMMENT

XV. ADJOURNMENT

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

BUSINESS MEETING

JANUARY 28, 2019

MINUTES

TRUSTEES William W. Wilson, Chair, Public Member Robert Bianchi, Vice-Chair, Public Member

Steven Hintz, Treasurer-Tax Collector

Steve Bennett, Public Member Mike Sedell, Public Member Dan Shapiro, General Member Will Hoag, Alternate Retiree Member Chris Johnston, Safety Member Ed McCombs, Alternate Public Member

TRUSTEES Craig Winter, General Member
ABSENT: Arthur E. Goulet, Retiree Member

STAFF Linda Webb, Retirement Administrator

PRESENT: Lori Nemiroff, General Counsel

Henry Solis, Chief Financial Officer Dan Gallagher, Chief Investment Officer Leah Oliver, Chief Technology Officer

Shalini Nunna, Retirement Benefits Manager Vickie Williams, Retirement Benefits Manager Donna Edwards, Retirement Benefits Specialist

Karen Scanlan, Accounting Manager Josiah Vencel, Communications Officer

Chris Ayala, Program Assistant Sierra Walsh, Office Assistant III-C

PLACE: Ventura County Employees' Retirement Association

Second Floor Boardroom 1190 South Victoria Avenue

Ventura, CA 93003

TIME: 9:00 a.m.

JANUARY 28, 2019

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ITEM:

I. CALL TO ORDER

Chair Wilson called the Business Meeting of January 28, 2019 to order at 9:02 a.m.

Mark Lunn, Ventura County Clerk-Recorder, Registrar of Voters, administered the Oath of Office to newly appointed trustee Steve Bennett and reappointed trustee Bill Wilson.

II. APPROVAL OF AGENDA

MOTION: Approve.

Moved by Johnston, seconded by Bianchi.

Vote: Motion carried

Yes: Bennett, Bianchi, Hintz, Johnston, Sedell, Shapiro, Wilson

No: -

Absent: Goulet, Winter

Abstain: -

III. APPROVAL OF MINUTES

A. Disability Minutes of January 7, 2019.

Ms. Webb offered a correction to the minutes, noting that staff member, Karen Scanlan, had attended the meeting, but was not listed as present in the minutes.

After discussion by the Board, the following motion was made:

MOTION: Approve with Correction.

Moved by Bianchi, seconded by Sedell.

Vote: Motion carried

Yes: Bennett, Bianchi, Hintz, Johnston, Sedell, Shapiro, Wilson

No: -

Absent: Goulet, Winter

Abstain: -

IV. CONSENT AGENDA

- A. Approve Regular and Deferred Retirements and Survivors Continuances for the Month of December 2018.
- B. Receive and File Report of Checks Disbursed in December 2018.
- C. Receive and File Budget Summary for FY 2018-19 Month Ending December 31, 2018.
- D. Receive and File Statement of Fiduciary Net Position, Statement of Changes in Fiduciary Net Position, Schedule of Investments, Cash and Cash Equivalents, and Schedule of Investment Management Fees for the Period Ending November 30, 2018.

JANUARY 28, 2019

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MOTION: Receive and File.

Moved by Bianchi, seconded by Sedell.

Vote: Motion carried

Yes: Bennett, Bianchi, Hintz, Johnston, Sedell, Shapiro, Wilson

No: -

Absent: Goulet, Winter

Abstain: -

V. COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR)

- A. June 30, 2018 Comprehensive Annual Financial Report (CAFR) Brown Armstrong, Rosalva Flores, Partner, and Alaina Sanchez, Manager.
 - 1. Comprehensive Annual Financial Report June 30, 2018.
 - 2. Brown Armstrong Presentation (in PowerPoint) by Rosalva Flores, Partner, and Alaina Sanchez, Manager.
 - 3. Independent Auditor's Report.
 - 4. Report to the Board of Retirement.

Ms. Sanchez said that a few technology-related findings and recommendations from the 2017 audit had continued into 2018, it could reasonably take multiple cycles to fully address or implement. She noted that VCERA had already satisfied some of the recommendations.

Ms. Webb said noted the recent hiring of VCERA's Chief Technology Officer, and said staff believed the auditor's I.T. recommendations would be fully addressed by the next annual audit.

After discussion by the Board, the following motion was made:

MOTION: Receive and File.

Moved by Sedell, seconded by Bianchi.

Vote: Motion carried

Yes: Bennett, Bianchi, Hintz, Johnston, Sedell, Shapiro, Wilson

No: -

Absent: Goulet, Winter

Abstain: -

VI. INVESTMENT MANAGER PRESENTATIONS

A. Receive Annual Investment Presentation, Prudential Real Estate Investors – PGIM, Catherine Minor and Marcus Berry.

Catherine Minor and Marcus Berry reviewed Prudential Real Estate Investors' organizational changes and discussed the firm's investment outlook, portfolio strategy, composition and performance.

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The Board took a break at 9:52 a.m., after the presentation by Prudential Real Estate Investors.

The Board returned from break at 10:02 a.m.

VII. INVESTMENT INFORMATION

NEPC – Allan Martin VCERA – Dan Gallagher, Chief Investment Officer

 A. Recommendation for \$100M Investment in LaSalle Growth & Income Fund VIII – US Real Estate Value Add Fund.

RECOMMENDED ACTION: Approve.

- 1. Staff Letter by CIO, Dan Gallagher.
- 2. Memorandum from NEPC.
- 3. LaSalle Income & Growth Fund VIII Presentation by Jim Hutchinson and Mathew Walley.

Mr. Gallagher noted that LaSalle was a long-tenured manager with a strong investment record, and Mr. Martin summarized the due diligence performed by NEPC prior to making the recommendation.

Trustee Johnston raised a concern about the timing of this investment near the end of a market cycle. Mr. Martin replied that NEPC did not foresee a severe drop in the real estate market as in 2008-09 and that LaSalle's investments were based on demographics, not expected GDP.

Chair Wilson asked Mr. Martin to confirm that LaSalle was one of the top-rated real estate firms, which Mr. Martin did.

After the presentation and discussion by the Board, staff and consultant, the following motions were made:

<u>MOTIONS</u>: Approve Recommendation for \$100M Investment in LaSalle Growth and Income Fund VIII, and, Subject to Legal Review, Authorize the Board Chairman or Retirement Administrator or, in the Absence of Both, the Chief Investment Officer, to Approve and Execute the Required Documentation.

Moved by Bianchi, seconded by Sedell.

Vote: Motion carried

Yes: Bennett, Bianchi, Hintz, Sedell, Shapiro, Wilson

No: Johnston

Absent: Goulet, Winter

Abstain: -

Trustee Johnston left at 10:40 a.m., after the vote on this agenda item.

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B. Recommendation for \$100M Allocation to US Treasury Portfolio Managed by Reams Asset Management.

RECOMMENDED ACTION: Approve.

1. Staff Letter by CIO, Dan Gallagher.

Mr. Gallagher said the recommendation was consistent with the allocation the Board had approved in 2013. Mr. Martin added that investing in Treasuries provided protection in a down market and easy liquidity to meet capital calls.

After discussion by the Board, staff and consultant, the following motions were made:

MOTIONS: Approve the Recommendation to Contract with Reams Asset Management for a \$100M Separate Account Rolling New-Issue 10-Year U.S. Treasury Notes, Subject to Contract Legal Review and Approval of VCERA's Internal Counsel, and Authorize the Board Chair or Retirement Administrator to Execute the Contract.

Moved by Hintz, seconded by Bianchi.

Vote: Motion carried

Yes: Bennett, Bianchi, Hintz, Hoag, Sedell, Shapiro, Wilson

No: -

Absent: Goulet, Johnston, Winter

Abstain: -

- C. Preliminary Performance Report Month Ending November 30, 2018. **RECOMMENDED ACTION: Receive and file.**
- D. Preliminary Performance Report Month Ending December 31, 2018. **RECOMMENDED ACTION: Receive and file.**

After discussion by the Board, staff and consultant, the following motion was made:

<u>MOTION</u>: Receive and File the Preliminary Performance Reports for November 30, 2018 and December 31, 2018.

Moved by Bianchi, seconded by Hoag.

Vote: Motion carried

Yes: Bennett, Bianchi, Hintz, Hoag, Sedell, Shapiro, Wilson

No: -

Absent: Goulet, Johnston, Winter

Abstain: -

VIII. OLD BUSINESS

- A. Request for Authority for Retirement Administrator to Extend Office Lease. **RECOMMENDED ACTION: Approve.**
 - 1. Staff Letter.

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Ms. Webb provided an update on office lease negotiations, noting the current lease would expire before negotiations were complete.

Chair Wilson asked about the duration of the proposed extension. Ms. Webb replied that the recommendation was for an extension of up to six months.

After discussion by the Board, the following motion was made:

<u>MOTION</u>: Approve Request to Authorize the Retirement Administrator to Extend the Current Office Lease with M.F. Daily, Up to Six Months.

Moved by Sedell, seconded by Hoag.

Vote: Motion carried

Yes: Bennett, Bianchi, Hintz, Hoag, Sedell, Shapiro, Wilson

No: -

Absent: Goulet, Johnston, Winter

Abstain: -

IX. NEW BUSINESS

- A. Request for Continued Engagement of Hanson Bridgett for Tax Compliance Counsel. **RECOMMENDED ACTION: Approve.**
 - 1. Staff Letter.

Ms. Webb said that the Board had previously approved an allocation in 2015 of \$25,000 to engage Hanson Bridgett for tax compliance projects, including working with staff on adoption of IRS model regulations. The recommended action was to authorize an additional \$25,000 to continue engagement on an as-needed basis.

After discussion by the Board, the following motion was made:

<u>MOTION</u>: Authorize the Retirement Administrator to Engage Hanson Bridgett, LLC, for Tax-Related Legal Services for an Amount Not to Exceed \$25,000.

Moved by Hintz, seconded by Bianchi.

Vote: Motion carried

Yes: Bennett, Bianchi, Hintz, Hoag, Sedell, Shapiro, Wilson

No: -

Absent: Goulet, Johnston, Winter

Abstain: -

B. Request to Reschedule Board Consideration of Disability Cases to be Heard at February Disability Meeting.

RECOMMENDED ACTION: Approve.

Staff Letter.

Ms. Webb said that Ventura County Risk Management had requested rescheduling the cases because their staff members had a professional scheduling conflict on February 11th.

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After discussion by the Board, the following motion was made:

<u>MOTION</u>: Approve Recommendation to Cancel Disability Meeting Scheduled for February 11, 2019, and Direct Staff to Bring Disability Cases to the Board for Consideration at the February 25, 2019 Business Meeting.

Moved by Bianchi, seconded by Shapiro.

Vote: Motion carried

Yes: Bennett, Bianchi, Hintz, Hoag, Sedell, Shapiro, Wilson

No: -

Absent: Goulet, Johnston, Winter

Abstain: -

- C. Recommendation for Authorization for Accounting Manager, Karen Scanlan, to Attend the Dynamics SL User Group (DSLUG) Conference, April 15 - 18, 2019, in Anaheim, CA. RECOMMENDED ACTION: Approve.
 - 1. Staff Letter.
 - 2. DSLUG 2019 Conference Schedule

After discussion by the Board, the following motion was made:

<u>MOTION</u>: Approve Recommendation for Authorization of Accounting Manager Karen Scanlan to Attend the 2019 Dynamics SL User Group (DSLUG) Conference, April 15 - 18, 2019, in Anaheim, CA.

Moved by Hintz, seconded by Bianchi.

Vote: Motion carried

Yes: Bennett, Bianchi, Hintz, Hoag, Sedell, Shapiro, Wilson

No: -

Absent: Goulet, Johnston, Winter

Abstain: -

- D. SACRS 2018-2019 Board of Directors Nominations.
 - 1. SACRS Notice.

Ms. Webb said the State Association of County Retirement Systems (SACRS) announced that it will be accepting nominations for the SACRS Board of Directors.

E. Quarterly Administrator's Report for October - December 2018. **RECOMMENDED ACTION: Receive and File.**

Ms. Webb noted that an item was referenced in the Retirement Administrator's quarterly report as being on the present agenda, but it had been moved to the February 25th Business Meeting.

After discussion by the Board, the following motion was made:

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MOTION: Receive and File.

Moved by Sedell, seconded by Shapiro.

Vote: Motion carried

Yes: Bennett, Bianchi, Hintz, Hoag, Sedell, Shapiro, Wilson

No: -

Absent: Goulet, Johnston, Winter

Abstain: -

F. Quarterly Chief Investment Officer's Report for October - December 2018.

RECOMMENDED ACTION: Receive and File.

MOTION: Receive and File.

Moved by Sedell, seconded by Hoag.

Vote: Motion carried

Yes: Bennett, Bianchi, Hintz, Hoag, Sedell, Shapiro, Wilson

No: -

Absent: Goulet, Johnston, Winter

Abstain: -

X. INFORMATIONAL

- A. CALAPRS Advanced Principles of Pension Management for Trustees Notice.
- B. CALAPRS General Assembly Notice.

XI. PUBLIC COMMENT

The Board received public comment from Melissa S. Wise, a former Ventura County Probation Agency (VCPA) employee, and her spouse Darryl Wise regarding the withdrawal of her service-connected disability retirement application. Ms. Wise asserted that representatives of Ventura County Risk Management and the VCPA urged her to withdraw her application, and that Risk Management's attorney had warned her she was at potential risk of arrest for fraud because of video footage the County had obtained. She said this was a threat to convince her to withdraw her disability retirement application and resign, in lieu of termination. Ms. Wise said she had responded by withdrawing her application from VCERA, but that she regretted that decision and wanted to appear before the Board to speak and to rescind her earlier withdrawal.

Ms. Webb said that disability staff had spoken to Ms. Wise the previous Friday, and informed her that she could reapply, which would begin the disability application process again.

Trustee Hintz said that Ms. Wise could indeed reapply, that he did not believe the Board could permit her to rescind her withdrawal, that there was no prejudice on the part of the Board, and that perhaps she should consider retaining a lawyer.

XII. STAFF COMMENT

Ms. Webb provided an update on the Board's direction to staff to work with Ventura County Risk Management on an independent process for Ms. Catherine Rodriguez's disability retirement

JANUARY 28, 2019

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case. She said the process would be for Risk Management to provide the applicant's medical records to VCERA, who would facilitate delivery to the Los Angeles County Employees' Retirement Association (LACERA) to begin its independent review process.

Ms. Webb also updated the Board regarding Tracy Towner's Civil Service Commission proceedings, which had begun, but the County of Ventura had requested a delay into March 2019.

XIII. BOARD MEMBER COMMEN	XIII.	BOARD	MEMBER	COMMEN
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None.

XIV. ADJOURNMENT

The Chairman adjourned the meeting at 11:26 a.m.

Respectfully submitted,

Suddiell

LINDA WEBB, Retirement Administrator

Approved,

WILLIAM W. WILSON, Chairman

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION REPORT OF REGULAR AND DEFERRED RETIREMENTS AND SURVIVORS CONTINUANCES

	January 2019										
			DATE OF	BENEFIT		EFFECTIVE					
FIRST NAME	LAST NAME	G/S	MEMBERSHIP	SERVICE *	DEPARTMENT	DATE					
REGULAR RE	TIREMENTS:										
Guillermina	Barajas	G	3/23/1986	31.70	Health Care Agency	1/6/2019					
Michael	Carone	G	12/13/1987	31.32	General Services Agency	1/1/2019					
Christine	Cassy	G	10/28/1990	34.81	Superior Court	12/27/2018					
Robert	Connal	G	5/10/2015	3.39 *	Information Technology Services (deferred)	1/6/2019					
Christina	Coronado	G	1/19/1992	25.41	Health Care Agency	12/22/2018					
Janine	Evans	G	3/5/2001	19.17	Health Care Agency	1/3/2019					
Penny	Fargo	S	4/14/2002	16.74	Probation Agency	1/2/2019					
Michael	Fonzo				Human Services Agency (alt-payee)	1/1/2019					
Gregory	Gay	s	7/8/1984	4.72 *	Sheriff's Department (deferred)	12/30/2018					
Steve	Gerhardt	S	5/18/1986	36.66	Fire Protection District	12/31/2018					
Freddi	Herrmann	G	3/7/1999	21.20	Agricultural Commissioner	12/8/2018					
Dona	Jones	G	2/12/2006	12.90	Health Care Agency	12/29/2018					
Paul	Jordan	G	12/16/1984	19.86	Resource Management Agency	1/5/2019					
Patricia	Kelliher	G	11/30/1986	10.58 *	District Attorney (deferred)	11/27/2018					
Andrew	Kish	G	4/14/1991	31.38	Sheriff's Department	12/29/2018					
Sharon	McCarthy	G	9/22/1985	36.23	Superior Court	1/5/2019					
John	McNamara	G	12/2/2007	11.08	Public Defender	12/22/2018					
Arturo	Melgoza	G	11/6/2005	12.93	=	12/15/2018					
	Quesada	G	12/8/2003	20.95	General Services Agency	1/4/2019					
Karen				20.95 1.80 *	Child Support Services						
Daniel	Ross	S	10/5/1986		Sheriff's Department (deferred)	1/31/2019					
Vicky	Salinas-Martinez	G	2/2/2004	13.89	Health Care Agency	12/5/2018					
Dennis	Scamardo	G	7/26/1999	14.51	General Services Agency	12/27/2018					
Angela	Seaborne	G	8/6/2000	23.50	Sheriff's Department	1/4/2019					
Jacqueline	Tilkens	G	7/22/1990	29.09	Child Support Services	1/4/2019					
Kevin	White	S	9/2/1990	28.34	Airport Department	12/13/2018					
Tina	Woolam	G	12/2/1984	5.21 *	Superior Court (deferred)	12/29/2018					
Patti	Yoshida	G	11/11/1979	39.20	Health Care Agency	1/1/2019					
Richard	Young	G	4/23/2001	17.35	Information Technology Services	12/30/2018					
Kathryn	Zwers	G	10/4/1999	18.83	Health Care Agency	11/2/2018					
DEFERRED R	ETIREMENTS:										
Raudel	Flores	G	06/28/2009	9.29	Health Care Agency	10/13/2018					
Amelia	Guerrero	S	04/20/2008	10.47	Probation Agency	11/03/2018					
Steve	Gutierrez	G	07/02/2017	1.47 **	Information Technology Services	12/18/2018					
Jose	Limas	G	09/03/2013	5.08	Human Services Agency	10/27/2018					
Francisco	Moncada	G	07/04/1993	8.88	Human Services Agency	01/05/2019					
Suzanne Julia	Sandberg McNamara	G G	04/27/2016 02/21/2000	2.43 14.25	Health Care Agency Ventura Superior Court	12/22/2018 01/05/2019					
	Snyder CONTINUANCES:	, G	02/2 1/2000	14.25	ventura Superior Court	01/05/2019					
Eugene	Connell	4									
Patricia	Fitzpatrick										
Murray	Glidden										
Melinda	Haffner										
Karen	Helus										
Barry	Maher										
Mavis	Marsh										
Karon	Pineau										
Barbara	Safe										
Viawvai	Senivongs										
Linda	Villegas										
	villegas	from a	ny previous retiren	nents							

^{* =} Excludes reciprocal service or service from any previous retirements

^{** =} Member establishing reciprocity

Date: Time: Monday, February 04, 2019

09:07AM 104164 User:

Ventura County Retirement Assn

Check Register - Standard Period: 07-19 As of: 2/4/2019

Page: Report: Company:

1 of 4 03630.rpt VCERA.

Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Peri To Post	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
Company:	VCER	RA								
Acct / Sub: 027894	10200 CK	1/3/2019	000000 CUSTOMPRIN CUSTOM PRINTING	07-19	000757	VO	ADMIN EXP	1/3/2019	0.00	1,019.41
027895	СК	1/3/2019	INCENTIVES INCENTIVE SERVICES	07-19	000758	VO	ADMIN EXP	1/3/2019	0.00	53.88
027896	СК	1/3/2019	JANOPRINTI JANO PRINTING & MAILWORKS	07-19	000759	VO	ADMIN EXP	1/3/2019	0.00	7,984.18
027897	CK	1/3/2019	PUBLICPENS PUBLIC PENSION FINANCIAL FO	07-19 O	000760	VO	ADMIN EXP	1/3/2019	0.00	150.00
027898	СК	1/9/2019	BANKOFAMER BUSINESS CARD	07-19	000761	VO	IT/ADMIN	1/9/2019	0.00	2,142.06
027899	СК	1/9/2019	BRENTWOODI BRENTWOOD IT	07-19	000762	VO	IT	1/9/2019	0.00	13,510.00
027900	СК	1/9/2019	DIGITALDEP DIGITAL DEPLOYMENT	07-19	000764	VO	IT	1/9/2019	0.00	650.00
027901	СК	1/9/2019	HANSONBRID HANSON BRIDGETT LLP	07-19	000763	VO	LEGAL FEES	1/9/2019	0.00	649.35
027902	СК	1/9/2019	HARRISWATE HARRIS WATER CONDITIONING	07-19 G	000765	VO	ADMIN EXP	1/9/2019	0.00	109.50
027903	СК	1/9/2019	SEGALCONSU SEGAL CONSULTING	07-19	000766	VO	ACTUARY FEES	1/9/2019	0.00	30,500.00
027904	СК	1/9/2019	SPRUCEGROV SPRUCEGROVE INVESTMENT N	- 07-19 И	000767	VO	INVESTMENT FEES	1/9/2019	0.00	62,808.16
027905	СК	1/9/2019	STATESTREE STATE STREET BANK AND TRU	07-19 S	000768	VO	INVESTMENT FEES	1/9/2019	0.00	110,306.29
027906	СК	1/16/2019	ACCESSINFO ACCESS INFORMATION PROTE	07-19 C	000769	VO	ADMIN EXP	1/16/2019	0.00	530.70

Date: Mon

Monday, February 04, 2019

Time: 09:07AM User: 104164

Ventura County Retirement Assn

Check Register - Standard Period: 07-19 As of: 2/4/2019 Page: Report: Company: 2 of 4 03630.rpt VCERA

Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Per To Post	riod Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
027907	СК	1/16/2019	ADP ADP, LLC	07-19		000770	VO	ADMIN EXP	1/16/2019	0.00	3,357.53
027908	СК	1/16/2019	ATTMOBILIT AT&T MOBILITY	07-19		000771	VO	IT	1/16/2019	0.00	401.18
027909	СК	1/16/2019	BROWNARMST BROWN ARMSTRONG	07-19		000772	VO	ADMIN EXP	1/16/2019	0.00	12,338.96
027910	CK	1/16/2019	HEXAVEST HEXAVEST INC.	07-19		000773	VO	INVESTMENT FEES	1/16/2019	0.00	98,501.04
027911	СК	1/16/2019	KLEPAROBER ROBERT KLEPA	07-19		000774	VO	ADMIN EXP	1/16/2019	0.00	875.00
027912	СК	1/16/2019	TEAMLEGAL TEAM LEGAL, INC.	07-19		000775	VO	ADMIN EXP	1/16/2019	0.00	132.40
027913	СК	1/16/2019	THOMSONREU THOMSON REUTERS- WEST	07-19		000776	VO	ІТ	1/16/2019	0.00	461.00
027914	СК	1/16/2019	TIMEWARNER TIME WARNER CABLE	07-19		000777	VO	ІТ	1/16/2019	0.00	275.33
027915	СК	1/23/2019	LINEASOLUT LINEA SOLUTIONS	07-19		000778	VO	ADMIN EXP	1/23/2019	0.00	10,621.88
027916	СК	1/23/2019	LOOMISSAYL LOOMIS, SAYLES & COMPANY,	07-19 L		000779	VO	INVESTMENT FEES	1/23/2019	0.00	126,844.53
027917	СК	1/23/2019	MFDAILYCOR M.F. DAILY CORPORATION	07-19		000780	VO	ADMIN EXP	1/23/2019	0.00	18,088.79
027918	СК	1/23/2019	NOSSAMAN NOSSAMAN LLP	07-19		000781	VO	LEGAL FEES	1/23/2019	0.00	53.50
027919	СК	1/23/2019	REAMSASSET SCOUT INVESTMENTS, INC	07-19		000782	VO	INVESTMENT FEES	1/23/2019	0.00	135,716.00

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Ventura County Retirement Assn

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Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Period To Post Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
027920	CK	1/23/2019	SBSGROUP VELOSIO	07-19	000783	VO	IT	1/23/2019	0.00	43.75
027921	СК	1/23/2019	STROUDDESI STROUD DESIGN, INC	07-19	000784	VO	ADMIN EXP	1/23/2019	0.00	4,000.00
027922	СК	1/30/2019	ADP ADP, LLC	07-19	000785	VO	ADMIN EXP	1/30/2019	0.00	2,850.14
027923	CK	1/30/2019	BEARDSLEYN NANCY T. BEARDSLEY, ESQ	07-19	000786	VO	ADMIN EXP	1/30/2019	0.00	875.00
027924	CK	1/30/2019	BIANCHIROB ROBERT BIANCHI	07-19	000789	VO	MILEAGE REIMB	1/30/2019	0.00	62.64
027925	CK	1/30/2019	CDWGOVERNM CDW GOVERNMENT	07-19	000787	VO	IT	1/30/2019	0.00	1,377.30
027926	СК	1/30/2019	FEDEX FEDEX	07-19	000788	VO	ADMIN EXP	1/30/2019	0.00	51.24
027927	СК	1/30/2019	PARAMETRIC PARAMETRIC PORTFOLIO ASS	07-19 60	000790	VO	INVESTMENT FEES	1/30/2019	0.00	132,462.00
027928	СК	1/30/2019	STAPLESADV STAPLES ADVANTAGE	07-19	000791	VO	ADMIN EXP	1/30/2019	0.00	1,509.00
027929	СК	1/30/2019	TORTOISECA TORTOISE CAPITAL ADVISORS	07-19 S,	000792	VO	INVESTMENT FEES	1/30/2019	0.00	162,108.33

Date:

Monday, February 04, 2019

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Ventura County Retirement Assn

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Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Period To Post Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
Check Count:		36						Acct Sub Total:		943,420.07
				Check Type		Count	Amount Paid			
				Regular		36	943,420.07			
				Hand		0	0.00			
				Electronic Payment		0	0.00			
				Void		0	0.00			
				Stub		0	0.00			
				Zero		0	0.00			
				Mask		0	0.00			
				Total:		36	943,420.07			
					Company I	Disc Total	0.00	Company Total		943,420.07

Ventura County Employees' Retirement Association Budget Summary Fiscal Year 2018-2019 For the Seven Months Ended January 31, 2019 and Year-To-Date - 58.33% of Fiscal Year Expended

	Adopted 2019 Budget	Adjusted 2019 Budget	January 2019	Expended Fiscal Year to Date	Available Balance	Percent Expended
Salaries and Benefits						
Regular Salary	\$3,215,800.00	\$3,215,800.00	\$366,757.69	\$1,769,415.61	\$1,446,384.39	55.02%
Extra-Help/Temporary Services	158,500.00	158,500.00	10,621.88	66,795.52	91,704.48	42.14%
Supplemental Payments	63,500.00	63,500.00	6,760.10	30,674.73	32,825.27	48.31%
Vacation Redemption	146,800.00	146,800.00	1,542.00	136,294.72	10,505.28	92.84%
Retirement Contributions	546,000.00	546,000.00	65,071.94	296,305.52	249,694.48	54.27%
OASDI Contribution FICA-Medicare	196,700.00	196,700.00 55,500.00	23,183.38 5,421.94	86,083.83 27,862.87	110,616.17 27,637.13	43.76% 50.20%
Medical Insurance	55,500.00 327,600.00	327,600.00	39,202.00	170,769.00	156,831.00	52.13%
Life Insurance	1,100.00	1,100.00	137.95	675.80	424.20	61.44%
Unemployment Insurance	2,300.00	2,300.00	259.90	1,238.54	1,061.46	53.85%
Mgmt Disability Insurance	23,500.00	23,500.00	2,372.51	11,424.53	12,075.47	48.62%
Workers Compensation Insurance	23,600.00	23,600.00	2,603.13	13,596.86	10,003.14	57.61%
401K Plan Contribution	81,700.00	81,700.00	8,700.85	42,972.77	38,727.23	52.60%
Total Salaries & Benefits	\$4,842,600.00	\$4,842,600.00	\$532,635.27	\$2,654,110.30	\$2,188,489.70	54.83%
Services & Supplies						
Board Member Stipend	\$13,200.00	\$13,200.00	\$900.00	\$5,900.00	\$7,300.00	44.70%
Other Professional Services	173,800.00	173,800.00	23,850.07	109,439.12	64,360.88	62.97%
Auditing	51,400.00	51,400.00	12,338.96	44,273.90	7,126.10	86.14%
Hearing Officers	50,000.00	50,000.00	1,750.00	2,625.00	47,375.00	5.25%
Legal	275,000.00	275,000.00	702.85	148,850.65	126,149.35	54.13%
Election Services	12,000.00	12,000.00	0.00	0.00	12,000.00	0.00%
Actuary-Valuation	61,000.00	61,000.00	30,500.00	61,000.00	0.00	100.00%
Actuary-GASB 67 Actuary-415 Calculation	13,000.00 0.00	13,000.00 0.00	0.00 0.00	13,000.00 1,076.00	0.00 (1,076.00)	100.00% 0.00%
Actuary-Misc Hrly Consult	16,000.00	16,000.00	0.00	364.00	15,636.00	2.28%
Printing	33,000.00	33,000.00	9,003.59	14,691.56	18,308.44	44.52%
Postage	70,000.00	70,000.00	4,988.67	31,374.59	38,625.41	44.82%
Copy Machine	3,000.00	3,000.00	0.00	981.69	2,018.31	32.72%
General Liability	15,100.00	15,100.00	0.00	7,542.50	7,557.50	49.95%
Fiduciary Liability	86,000.00	86,000.00	0.00	83,609.01	2,390.99	97.22%
Cost Allocation Charges	30,200.00	30,200.00	0.00	15,099.00	15,101.00	50.00%
Education Allowance	4,000.00	4,000.00	0.00	4,000.00	0.00	100.00%
Training/Travel-Staff	76,100.00	76,100.00	177.00	19,911.23	56,188.77	26.16%
Training/Travel-Trustee Travel-Due Diligence-Staff	53,500.00 7,800.00	53,500.00	0.00 0.00	7,420.23 3,052.26	46,079.77 4,747.74	13.87%
Travel-Due Diligence-Trustee	13,400.00	7,800.00 13,400.00	310.09	4,539.39	8,860.61	39.13% 33.88%
Mileage-Staff	4,800.00	4,800.00	0.00	1,332.82	3,467.18	27.77%
Mileage -Trustee	5,000.00	5,000.00	62.64	1,146.76	3,853.24	22.94%
Mileage-Due Diligence-Staff	1,000.00	1,000.00	0.00	143.01	856.99	14.30%
Mileage-Due Diligence-Trustee	1,000.00	1,000.00	0.00	49.05	950.95	4.91%
Auto Allowance	6,900.00	6,900.00	1,150.00	4,600.00	2,300.00	66.67%
Facilities-Security	2,700.00	2,700.00	261.56	1,840.96	859.04	68.18%
Facilities-Maint & Repairs	2,300.00	2,300.00	0.00	150.00	2,150.00	6.52%
Equipment-Maint & Repairs	2,000.00	2,000.00	0.00 126.20	0.00	2,000.00	0.00%
General Office Expense Books & Publications	10,400.00 2,500.00	10,400.00 2,500.00	135.00	2,378.90 716.78	8,021.10 1,783.22	22.87% 28.67%
Office Supplies	18,000.00	18,000.00	1,789.44	6,722.16	11,277.84	37.35%
Memberships & Dues	13,500.00	13,500.00	600.00	12,988.00	512.00	96.21%
Bank Service Charges	1,500.00	1,500.00	191.94	819.89	680.11	54.66%
Offsite Storage	4,800.00	4,800.00	530.70	4,373.15	426.85	91.11%
Rents/Leases-Structures	217,600.00	217,600.00	18,088.79	125,398.01	92,201.99	57.63%
Non-Capital Equipment	23,900.00	23,900.00	0.00	0.00	23,900.00	0.00%
Non-Capital Furniture	15,000.00	15,000.00	0.00	125.00	14,875.00	0.83%
Depreciation /Amortization	1,460,600.00	1,460,600.00	121,716.16	852,013.12 \$1,502,547,74	608,586.88	58.33%
Total Sal Ron San & Supplies	\$2,851,000.00	\$2,851,000.00	\$229,173.66	\$1,593,547.74	\$1,257,452.26	55.89%
Total Sal, Ben, Serv & Supp	\$7,693,600.00	\$7,693,600.00	\$761,808.93	\$4,247,658.04	\$3,445,941.96	55.21%

Ventura County Employees' Retirement Association Budget Summary Fiscal Year 2018-2019 For the Seven Months Ended January 31, 2019 and Year-To-Date - 58.33% of Fiscal Year Expended

	Adopted Adjusted 2019 2019		January	Expended Fiscal	Available	Percent
	Budget	Budget	2019	Year to Date	Balance	Expended
Technology						
Technology Hardware	\$67,100.00	\$67,100.00	\$1,703.31	\$36,620.80	\$30,479.20	54.58%
Technology Hardware Support	0.00	0.00	0.00	3,968.32	(3,968.32)	0.00%
Technology Software	214,600.00	214,600.00	1,369.70	41,610.48	172,989.52	19.39%
Technology Software Support	15,500.00	15,500.00	544.68	8,692.65	6,807.35	56.08%
Technology Systems Support	266,800.00	266,800.00	737.26	132,011.01	134,788.99	49.48%
Technology Infrastruct Support	500.00	500.00	0.00	339.98	160.02	68.00%
Technology Application Support	310,400.00	310,400.00	4,034.70	106,677.55	203,722.45	34.37%
Technology Data Communication	55,700.00	55,700.00	3,423.14	29,925.63	25,774.37	53.73%
Total Technology	\$930,600.00	\$930,600.00	\$11,812.79	\$359,846.42	\$570,753.58	38.67%
Congtingency	\$688,100.00	\$688,100.00	\$0.00	\$0.00	\$688,100.00	0.00%
Total Current Year	\$9,312,300.00	\$9,312,300.00	\$773,621.72	\$4,607,504.46	\$4,704,795.54	49.48%

Ventura County Employees' Retirement Association Statement of Fiduciary Net Position As of December 31, 2018 (Unaudited)

Assets

Cash & Cash Equivalents		\$102,729,876
Receivables		
Interest and Dividends Securities Sold Miscellaneous Total Receivables	4,186,277 76,891,421 2,881	81,080,579
Investments at Fair Value		
Domestic Equity Non U.S. Equity Global Equity Fixed Income Private Equity Real Assets Cash Overlay Total Investments	1,466,166,425 823,353,475 545,347,212 1,012,722,795 377,426,806 834,101,135 71,490	5 050 190 337
Total Investments		5,059,189,337
Capital Assets, Net of Accumulated Depreciation & Amortization		12,373,983
Total Assets		5,255,373,775
Liabilities		
Securities Purchased Accounts Payable Tax Withholding Payable Deferred Revenue (PrePaid Contributions)	35,709,113 1,976,367 3,119,642 85,685,666	
Total Liabilities		126,490,788
Net Position Restricted for Pensions		\$5,128,882,987

Ventura County Employees' Retirement Association Statement of Changes in Fiduciary Net Position For The Six Months Ending December 31, 2018 (Unaudited)

ADDITIONS

Contributions Employer Employee Total Contributions	\$91,628,923 34,382,190	126,011,113
Investment Income Net Appreciation (Depreciation) in Fair Value of Investments Interest Income Dividend Income Other Investment Income Real Estate Operating Income, Net Security Lending Income Total Investment Income	(258,747,668) 10,791,256 4,733,647 (1,403,663) 9,241,534 624,546 (234,760,348)	
Less Investment Expenses Management & Custodial Fees Other Investment Expenses Securities Lending Borrower Rebates Securities Lending Management Fees Totat Investment Expenses	8,444,005 275,854 522,391 35,295 9,277,545	
Net Investment Income/(Loss)	-	(244,037,893)
Total Additions		(118,026,779)
DEDUCTIONS		
Benefit Payments Member Refunds and Death Benefit Payments Administrative Expenses Other Expenses Total Deductions	143,934,408 2,060,319 2,461,261 1,096,768	149,552,756
Net Increase/(Decrease)		(267,579,535)
Net Position Restricted For Pensions		
Beginning of Year	_	5,396,462,523
Ending Balance	=	\$5,128,882,988

Ventura County Employees' Retirement Association Investments, Cash, and Cash Equivalents As of December 31, 2018 (Unaudited)

	Investments	Cash & Cash Equivalents
Equity		
Domestic Equity		
Blackrock - Russell 1000	\$1,237,680,697	\$0
Blackrock - Russell 2500	55,224,796	0
Western Asset Enhanced Equity Index Plus	173,260,933	30,696,294
Total Domestic Equity	1,466,166,425	30,696,294
Non U.S. Equity	410 477 071	0
Blackrock - ACWI ex - US Hexavest	418,477,871 84,046,977	0
Sprucegrove	204,625,925	0
Walter Scott	116,202,702	0
Total Non U.S. Equity	823,353,475	
Global Equity	020,000,170	
Blackrock - ACWI Index	545,347,212	0
Total Global Equity	545,347,212	
rotal alobal Equity	010,017,212	
Fixed Income		
Blackrock - Bloomberg Barclays Aggregate Index	274,110,828	0
Loomis Sayles Multi Sector	81,175,279	833,956
Loomis Sayles Strategic Alpha	46,548,032	0
Reams	311,909,248	9
Western Asset Management	298,979,407	8,024,790
Total Fixed Income	1,012,722,795	8,858,756
Private Equity		
Abbott Capital	(34,391)	0
Abbott Secondaries	12,219,907	0
Adams Street	173,825,033	0
Battery Ventures Buenaventure One	3,157,999 17,820,572	0
Buenaventure Two	181,338	0
Carval Investors	10,770,631	Ö
Clearlake Investors	4,658,973	0
Drive Capital	5,811,980	0
ECI 11 GP LP	1,252,530	0
GTCR Fund XII	2,991,478	0
Harbourvest	86,424,108	0
Insight Ventures	10,295,624	0
Monroe Capital	6,001,831	0
Pantheon Resolute Fund IV LP	39,845,689 2,203,503	0
Total Private Equity	377,426,806	
Total Private Equity	377,420,000	
Real Assets		
Prudential Real Estate	156,400,478	0
UBS Realty	276,737,035	0
Bridgewater All Weather	298,783,262	0
Tortoise (MLPs)	102,180,359	2,483,245
Total Real Assets	834,101,135	2,483,245
Parametric (Cash Equitization)	71,490	36,749,448
State Street Bank and Trust		17,720,735
County Treasury and Bank of America		6,221,399
Total Investments, Cash, and Cash Equivalents	\$5,059,189,337	\$102,729,876

Ventura County Employees' Retirement Association Schedule of Investment Management Fees For the Six Months Ending December 31, 2018 (Unaudited)

Equity Managers Portrait of the Six Months Ending December 31, 2016 (6)	Jilauulleuj
Domestic Equity Blackrock - Russell 1000	\$5,470
Blackrock - Russell 2500	53,583
Western Asset Enhanced Equity Index Plus	186,580
Total Domestic Equity	245,633
Non U.S. Equity	211 256
Blackrock - ACWI ex - US Hexavest	211,356 202.866
Sprucegrove	387,410
Walter Scott	431,879
Total Non U.S. Equity	1,233,511
Global Equity	117 400
Blackrock - ACWI Index Total Global Equity	117,400 117,400
Total Global Equity	117,400
Fixed Income Managers	F0 001
Blackrock Bloomberg Barclays Aggregate Index Loomis Sayles Multi Sector	58,291 126,818
Loomis Sayles Strategic Alpha	126,877
Reams Asset Management	269,702
Western Asset Management	263,410
Total Fixed Income	845,098
Private Equity	
Abbott Capital	79,752
Abbott Secondary Opportunities Adams Street	149,313 919,736
Battery Ventures	102,550
Carval, CVI A Fund	24,167
Clearlake	54,460
Drive Capital ECI 11 GP LP	150,000
GTCR XII/A & B	469,309
Harbourvest	761,204
Insight Venture Partners Monroe Capital	305,583
Pantheon	265,151
Total Private Equity	3,281,225
Real Assets	
Prudential Real Estate Advisors	651,436
UBS Realty Bridgewater All Weather	970,400 295,811
Tortoise (MLPs)	355,591
Total Real Assets	2,273,237
Cash Overlay (Parametric)	132,462
Securities Lending	
Borrower's Rebate	522,391
Management Fees	35,295
Total Securities Lending	557,686
Other	
Investment Consultant (NEPC)	155,000
Investment Custodian (State Street)	160,439
Total Other Fees	315,439
Total Investment Management Fees	\$9,001,691

Ventura County Employees' Retirement Association Statement of Fiduciary Net Position As of January 31, 2019 (Unaudited)

Assets

Cash & Cash Equivalents		\$153,104,283
Receivables		
Interest and Dividends Securities Sold Miscellaneous Total Receivables	5,086,637 55,693,933 16,177	60,796,747
Investments at Fair Value		
Domestic Equity Non U.S. Equity Global Equity Fixed Income Private Equity Real Assets Cash Overlay	1,578,155,517 882,483,224 588,535,380 1,025,656,414 382,062,481 861,324,374 111,017	
Total Investments		5,318,328,407
Capital Assets, Net of Accumulated Depreciation & Amortization		12,252,267
Total Assets		5,544,481,705
Liabilities		
Securities Purchased Accounts Payable Tax Withholding Payable Deferred Revenue (PrePaid Contributions)	68,368,273 1,173,870 3,082,741 62,814,885	
Total Liabilities		135,439,769
Net Position Restricted for Pensions		\$5,409,041,936

Ventura County Employees' Retirement Association Statement of Changes in Fiduciary Net Position For The Seven Months Ending January 31, 2019 (Unaudited)

ADDITIONS

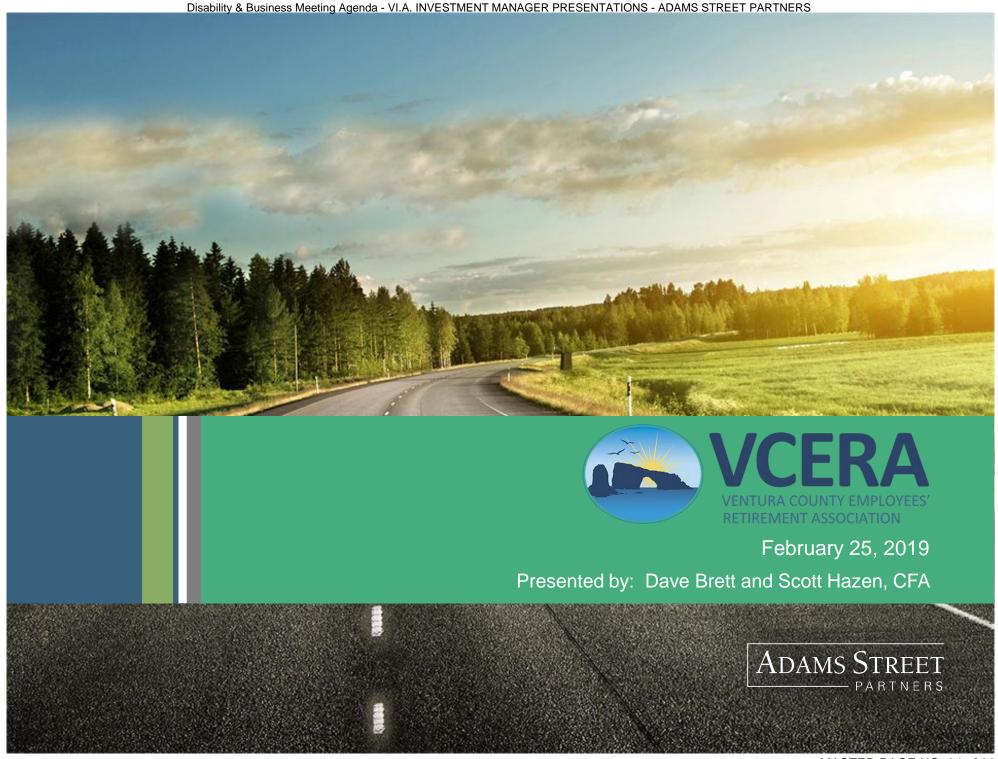
Contributions Employer Employee Total Contributions	\$114,478,586 43,028,094	157,506,680
Investment Income Net Appreciation (Depreciation) in Fair Value of Investments Interest Income Dividend Income Other Investment Income Real Estate Operating Income, Net Security Lending Income Total Investment Income	12,062,533 12,518,955 5,872,748 (1,130,725) 9,241,534 725,068 39,290,113	
Less Investment Expenses Management & Custodial Fees Other Investment Expenses Securities Lending Borrower Rebates Securities Lending Management Fees Total Investment Expenses	8,445,978 312,647 602,846 39,895 9,401,366	
Net Investment Income/(Loss)	-	29,888,747
Total Additions		187,395,427
DEDUCTIONS		
Benefit Payments Member Refunds and Death Benefit Payments Administrative Expenses Other Expenses Total Deductions	168,148,578 2,372,580 3,037,483 1,257,374	174,816,015
Net Increase/(Decrease)		12,579,412
Net Position Restricted For Pensions		
Beginning of Year		5,396,462,523
Ending Balance	=	\$5,409,041,935

Ventura County Employees' Retirement Association Investments, Cash, and Cash Equivalents As of January 31, 2019 (Unaudited)

	Investments	Cash & Cash Equivalents
Equity		
Domestic Equity	¢1 241 426 461	¢Ω
Blackrock - Russell 1000 Blackrock - Russell 2500	\$1,341,426,461 61,580,921	\$0 0
Western Asset Enhanced Equity Index Plus	175,148,136	31,468,130
Total Domestic Equity	1,578,155,517	31,468,130
Non U.S. Equity		
Blackrock - ACWI ex - US	450,259,814	0
Hexavest	89,484,208	0
Sprucegrove	221,059,241	0
Walter Scott Total Non U.S. Equity	121,679,961 882,483,224	0
Global Equity	002,403,224	
Blackrock - ACWI Index	588,535,380	0
Total Global Equity	588,535,380	
, otal alobal Equity	000,000,000	
Fixed Income		
Blackrock - Bloomberg Barclays Aggregate Index	277,081,703	0
Loomis Sayles Multi Sector	81,312,043	2,212,735
Loomis Sayles Strategic Alpha	47,265,900	0
Reams Western Asset Management	314,686,250 305,310,519	9 9,969,276
Total Fixed Income	1,025,656,414	12,182,020
Total Fixed Illcome	1,023,030,414	12,102,020
Private Equity		
Abbott Capital	(34,391)	0
Abbott Secondaries	12,219,907	0
Adams Street	173,278,734	0
Battery Ventures	4,454,819	0
Buenaventure One Buenaventure Two	17,820,572	0
Carval Investors	181,338 10,770,631	0
Clearlake Investors	4,658,973	Ő
GGV Capital	613,000	0
Drive Capital	6,918,344	0
ECI 11 GP LP	1,252,530	0
GTCR Fund XII	4,866,478	0
Harbourvest Insight Ventures	86,424,108 10,295,624	0
Monroe Capital	6,292,621	0
Pantheon	39,845,689	0
Resolute Fund IV LP	2,203,503	0
Total Private Equity	382,062,481	0
Real Assets	150 400 470	0
Prudential Real Estate UBS Realty	156,400,478 276,737,035	0
Bridgewater All Weather	312,221,845	0
Tortoise (MLPs)	115,965,016	1,011,113
Total Real Assets	861,324,374	1,011,113
Parametric (Cash Equitization)	111,017	46,029,056
State Street Bank and Trust	111,017	55,469,660
County Treasury and Bank of America		6,944,304
	êE 210 200 407	
Total Investments, Cash, and Cash Equivalents	\$5,318,328,407	\$153,104,283

Ventura County Employees' Retirement Association Schedule of Investment Management Fees For the Seven Months Ending January 31, 2019 (Unaudited)

Equity Managers Domestic Equity	nauuneuj
Blackrock - Russell 1000	\$5,470
Blackrock - Russell 2500 Western Asset Enhanced Equity Index Plus	53,583 186,580
Total Domestic Equity	245,633
Non U.S. Equity Blackrock - ACWI ex - US	211,356
Hexavest	202,866
Sprucegrove	387,410
Walter Scott Total Non U.S. Equity	431,879 1,233,511
Total Non 6.5. Equity	1,200,011
Global Equity	117.100
Blackrock - ACWI Index	117,400 117,400
Total Global Equity	117,400
Fixed Income Managers	
Blackrock Bloomberg Barclays Aggregate Index Loomis Sayles Multi Sector	58,291 126,818
Loomis Sayles Strategic Alpha	126,877
Reams Asset Management	269,702
Western Asset Management Total Fixed Income	263,410 845,098
Total Fixed modifie	040,030
Private Equity	70 750
Abbott Capital Abbott Secondary Opportunities	79,752 149,313
Adams Street	919,736
Battery Ventures	102,550
Carval, CVI A Fund Clearlake	24,167 54,460
Drive Capital	150,000
ECI 11 GP LP	100,000
GTCR XII/A & B Harbourvest	469,309 761,204
Insight Venture Partners	305,583
Monroe Capital Pantheon	265,151
Total Private Equity	3,281,225
	0,201,220
Real Assets Prudential Real Estate Advisors	651,436
UBS Realty	970,400
Bridgewater All Weather	295,811
Tortoise (MLPs) Total Real Assets	355,591 2,273,237
Total Real Assets	2,2/3,23/
Cash Overlay (Parametric)	132,462
Securities Lending	
Borrower's Rebate	602,846
Management Fees	39,895
Total Securities Lending	642,741
Other	
Investment Consultant (NEPC) Investment Custodian (State Street)	155,000 162,412
Total Other Fees	317,412
Total Investment Management Fees	\$9,088,719



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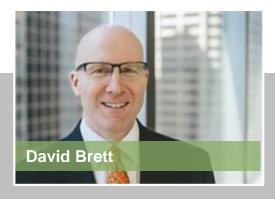
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Introduction





Partner & Head of Co-Investments, Chicago

Education: University of Illinois, BS

University of Chicago Booth School of Business, MBA

Years of Investment/
Operational Experience: 34



Partner, Investor Relations, Chicago

Education: University of Notre Dame, magna cum laude, BBA

University of Chicago Booth School of Business, MBA

Years of Investment/ Operational Experience: 27

Topics for Discussion



	Page
Adams Street Update	5
VCERA Portfolio Review	9
Adams Street Co-Investment Fund IV Update	18
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Adams Street Update



Investing with Adams Street Partners



Global Private Markets Platform

- Employee-owned
- 45+ years of experience
- Over \$36 billion in assets under management
- Highly integrated platform with shared insights

Robust Investment Process

- Disciplined and coordinated investment process
- Top-down, bottom-up analysis
- Consistent outperformance through market cycles

Exemplary Client Service

- Client based solutions have been a strategic focus for Adams Street since inception
- Deep understanding of institutional client needs
- Client access to industry-leading analytical tools and data



No Adams Street client has lost capital in an ASP investment program since our inception

Experienced, Cohesive and Strategically Integrated Platform





Jeff Diehl Managing Partner & Head of Investments

25 Years of Experience*

250+ GP relationships

8 Professionals

Bon French Chairman

42 Years of Experience*



Primary Investments Secondary Investments Since 1979 Since 1986 850+ funds 430+ funds 280+ GP relationships 180+ GP relationships 430+ advisory boards 14 Professionals 28 Professionals **Kelly Meldrum Jeff Akers** Partner & Head of Partner & Head of **Primary Investments Secondary Investments** Strategically Co-Investments Growth Equity 34 Years of Experience* 21 Years of Experience* Integrated **Platform** Co-Investments **Growth Equity** Since 1989 Since 1972 Private Credit 270+ companies 130+ companies 90+ GP relationships 12 Professionals 7 Professionals **Private Credit** Since 2016 **David Brett Terry Gould** Partner & Head of Partner & Head of

Bill Sacher

Private Credit

Partner & Head of

34 Years of Experience*

*Investment and Operational As of September 30, 2018.

Growth Equity Investments

38 Years of Experience*

Co-Investments

34 Years of Experience*

Deep Expertise Around the World







Bon French Chairman Chicago







VCERA Portfolio Review





Adams Street Private Equity Program

Strong absolute and relative performance, net of all fees, since 2010*

	1 Year net IRR	5 Year net IRR	Since inception net IRR
VCERA	20.2%	14.3%	13.5%
MSCI ACWI	10.3%	9.5%	10.1%

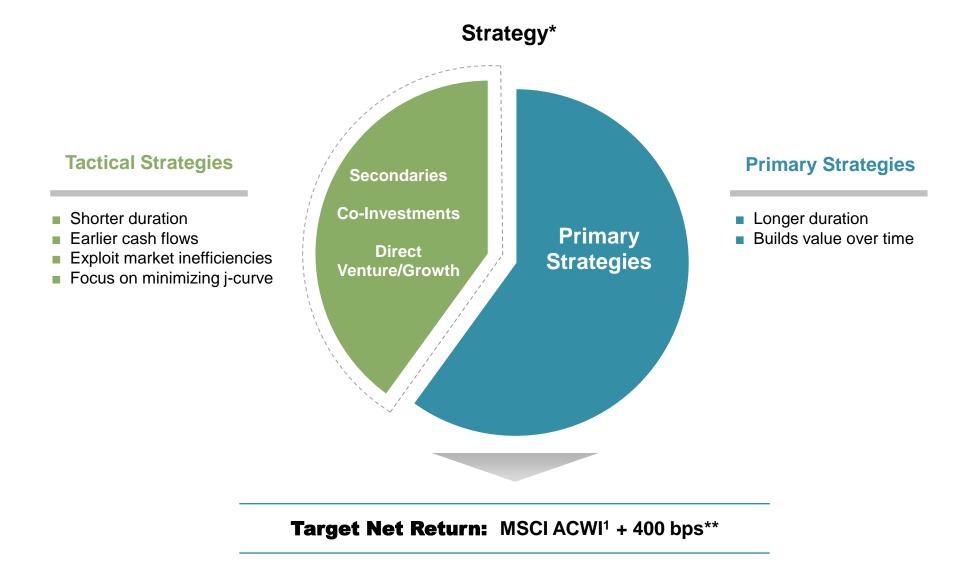
- VCERA has built a successful PE program through a disciplined investment pace
- Globally diversified portfolio across strategies and sub-asset classes
- Portfolio has grown significantly since inception:
 - \$157 million paid-in
 - \$60 million received in distributions
 - \$171 million in remaining value
 - 1.5x Total Value to Paid-In

VCERA is a strategically important relationship for Adams Street Partners

Building Value While Maximizing IRR







^{*} Actual allocations will differ once the Program is fully invested.

^{**} The targeted annual net return (after Adams Street Partners' fees, expenses and carried interest) is only a target. There can be no guarantee that the VCERA Private Equity Program will achieve returns in the targeted range.

^{1.} MSCI ACWI (All Country World Index) captures large and mid cap representation across Developed and Emerging Markets countries.



Subscriptions to Adams Street: \$250,000,000

Total portfolio as of September 30, 2018

										Total
			Market	Distributions	Total			Net IRR		Value /
		Amount	Value	Received	Value	Net IRR	Net IRR	Since	Inception	Amount
_	Subscription	Drawn	(NAV)	(D)	(NAV + D)	1-Year	3-Year	Inception	Date	Drawn
ASP 2010 Global Program	\$85,000,000	\$75,191,849	\$72,631,419	\$49,621,664	\$122,253,083	18.67%	13.45%	13.48%		1.63x
ASP 2010 US Fund	\$42,500,000	\$37,442,500	\$38,425,394	\$24,264,925	\$62,690,319	18.93%	12.36%	14.55%	5/2010	1.67x
ASP 2010 Non-US Developed Fund	\$25,500,000	\$22,325,249	\$18,784,409	\$14,463,457	\$33,247,866	16.42%	17.28%	11.85%	5/2010	1.49x
ASP 2010 Emerging Markets Fund	\$8,500,000	\$7,378,000	\$9,659,136	\$2,030,308	\$11,689,444	15.92%	12.46%	11.78%	1/2011	1.58x
ASP 2010 Direct Fund	\$8,500,000	\$8,046,100	\$5,762,480	\$8,862,974	\$14,625,454	28.93%	11.12%	13.92%	5/2010	1.82x
ASP 2013 Global Fund	\$75,000,000	\$56,625,000	\$70,923,287	\$8,075,792	\$78,999,079	21.91%	14.53%	12.66%	6/2013	1.40x
ASP 2016 Global Fund	\$60,000,000	\$21,150,000	\$22,994,812	\$2,082,389	\$25,077,201	22.82%	N/A	27.00%	8/2016	1.19x
ASP Program Participant Total	\$220,000,000	\$152,966,849	\$166,549,518	\$59,779,845	\$226,329,363	20.42%	14.38%	13.52%		1.48x
Co-Investment IV A	\$30,000,000	\$4,500,000	\$4,247,916	\$0	\$4,247,916	N/A	N/A	N/A	9/2018	0.94x
Grand Total	\$250,000,000	\$157,466,849	\$170,797,434	\$59,779,845	\$230,577,279	20.22%	14.31%	13.48%		1.46x

Thru 9/30/2018	Committed / Subscription	Drawn / Subscription	Distributed/ Drawn
2010 Program	100%	88%	66%
2013 Program	100%	76%	14%
2016 Program	100%	35%	10%
Co-Investment IV	100%	14%	0%
Grand Total	100%	63%	38%

October 1, 2018 - February 15, 2019

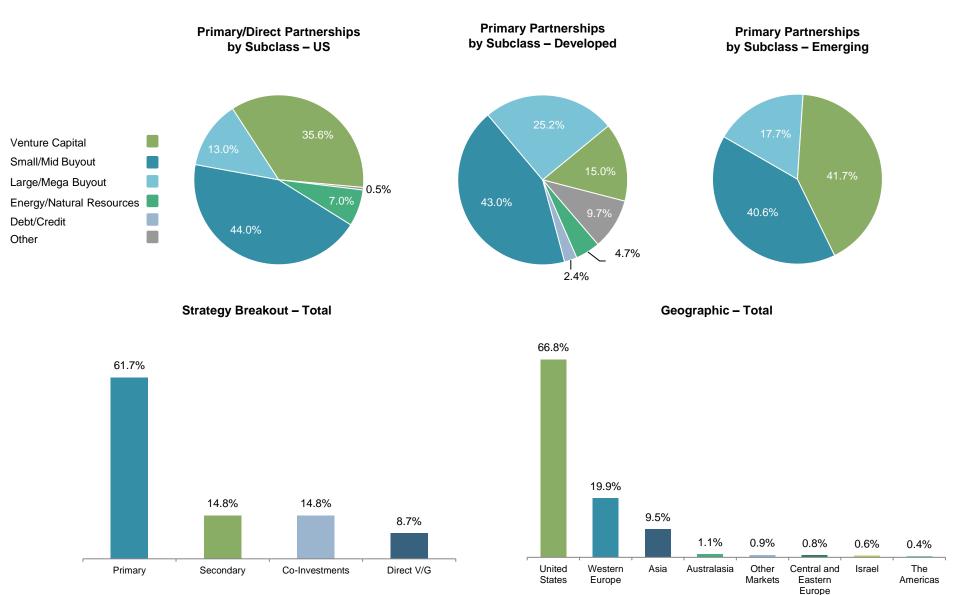
Draws: \$7,325,400

Distributions: \$5,355,084

As investments continue to be made and mature, the ASP Global Program is generating attractive returns and distributing capital to VCERA



Diversification of investment **commitments***
Total portfolio as of September 30, 2018



^{*} Calculated by applying the participant's respective ownership percentage to the underlying investment commitments.



Underlying GP Fund Performance attribution by subclass and strategy type As of September 30, 2018

	Subclass /	Allocation	VCERA				
	Committed %	NAV %	1-Year	3-Year	5-Year	Since Inception	
All Private Equity	100.0%	100.0%	21.5%	16.0%	16.4%	16.6%	
Venture Capital	27.2%	39.1%	28.8%	14.5%	19.3%	17.9%	
Early/Seed Stage	11.1%	17.8%	26.2%	13.7%	22.4%	20.9%	
Later/Multi Stage	16.1%	21.3%	30.8%	15.1%	17.5%	16.5%	
Non-Venture Capital	72.8%	60.9%	17.1%	17.1%	14.7%	15.8%	
Buyout - Small/Mid	41.2%	32.8%	20.1%	20.0%	18.0%	17.5%	
Buyout - Large/Mega	21.0%	17.5%	15.2%	16.2%	14.0%	17.2%	
Other	10.6%	10.7%	12.3%	11.0%	8.2%	9.2%	
Primaries	61.7%	71.4%	22.0%	17.2%	18.2%	17.0%	
Secondaries	14.8%	10.7%	11.6%	10.2%	9.0%	15.6%	
Co-Investments	14.8%	7.4%	15.4%	23.1%	23.1%	23.0%	
Direct Venture/Growth	8.7%	10.5%	30.2%	11.0%	14.5%	13.4%	

Benefits of subclass and strategy diversification are clear



Intraperiod Returns
Total Portfolio as of September 30, 2018

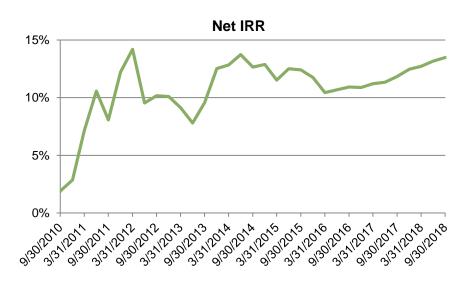
Internal Rate of Return (Net of Fees)

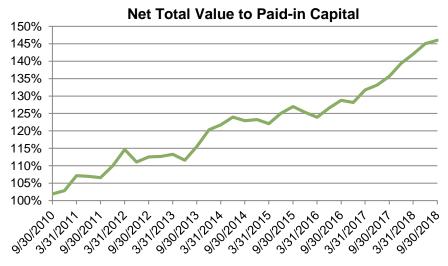


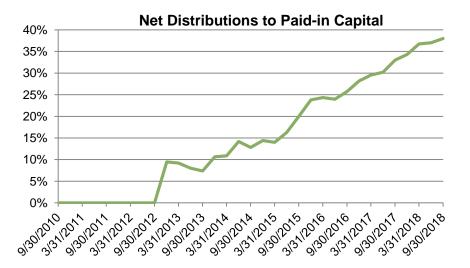
VCERA's Global PE Program has established a meaningful premium over global public equity markets



Total Portfolio as of September 30, 2018



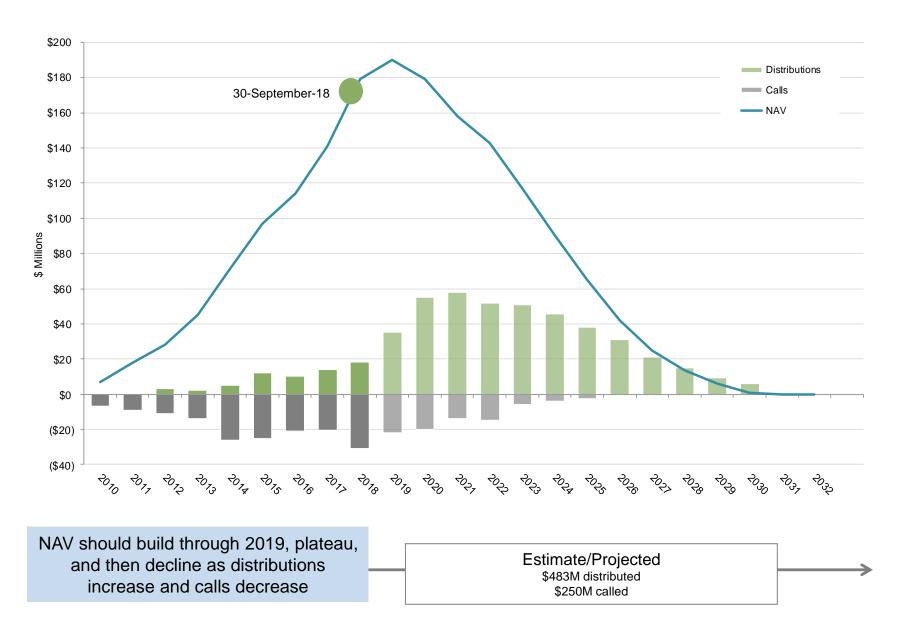




- Portfolio moved quickly through j-curve due to secondaries, value now being driven by maturing primaries
- Portfolio is 100% committed and 63% drawn
- Distribution activity continues to ramp up, now at 38% of drawn capital



Net asset value, capital calls and distributions (actual and projected) Represents existing Adams Street commitments





Adams Street Co-Investment Fund IV Update



Adams Street Partners Co-Investment Advantage



Proven Co-Investment
Track Record¹

MOIC: 2.4x

since inception gross realized investments²

MOIC: 1.8x

since inception gross total invested²

21.1%

since inception net IRR for Co-Investment Funds³

Deep Co-Investment Expertise

1989

first Adams Street co-investment

1.7B+

committed to date

130+

company investments

盒

Strength of ASP Platform

75+

investment professionals around the world

850+

fund commitments over 40 years

280+

GP Relationships

Performance data as of September 30, 2018.

^{1.} Past performance is not a guarantee of future results. The IRR and multiples shown above are composite performance and do not represent returns achieved by any particular Adams Street Partners fund or any investor in an Adams Street Partners fund. There can be no guarantee that unrealized investments reflected in this performance data will ultimately be liquidated at values reflected above. For net performance of Adams Street Partners' dedicated co-investment funds and aggregate net performance of its other co-investments, see the slide entitled "Long-Term, Consistent Record of Success" in this presentation.

^{2.} Composite since inception performance of all co-investments (realized investments only, where indicated above), including co-investments outside dedicated co-investment funds; multiples are gross of Adams Street Partners fees, carried interest and expenses. Inception date as of March 1, 1989. See the slide entitled "Long-Term, Consistent Record of Success" for net performance and other important information. Realized investments include proceeds from investments where 50% or more of the investment has been realized, the fair value is 5% or less of invested capital, or the investment is currently a publicly traded security.

Composite since inception IRR of dedicated co-investment funds is net of Adams Street Partners' fees, carried interest and expenses. Inception date as of July 8, 1992. Includes a separate account (1992-1998), Co-Investment Fund I (2006), II (2009), III (2014) and IV (2018).

Dedicated Co-Investment Team on Integrated Platform



Shared insights from global investment platform

Primary Investments

27 Professionals Globally

840+ funds 280+ GP relationships 420+ advisory boards

Secondary Investments

15 Professionals **Globally**

410+ funds 180+ GP relationships **Co-Investments**

7 Professionals **Globally**

120+ companies 80+ GP relationships **Growth Equity**

12 Professionals

270+ companies

Private Credit

8 Professionals

250+ GP relationships

















	David Brett	Sachin Tulyani, CFA	Craig Waslin, CFA	Alex Kessel	Benjamin Wallwork	Paul Cappelli	Carol Rusin
Title	Partner & Head of Co-Investments	Partner	Partner	Principal	Principal	Associate	Associate
YOE	34	20	25	13	11	6	5
Years w/Firm	14	8	12	2	4	2	1
Office	Chicago	London	Chicago	Chicago	London	Chicago	London

Co-Investments: Long-Term, Consistent Record of Success



As of September 30, 2018

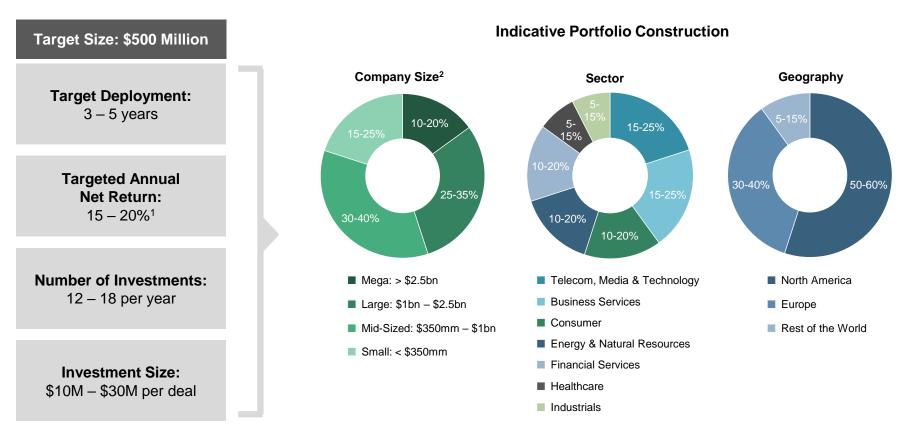
		vestments Outsi Dedicated Funds		Fund I	Fund II	Fund III ⁹	Fund IV ⁹
Investment Period	1989-2000	2001-2010	2011- Present	2006-2011	2009-2015	2014-2018	2018
Fund Size ¹ (in millions)	\$151.7	\$138.3	\$509.1	\$250.7	\$263.0	\$342.3	\$500.0
Gross IRR ²	37.9%	15.6%	28.6%	7.0%	34.3%	18.7%	N/M*
Net IRR ³	31.9%	12.6%	22.1%	5.2%	26.5%	18.6%	N/M*
PME ⁴	18.5% ⁷	8.2% ⁷	15.1%	7.0%	16.4% ⁷	16.6%	N/M*
Net Multiple ⁵	2.38x	1.74x	1.54x	1.46x	2.32x	1.32x	N/M*
DPI ⁶	2.38x	1.70x	0.45x	1.42x	1.65x	0.08x	N/M*

^{*} Not Meaningful

Co-Investment Fund IV



- Capitalizes on Adams Street's 350+ GP relationships and differentiated network to source high-quality deal flow
- Targets a portfolio diversified by time, company size, sector, geography, and investment theme to balance risk and return potential
- Managed by a dedicated team focused on detailed due diligence, reliable deal execution, and GP alignment of interests
- Anticipated fund size and ASP's GP network allows for overweight to small/mid-market companies

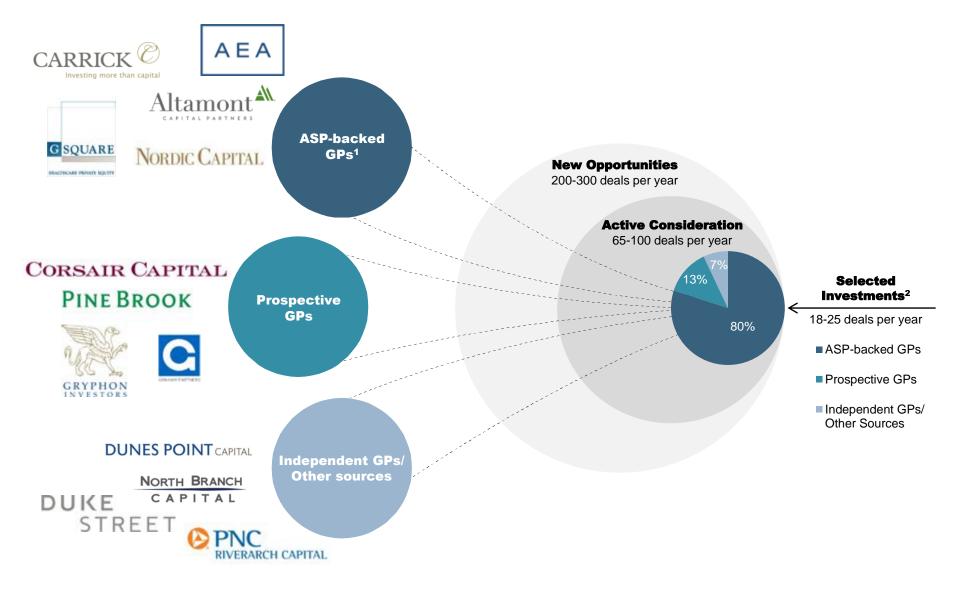


Estimates are based on projected commitments. No assurance can be made that these projections will be achieved. These projections are provided for informational purposes only.

- 1. The targeted net IRR is a target only; there can be no guarantee that the Adams Street Co-Investment Fund IV will achieve this target.
- 2. Enterprise value as of investment commitment date

Global Platform Drives High-Quality Deal Flow





^{1.} General partners in whose funds Adams Street has invested its fund and/or separate account clients. A complete list of such general partners is available upon request.

^{2.} Dollar weighted average of all Fund III, Fund IV, and Fund IV Select investments by source at the time of initial investment (as of September 2018).

We Target Deals with Specific Attributes and Themes



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Recurring Revenue	Organic Growth	Buy and Build	Margin Expansion	Downside Protection
LeasePlan	TIPEL Cuelly Card Solutions	ivc Independent Vetcare	Zeplnc	PLAINS ALL AMERICAN PIPELINE, LP
AmWINS Group, Inc.	Envision HEALTHCARE	Shred-it	SPOTLESS	Williams Glyn
Ranpak	Nordax Bank	ROYAL ADHESIVES & SEALANTS	Sabre Holdings	NMF NEW MOUNTAIN FINANCE CORPORATION

Fund IV Investments to Date

As of February 1, 2019



Company Name	Close Date	Lead Sponsor	Sector	Description
C-H-GUENTHER &SON, INC.	Q1'18	PPC Partners	Consumer	Premier food manufacturer selling custom, branded and private label products across the foodservice, retail, in-store bakery and industrial market channels
III PRO MACH	Q1'18		Industrial	Leading provider of complete packaging machinery solutions to the food, beverage, pharmaceutical, household and industrial goods industries
RODAN+FIELDS DERMATOLOGISTS	Q2'18	TPG	Consumer	Premium skincare products sold through a multi-level marketing channel
Mankind III	Q2'18	CLORYSCAPITAL	Healthcare	Leading India branded generic pharma company
GFL	Q3'18	BC Partners	Business Services	Leading diversified and vertically integrated environmental services companies providing solid waste, soil remediation and liquid waste solutions
Rimini Street	Q3'18	VICTORY PARK CAPITAL	TMT	Provider of maintenance service alternatives to customers of enterprise software vendors
△ZPG	Q3'18	SILVERLAKE	TMT	Leading online property classifieds portal, providing software and data services to UK real estate agents
THERAPY BRANDS	Q3'18	HC/FT LIGHTYEAR CAPITAL	TMT	SaaS platform providing end-to-end practice management and revenue cycle management solutions to mental and behavioral health segments
Verifone	Q3'18	FP RATION	TMT	Leading provider of point-of-sale ("POS") payment solutions to retailers
NEXUS	Q3'18	Phoenix Fourty	Business Services	Tech-enabled vehicle rental platform provider for B2B customers in the UK
SUS	Q3'18	MDP * Madison Dearborn Partners	Healthcare	Provider of mammography services across a variety of settings and 100+ centers
asurion 🎉	Q3'18	MDP * Madison Dearborn Partners	Consumer	Largest global provider of device support and protection services
EXIGER	Q3'18	CARRICK (Investing more than capital	Business Services	Global provider of financial crime, risk, and compliance services
5 DJR Energy	Q3'18	TRILANTIC facilità	Energy	Exploration & production company focused on developing oil and gas resources in the San Juan Basin
prospitalia	Q4'18	NORDIC CAPITAL. Five Arrows Principal Investments	Healthcare	Leading tech-enabled spend management platform in Germany primarily serving the healthcare end market
OS) OHES ECTAMENTS	Q1'19	NORDIC CAPITAL Palamon	Healthcare	The leading ophthalmic surgery platform in Germany operating across 75+ facilities

Total Fund IV Commitment





Appendix



Investment Capabilities



Direct Investing							
	Target Net Return ¹	Geographic Diversification	Capacity				
	10-12%	US & Europe	\$500M – \$1B				
Private Credit Fund I	debt) in predominant	s (1st and 2nd lien, mez y US mid-market buyou llined loss avoidance ap	ut transactions,				
Co-Investment	15%+	Mainly US & Western Europe	\$500M				
Fund IV	Partnering with leading financial sponsors in buyout and growth equity investments						
Co-Investment	15%+	Mainly US & Western Europe	\$250M				
Select Fund	Providing access to a large, and mega cap	strategic portfolio of coportfolio companies	o-investments in mid,				
Growth	15%+	Mainly US & Western Europe	\$400M				
Equity Fund VII	Investing directly in g companies	rowth-stage technology	and healthcare				

	Fund I	nvesting							
	Target Net Return ¹	Geographic Diversification	Capacity						
Annual Global Program ²	14-18% Global \$800M Comprehensive program integrating primary, secondary, grow equity, and co-investments diversified by time, subclass, and geography								
US Small Market Buyout II		Mainly US funds which target US or prprise value with oppor							
Global Secondary Fund 6		Global onviction approach to sets and structured trans							
Venture Innovation*		Mainly US and opportunistic seconed by manager, stage,							

	Customized Solutions & Capabilities							
Separately Managed Accounts European ³ Small Market Buyout		Global Health	Asia Only					
Adams Street offers customized portfolio solutions tailored specifically to address a client's investment goals and risk/return objectives.	Adams Street's European Small Market Buyout strategy focuses on buyout funds and co-investments (€1.5B and below) that target companies with less than €500M in enterprise value.	The Adams Street Global Health strategy is focused on constructing a portfolio that targets the worlds' most innovative and transformative healthcare companies.	Adams Street's Asia-only strategy provides exposure to primary, secondary, and co-investments in a balanced portfolio diversified by subclass, geography, and fund size.					

^{*} No fund currently available.

^{1.} The targeted annual net return (after Adams Street Partners' fees, expenses and carried interest) is only a target. There can be no guarantee that Adams Street Partners will achieve returns in the targeted range.

^{2.} Consists of a US Partnership Fund, a Non-US Partnership Fund and a Direct Growth Equity Fund.

^{3.} European defined as Austria, Belgium, Czech Republic, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, and UK.

Notes to Performance: Co-Investments: Long-Term, Consistent Record of Success



As of September 30, 2018

- 1. For the dedicated co-investment funds, with the exception of Co-Investment Fund IV (A and B) and Co-Investment Select Fund (A and B), the fund size is the total capital committed to each fund. For Co-Investment Fund IV (A and B) and Co-Investment Select Fund (A and B), fund size represents the target fund size. For Co-Investments Outside of Dedicated Funds, the fund size is the amount of capital committed to co-investments by other funds and separate accounts.
- 2. Gross IRR represents annualized internal rate of return, since inception, at the portfolio company level, prior to deduction of Adams Street Partners' management fees, carried interest or expenses, which reduce returns to investors.
- 3. Unless otherwise noted, net IRR represents annualized internal rate of return to limited partners, since inception, after subtracting Adams Street Partners' management fees, carried interest and expenses, where applicable. In the case of Co-Investment Fund III, IV, and Select, net IRR also reflects the use of a capital call credit line.
- 4. Public Market Equivalent (PME) is calculated using the S&P 500 Index. The PME calculation is based on net IRR cash flows, which reflect the payment of Adams Street Partners' fees, carried interest and expenses.
- 5. Unless otherwise noted, net multiple represents the sum of estimated remaining fair value plus realized proceeds, divided by invested capital, and is net of Adams Street Partners' management fees, carried interest and expenses. In the case of Co-Investment Fund III, IV and Select, Net Multiple also reflects the use of a capital call credit line.
- 6. The DPIs are calculated as the distributions divided by the dollars drawn for the dedicated co-investment funds. DPIs are net to LPs and reflect deduction of underlying general partners' and Adams Street Partners' fees, carried interest and expenses. In the case of Co-Investments Outside of Dedicated Funds, DPIs are calculated at the underlying partnership level and reflect deduction of Adams Street Partners' management fees and carried interest; it is not possible to deduct expenses in this calculation.
- 7. During some periods in which Adams Street Partners investments outperformed the benchmark by a substantial margin, PME could not be calculated because the tracking position in the underlying benchmark index would have resulted in a short position. In these cases, the PME is calculated using the "Direct Alpha" PME methodology (Gredil, Griffiths, Stucke, "Benchmarking Private Equity: The Direct Alpha Method," 2014). Mathematically, Direct Alpha PME is equal to the IRR of the future value of the cash flows underlying the IRR calculation, where future value is based on the return of the benchmark index, less the IRR of the actual value of the cash flows.
- 8. Reflects dollars invested in co-investments since 1989 by separate accounts and funds other than the Adams Street Partners dedicated co-investment funds. This data reflects only aggregate performance of these co-investments and does not reflect performance of any particular Adams Street Partners fund or the performance achieved by an investor in any such fund. Gross IRR represents annualized internal rate of return, since inception, at the portfolio company level prior to deduction of Adams Street Partners' management fees or carried interest. The net IRR and net multiple are calculated for the investment periods 1989-2000, 2001-2010 and 2011-September 30, 2018 using the assumption that each year bracket is a single fund charging the highest fees under a model fee structure that deducted management fees and carried interest based on the Adams Street Partners dedicated co-investment funds fee schedule. Note that the 1989-2000 investment period includes one separate account dedicated to co-investments (the "Dedicated Account") that had a specific fee structure; however, for purposes of combining this account with other co-investments outside of dedicated funds in this time period, we have calculated the net IRR and net multiple for the Dedicated Account using the model fee structure described above. The Dedicated Account, which had invested capital of \$109.8 million, has an actual net multiple of 2.24x, an actual net IRR of 24.9%, and PME of 17.0%.
- Adams Street Co-Investment Fund III is comprised of Adams Street Co-Investment Fund III A and Adams Street Co-Investment Fund III C. Adams Street Co-Investment Fund IV is comprised of Adams Street Co-Investment Fund IV A and Adams Street Co-Investment Select is comprised of Adams Street Co-Investment Select A and Adams Street Co-Investment Select B.

Past performance is not indicative of future results. There can be no guarantee that unrealized investments included in this data will ultimately be liquidated at the values reflected therein.





EDUCATION: University of Illinois, BS

University of Chicago Booth School of Business, MBA

YEARS OF INVESTMENT/
OPERATIONAL EXPERIENCE:
34

David Brett

Partner & Head of Co-Investments, Chicago

- Dave oversees the sourcing, screening, execution, monitoring, and exiting of leveraged buyout co-investments.
- Before joining the firm, Dave served as a senior partner with PPM America Capital Partners, LLC, responsible for marketing to equity sponsors, underwriting buyout co-investments, and managing the underwriting group. Prior to joining PPM to establish their private debt placement group, he worked with Heller Financial where he structured, originated, and managed a portfolio of LBO debt transactions. He also worked as a senior auditor with KPMG LLP.
- Dave is the Chair of the Adams Street Partners Co-Investment Committee.





EDUCATION: University of Notre Dame, BBA, *magna cum laude*

University of Chicago Booth School of Business, MBA

YEARS OF INVESTMENT/ OPERATIONAL EXPERIENCE: 27

Scott Hazen, CFA®

Partner, Investor Relations, Chicago

- Scott works closely with investors in the management of their portfolios, and provides assistance in the development and monitoring of their private equity programs. Additionally, he is actively involved in the portfolio construction and ongoing monitoring of the firm's various fund of funds programs and separate accounts, as well as the development of consultant relationships. He also participates in the tracking and analysis of portfolio performance measurement.
- Prior to joining the firm, Scott was an Executive Director and US Equity Strategist with UBS Global Asset Management focused on portfolio management and client communication. Earlier in his career, Scott was an Executive Director and Institutional Client Advisor with UBS Global Asset Management, responsible for business development and client relationship management.
- Scott is a member of the CFA Institute and the CFA Society of Chicago.

QUARTERLY PERFORMANCE REPORT

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

December 31, 2018

Allan Martin, Partner
Anthony Ferrara, CAIA, Consultant
Michael Miranda, CFA, Senior Analyst





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MARKET ENVIRONMENT UPDATE AND OUTLOOK

NEPC, LLC —

ECONOMIC ENVIRONMENT

- Real GDP (third quarter) increased at an annual rate of 3.4%.
 - Retail sales ended October at +3.7% on a YoY basis. In the same period last year the YoY growth rate was 5.9%.
 - Corporate profits (ended July) as a percent of GDP decreased to 9.59% from 9.61% (in April) and remain elevated relative to historical levels.
 - The inventory-to-sales ratio ended October up to 1.4 from 1.3 in July and has remained relatively constant since early 2010.
 - The U.S. trade deficit widened 7.3% as exports in soy and aircraft fell.
- The unemployment rate increased slightly to 3.9% from to 3.7% ended Q4; U-6, a broader measure of unemployment, increased to 7.6% from 7.5% during the fourth quarter.
- The Case-Shiller Home Price Index (ended October) increased to 206.3 from 205.4 and remains at levels higher than that of pre-financial crisis levels of 150.9.
- Rolling 12-month seasonally-adjusted CPI saw a down-tick to 1.9% from 2.3% ended December;
 Capacity Utilization increased to 78.7% from 78.4% in Q4.
- Fed Funds rate was increased 0.25% to a targeted range of 2.25% -to- 2.50%. The 10-year Treasury Yield (constant maturity) finished Q4 down to 2.8% from 3.0%.
- The Fed continues its planned reduction in balance sheet size, while the European Central Bank balance sheet increased.
 - ECB held its benchmark refinance rate at 0%, deposit rates -0.4% and has ended its bond purchase program.
- S&P valuations decreased in Q4, remaining above the 10-year and long-term averages.
 - Cyclically adjusted Shiller PE ratio (28.41x) is above the long-term average of 16.6x and above the 10-year average of 24.3x.



MARKET ENVIRONMENT – Q4 2018 OVERVIEW

1		Qtr.	<u>1 Yr.</u>	3 Yr.	<u>5 Yr.</u>	10 Yr.	The state of the s				
World Equity Benchmarks							l		1 1		3 0
MSCI ACWI (Net) (USD)	World	-12.8%	-9.4%	6.6%	4.3%	9.5%	MSCI ACWI (Net) (USD)	District Control of the last o			
MSCI ACWI (Local)	World (Local Currency)	-13.6%	-8.9%	5.9%	5.6%	9.8%	MSCI ACWI (Local)				
Domestic Equity Benchmarks							5&P 500				
S&P 500	Large Core	-13.5%	-4.4%	9.3%	8.5%	13.1%	Russell 1000				
Russell 1000	Large Core	-13.8%	-4.8%	9.1%	8.2%	13.3%	Russell 1000 Growth				
Russell 1000 Growth	Large Growth	-15.9%	-1.5%	11.1%	10.4%	15.3%	Russell 1000 Value	(KI) (A) (A)			
Russell 1000 Value	Large Value	-11.7%	-8.3%	7.0%	5.9%	11.2%	Russell 2000	and the same			
Russell 2000	Small Core	-20.2%	-11.0%	7.4%	4.4%	12.0%	Russell 2000 Growth				
Russell 2000 Growth	Small Growth	-21.7%	-9.3%	7.2%	5.1%	13.5%	Russell 2000 Value				
Russell 2000 Value	Small Value	-18.7%	-12.9%	7.4%	3.6%	10.4%					
International Equity Benchmarks							MSCI ACWI Ex USA				
MSCI ACWI Ex USA	World ex-US	-11.5%	-14.2%	4.5%	0.7%	6.6%	MSCI EA/E (Net) (USD)				
MSCI EAFE (Net) (USD)	Int'l Developed	-12.5%	-13.8%	2.9%	0.5%	6.3%	MSCI EAFE (Local)				
MSCI EAFE (Local)	Int'i Developed (Local Currency)	-12.2%	-11.0%	2.6%	3.8%	7.5%	S&P ERAC Small Cap				
S&P EPAC Small Cap	Small Cap Int'l	-16.4%	-18.3%	3.7%	3.3%	10.2%	MSCI EM	F-60			8
MSCI EM	Emerging Equity	-7.5%	-14.6%	9.2%	1.6%	8.0%	Bardays Aggregate	-			
Domestic Fixed Income Benchmarks							Barclays US High Yield				
Barclays Aggregate	Core Bonds	1.6%	0.0%	2.1%	2.5%	3.5%	BofA ML US HY BB/B				
Barclays US High Yield	High Yield	-4.5%	-2.1%	7.2%	3.8%	11.1%	CSFB Levered Loans				
BofA ML US HY BB/B	High Yield	-3.8%	-2.0%	6.4%	3.9%	10.0%	BofA MLUS 3-Month T-Bill				
CSFB Levered Loans	Bank Loans	-3.1%	1.1%	5.0%	3.3%	8.3%	Barclays US TIPS 1-10 Yr	_			
BofA ML US 3-Month T-Bill	Cash	0.6%	1.9%	1.0%	0.6%	0.4%					
Barclays US TIPS 1-10 Yr	Inflation	-0.1%	-0.3%	1.9%	1.2%	3.1%	Otigroup WGBI				
Global Fixed Income Benchmarks							Barclays Global Aggregate				
Citigroup WGBI	World Gov. Bonds	1.8%	-0.8%	2.7%	0.8%	1.5%	BC Global Credit				
Barclays Global Aggregate	Global Core Bonds	1.2%	-1.2%	2.7%	1.1%	2.5%	JPM GBI-EM Glob. Diversified				
BC Global Credit	Global Bonds	-0.6%	-3.2%	3.0%	1.7%	4.5%	JPM EMBI+				
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local Currency)	2.1%	-6.2%	5.9%	-1.0%	3.5%	Bloomberg Commodity Index			Quart	er
JPM EMBI+	Em. Mkt. Bonds	-0.7%	-5.3%	4.0%	4.0%	7.3%	Credit Suisse Hedge Fund Index	Para la		■1Yr	
Alternative Benchmarks							HFRI FoF Consensative	100			\perp
Bloomberg Commodity Index	Commodities	-9.4%	-11.2%	0.3%	-8.8%	-3.8%	Cambridge PE Lagged*				
Credit Suisse Hedge Fund Index	Hedge Fund	-4.3%	-3.2%	1.6%	1.7%	5.1%	NCREF ODCE Net Lagged*				
HFRI FoF Conservative	Fund of Hedge Funds	-3.4%	-1.1%	1.6%	1.7%	3.1%	Wishire REIT Index				
Cambridge PE Lagged*	Private Equity	4.1%	18.9%	14.8%	13.6%	12.1%					
NCREIF ODCE Net Lagged*	Real Estate	1.9%	7.7%	7.8%	9.7%	4.6%	CPI + 2%				
Wilshire REIT Index	REIT	-6.9%	-4.8%	2.1%	7.9%	12.2%	-296 -206 -196	-10% -5% 0%	5% 10%	15% 209	% 2
CPI + 2%	Inflation/Real Assets	0.8%	4.0%	4.1%	3.5%	3.8%					

^{*} As of 9/30/2018



PERFORMANCE OVERVIEW

Q4 Market Summary

	Macro			Equity			Credit		Re	al Asso	ets
US Dollar	VIX	US 10-Yr	S&P 500	MSCI EAFE	MSCI EM	US Agg.	High Yield	Dollar EMD	Oil	Gold	REITS
1.1%	13.3	-38 bps	-13.5%	-12.5%	-7.5%	1.6%	-4.5%	-1.2%	-38.0%	7.7%	-6.0%

- Global equities sold-off during the quarter due to concerns related to fed funds rate increases, fears of a global slowdown, and trade uncertainties
- The sharp decline in crude oil prices weighed on commodities overall and US high-yield bonds, which have meaningful portion to the energy sector
- The Federal Reserve hiked rates for the fourth time in 2018 with one to two additional rate increases expected for 2019

Market segment (index representation) as follows: US Dollar (DXY Index), VIX (CBOE Volatility Index), US 10-Year (US 10-Year Treasury Yield), S&P 500 (US Equity), MSCI EAFE Index (International Developed Equity), MSCI Emerging Markets (Emerging Markets Equity), US Agg (Barclays US Aggregate Bond Index), High Yield (Barclays US High Yield Index), Dollar EMD (JPM Emerging Market Bond Index), Crude Oil (WTI Crude Oil Spot), Gold (Gold Price Spot), and REITs (NAREIT Composite Index).



MACRO PERFORMANCE OVERVIEW

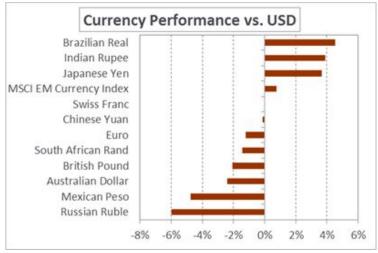
Q4 Macro Market Summary

- Global growth has been revised lower and the outlook is likely to moderate in 2019
- Developed government bond yields decreased as demand for safe haven assets increased
- Global liquidity tightened as the Fed raised rates and the ECB ended the expansion of its QE program

Central Banks	Current Rate	CPI YOY	Notes from the Quarter
Federal Reserve	2.25% - 2.50%	2.2%	The Fed increased its benchmark interest rate 0.25% to 2.25% - 2.50% in December
European Central Bank	0.0%	1.9%	The ECB maintained its current benchmark interest rate, but ended the expansion of its QE bond-buying program
Bank of Japan	-0.1%	0.8%	The BoJ will continue its ultra-easy QE program with inflation remaining well below target

	Yield 09/29/18	Yield 12/31/18	Δ
US 10-Yr	3.06%	2.68%	-0.38%
US 30-Yr	3.21%	3.01%	-0.19%
US Real 10-Yr	0.92%	0.97%	0.05%
German 10-Yr	0.47%	0.24%	-0.23%
Japan 10-Yr	0.13%	0.00%	-0.13%
China 10-Yr	3.63%	3.31%	-0.32%
EM Local Debt	6.62%	6.46%	-0.17%

Source: Bloomberg



Source: Bloomberg



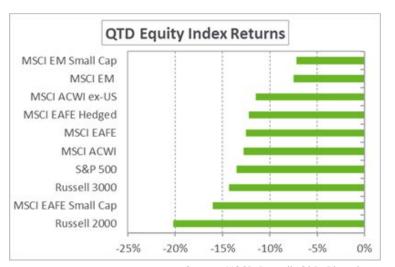
EQUITY PERFORMANCE OVERVIEW

Q4 Equity Market Summary

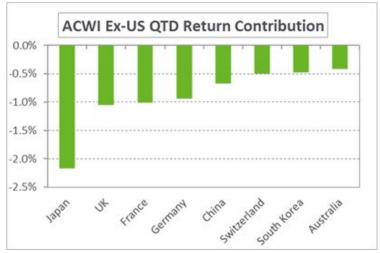
- US equities led the global equity sell-off and developed market indices moved into a bear market
- Equities markets were volatile as ongoing trade concerns and fears of global growth slowdown weighed on investor sentiment

Russell 3000 QTD Sector Return Contribution				
Information Technology	-3.35%			
Consumer Discretionary	-1.80%			
Financials	-1.80%			
Industrials	-1.82%			
Consumer Staples	-0.35%			
Energy	-1.42%			
Materials	-0.43%			
Health Care	-1.52%			
Real Estate	-0.22%			
Communication Services	-1.64%			
Utilities	0.02%			





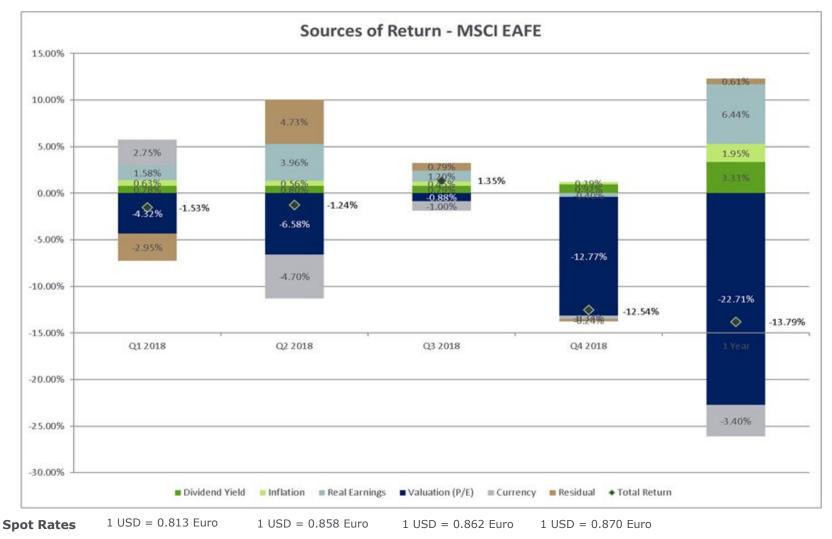
Source: MSCI, Russell, S&P, Bloomberg



Source: MSCI, Bloomberg. QTD top country contributors to index return

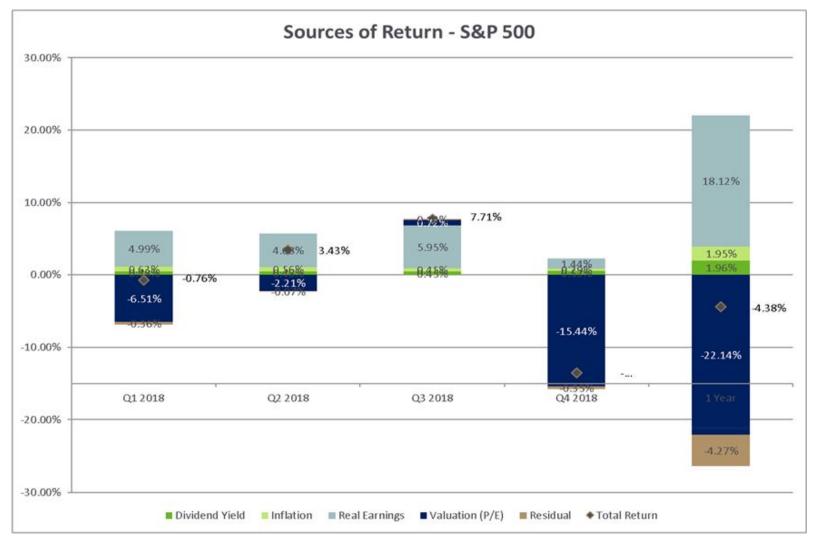


1 YEAR ATTRIBUTION OF MSCI EAFE RETURNS





1 YEAR ATTRIBUTION OF S&P 500 RETURNS





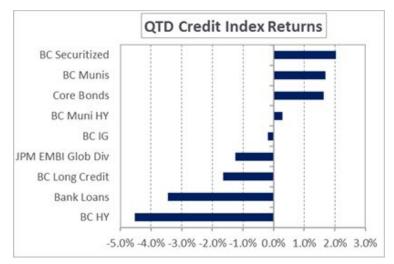
CREDIT PERFORMANCE OVERVIEW

Q4 Credit Market Summary

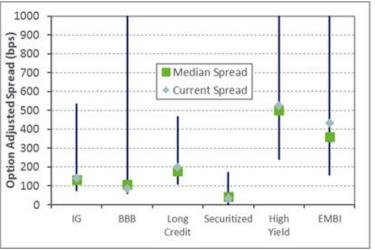
- Credit spreads broadly increased across most areas of the market
- Riskier assets underperformed as demand for high quality and safehaven assets increased
- Bank loans declined by 3.5% as market outflows weighed on asset prices

Credit Spread (Basis Points)	09/30/18	12/31/18	Δ
BC IG Credit	100	143	43
BC Long Credit	153	200	47
BC Securitized	28	35	7
BC High Yield	316	526	210
Muni HY	184	236	52
JPM EMBI	362	435	73
Bank Loans - Libor	281	414	133





Source: Barclays, JPM, S&P, Bloomberg



Source: Barclays, JPM, S&P, Bloomberg; as of 01/31/2000

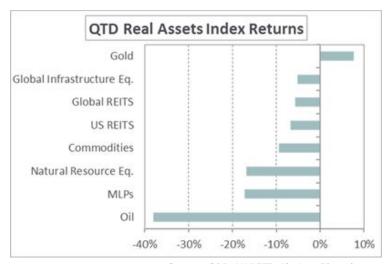


REAL ASSETS PERFORMANCE OVERVIEW

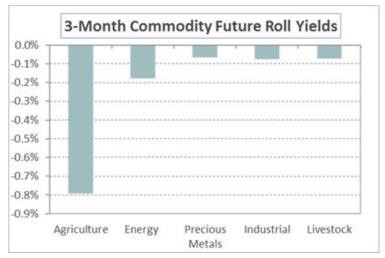
Q4 Real Assets Market Summary

- Oil declined 38% for the quarter due to an increase in supply led by US shale production
- MLPs decreased 17.3% under pressure from falling energy prices and investor outflows
- Commodities declined overall due to the substantial decline in oil markets

Real Asset Yields	09/30/18	12/31/18
MLPs	8.0%	9.0%
Core Real Estate	4.4%	4.5%
US REITs	4.2%	4.6%
Global REITs	3.7%	3.9%
Global Infrastructure Equities	4.5%	4.6%
Natural Resource Equities	3.5%	4.5%
US 10-Yr Breakeven Inflation	2.1%	1.7%
Commodity Index Roll Yield	-1.2%	-6.1%



Source: S&P, NAREIT, Alerian, Bloomberg



Source: Bloomberg, NEPC Calculated as of 09/28/2018



Source: NCREIF, Alerian, NAREIT, S&P, Bloomberg

2019 SUMMARY OUTLOOK

Market dynamics shifted significantly in 2018, with Fed policy and US-China trade tensions disrupting many of our key market themes

As a result we have removed Federal Reserve Gradualism, Extended US Economic Cycle, and Global Synchronized Growth as key themes

We believe we have entered a late-cycle market environment and the dynamics of such an environment will be a focal point for investors

However, late-cycle does not mean end of cycle and equities can still offer lucrative returns, though are likely to be accompanied by additional volatility

We encourage investors to rebalance developed market equity exposure

We have downgraded our outlook for non-US developed equities and removed the overweight recommendation from our current opportunities list

The main driver of the change is negative sentiment surrounding economic and political conditions of Europe, concerns related to the earnings growth outlook, and central banks paring back their support of easy financial conditions

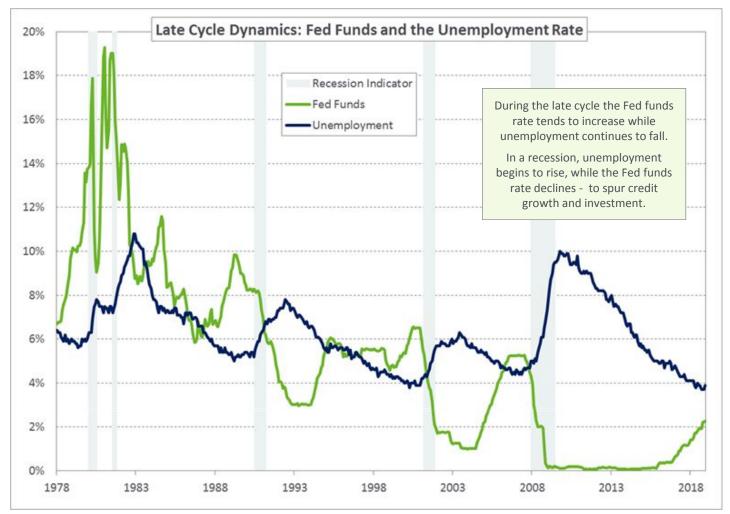
The transition to a late-cycle is accompanied with a more risk-averse investment outlook as economic risks become more pronounced

After years of low volatility and outsized equity returns, the market is likely to transition to a higher volatility regime, which offers more risk but also tactical opportunities

We recommend reducing lower quality credit exposure as higher default rates are a common aspect of late-cycle market dynamics



THE ECONOMIC CYCLE IS IN TRANSITION







KEY MARKET THEMES

Late Cycle Dynamics

The US economy has transitioned from a mid- to late-cycle environment

Late cycle does not mean end of cycle; equity markets can offer strong returns and abandoning risk assets early may detract from long-term results

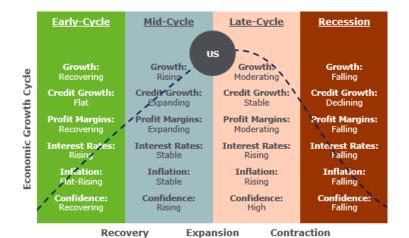
Positive economic data can support continued US economic expansion and further equity gains

However, moving into a late cycle negatively skews the range of outcomes and our investment outlook reflects a more risk-averse posture with a bias toward selling low quality credit and increasing safe-haven fixed income exposure

Trends among key indicators suggest a transition to late-cycle has occurred

These indicators provide a useful guide to recognize changes in the economic cycle

Despite the recent trend, there is minimal evidence in economic/financial indicators to suggest that a US recession is imminent

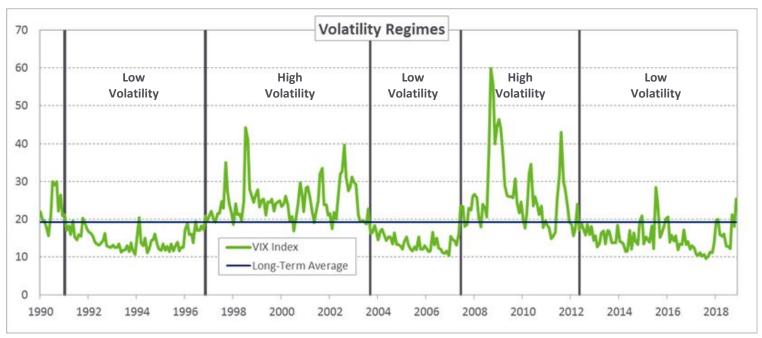


US Indicators	Late-Cycle Trend	Current Trend	
Equities	Peaking	Uncertain	
Interest Rates	Rising	Yes	
Yield Curve	Flattening	Yes	
Inflation	Rising	Yes	
GDP Growth	Moderating	Uncertain	
Credit Spreads	Stable/Rising	Yes	
Output Gap	Near/Above Potential	Yes	
Unemployment	Falling/Bottoming	Uncertain	

Source: (Top) NEPC Source: (Bottom) NEPC



BRACE FOR HIGHER VOLATILITY IN 2019



Source: S&P, CBOE, Bloomberg, NEPC

Equity volatility regimes tend to persist over prolonged periods and 2018 was witness to a material shift higher in equity volatility

We encourage investors to raise "safe haven" fixed income exposure as trends associated with each of our key market themes suggest higher volatility is on the horizon

2019 may prove to be a difficult year for markets but higher volatility can also offer a greater number of opportunities for dynamic investors

Investors should be prepared to act in a higher volatility regime, as dynamic opportunities may arise to deploy safe-haven assets back into US equity and other risk assets



KEY MARKET THEMES

Tightening Global Liquidity

The Fed has shifted from a "lower for longer" policy to a more balanced posture of raising rates in line with higher inflation

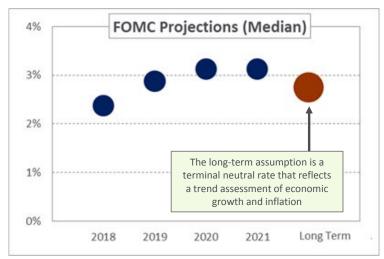
Based on the FOMC projections, the Fed is communicating a tightening path as their forecast for interest rate hikes moves beyond the long-term neutral rate

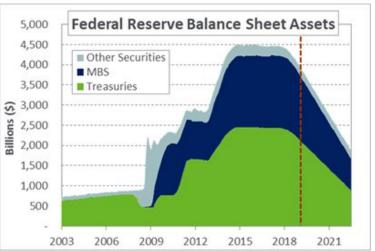
Markets are discounting a muted pace of hikes relative to Fed projections, creating potential for capital market disruption. However, the Fed's bias appears to be to raise rates in the absence of market turmoil

The Fed's balance sheet has shrunk by \$400B and will continue to decline by a monthly maximum target of \$50B

Normalization of the balance sheet is a form of monetary policy tightening as liquidity is methodically extracted from the system

The impact of the balance sheet reduction is untested – potentially mirroring how the Fed's balance sheet expansion (QE) had easing effects





Source: (Top) Bloomberg, NEPC Source: (Bottom) Bloomberg, NEPC



KEY MARKET THEMES

China Transitions

China is the global growth engine but faces fundamental transitions

China's economy is transitioning from a focus on production and investment to a service and consumption based economy

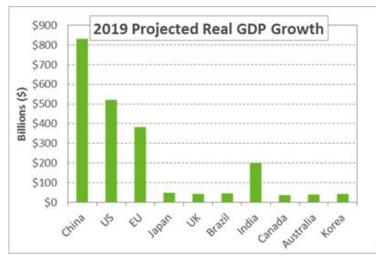
Fixed investment and credit expansion is needed to sustain the "old" production-based economy and support employment as the population shifts to urban centers

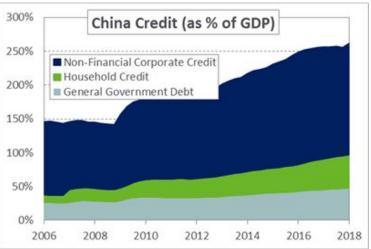
Any disruption to these transitions will be transmitted globally due to China's outsized role in the world economy

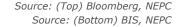
Policy makers must continue to balance goals of moderating credit expansion against sustaining healthy economic growth rates

Recent shifts in policy suggest a tilt away from credit moderation to offset the harmful effects of the US-China trade dispute

However, an uncontrolled expansion of credit growth and real estate development pose a future systemic risk to the economy









HIGHLIGHTS OF FOURTH QUARTER HAPPENINGS AT NEPC



NEPC INSIGHTS

- Defined Contribution Financial Wellness Results: Is All Well(ness) and Good?
- · Low-Basis Assets: Developing a Plan to Avoid Investor Inertia
- · Defined Contribution: Active Management and Marriage, Part 1
- Defined Contribution: In-Laws & Income Solutions, Part 2
- Taking Stock: NEPC Drops Fed Gradualism Theme
- It's November: Year-End Tax-Planning Starts Now
- 2018 Third Quarter Market Thoughts
- Partial Annuitizations: The Go-To Strategy for Pension Risk Transfers
- · NEPC 2018 Corporate DB Outlook Results: Plans to De-Risk Portfolio and Invest in Alternative Assets
- Taking Stock: Hedge Funds: A New World Post-Crisis
- · Don't Let the Tail Wag the Dog: For Insurers, It's Investment Discipline First, Capital Efficiency Second
- · Taking Stock: Decision Time for Pension Plans and Q3 Liability Performance
- NEPC's 2018 Hedge Fund Operational Due Diligence Survey Results
- Make an Impact in the Season of Giving
- NEPC's Year-End 2018 Endowments & Foundations Survey Results: Storms Ahead, But Staying the Course
- · Taking Stock: Making Sense of Recent Market Movements

WEBINAR REPLAYS

- NEPC's Third Quarter 2018 Quarterly Markets Call
- Total Enterprise Management for Endowments and Foundations

To download NEPC's recent insights and webinar replays, visit: www.NEPC.com/insights



SAVE THE DATE



MAY 7-8, 2019 | BOSTON PARK PLAZA | #NEPC_CONFERENCE



NEPC's 24th Annual Investment Conference

- Gradual or dramatic, the economic and political worlds around us are going through major transition.
 Whether it be global resources, climate, political power, technology, demographics or personal habits,
 adapting and advancing through these shifts has become a regularity. Most importantly, as we transition
 our daily processes, so do we transition our investment approaches. Please join us for NEPC's 24th
 Annual Investment Conference on May 7-8, 2019 at the Boston Park Plaza Hotel, as we address the
 'Transitions' we are experiencing and what lies ahead.
- Please reach out to Sarah Winrow at swinrow@nepc.com if you have any questions.



TOTAL FUND PERFORMANCE SUMMARY

NEPC, LLC —

TOTAL FUND PERFORMANCE SUMMARY (NET)

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank	Inception	Inception Date
Total Fund	\$5,198,137,872	-7.5%	64	-4.3%	38	-3.5%	38	6.7%	21	5.1%	28	9.5%	7	7.7%	Apr-94
Policy Index		-8.0%	76	-4.7%	49	-3.6%	41	6.7%	21	5.5%	12	9.1%	20	7.7%	Apr-94
60% MSCI ACWI (Net) / 40% FTSE WGBI		-7.1%	55	-5.3%	67	-5.8%	85	5.2%	96	3.0%	99	6.5%	99		Apr-94
60% S&P 500 / 40% BBgBarc Aggregate		-7.6%	64	-3.3%	16	-2.3%	19	6.5%	28	6.2%	6	9.4%	9	8.0%	Apr-94
InvestorForce Public DB > \$1B Net Median		-6.9%		-4.7%		-4.0%		6.0%		4.6%		8.2%		7.0%	Apr-94

- For the five year period ending December 31, 2018, the Fund returned 5.1% trailing the policy index by 0.4% and ranking in the 28th percentile of its peers and underperforming the actuarial assumed rate of 7.25%. The Fund's volatility, as measured by standard deviation, ranked in the 77th percentile of its peers, and the risk-adjusted return, or Sharpe Ratio, ranks in the 52nd percentile. This means that the Fund has earned more return per unit of volatility taken than 48% of its peers.
- For the three-year period, the Fund returned 6.7%, performing in line with the policy index and ranking in the 21st percentile of its peers. The Fund's volatility ranks in the 76th percentile of its peers over this period, with the Fund's Sharpe Ratio ranking in the 49th percentile.
- For the one-year period, the Fund returned -3.5%, outperforming the policy index by 0.1% and ranking in the 38th percentile of the InvestorForce Public Funds > \$1 Billion Universe (Net of fees).
- For the one-year period, the Fund experienced a net investment loss of \$183.2 million which includes a net investment loss of \$483.2 million in the quarter. Assets decreased from \$5.42 billion one year ago to \$5.20 billion.



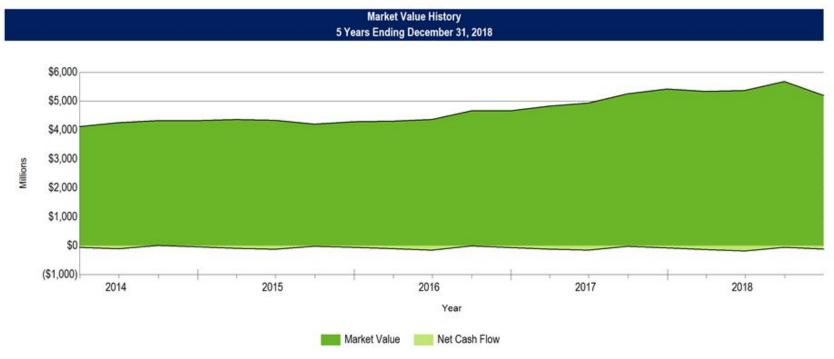
3 Years Ending December 31, 2018											
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank			
Total Fund	6.7%	21	6.6%	76	0.9	49	0.9	38			
Policy Index	6.7%	21	6.7%	81	0.8	51	0.8	59			
InvestorForce Public DB > \$1B Net Median	6.0%		5.8%		0.8		0.9				

5 Years Ending December 31, 2018											
Anlzd Ret Rank Anlzd Std Rank Sharpe Rank Sortino Rank Dev Ratio Ratio RF											
Total Fund	5.1%	28	6.7%	77	0.7	52	0.9	45			
Policy Index	5.5%	12	6.6%	75	0.7	35	0.9	36			
InvestorForce Public DB > \$1B Net Median	4.6%		5.9%		0.7		0.8				

Policy Index as of January 2016: 28% Russell 3000 Index, 20% Barclays Aggregate, 15% MSCI ACWI ex U.S., 10% MSCI ACWI, 10% Russell 3000 Index + 3%, 10% CPI+4% Index, and 7% NCREIF ODCE Real Estate Index.



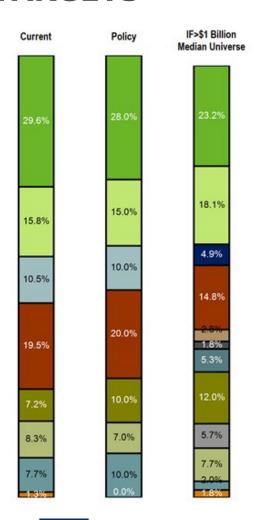
TOTAL FUND ASSET GROWTH SUMMARY



		Summary of Cas	Summary of Cash Flows									
	Last Three Months	Fiscal Year-To-Date	One Year	Three Years	Five Years							
Beginning Market Value	\$5,681,345,338	\$5,370,442,517	\$5,420,490,945	\$4,290,811,595	\$4,092,440,847							
Net Cash Flow	-\$59,963,396	\$65,526,583	-\$39,202,926	-\$58,244,769	-\$115,894,012							
Net Investment Change	-\$423,244,071	-\$237,831,228	-\$183,150,147	\$965,571,046	\$1,221,591,037							
Ending Market Value	\$5,198,137,872	\$5,198,137,872	\$5,198,137,872	\$5,198,137,872	\$5,198,137,872							



TOTAL FUND ASSET ALLOCATION VS. POLICY TARGETS



	Asset Alloc	cation vs. T	arget			
	Current	Current	Policy Di	fference*	Policy Range	Within Range
U.S. Equity	\$1,540,549,958	29.6%	28.0%	1.6%	24.0% - 32.0%	Yes
Non-US Equity	\$823,353,475	15.8%	15.0%	0.8%	12.0% - 18.0%	Yes
Emerging Markets Equity				0.0%		
Global Equity	\$545,347,212	10.5%	10.0%	0.5%	7.0% - 13.0%	Yes
U.S. Fixed Income	\$1,012,479,844	19.5%	20.0%	-0.5%	16.0% - 24.0%	Yes
Non-U.S. Fixed Income				0.0%		
Fixed Income - Emerging				0.0%		
GTAA				0.0%		
Private Equity	\$374,799,439	7.2%	10.0%	-2.8%	0.0% - 12.0%	Yes
Hedge Funds				0.0%		
Real Estate	\$433,137,514	8.3%	7.0%	1.3%	4.0% - 10.0%	Yes
Real Assets	\$402,539,646	7.7%	10.0%	-2.3%	5.0% - 15.0%	Yes
Cash	\$65,930,785	1.3%	0.0%	1.3%	0.0% - 3.0%	Yes
Total	\$5,198,137,872	100.0%	100.0%			

^{*}Difference between Policy and Current Allocation

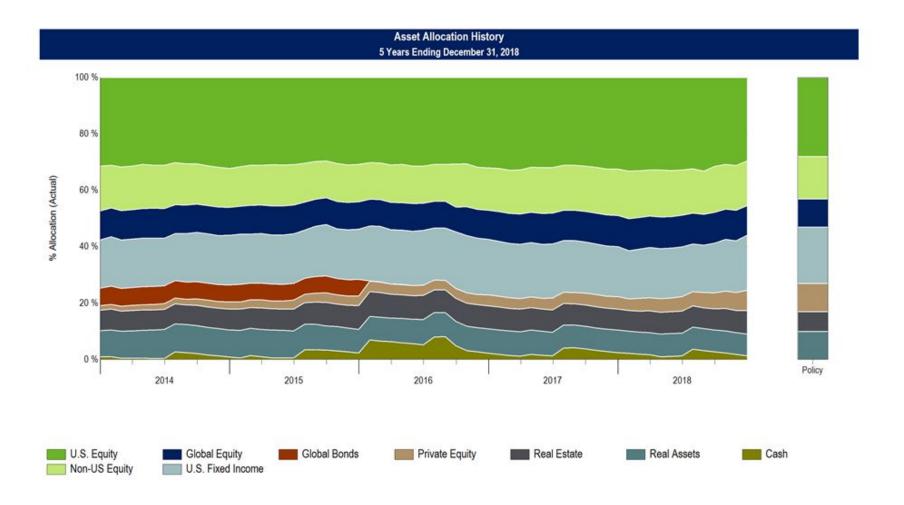
Cash represents assets in Parametric Overlay.

Policy Index as of January 2016:, 28% Russell 3000 Index, 20% Barclays Aggregate, 15% MSCI ACWI ex U.S., 10% MSCI ACWI, 10% Russell 3000 Index + 3%, 10% CPI+4% Index, and 7% NCREIF ODCE Real Estate Index.

Asset Allocation vs. Policy Targets chart does not reflect Overlay adjusted weights.



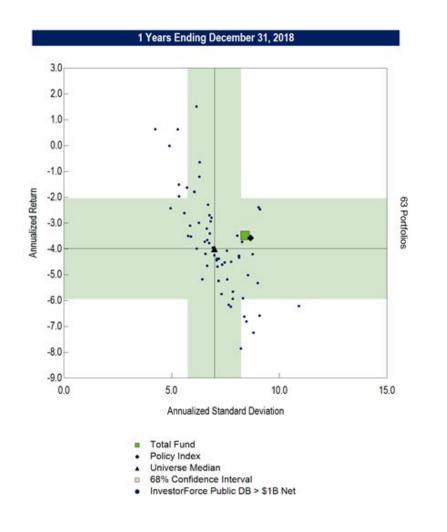
TOTAL FUND ALLOCATION HISTORY

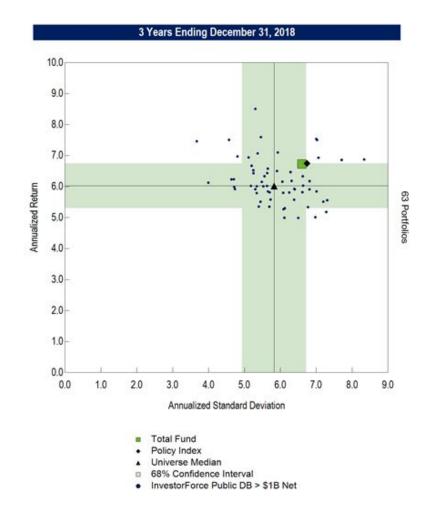


Policy Index shown is most recently approved index



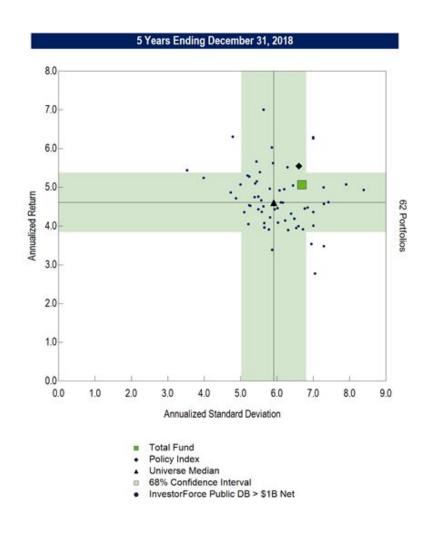
TOTAL FUND RISK/RETURN

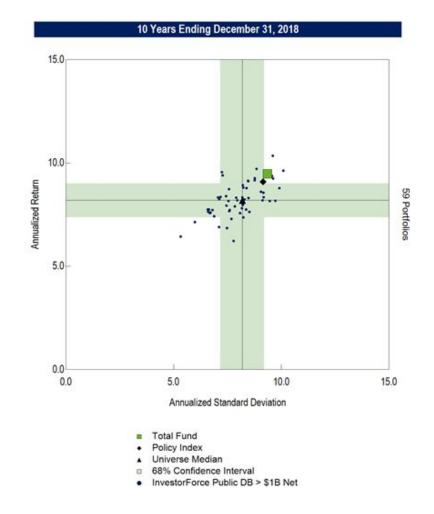






TOTAL FUND RISK/RETURN

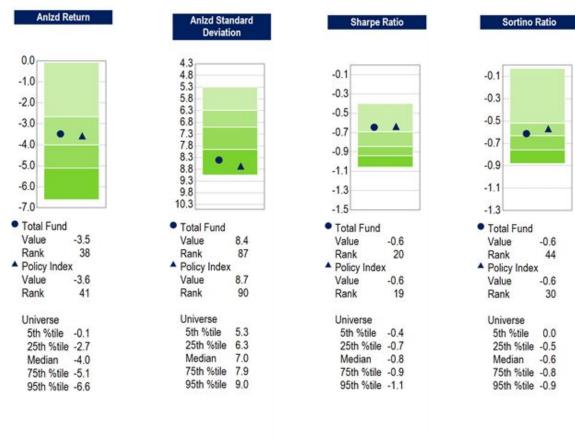






TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

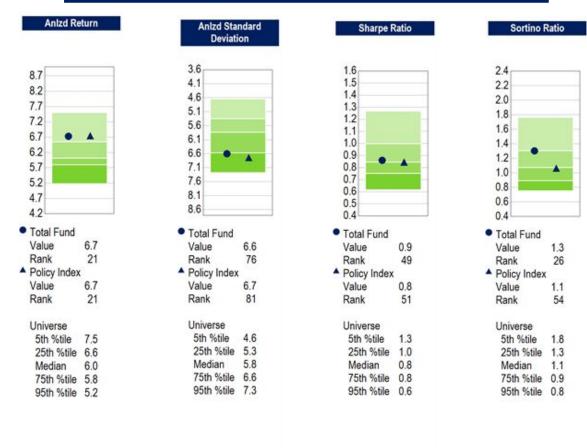






TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

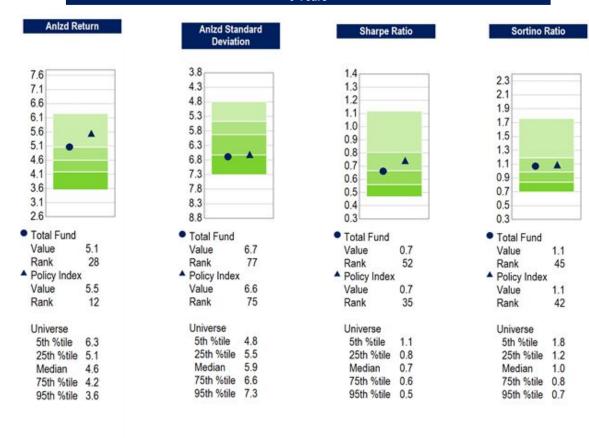






TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

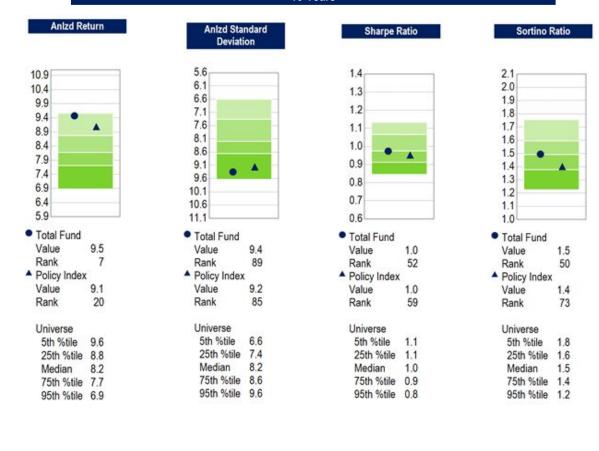
Total Fund vs. InvestorForce Public DB > \$1B Net 5 Years





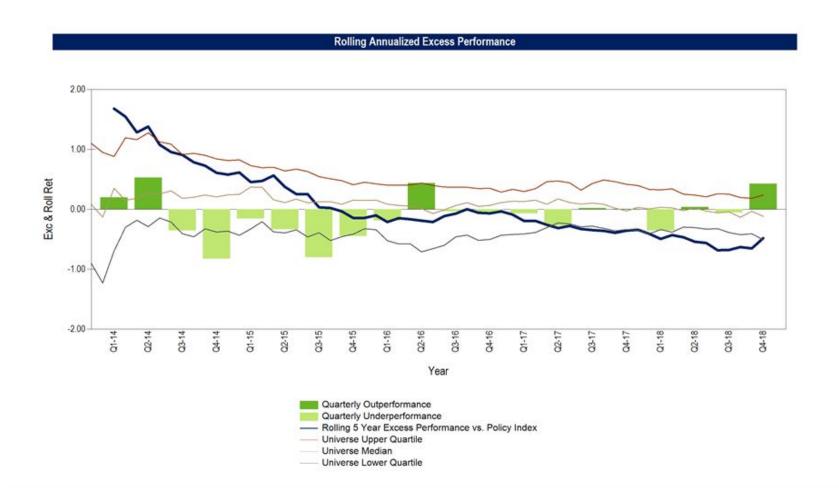
TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

Total Fund vs. InvestorForce Public DB > \$1B Net 10 Years

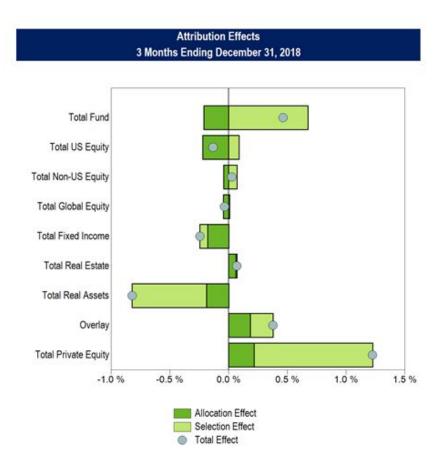




ROLLING 5 YEAR EXCESS RETURNS- NET OF FEES

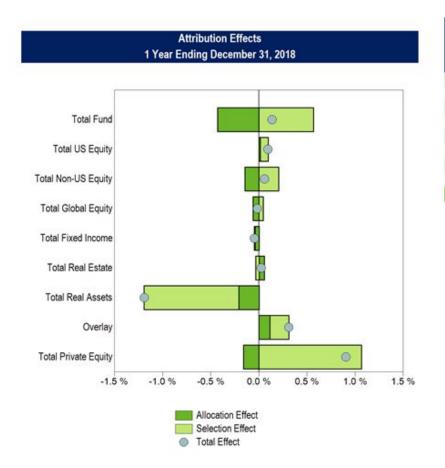






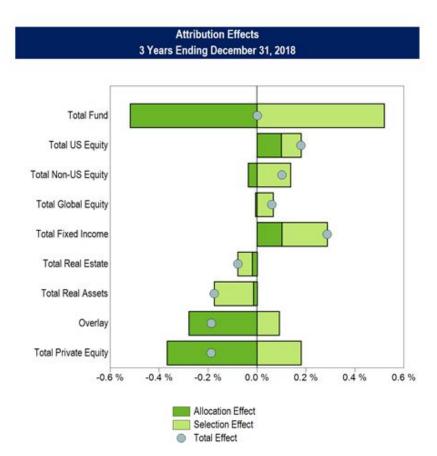
Attribution Summary 3 Months Ending December 31, 2018											
Wtd. Actual Wtd. Index Excess Selection Allocation Return Return Return Effect Effect I											
Total US Equity	-14.0%	-14.3%	0.3%	0.1%	-0.2%	-0.1%					
Total Non-US Equity	-11.0%	-11.5%	0.4%	0.1%	0.0%	0.0%					
Total Global Equity	-12.7%	-12.8%	0.1%	0.0%	0.0%	0.0%					
Total Fixed Income	1.3%	1.6%	-0.4%	-0.1%	-0.2%	-0.2%					
Total Real Estate	1.6%	1.5%	0.1%	0.0%	0.1%	0.1%					
Total Real Assets	-7.9%	0.5%	-8.4%	-0.6%	-0.2%	-0.8%					
Overlay	12.0%	0.6%	11.4%	0.2%	0.2%	0.4%					
Total Private Equity	3.1%	-13.6%	16.7%	1.0%	0.2%	1.2%					
Total	-7.5%	-8.0%	0.5%	0.7%	-0.2%	0.5%					





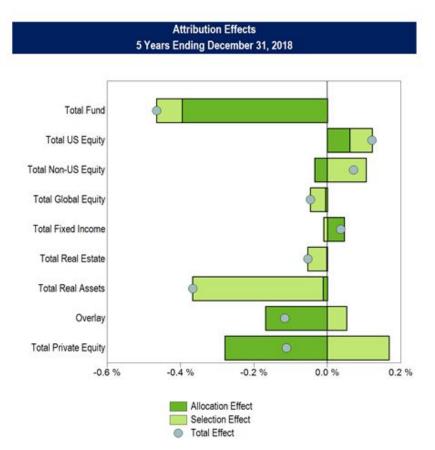
Attribution Summary 1 Year Ending December 31, 2018											
	Wtd. Actual Wtd. Index Excess Selection Allocation Return Return Return Effect Effect										
Total US Equity	-5.0%	-5.2%	0.3%	0.1%	0.0%	0.1%					
Total Non-US Equity	-13.0%	-14.2%	1.2%	0.2%	-0.1%	0.1%					
Total Global Equity	-9.0%	-9.4%	0.4%	0.0%	-0.1%	0.0%					
Total Fixed Income	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%					
Total Real Estate	6.9%	7.4%	-0.5%	0.0%	0.1%	0.0%					
Total Real Assets	-7.3%	6.0%	-13.3%	-1.0%	-0.2%	-1.2%					
Overlay	13.5%	1.9%	11.6%	0.2%	0.1%	0.3%					
Total Private Equity	18.4%	-2.4%	20.7%	1.1%	-0.2%	0.9%					
Total	-3.4%	-3.6%	0.1%	0.6%	-0.4%	0.1%					





	3 Yea	Attribution S	•	018							
	Wtd. Actual Wtd. Index Excess Selection Allocation Return Return Return Effect Effect I										
Total US Equity	9.2%	9.0%	0.3%	0.1%	0.1%	0.2%					
Total Non-US Equity	5.5%	4.5%	1.0%	0.1%	0.0%	0.1%					
Total Global Equity	7.3%	6.6%	0.7%	0.1%	0.0%	0.1%					
Total Fixed Income	3.1%	2.1%	1.0%	0.2%	0.1%	0.3%					
Total Real Estate	6.6%	7.3%	-0.7%	-0.1%	0.0%	-0.1%					
Total Real Assets	3.5%	6.1%	-2.6%	-0.2%	0.0%	-0.2%					
Overlay	5.8%	1.1%	4.8%	0.1%	-0.3%	-0.2%					
Total Private Equity	14.2%	12.2%	2.0%	0.2%	-0.4%	-0.2%					
Total	6.7%	6.7%	0.0%	0.5%	-0.5%	0.0%					





	Attribution Summary 5 Years Ending December 31, 2018											
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects						
Total US Equity	8.1%	7.9%	0.2%	0.1%	0.1%	0.1%						
Total Non-US Equity	1.5%	0.7%	0.8%	0.1%	0.0%	0.1%						
Total Global Equity	3.9%	4.3%	-0.4%	0.0%	0.0%	0.0%						
Total Fixed Income	2.2%	2.1%	0.1%	0.0%	0.0%	0.0%						
Total Real Estate	8.8%	9.4%	-0.6%	-0.1%	0.0%	-0.1%						
Total Real Assets	1.1%	5.6%	-4.5%	-0.4%	0.0%	-0.4%						
Overlay	3.4%	0.6%	2.8%	0.0%	-0.2%	-0.1%						
Total Private Equity	15.2%	11.1%	4.1%	0.2%	-0.3%	-0.1%						
Total	5.1%	5.5%	-0.5%	-0.1%	-0.4%	-0.5%						



TOTAL FUND RISK STATISTICS

				1 Year E	nding Dec	ember 31, 2018						
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Equity	56.0%	-7.9%	39	13.6%	75	1.6%	9	1.2%	33	1.2	6	1.0
MSCI ACWI		-9.4%	69	13.5%	68	0.0%	48	0.0%	1			1.0
Total US Equity	29.6%	-5.0%	23	15.4%	80	0.2%	23	0.5%	6	0.5	13	1.0
Russell 3000		-5.2%	32	15.5%	85	0.0%	30	0.0%	1			1.0
Total Non-US Equity	15.8%	-13.0%	12	12.0%	25	0.2%	22	1.1%	8	1.1	4	0.9
MSCI ACWI ex USA		-14.2%	29	12.7%	70	0.0%	28	0.0%	1			1.0
Total Global Equity	10.5%	-9.0%	64	13.5%	93	0.4%	65	0.1%	1	2.9	1	1.0
MSCI ACWI		-9.4%	69	13.5%	93	0.0%	66	0.0%	1			1.0
Total Fixed Income	19.5%	0.0%	43	2.6%	77	-0.4%	35	0.8%	36	0.0	30	8.0
Total Fixed Income Policy Index		0.0%	43	3.1%	94	0.0%	17	0.0%	1			1.0
Total US Fixed Income	19.5%	0.0%	43	2.6%	77	-0.4%	35	0.8%	36	0.0	30	8.0
BBgBarc US Aggregate TR		0.0%	43	3.1%	94	0.0%	17	0.0%	1			1.0
Total Real Assets	7.7%	-7.3%		8.3%		-19.3%		8.1%		-1.6		2.5
CPI + 4% (Unadjusted)		6.0%		1.0%		0.0%		0.0%		-		1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Total Real Estate	8.3%	6.9%	55	2.9%	58
NCREIF ODCE Net		7.4%	50	3.1%	64
Total Private Equity	7.2%	18.4%	37	5.4%	30
Russell 3000 + 3%		-2.4%	99	15.5%	94

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Total Non-U.S. Equity Benchmark: MSCI ACWI ex US Free, prior to May 2002, the MSCI EAFE.

Composite rankings are used for Total Equity (InvestorForce Public DB Total Eq consists of 86 portfolios), Total Us Equity (InvestorForce Public DB US Eq consists of 169 portfolios), Total Non-US Equity (InvestorForce Public DB Glbl Eq consists of 39 portfolios), Total Fixed Income (InvestorForce Public DB Total Fix Inc consists of 86 portfolios), Total US Fixed Income (InvestorForce Public DB US Fix Inc consists of 104 portfolios), Total Real Estate (InvestorForce Public DB Real Estate Pub+Priv consists of 60 portfolios) and Total Private Equity(InvestorForce Public DB Private Eq consists of 45 portfolios).



TOTAL FUND RISK STATISTICS

				3 Years E	Ending Dec	ember 31, 2018	3					
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Equity	56.0%	7.9%	8	10.6%	56	1.3%	6	1.2%	34	1.1	1	1.0
MSCI ACWI		6.6%	75	10.6%	57	0.0%	40	0.0%	1			1.0
Total US Equity	29.6%	9.2%	8	11.3%	43	0.3%	7	0.4%	3	0.7	4	1.0
Russell 3000		9.0%	18	11.3%	43	0.0%	20	0.0%	1			1.0
Total Non-US Equity	15.8%	5.5%	11	11.0%	18	1.2%	16	1.2%	7	0.9	4	1.0
MSCI ACWI ex USA		4.5%	46	11.5%	57	0.0%	51	0.0%	1			1.0
Total Global Equity	10.5%	7.3%	4	10.6%	73	0.7%	32	0.5%	1	1.3	1	1.0
MSCI ACWI		6.6%	50	10.6%	73	0.0%	80	0.0%	1			1.0
Total Fixed Income	19.5%	3.1%	48	2.6%	56	1.2%	39	1.4%	51	0.7	24	0.8
Total Fixed Income Policy Index		2.1%	67	2.9%	69	0.0%	79	0.0%	1			1.0
Total US Fixed Income	19.5%	3.1%	48	2.6%	56	1.2%	40	1.4%	53	0.7	29	0.8
BBgBarc US Aggregate TR		2.1%	67	2.9%	69	0.0%	79	0.0%	1			1.0
Total Real Assets	7.7%	3.5%		7.7%		-10.9%		7.5%		-0.3		2.6
CPI + 4% (Unadjusted)		6.1%		0.8%		0.0%		0.0%				1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Total Real Estate	8.3%	6.6%	82	2.7%	41
NCREIF ODCE Net		7.3%	67	3.0%	47
Total Private Equity	7.2%	14.2%	42	5.3%	27
Russell 3000 + 3%		12.2%	66	11.3%	92

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Total Non-U.S. Equity Benchmark: MSCI ACWI ex US Free, prior to May 2002, the MSCI EAFE.

Composite rankings are used for Total Equity (InvestorForce Public DB Total Eq consists of 81 portfolios), Total Us Equity (InvestorForce Public DB US Eq consists of 158 portfolios), Total Non-US Equity (InvestorForce Public DB Glbl Eq consists of 34 portfolios), Total Fixed Income (InvestorForce Public DB Total Fix Inc consists of 79 portfolios), Total US Fixed Income (InvestorForce Public DB US Fix Inc consists of 104 portfolios), Total Real Estate (InvestorForce Public DB Real Estate Pub+Priv consists of 60 portfolios) and Total Private Equity(InvestorForce Public DB Private Eq consists of 44 portfolios).



TOTAL FUND RISK STATISTICS

				5 Years E	Ending Dec	ember 31, 2018	3					
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Equity	56.0%	5.6%	33	10.7%	52	1.4%	6	1.2%	24	1.1	1	1.0
MSCI ACWI		4.3%	73	10.9%	70	0.0%	52	0.0%	1			1.0
Total US Equity	29.6%	8.1%	7	11.2%	42	0.2%	10	0.3%	1	0.7	1	1.0
Russell 3000		7.9%	15	11.2%	42	0.0%	15	0.0%	1			1.0
Total Non-US Equity	15.8%	1.5%	28	11.3%	26	0.8%	25	1.1%	5	0.7	6	0.9
MSCI ACWI ex USA		0.7%	65	11.9%	66	0.0%	56	0.0%	1			1.0
Total Global Equity	10.5%	3.9%	67	10.9%	59	-0.4%	96	1.0%	1	-0.4	99	1.0
MSCI ACWI		4.3%	62	10.9%	58	0.0%	85	0.0%	1			1.0
Total Fixed Income	19.5%	2.2%	58	2.3%	29	0.6%	34	1.6%	57	0.1	40	0.7
Total Fixed Income Policy Index		2.1%	67	2.7%	52	0.0%	73	0.0%	1			1.0
Total US Fixed Income	19.5%	2.5%	44	2.3%	27	0.7%	27	1.8%	62	0.0	51	0.6
BBgBarc US Aggregate TR		2.5%	43	2.8%	54	0.0%	73	0.0%	1	-		1.0
Total Real Assets	7.7%	1.1%		9.0%		-11.4%		8.8%		-0.5		2.4
CPI + 4% (Unadjusted)		5.6%		1.0%		0.0%		0.0%		-		1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Total Real Estate	8.3%	8.8%	84	3.8%	47
NCREIF ODCE Net		9.4%	67	4.0%	51
Total Private Equity	7.2%	15.2%	34	6.3%	48
Russell 3000 + 3%		11.1%	66	11.2%	88

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Total Non-U.S. Equity Benchmark: MSCI ACWI ex US Free, prior to May 2002, the MSCI EAFE.

Composite rankings are used for Total Equity (InvestorForce Public DB Total Eq consists of 63 portfolios), Total Us Equity (InvestorForce Public DB US Eq consists of 134 portfolios), Total Non-US Equity (InvestorForce Public DB ex-US Eq consists of 97 portfolios), Total Global Equity (InvestorForce Public DB Glbl Eq consists of 22 portfolios), Total Fixed Income (InvestorForce Public DB Total Fix Inc consists of 67 portfolios), Total US Fixed Income (InvestorForce Public DB US Fix Inc consists of 93 portfolios), Total Real Estate (InvestorForce Public DB Real Estate Pub+Priv consists of 54 portfolios) and Total Private Equity(InvestorForce Public DB Private Eq consists of 40 portfolios).



TOTAL FUND PERFORMANCE DETAIL (NET)

											_						
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Fund	5,198,137,872	100.0	100.0	-7.5	64	-4.3	38	-3.5	38	6.7	21	5.1	28	9.5	7	7.7	Apr-94
Policy Index				-8.0	76	<u>-4.7</u>	49	<u>-3.6</u>	41	<u>6.7</u>	21	<u>5.5</u>	12	<u>9.1</u>	20	7.7	Apr-94
Over/Under				0.5		0.4		0.1		0.0		-0.4		0.4		0.0	•
60% MSCI ACWI (Net) / 40% FTSE WGBI				-7.1	55	-5.3	67	-5.8	85	5.2	96	3.0	99	6.5	99		Apr-94
60% S&P 500 / 40% BBgBarc Aggregate				-7.6	64	-3.3	16	-2.3	19	6.5	28	6.2	6	9.4	9	8.0	Apr-94
InvestorForce Public DB > \$1B Net Median				-6.9		-4.7		-4.0		6.0		4.6		8.2		7.0	Apr-94
Total Fund ex Parametric*	5,150,006,230	99.1		-7.7	-	-4.6		-3.8	-	6.6		5.0	-	9.3		7.6	Apr-94
Total Fund ex Private Equity	4,823,338,434	92.8		-8.2	81	-5.1	59	-4.7	73	6.3	37	4.7	47			7.4	Jan-12
Policy Index				<u>-8.0</u>	76	<u>-4.7</u>	49	<u>-3.6</u>	41	<u>6.7</u>	21	<u>5.5</u>	12	<u>9.1</u>	20	<u>8.2</u>	Jan-12
Over/Under				-0.2		-0.4		-1.1		-0.4		-0.8				-0.8	
InvestorForce Public DB > \$1B Net				-6.9		-4.7		-4.0		6.0		4.6		8.2		7.1	Jan-12
Median						_											
Total US Equity	1,540,549,958	29.6	28.0	-14.0	27	-7.7	14	-5.0	23	9.2	8	8.1	7	13.6	6	8.8	Dec-93
Russell 3000				<u>-14.3</u>	38	<u>-8.2</u>	27	<u>-5.2</u>	32	<u>9.0</u>	18	<u>7.9</u>	15	<u>13.2</u>	17	<u>9.1</u>	Dec-93
Over/Under				0.3		0.5		0.2		0.2		0.2		0.4		-0.3	
InvestorForce Public DB US Eq Net Median				-14.5		-9.0		-6.1		8.5		7.1		12.8		8.6	Dec-93
Western U.S. Index Plus	187,644,466	3.6		-14.3	53	-7.4	41	-5.3	47	9.7	19	8.8	19	16.0	4	4.9	May-07
S&P 500				<u>-13.5</u>	41	<u>-6.9</u>	34	<u>-4.4</u>	38	<u>9.3</u>	26	<u>8.5</u>	24	<u>13.1</u>	33	<u>6.6</u>	May-07
Over/Under				-0.8		-0.5		-0.9		0.4		0.3		2.9		-1.7	
eV US Large Cap Equity Net Median				-14.1		-8.2		-5.8		7.8		7.1		12.3		6.4	May-07
Blackrock Russell 1000 Index	1,297,680,697	25.0		-13.8	45	-7.4	41	-4.7	41							4.9	May-17
Russell 1000				<u>-13.8</u>	46	<u>-7.4</u>	41	<u>-4.8</u>	42	<u>9.1</u>	28	<u>8.2</u>	30	<u>13.3</u>	30	<u>4.8</u>	May-17
Over/Under				0.0		0.0		0.1								0.1	
eV US Large Cap Equity Net Median				-14.1		-8.2		-5.8		7.8		7.1		12.3		3.9	May-17
Blackrock Russell 2500 Index	55,224,796	1.1		-18.5	45	-14.6	52	-9.9	47							0.4	May-17
Russell 2500				<u>-18.5</u>	47	<u>-14.7</u>	52	<u>-10.0</u>	47	<u>7.3</u>	44	<u>5.1</u>	37	<u>13.2</u>	39	<u>0.3</u>	May-17
Over/Under				0.0		0.1		0.1								0.1	
eV US Small-Mid Cap Equity Net Median				-18.6		-14.5		-10.5		6.6		4.5		12.7		-0.2	May-17

Color Coding: PERFORMANCE: Green-Over performance, Red-Under performance / Color Coding: RANKS: 1 - 25 Green - Positive Result, 26 - 50 Yellow, 50 - 75 Orange, 76 - 100 Red - Negative Result.

Policy Index: Currently, 28% Russell 3000 Index, 20% Barclays Aggregate, 15% MSCI ACWI ex U.S., 10% MSCI ACWI, 10% Russell 3000 Index + 3%, 10% CPI+4% Index, and 7% NCREIF ODCE Real Estate Index.

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

TOTAL FUND PERFORMANCE DETAIL (NET)

											_						
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Non-US Equity	823,353,475	15.8	15.0	-11.0	20	-10.2	14	-13.0	12	5.5	11	1.5	28	7.1	41	5.9	Mar-94
MSCI ACWI ex USA				<u>-11.5</u>	34	<u>-10.8</u>	24	-14.2	29	<u>4.5</u>	46	<u>0.7</u>	65	<u>6.6</u>	58	<u>4.7</u>	Mar-94
Over/Under				0.5		0.6		1.2		1.0		0.8		0.5		1.2	
MSCI EAFE				-12.5	60	-11.4	40	-13.8	20	2.9	85	0.5	72	6.3	64	4.3	Mar-94
MSCI ACWI ex USA NR LCL				-10.9	19	-9.5	5	-10.6	3	4.2	62	4.1	1	7.8	21		Mar-94
MSCI EAFE NR LCL				-12.2	54	-10.1	13	-11.0	5	2.6	89	3.8	1	7.5	28	4.4	Mar-94
InvestorForce Public DB ex-US Eq Net Median				-12.0		-11.8		-15.1		4.4		1.0		6.8		5.0	Mar-94
BlackRock ACWI ex-U.S. Index	418,477,871	8.1		-11.9	22	-11.5	28	-14.6	43	4.6	41	1.0	51	7.1	60	1.7	Mar-07
MSCI ACWI ex USA IMI				<u>-11.9</u>	22	<u>-11.5</u>	28	<u>-14.8</u>	45	<u>4.4</u>	44	<u>0.8</u>	54	<u>7.0</u>	63	<u>1.4</u>	Mar-07
Over/Under				0.0		0.0		0.2		0.2		0.2		0.1		0.3	
MSCI ACWI ex USA NR LCL				-10.9	15	-9.5	9	-10.6	10	4.2	45	4.1	11	7.8	55	2.4	Mar-07
eV ACWI ex-US All Cap Equity Net Median				-13.8		-13.2		-15.2		3.7		1.3		8.0		1.9	Mar-07
Sprucegrove	204,625,925	3.9		-11.1	18	-10.4	15	-13.8	35	7.1	13	1.6	49	7.9	52	6.7	Mar-02
MSCI ACWI ex USA				<u>-11.5</u>	18	-10.8	23	<u>-14.2</u>	41	<u>4.5</u>	44	0.7	56	<u>6.6</u>	68	<u>5.7</u>	Mar-02
Over/Under				0.4		0.4		0.4		2.6		0.9		1.3		1.0	
MSCI EAFE				-12.5	31	-11.4	26	-13.8	35	2.9	61	0.5	60	6.3	76	5.2	Mar-02
MSCI ACWI ex USA NR LCL				-10.9	15	-9.5	9	-10.6	10	4.2	45	4.1	11	7.8	55	4.6	Mar-02
MSCI EAFE NR LCL				-12.2	27	-10.1	14	-11.0	11	2.6	64	3.8	12	7.5	57	3.8	Mar-02
eV ACWI ex-US All Cap Equity Net Median				-13.8		-13.2		-15.2		3.7		1.3		8.0		6.2	Mar-02
Hexavest	84,046,977	1.6		-8.4	2	-7.6	5	-11.3	22	2.7	51	0.4	67	_		2.9	Dec-10
MSCI EAFE				<u>-12.5</u>	31	-11.4	33	<u>-13.8</u>	47	<u>2.9</u>	49	<u>0.5</u>	65	<u>6.3</u>	62	<u>3.3</u>	Dec-10
Over/Under				4.1		3.8		2.5		-0.2		-0.1				-0.4	
MSCI EAFE NR LCL				-12.2	31	-10.1	20	-11.0	20	2.6	52	3.8	5	7.5	40	5.9	Dec-10
eV EAFE All Cap Equity Net Median				-14.1		-13.3		-14.6		2.8		1.1		6.8		4.1	Dec-10
Walter Scott	116,202,702	2.2		-9.6	5	-6.7	2	-7.1	1	7.3	11	3.5	13			4.8	Dec-10
MSCI ACWI ex USA				<u>-11.5</u>	18	-10.8	23	-14.2	41	<u>4.5</u>	44	0.7	56	6.6	68	<u>2.3</u>	Dec-10
Over/Under				1.9		4.1		7.1		2.8		2.8				2.5	
MSCI ACWI ex USA NR LCL				-10.9	15	-9.5	9	-10.6	10	4.2	45	4.1	11	7.8	55	5.2	Dec-10
MSCI EAFE				-12.5	31	-11.4	26	-13.8	35	2.9	61	0.5	60	6.3	76	3.3	Dec-10
eV ACWI ex-US All Cap Equity Net Median				-13.8		-13.2		-15.2		3.7		1.3		8.0		3.7	Dec-10



TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Global Equity	545,347,212	10.5	10.0	-12.7	79	-8.9	65	-9.0	64	7.3	4	3.9	67	7.8	17	5.2	May-05
MSCI ACWI Over/Under				<u>-12.8</u> 0.1	86	<u>-9.0</u> 0.1	71	<u>-9.4</u> 0.4	69	<u>6.6</u> 0.7	50	<u>4.3</u> -0.4	62	<u>9.5</u> -1.7	7	<u>6.0</u> -0.8	May-05
InvestorForce Public DB Glbl Eq Net Median				-11.7		-7.9		-7.9		6.6		4.6		6.5	_	5.0	May-05
BlackRock MSCI ACWI Equity Index	545,347,212	10.5		-12.7	43	-8.9	38	- 9.0	48	7.1	28	4.7	44			8.4	Aug-12
MSCI ACWI Over/Under				<u>-12.8</u> 0.1	44	<u>-9.0</u> 0.1	40	<u>-9.4</u> 0.4	50	<u>6.6</u> 0.5	34	<u>4.3</u> 0.4	52	<u>9.5</u>	54	<u>8.0</u> 0.4	Aug-12
eV All Global Equity Net Median				-13.5		-10.2		-9.4		5.8		4.3		9.7		8.2	Aug-12



TOTAL FUND PERFORMANCE DETAIL (NET)

											_						
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Private Equity	374,799,439	7.2	10.0	3.1	54	8.3	41	18.4	37	14.2	42	15.2	34	-		14.9	Jan-12
Russell 3000 + 3% Over/Under				<u>-13.6</u> 16.7	99	<u>-6.8</u> 15.1	99	<u>-2.4</u> 20.8	99	<u>12.2</u> 2.0	66	<u>11.1</u> 4.1	66	<u>16.5</u>	1	<u>15.8</u> -0.9	Jan-12
Cambridge Associates Global All PE (Qtr Lag)				3.4	50	8.1	49	16.6	52	13.6	49	12.8	53	11.1	45	13.2	Jan-12
InvestorForce Public DB Private Eq Net Median				3.4		7.8		17.0		13.5		13.4		10.8		13.7	Jan-12
Adams Street Global Fund Series	173,586,029	3.3		4.4		9.4		19.6		13.2		13.9		-		13.7	Jan-12
Russell 3000 + 3% Over/Under				<u>-13.6</u> 18.0		<u>-6.8</u> 16.2		<u>-2.4</u> 22.0		<u>12.2</u> 1.0		<u>11.1</u> 2.8		<u>16.5</u>		<u>15.8</u> -2.1	Jan-12
- : - : · · · · · · · · · · · · · · · ·	04 474 005	1.6		2.7		10.2		22.7		17.2		19.7				19.9	A 12
Harbourvest Russell 3000 + 3%	84,171,685	1.0											-	 40 F			Aug-13
Over/Under				<u>-13.6</u> 16.3		<u>-6.8</u> 16.9		<u>-2.4</u> 25.1		<u>12.2</u> 5.0		<u>11.1</u> 8.6		<u>16.5</u>	-	<u>12.6</u> 7.3	Aug-13
Pantheon Global Secondary Funds	39,845,681	0.8		2.9		8.7		17.3		18.9		15.8				13.4	Jan-12
Russell 3000 + 3% Over/Under				<u>-13.6</u> 16.5		<u>-6.8</u> 15.5		<u>-2.4</u> 19.7		<u>12.2</u> 6.7		<u>11.1</u> 4.7		<u>16.5</u>		<u>15.8</u> -2.4	Jan-12
Drive Capital Fund	5.811.980	0.1		-1.5		1.6		-2.5		-						-28.5	Sep-16
Russell 3000 + 3% Over/Under	, ,			<u>-13.6</u> 12.1		<u>-6.8</u> 8.4		<u>-2.4</u> -0.1	-	<u>12.2</u>		<u>11.1</u>		<u>16.5</u>	-	<u>11.3</u> -39.8	Sep-16
Abbott Secondary Opportunities	12,219,909	0.2		3.9		26.0		26.0								26.0	Jan-18
Russell 3000 + 3% Over/Under				<u>-13.6</u> 17.5		<u>-6.8</u> 32.8		<u>-2.4</u> 28.4		<u>12.2</u>		<u>11.1</u>		<u>16.5</u>		<u>-2.4</u> 28.4	Jan-18
CVI Credit Value Fund	10,718,254	0.2		1.0		2.3		4.6								4.6	Jan-18
Russell 3000 + 3% Over/Under				<u>-13.6</u> 14.6		<u>-6.8</u> 9.1		<u>-2.4</u> 7.0		<u>12.2</u>		<u>11.1</u>		<u>16.5</u>		<u>-2.4</u> 7.0	Jan-18
Clearlake Capital Partners V	4,658,973	0.1		17.6		32.9	_			-			_			29.7	Mar-18
Russell 3000 + 3% Over/Under				<u>-13.6</u> 31.2		<u>-6.8</u> 39.7		<u>-2.4</u>	-	<u>12.2</u>		<u>11.1</u>		<u>16.5</u>	-	<u>-4.2</u> 33.9	Mar-18

Private equity performance shown above is calculated using a time-weighted return methodology. Market values shown are cash-adjusted based on the current period's cash flows.

Adams Street Global Fund Series includes Adams Street 2010 U.S. Fund, 2010 Non-U.S. Developed Markets Fund, 2010 Non-U.S. Emerging Markets Fund, 2010 Direct Fund, 2013, and 2016 Global Fund.

Pantheon Global Secondary Funds includes Pantheon Global Secondary Fund IV and Global Secondary Fund V.

TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Battery Ventures XII	3,157,998	0.1		-2.2		-8.0										-8.0	Apr-18
Russell 3000 + 3%				<u>-13.6</u>		<u>-6.8</u>		<u>-2.4</u>		<u>12.2</u>		<u>11.1</u>		<u>16.5</u>		<u>-2.5</u>	Apr-18
Over/Under				11.4		-1.2										-5.5	
Insight Venture Partners X	10,035,627	0.2		0.6		-5.7							-			-5.7	May-18
Russell 3000 + 3%				<u>-13.6</u>		<u>-6.8</u>		<u>-2.4</u>		<u>12.2</u>		<u>11.1</u>		<u>16.5</u>		<u>-3.1</u>	May-18
Over/Under				14.2		1.1										-2.6	
GTCR Fund XII	3,569,355	0.1		-5.7		-42.2								-		-42.2	Jun-18
Russell 3000 + 3%				<u>-13.6</u>		<u>-6.8</u>		<u>-2.4</u>		<u>12.2</u>		<u>11.1</u>		<u>16.5</u>		<u>-6.0</u>	Jun-18
Over/Under				7.9		-35.4										-36.2	
Buenaventure One, LLC	17,820,574	0.3		-0.8		-0.8										-0.8	Jul-18
Russell 3000 + 3%				<u>-13.6</u>		<u>-6.8</u>		<u>-2.4</u>		<u>12.2</u>		<u>11.1</u>		<u>16.5</u>		<u>-6.8</u>	Jul-18
Over/Under				12.8		6.0										6.0	
ECI 11	1,241,760	0.0		-												-2.6	Dec-18
Russell 3000 + 3%				<u>-13.6</u>		<u>-6.8</u>		<u>-2.4</u>		<u>12.2</u>		<u>11.1</u>		<u>16.5</u>		<u>-9.1</u>	Dec-18
Over/Under																6.5	
Buenaventure Two, LLC	55,928	0.0		-									-			0.0	Dec-18
Russell 3000 + 3%				<u>-13.6</u>		<u>-6.8</u>		<u>-2.4</u>		<u>12.2</u>		<u>11.1</u>		<u>16.5</u>		<u>-9.1</u>	Dec-18
Over/Under																9.1	
Monroe Capital Private Credit Fund III	6,001,831	0.1		-									-			0.0	Dec-18
Russell 3000 + 3%				<u>-13.6</u>		<u>-6.8</u>		<u>-2.4</u>		<u>12.2</u>		<u>11.1</u>		<u>16.5</u>		<u>-9.1</u>	Dec-18
Over/Under																9.1	
The Resolute Fund IV L.P	1,903,855	0.0		-													Jan-19
Russell 3000 + 3%				<u>-13.6</u>		<u>-6.8</u>		<u>-2.4</u>		<u>12.2</u>		<u>11.1</u>		<u>16.5</u>			Jan-19
Over/Under																	



VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE EQUITY LIMITED PARTNERSHIP PERFORMANCE

													Since Incept	
Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date ¹	Outstanding Commitment 1	Call Ratio	Add'l Fees ²	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Abbott Secondary Opportunities, LP.	2017	12/21/2017	\$25,000,000	\$13,348,706	\$12,014,011	53%	_	\$2,625,000	\$12,219,907	\$14,844,907	\$1,496,201	23.4%	0.2x	1.11x
ABRY Partners IX	2019	12/6/2018	\$7,600,000	-	\$7,600,000	0%		-						
Adams Street 2010 U.S. Fund	2010	5/21/2010	\$42,500,000	\$37,442,500	\$5,057,500	88%	\$15,213	\$25,869,869	\$36,820,450	\$62,690,319	\$25,232,606	14.1%	0.69x	1.67x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	\$25,500,000	\$22,325,249	\$3,174,751	88%	\$1,589	\$15,702,344	\$17,545,522	\$33,247,866	\$10,921,028	11.5%	0.7x	1.49x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	\$8,500,000	\$7,633,000	\$867,000	90%	\$0	\$2,030,308	\$9,914,136	\$11,944,444	\$4,311,444	11.2%	0.27x	1.56x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$8,046,100	\$453,900	95%	\$6,697	\$9,077,781	\$5,547,673	\$14,625,454	\$6,572,657	13.7%	1.13x	1.82x
Adams Street 2013 Global Fund	2013	6/27/2013	\$75,000,000	\$56,625,000	\$18,375,000	76%	\$10,728	\$8,075,792	\$70,923,287	\$78,999,079	\$22,363,351	11.7%	0.14x	1.4x
Adams Street 2016 Global Fund	2016	12/22/2016	\$60,000,000	\$28,200,000	\$31,800,000	47%	\$0	\$3,621,043	\$28,506,158	\$32,127,201	\$3,927,201	19.8%	0.13x	1.14x
Adams Street Co-Investment Fund IV A	2018	9/24/2018	\$30,000,000	\$4,567,808	\$25,500,000	15%	\$67,808		\$4,500,000	\$4,500,000	-\$67,808	-6.0%		0.99x
Astong VII	2019	12/17/2018	\$8,807,183		\$8,807,183	0%		-				-		-
Battery Ventures XII	2018	2/1/2018	\$9,050,000	\$2,045,300	\$7,004,700	23%	\$0	\$0	\$1,916,991	\$1,916,991	-\$128,309	-16.3%	0x	0.94x
Battery Ventures XI Side Fund	2018	2/1/2018	\$5,050,000	\$1,267,550	\$3,782,450	25%	\$0	\$0	\$1,241,008	\$1,241,008	-\$26,542	-6.7%	0x	0.98x
Buenaventure One, LLC	2018	1/5/2018	\$57,172,500	\$18,355,590	\$38,816,910	32%		\$403,156	\$17,820,572	\$18,223,728		-2.6%		0.99x
CapVest Equity Partners IV	2018	7/11/2018	\$12,610,285		\$12,610,285	0%								-
Clearlake Capital Partners V	2017	12/22/2017	\$9,950,000	\$3,976,011	\$5,974,799	40%	\$46,158	\$38,823	\$4,619,260	\$4,658,083	\$635,914	44.1%	0.01x	1.17x
CVI Credit Value Fund IV	2017	12/31/2017	\$30,000,000	\$10,500,000	\$19,500,000	35%		\$6,147	\$10,728,311	\$10,734,458	\$234,458	4.7%	0x	1.02x
Drive Capital Fund II	2016	9/1/2016	\$15,000,000	\$6,355,302	\$8,647,908	42%	\$3,210	\$0	\$5,811,980	\$5,811,980	-\$546,532	-7.9%	0x	0.91x
ECI 11	2018	7/5/2018	\$9,532,886	\$1,252,530	\$8,280,356	0%			\$955,863	\$955,863	-	-99.3%		0.76x
GGV Capital VII	2018	8/15/2018	\$10,160,000	_	\$10,160,000	0%	_	_		-	_			_
GGV Capital VII Plus	2018	8/15/2018	\$2,540,000		\$2,540,000	0%	_	_			_			
GGV Discovery II	2018	8/15/2018	\$2,100,000		\$2,100,000	0%	_	_			_			
GTCR Fund XII	2017	9/29/2017	\$30,000,000	\$4,548,000	\$25,547,792	15%		\$264,502	\$2,754,397	\$3,018,899	-\$1,529,101	-76.6%	0.06x	0.66x
Insight Venture Partners X	2017	10/13/2017	\$25,000,000	\$10,250,000	\$14,750,000	41%		\$8,561	\$10,035,624	\$10,044,185	-\$205,815	-5.4%	0x	0.98x
HarbourVest - Dover Street VIII	2013	5/30/2013	\$67,500,000	\$60,834,954	\$6,750,000	90%	\$84,954	\$66,622,008	\$26,906,179	\$93,528,187	\$32,608,279	21.5%	1.1x	1.54x
HarbourVest - Dover Street IX	2016	12/16/2016	\$60,000,000	\$31,800,000	\$28,200,000	53%	\$0	\$7,282,016	\$31,808,721	\$39,090,737	\$7,290,737	33.8%	0.23x	1.23x
HarbourVest - PRTNS CO INVEST IV L.P.	2017	6/2/2017	\$30,000,000	\$22,428,591	\$7,768,149	75%	\$0	\$1,736,653	\$24,908,366	\$26,645,019	\$4,216,428	15.7%	0.08x	1.19x
HarbourVest - PRTNS CO INVEST V L.P.	2018	7/31/2018	\$35,000,000	_	\$35,000,000	0%	_	_	_					
Hellman & Friedman Capital Partners IX	2018	9/28/2018	\$19,800,000		\$19,800,000	0%	_	_			_			
M/C Partners VIII	2018	4/2/2018	\$10,000,000		\$10,000,000	0%	_	_		-	_			
Monroe Capital Private Credit Fund III	2018	9/5/2018	\$25,000,000	\$6,250,000	\$18,750,000	0%		\$248,169	\$6,001,831	\$6,250,000		0.0%		1x
Pantheon Global Secondary Fund IV	2010	8/20/2010	\$15,000,000	\$9,960,000	\$5,040,000	66%	\$0	\$12,450,001	\$3,342,817	\$15,792,818	\$5,832,818	14.1%	1.25x	1.59x
Pantheon Global Secondary Fund V	2015	2/26/2015	\$50,000,000	\$33,566,509	\$16,433,491	67%	(\$162,514)	\$9,600,205	\$36,490,269	\$46,090,474	\$12,686,479	20.2%	0.29x	1.37x
The Resolute Fund IV	2018	5/2/2018	\$20,000,000	\$1,903,855	\$18,096,145	0%			\$2,047,844	\$2,047,844		203.1%	-	1.08x
Riverside Micro-Cap Fund V	2018	8/21/2018	\$10,000,000	-	\$10,000,000	0%	-	-			-	-	-	-
Total VCERA Private Equity Program	-	5/21/2010	\$851,872,854	\$403,482,555	\$449,202,330	47%	\$73,843	\$165,662,378	\$373,367,166	\$539,029,544	\$135,825,494	14.8%	0.41x	1.34x

^{1.} Includes recycled/recallable distributions received to date.

Performance shown is based on 12/31/2018 statement of investments produced by Abbott Capital.



^{2.} Add'l Fees represents notional interest paid/(received).

^{2.} Add'l Fees for Pantheon Global Secondary Fund V includes notional interest paid/(received) and management fee rebates paid to VCERA.

Note: Private equity performance data is reported net of fees.

TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total US Fixed Income	1,012,479,844	19.5	20.0	1.3	32	1.4	38	0.0	43	3.1	48	2.5	44	6.3	23	5.7	Feb-94
BBgBarc US Aggregate TR				<u>1.6</u>	17	<u>1.7</u>	20	0.0	43	<u>2.1</u>	67	<u>2.5</u>	43	<u>3.5</u>	88	<u>5.1</u>	Feb-94
Over/Under				-0.3		-0.3		0.0		1.0		0.0		2.8		0.6	
InvestorForce Public DB Total Fix Inc Net				0.4		0.8		-0.2		2.8		2.4		4.5		5.2	Feb-94
Median				-				-		-				-			
BlackRock U.S. Debt Fund	274,110,828	5.3		1.6	12	1.7	13	0.0		2.1	57	2.6	48	3.6	61	5.0	Nov-95
BBgBarc US Aggregate TR				<u>1.6</u>	11	<u>1.7</u>	14	0.0		<u>2.1</u>	58	<u>2.5</u>	51	<u>3.5</u>	63	<u>4.9</u>	Nov-95
Over/Under				0.0		0.0		0.0		0.0		0.1		0.1		0.1	
eV All US Fixed Inc Net Median	007.004.000			0.6	4 -	1.0	0.4	0.3		2.3	07	2.5	00	4.2	00	4.8	Nov-95
Western	297,084,068	5.7		1.5	15 11	1.5	21 14	-0.6		3.1	37 58	3.5	23 51	6.2	30 63	5.9	Dec-96 Dec-96
BBgBarc US Aggregate TR Over/Under				<u>1.6</u> -0.1	11	<u>1.7</u> -0.2	14	<u>0.0</u> -0.6		<u>2.1</u> 1.0	58	<u>2.5</u> 1.0	51	3.5 2.7	03	<u>5.0</u> 0.9	Dec-96
eV All US Fixed Inc Net Median				0.6		-0.2 1.0		0.3		2.3		2.5		4.2		0.9 4.9	Dec-96
Reams	311.909.321	6.0		1.5	17	1.3	35	0.3	42	3.0	38	1.1	88	6.6	27	5.1	Sep-01
Reams Custom Index	311,303,021	0.0		0.7	49	1.3	36	2.4		1.5	80	1.0	91	2.9	75	<u>3.8</u>	Sep-01
Over/Under				0.8	40	0.0	00	-1.7	O	1.5	00	0.1	01	3.7	70	1.3	00p 01
BBqBarc US Aggregate TR				1.6	11	1.7	14	0.0	55	2.1	58	2.5	51	3.5	63	4.2	Sep-01
3-Month LIBOR + 3%				1.4	18	2.8	1	5.4		4.5	19	4.0	16	3.7	57	4.8	Sep-01
eV All US Fixed Inc Net Median				0.6		1.0		0.3		2.3		2.5		4.2		4.2	Sep-01
Loomis Strategic Alpha	46,548,032	0.9		-1.1	77	-0.4	77	0.6	44	3.3	35	2.2	61			2.3	Jul-13
BBgBarc US Aggregate TR				<u>1.6</u>	11	<u>1.7</u>	14	<u>0.0</u>	55	<u>2.1</u>	58	<u>2.5</u>	51	<u>3.5</u>	63	<u>2.4</u>	Jul-13
Over/Under				-2.7		-2.1		0.6		1.2		-0.3				-0.1	
3-Month LIBOR + 3%				1.4	18	2.8	1	5.4	1	4.5	19	4.0	16	3.7	57	4.0	Jul-13
eV All US Fixed Inc Net Median				0.6		1.0		0.3		2.3		2.5		4.2		2.5	Jul-13
Loomis Sayles Multi Strategy	82,827,595	1.6		-0.1	67	1.0	53	-0.8		5.2	14	3.9	17	8.9	12	6.0	Jul-05
Loomis Custom Index				<u>-0.3</u>	70	<u>0.4</u>	68	<u>-0.6</u>		<u>3.6</u>	32	<u>2.8</u>	41	<u>5.6</u>	35	<u>4.7</u>	Jul-05
Over/Under				0.2		0.6	0.4	-0.2		1.6		1.1		3.3		1.3	
BBgBarc US Govt/Credit TR				1.5	17	1.5	21	-0.4		2.2	54	2.5	51	3.5	63	3.9	Jul-05
eV All US Fixed Inc Net Median				0.6		1.0		0.3		2.3		2.5		4.2		3.9	Jul-05

Reams Custom Index: Merrill Lynch 3 Month Libor Constant Maturity Index, prior to February 2013 the Barclays Aggregate

Loomis Custom Index: 65% Barclays Aggregate, 30% Citigroup High Yield Market Index and 5% JPM Non-US Hedged Bond Index

As of January 2016, Loomis Strategic Alpha was moved from the Total Global Fixed Income composite to the Total US Fixed Income composite.



TOTAL FUND PERFORMANCE DETAIL (NET)

											_		_				
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Real Estate	433,137,514	8.3	7.0	1.6	27	3.2	46	6.9	55	6.6	82	8.8	84	5.3	67	7.8	Mar-94
NCREIF ODCE Net				<u>1.5</u>	28	<u>3.4</u>	41	<u>7.4</u>	50	<u>7.3</u>	67	<u>9.4</u>	67	<u>6.0</u>	50	<u>8.1</u>	Mar-94
Over/Under				0.1		-0.2		-0.5		-0.7		-0.6		-0.7		-0.3	
InvestorForce Public DB Real Estate Pub+Priv Net Median				1.2		2.9		7.3		7.6		9.8		5.9		8.9	Mar-94
Prudential Real Estate	156,400,478	3.0		1.7		4.0		8.2		7.8		10.0		6.1		6.3	Jun-04
NCREIF ODCE Net				<u>1.5</u>		3.4		7.4		7.3		9.4		6.0		<u>7.1</u>	Jun-04
Over/Under				0.2		0.6		0.8		0.5		0.6		0.1		-0.8	
NCREIF ODCE				1.8		3.9		8.3		8.2		10.4		7.0		8.1	Jun-04
UBS Real Estate	276,737,035	5.3		1.5		2.8		6.2		5.9		8.0		5.8		7.3	Mar-03
NCREIF ODCE Net				<u>1.5</u>		<u>3.4</u>		<u>7.4</u>		<u>7.3</u>		<u>9.4</u>		<u>6.0</u>		<u>7.3</u>	Mar-03
Over/Under				0.0		-0.6		-1.2		-1.4		-1.4		-0.2		0.0	
NCREIF ODCE				1.8		3.9		8.3		8.2		10.4		7.0		8.3	Mar-03

Total Real Estate Benchmark: NCREIF ODCE; prior to January 2006, the NCREIF Property Index



TOTAL FUND PERFORMANCE DETAIL (NET)

											_		_				
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Real Assets	402,539,646	7.7	10.0	-7.9		-7.3		-7.3		3.5		1.1	-	-		2.8	Apr-13
CPI + 4% (Unadjusted)				<u>0.5</u>		<u>1.7</u>		<u>6.0</u>		<u>6.1</u>		<u>5.6</u>				<u>6.1</u>	Apr-13
Over/Under				-8.4		-9.0		-13.3		-2.6		-4.5				-3.3	
Bridgewater All Weather Fund	298,783,262	5.7		-4.5		-4.8		-5.0		5.3		3.2				3.7	Aug-13
CPI + 5% (Unadjusted)				<u>0.7</u>		<u>2.2</u>		<u>7.0</u>		<u>7.1</u>		<u>6.6</u>				<u>6.4</u>	Aug-13
Over/Under				-5.2		-7.0		-12.0		-1.8		-3.4				-2.7	
Tortoise Energy Infrastructure	103,756,384	2.0		-16.3		-14.0		-13.3		-1.0		-4.0				-1.5	Apr-13
Tortoise MLP Index				<u>-16.7</u>		<u>-12.4</u>		<u>-13.7</u>		<u>-0.5</u>		<u>-6.9</u>				<u>-5.0</u>	Apr-13
Over/Under				0.4		-1.6		0.4		-0.5		2.9				3.5	
Overlay	65,930,785	1.3	0.0														
Parametric	48,131,642	0.9															
Abbott Capital Cash	17,799,143	0.3															

Overlay performance is not applicable on an individual account level.

Color Coding: PERFORMANCE: Green-Over performance, Red-Under performance Color Coding: RANKS: 1 - 25 Green - Positive Result, 26 - 50 Yellow, 50 - 75 Orange, 76 - 100 Red - Negative Result



MANAGER DUE DILIGENCE

NEPC, LLC —

DUE DILIGENCE MONITOR

The items below summarize the recent quarter's performance and any changes or announcements from the Plan's managers/products. A "-" indicates there were no material announcements. A "Yes" indicates there was an announcement and a brief summary is provided on the following pages. NEPC's Due Diligence Committee meets every two weeks to review events as they relate to investment managers and determine if any action should be taken (by NEPC and/or by our clients). Events are rated: No Action, Watch, Hold, Client Review or Terminate. NEPC's recommendation in view of the recent quarter's developments (performance, manager events, and any of the longer-term trending data) is refreshed quarterly.

Investment Options	Performance (Recent Quarter)	Changes/ Announcements (Recent Quarter)	NEPC DD Committee Rec.	Plan Rec.	Comments	Last Onsite Conducted
BlackRock Russell 1000 Index	-	-	-	-		10/2013
Western U.S. Index Plus	-	-	-	-		6/2014
BlackRock Russell 2500 Index	-	-	-	-		10/2013
BlackRock MSCI ACWI ex-U.S. Index	Top Quartile	-	-	-		10/2013
Sprucegrove	Top Quartile	-	-	-		N/A
Hexavest	Top Quartile	-	-	Watch (Board Driven)	On Watch for Performance Issues	1/2013
Walter Scott	Top Quartile	-	-	-		10/2012
BlackRock MSCI ACWI Index	-	-	-	-		10/2013
Adams Street	N/A	-	-	-		11/2013
HarbourVest	N/A	-	-	-		3/2014
Pantheon	N/A	-	-	-		1/2015
Drive	N/A	-	-	-		
Abbott Secondary Opps.	N/A	-	-	-		
Carval Credit Value	N/A	-	-	-		
Battery Ventures	N/A	-	-	-		
Buenaventure	N/A	-	-	-		
Clearlake Capital	N/A	-	-	-		
Insight Venture Partners	N/A	-	-	-		10/2013
ECI	N/A	-	-	-		6/2014
Monroe	N/A	-	-	-		11/2013



DUE DILIGENCE MONITOR

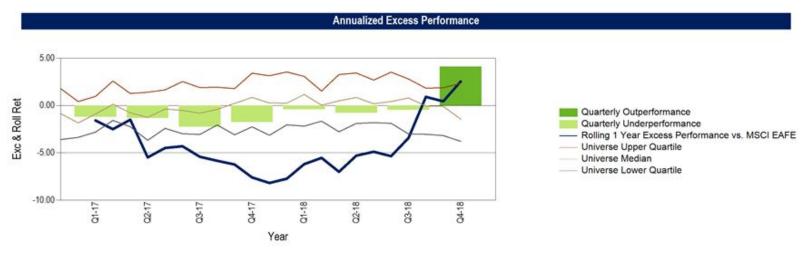
	Performance (Recent Quarter)	Changes/ Announcements (Recent Quarter)	NEPC DD Committee Rec.	Plan Rec.	Comments	Last Onsite Conducted
Resolute Fund	N/A					
BlackRock U.S. Debt Fund	Top Quartile	-	-	-		10/2013
Western	Top Quartile	-	-	-		6/2014
Reams	Top Quartile	-	-	-		11/2013
Loomis Sayles Strategic Alpha	Bottom Quartile	-	-	-		11/2013
Loomis Sayles Multi-Sector Full Discretion	-	-	-	-		11/2013
Prudential	N/A	-	-	-		7/2014
RREEF	N/A	-	-	-		7/2013
UBS	N/A	-	-	-		8/2011
Bridgewater	N/A	-	-	 -		9/2012
Tortoise	N/A	-	-	-		8/2013
Parametric/Clifton	N/A	Yes	No Action	i - - 	Announced one departure and organizational changes	7/2013

NEPC Due Diligence Committee Recommendation Key					
No Action	Informational items have surfaced; no action is recommended.				
Watch	Issues have surfaced to be concerned over; manager can participate in future searches, but current and prospective clients must be made aware of the issues.				
Hold	Serious issues have surfaced to be concerned over; manager cannot participate in future searches unless a client specifically requests, but current and prospective clients must be made aware of the issues.				
Client Review	Very serious issues have surfaced with an Investment Manager; manager cannot participate in future searches unless a client specifically requests. Current clients must be advised to review the manager.				
Terminate	We have lost all confidence in the product; manager would not be recommended for searches and clients would be discouraged from using. The manager cannot participate in future searches unless a client specifically requests. Current clients must be advised to replace the manager.				



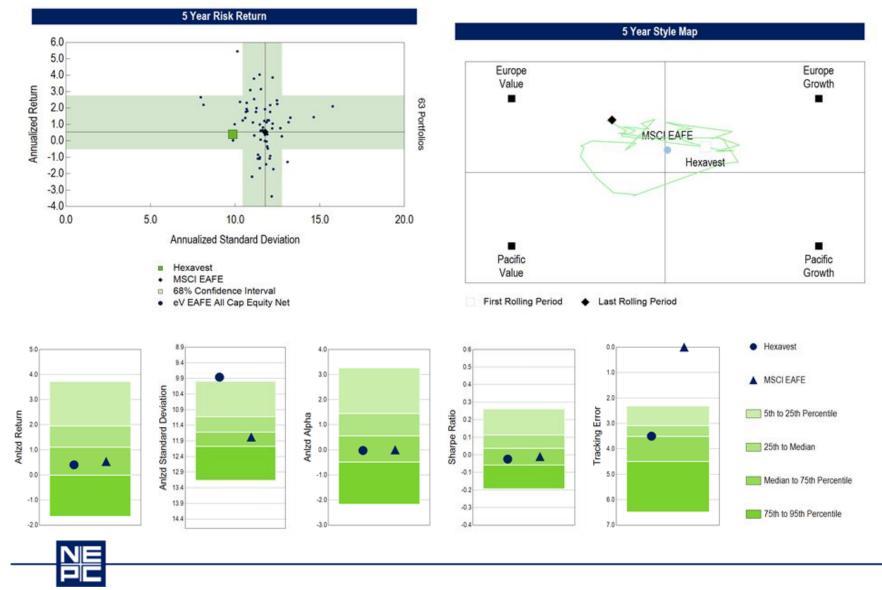
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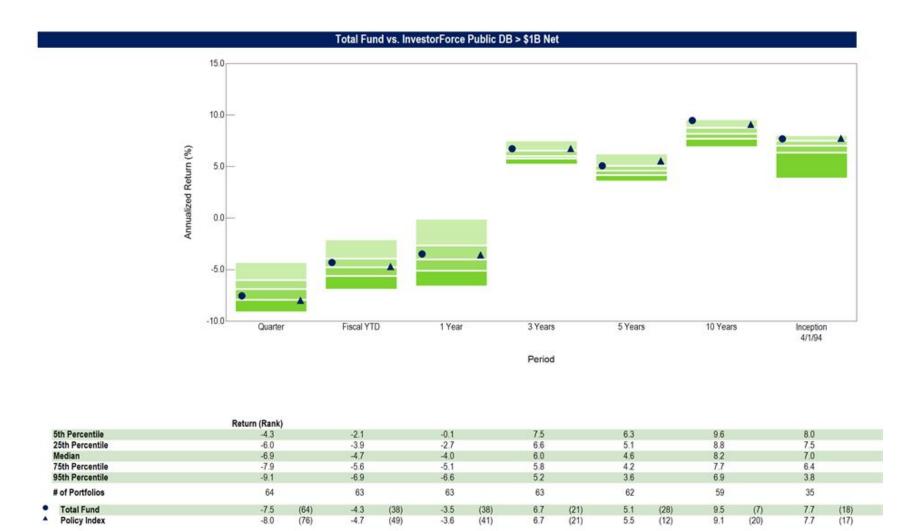




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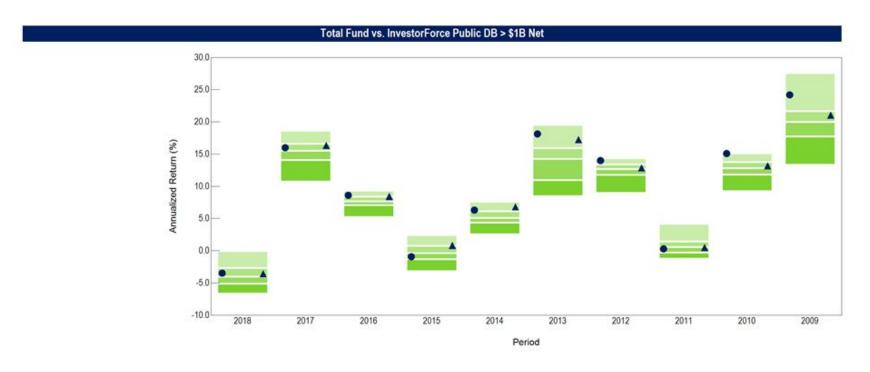


TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE





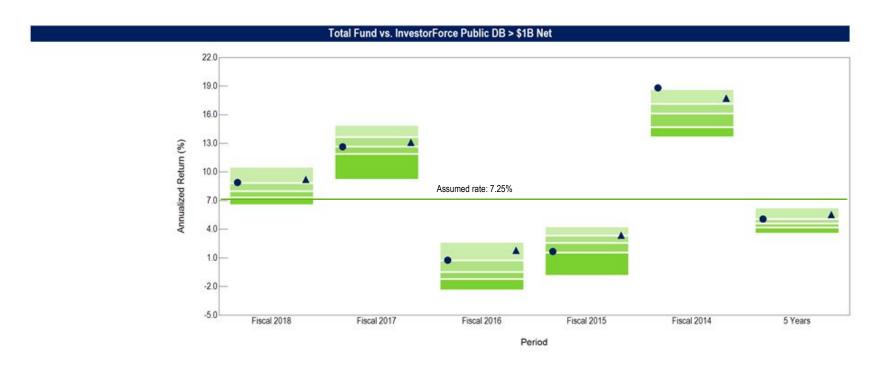
TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE



	Return (Ra	ink)																
5th Percentile	-0.1	18.6	9	3	2.4		7.6		19.5		14.3		4.2		15.1		27.5	
25th Percentile	-2.7	16.6	8	4	0.8		6.1		16.0		13.4		1.5		13.8		21.7	
Median	-4.0	15.6	7	7	-0.4		5.1		14.3		12.7		0.6		12.8		20.0	
75th Percentile	-5.1	14.1	7	1	-1.3		4.4		11.0		11.8		-0.3		11.8		17.7	
95th Percentile	-6.6	10.7	5	.3	-3.2		2.6		8.5		9.0		-1.2		9.3		13.4	
# of Portfolios	63	61		2	57		55		48		44		42		41		40	
Total Fund	-3.5	(38) 16.0	(37) 8	6 (15	-0.9	(65)	6.3	(20)	18.1	(10)	14.0	(15)	0.3	(61)	15.1	(6)	24.2	(16)
Policy Index	-3.6	(41) 16.3	(29) 8	4 (25	0.8	(25)	6.8	(12)	17.2	(14)	12.9	(41)	0.5	(55)	13.2	(44)	21.0	(33)



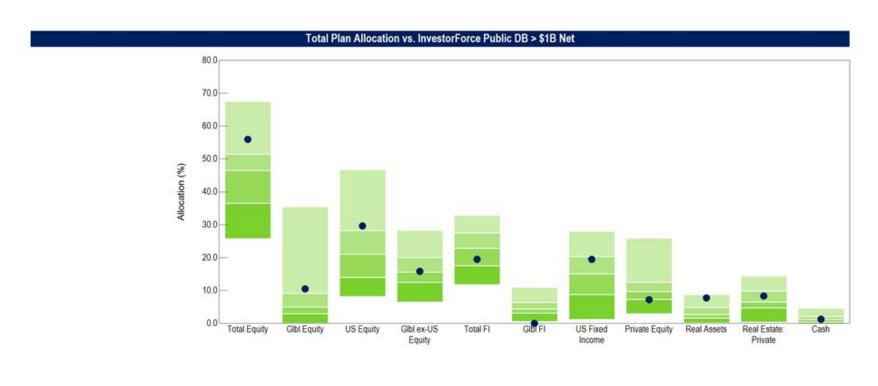
TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE



	Return (Rank)											
5th Percentile	10.5		14.9		2.7		4.3		18.7		6.3	
25th Percentile	8.8		13.7		0.8		3.3		17.2		5.1	
Median	8.0		12.7		-0.5		2.6		16.1		4.6	
75th Percentile	7.3		11.9		-1.2		1.6		14.7		4.2	
95th Percentile	6.5		9.2		-2.4		-0.9		13.6		3.6	
# of Portfolios	51		65		55		53		43		62	
Total Fund	8.9	(23)	12.6	(53)	0.8	(26)	1.7	(71)	18.8	(4)	5.1	(28)
Policy Index	9.2	(13)	13.1	(37)	1.8	(9)	3.4	(25)	17.7	(19)	5.5	(12)



TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE



	Allocatio	n (Rank)																			
5th Percentile	67.5	35.5	46	.8	28.3		32.9		11.0		28.1		25.9		8.8		14.4		4.7		100
25th Percentile	51.5	9.2	28	.3	20.1		27.6		6.5		20.4		12.6		4.9		9.9		2.2		
Median	46.5	5.1	21	2	15.7		22.9		4.5		15.1		9.7		2.8		6.6		1.3		-
75th Percentile	36.6	3.0	14	.1	12.6		17.6		3.2		8.9		7.3		1.7		4.8		0.5		-
95th Percentile	25.9	0.1	8	2	6.5		11.9		0.6		1.2		3.0		0.2		0.4		0.1		-
# of Portfolios	50	20		13	49		50		23		43		46		23		42		50		
Total Fund	56.0	(17) 10.5	(21) 29	.6 (20)	15.8	(48)	19.5	(68)	0.0	(99)	19.5	(31)	7.2	(76)	7.7	(9)	8.3	(35)	1.3	(48)	-



	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)	2008 (%)
Total Fund	-3.5	16.0	8.6	-0.9	6.3	18.1	14.0	0.3	15.1	24.2	-30.9
Policy Index	<u>-3.6</u>	<u>16.3</u>	<u>8.4</u>	<u>0.8</u>	<u>6.8</u>	<u>17.2</u>	<u>12.9</u>	<u>0.5</u>	<u>13.2</u>	<u>21.0</u>	<u>-27.1</u>
Over/Under	0.1	-0.3	0.2	-1.7	-0.5	0.9	1.1	-0.2	1.9	3.2	-3.8
60% MSCI ACWI (Net) / 40% FTSE WGBI	-5.8	17.1	5.5	-2.6	2.3	11.4	10.3	-1.8	10.0	21.3	-24.1
60% S&P 500 / 40% BBgBarc Aggregate	-2.3	14.2	8.3	1.3	10.6	17.6	11.3	4.7	12.1	18.4	-22.1
Total Fund ex Parametric*	-3.8	15.9	8.6	-0.9	6.3	17.8	13.7	0.6	14.5	23.3	-30.3
Total Fund ex Private Equity	-4.7	15.9	8.6	-1.4	6.1	16.2	13.3	-	-	-	
Policy Index	<u>-3.6</u>	<u>16.3</u>	<u>8.4</u>	<u>0.8</u>	<u>6.8</u>	<u>17.2</u>	<u>12.9</u>	<u>0.5</u>	<u>13.2</u>	<u>21.0</u>	<u>-27.1</u>
Over/Under	-1.1	-0.4	0.2	-2.2	-0.7	-1.0	0.4				
Total US Equity	-5.0	21.4	13.0	0.5	12.5	34.0	16.9	0.9	18.5	29.2	-40.0
Russell 3000	<u>-5.2</u>	<u>21.1</u>	<u>12.7</u>	<u>0.4</u>	<u>12.4</u>	<u>33.5</u>	<u>16.4</u>	<u>1.1</u>	<u>17.5</u>	<u>28.6</u>	<u>-37.2</u>
Over/Under	0.2	0.3	0.3	0.1	0.1	0.5	0.5	-0.2	1.0	0.6	-2.8
Western U.S. Index Plus	-5.3	22.7	13.8	1.1	14.2	32.9	20.7	1.0	24.7	42.6	-56.3
S&P 500	<u>-4.4</u>	<u>21.8</u>	<u>12.0</u>	<u>1.4</u>	<u>13.7</u>	<u>32.4</u>	<u>16.0</u>	<u>2.1</u>	<u>15.1</u>	<u>26.5</u>	<u>-37.0</u>
Over/Under	-0.9	0.9	1.8	-0.3	0.5	0.5	4.7	-1.1	9.6	16.1	-19.3
Blackrock Russell 1000 Index	-4.7										
Russell 1000	<u>-4.8</u>	<u>21.7</u>	<u>12.1</u>	<u>0.9</u>	<u>13.2</u>	<u>33.1</u>	<u>16.4</u>	<u>1.5</u>	<u>16.1</u>	<u>28.4</u>	<u>-37.6</u>
Over/Under	0.1										
Blackrock Russell 2500 Index	-9.9	-			-					-	
Russell 2500 Over/Under	<u>-10.0</u> 0.1	<u>16.8</u>	<u>17.6</u>	<u>-2.9</u>	<u>7.1</u>	<u>36.8</u>	<u>17.9</u>	<u>-2.5</u>	<u>26.7</u>	<u>34.4</u>	<u>-36.8</u>



	2018 (%)	2017	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009	2008
Total Non-US Equity	-13.0	26.5	6.6	-4.8	-3.6	16.3	17.9	-13.6	13.5	37.4	-44.1
MSCI ACWI ex USA	<u>-14.2</u>	<u>27.2</u>	<u>4.5</u>	<u>-5.7</u>	<u>-3.9</u>	<u>15.3</u>	<u>16.8</u>	<u>-13.7</u>	<u>11.2</u>	<u>41.4</u>	-45.5
Over/Under	1.2	-0.7	2.1	0.9	0.3	1.0	1.1	0.1	2.3	-4.0	1.4
MSCI EAFE	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8	31.8	-43.4
MSCI ACWI ex USA NR LCL	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6	31.7	-40.9
MSCI EAFE NR LCL	-11.0	15.2	5.3	5.3	5.9	26.9	17.3	-12.2	4.8	24.7	-40.3
BlackRock ACWI ex-U.S. Index	-14.6	28.1	4.7	-4.5	-3.8	16.0	17.2	-14.1	12.8	43.1	-45.6
MSCI ACWI ex USA IMI	<u>-14.8</u>	<u>27.8</u>	<u>4.4</u>	<u>-4.6</u>	<u>-3.9</u>	<u>15.8</u>	<u>17.0</u>	<u>-14.3</u>	<u>12.7</u>	<u>43.6</u>	<u>-46.0</u>
Over/Under	0.2	0.3	0.3	0.1	0.1	0.2	0.2	0.2	0.1	-0.5	0.4
MSCI ACWI ex USA NR LCL	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6	31.7	-40.9
Sprucegrove	-13.8	27.5	11.9	-9.1	-3.2	17.1	17.2	-10.7	18.8	36.2	-42.4
MSCI ACWI ex USA	<u>-14.2</u>	<u>27.2</u>	<u>4.5</u>	<u>-5.7</u>	<u>-3.9</u>	<u>15.3</u>	<u>16.8</u>	<u>-13.7</u>	<u>11.2</u>	<u>41.4</u>	<u>-45.5</u>
Over/Under	0.4	0.3	7.4	-3.4	0.7	1.8	0.4	3.0	7.6	-5.2	3.1
MSCI EAFE	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8	31.8	-43.4
MSCI ACWI ex USA NR LCL	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6	31.7	-40.9
MSCI EAFE NR LCL	-11.0	15.2	5.3	5.3	5.9	26.9	17.3	-12.2	4.8	24.7	-40.3
Hexavest	-11.3	17.4	3.8	-1.4	-4.3	20.2	13.7	-9.6			
MSCI EAFE	<u>-13.8</u>	<u>25.0</u>	<u>1.0</u>	<u>-0.8</u>	<u>-4.9</u>	<u>22.8</u>	<u>17.3</u>	<u>-12.1</u>	<u>7.8</u>	<u>31.8</u>	<u>-43.4</u>
Over/Under	2.5	-7.6	2.8	-0.6	0.6	-2.6	-3.6	2.5			
MSCI EAFE NR LCL	-11.0	15.2	5.3	5.3	5.9	26.9	17.3	-12.2	4.8	24.7	-40.3
Walter Scott	-7.1	26.6	5.1	-0.4	-3.5	11.8	20.4	-9.3			
MSCI ACWI ex USA	<u>-14.2</u>	<u>27.2</u>	<u>4.5</u>	<u>-5.7</u>	<u>-3.9</u>	<u>15.3</u>	<u>16.8</u>	<u>-13.7</u>	<u>11.2</u>	<u>41.4</u>	<u>-45.5</u>
Over/Under	7.1	-0.6	0.6	5.3	0.4	-3.5	3.6	4.4			
MSCI ACWI ex USA NR LCL	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6	31.7	-40.9
MSCI EAFE	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8	31.8	-43.4
Total Global Equity	-9.0	24.5	9.0	-3.8	1.9	22.0	14.4	-3.9	11.4	17.8	-37.3
MSCI ACWI	<u>-9.4</u>	<u>24.0</u>	<u>7.9</u>	<u>-2.4</u>	<u>4.2</u>	<u>22.8</u>	<u>16.1</u>	<u>-7.3</u>	<u>12.7</u>	<u>34.6</u>	<u>-42.2</u>
Over/Under	0.4	0.5	1.1	-1.4	-2.3	-0.8	-1.7	3.4	-1.3	-16.8	4.9
BlackRock MSCI ACWI Equity Index	-9.0	24.5	8.4	-2.0	4.6	23.2				-	
MSCI ACWI	<u>-9.4</u>	<u>24.0</u>	<u>7.9</u>	<u>-2.4</u>	<u>4.2</u>	<u>22.8</u>	<u>16.1</u>	<u>-7.3</u>	<u>12.7</u>	<u>34.6</u>	<u>-42.2</u>
Over/Under	0.4	0.5	0.5	0.4	0.4	0.4					



	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)	2008 (%)
Total Private Equity	18.4	16.9	7.6	14.7	19.0	17.9	10.3	-	-	-	
Russell 3000 + 3%	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>	<u>-35.3</u>
Over/Under	20.8	-7.8	-8.5	11.2	3.1	-19.6	-9.6				
Cambridge Associates Global All PE (Qtr Lag)	16.6	15.9	8.5	7.0	16.3	15.9	13.0	12.6	17.1	-9.3	-7.2
Adams Street Global Fund Series	19.6	13.4	7.1	10.3	19.6	15.7	10.8	-			
Russell 3000 + 3%	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>	<u>-35.3</u>
Over/Under	22.0	-11.3	-9.0	6.8	3.7	-21.8	-9.1				
Harbourvest	22.7	23.2	6.7	28.5	18.5			-			
Russell 3000 + 3%	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>	<u>-35.3</u>
Over/Under	25.1	-1.5	-9.4	25.0	2.6						
Pantheon Global Secondary Funds	17.3	24.1	15.5	6.4	16.7	14.9	0.9	-			
Russell 3000 + 3%	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>	<u>-35.3</u>
Over/Under	19.7	-0.6	-0.6	2.9	0.8	-22.6	-19.0				
Drive Capital Fund	-2.5	-33.7									
Russell 3000 + 3%	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>	<u>-35.3</u>
Over/Under	-0.1	-58.4									
Abbott Secondary Opportunities	26.0										
Russell 3000 + 3%	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>	<u>-35.3</u>
Over/Under	28.4										
CVI Credit Value Fund	4.6										
Russell 3000 + 3% Over/Under	<u>-2.4</u> 7.0	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>	<u>-35.3</u>



	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)	2008 (%)
Clearlake Capital Partners V					-		-				
Russell 3000 + 3% Over/Under	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>	<u>-35.3</u>
Battery Ventures XII											
Russell 3000 + 3% Over/Under	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>	<u>-35.3</u>
Insight Venture Partners X					-						
Russell 3000 + 3% Over/Under	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>	<u>-35.3</u>
GTCR Fund XII					-						
Russell 3000 + 3% Over/Under	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>	<u>-35.3</u>
Buenaventure One, LLC								-			
Russell 3000 + 3% Over/Under	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>	<u>-35.3</u>
ECI 11					-	-		-		-	
Russell 3000 + 3% Over/Under	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>	<u>-35.3</u>



	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)	2008 (%)
Total US Fixed Income	0.0	4.4	4.9	0.3	3.0	-0.1	9.6	7.3	10.6	25.6	-8.7
BBgBarc US Aggregate TR	<u>0.0</u>	<u>3.5</u>	<u>2.6</u>	<u>0.5</u>	<u>6.0</u>	<u>-2.0</u>	<u>4.2</u>	<u>7.8</u>	<u>6.5</u>	<u>5.9</u>	<u>5.2</u>
Over/Under	0.0	0.9	2.3	-0.2	-3.0	1.9	5.4	-0.5	4.1	19.7	-13.9
BlackRock U.S. Debt Fund	0.0	3.6	2.7	0.6	6.2	-2.0	4.3	7.9	6.7	6.0	5.4
BBgBarc US Aggregate TR	<u>0.0</u>	<u>3.5</u>	<u>2.6</u>	<u>0.5</u>	<u>6.0</u>	<u>-2.0</u>	<u>4.2</u>	<u>7.8</u>	<u>6.5</u>	<u>5.9</u>	<u>5.2</u>
Over/Under	0.0	0.1	0.1	0.1	0.2	0.0	0.1	0.1	0.2	0.1	0.2
Western	-0.6	6.0	4.1	0.9	7.4	-1.2	9.7	7.3	11.3	18.9	-8.9
BBgBarc US Aggregate TR	<u>0.0</u>	<u>3.5</u>	<u>2.6</u>	<u>0.5</u>	<u>6.0</u>	<u>-2.0</u>	<u>4.2</u>	<u>7.8</u>	<u>6.5</u>	<u>5.9</u>	<u>5.2</u>
Over/Under	-0.6	2.5	1.5	0.4	1.4	0.8	5.5	-0.5	4.8	13.0	-14.1
Reams	0.7	2.5	6.0	0.3	-3.6	2.5	10.0	8.4	10.0	33.6	-11.0
Reams Custom Index	<u>2.4</u>	<u>1.3</u>	<u>0.7</u>	<u>0.3</u>	<u>0.2</u>	<u>-0.5</u>	<u>4.2</u>	<u>7.8</u>	<u>6.5</u>	<u>5.9</u>	<u>5.2</u>
Over/Under	-1.7	1.2	5.3	0.0	-3.8	3.0	5.8	0.6	3.5	27.7	-16.2
BBgBarc US Aggregate TR	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5	5.9	5.2
3-Month LIBOR + 3%	5.4	4.4	3.8	3.3	3.2	3.3	3.5	3.3	3.4	3.8	6.2
Loomis Strategic Alpha	0.6	3.3	6.1	-1.0	2.4						
BBgBarc US Aggregate TR	<u>0.0</u>	<u>3.5</u>	<u>2.6</u>	<u>0.5</u>	6.0	<u>-2.0</u>	<u>4.2</u>	<u>7.8</u>	<u>6.5</u>	<u>5.9</u>	<u>5.2</u>
Over/Under	0.6	-0.2	3.5	-1.5	-3.6						
3-Month LIBOR + 3%	5.4	4.4	3.8	3.3	3.2	3.3	3.5	3.3	3.4	3.8	6.2
Loomis Sayles Multi Strategy	-0.8	8.4	8.2	-2.3	6.8	1.4	16.7	4.2	13.6	37.6	-19.7
Loomis Custom Index	-0.6	<u>4.5</u>	<u>7.0</u>	<u>-1.2</u>	4.6	<u>0.8</u>	<u>7.5</u>	<u>7.1</u>	8.7	18.8	-4.6
Over/Under	-0.2	3.9	1.2	-1.1	2.2	0.6	9.2	-2.9	4.9	18.8	-15.1
BBgBarc US Govt/Credit TR	-0.4	4.0	3.0	0.1	6.0	-2.4	4.8	8.7	6.6	4.5	5.7
Total Real Estate	6.9	5.9	6.8	12.8	11.6	10.6	9.1	14.4	15.4	-31.2	-16.0
NCREIF ODCE Net	7.4	<u>6.7</u>	7.8	<u>14.0</u>	11.5	<u>12.9</u>	<u>9.8</u>	15.0	<u>15.3</u>	-30.4	<u>-10.7</u>
Over/Under	-0.5	-0.8	-1.0	-1.2	0.1	-2.3	-0.7	-0.6	0.1	-0.8	-5.3
Prudential Real Estate	8.2	7.0	8.2	14.5	12.5	13.8	8.8	18.0	17.2	-34.8	-13.6
NCREIF ODCE Net	7.4	6.7	7.8	14.0	11.5	12.9	<u>9.8</u>	15.0	<u>15.3</u>	-30.4	-10.7
Over/Under	0.8	0.3	0.4	0.5	1.0	0.9	-1.0	3.0	1.9	-4.4	-2.9
NCREIF ODCE	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4	-29.8	-10.0
UBS Real Estate	6.2	5.4	6.2	11.9	10.6	9.3	9.0	12.1	15.9	-22.9	-8.3
NCREIF ODCE Net	<u>7.4</u>	6.7	7.8	14.0	11.5	12.9	9.8	15.0	<u>15.3</u>	<u>-30.4</u>	<u>-10.7</u>
Over/Under	-1.2	-1.3	-1.6	-2.1	-0.9	-3.6	-0.8	<u>-2.9</u>	0.6	7.5	2.4
NCREIF ODCE	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4	-29.8	-10.0



	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012	2011 (%)	2010 (%)	2009 (%)	2008
Total Real Assets	-7.3	7.2	11.7	-13.8	10.2		-	-		-	
CPI + 4% (Unadjusted)	<u>6.0</u>	<u>6.2</u>	<u>6.2</u>	<u>4.8</u>	4.8	<u>28.8</u>	<u>5.4</u>	<u>13.5</u>			
Over/Under	-13.3	1.0	5.5	-18.6	5.4						
Bridgewater All Weather Fund	-5.0	11.9	10.0	-6.8	7.6						
CPI + 5% (Unadjusted)	<u>7.0</u>	<u>7.2</u>	<u>7.2</u>	<u>5.8</u>	<u>5.8</u>						
Over/Under	-12.0	4.7	2.8	-12.6	1.8						
Tortoise Energy Infrastructure	-13.3	-3.5	15.9	-27.1	15.7			-			
Tortoise MLP Index	<u>-13.7</u>	<u>-5.7</u>	<u>21.0</u>	<u>-34.1</u>	<u>8.0</u>	<u>28.8</u>	<u>5.4</u>	<u>13.5</u>			
Over/Under	0.4	2.2	-5.1	7.0	7.7						
Overlay											
Parametric											
Abbott Capital Cash											



APPENDIX

NEPC, LLC —

CALENDAR YEAR INDEX PERFORMANCE

	2010	2011	2012	2013	2014	2015	2016	2017	Q1	Q2	Q3	Oct	Nov	Dec	Q4	YTD
US Large Cap	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-0.8%	3.4%	7.7%	-6.8%	2.0%	-9.0%	-13.5%	-4.4%
US Small/Mid Cap	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-0.2%	5.7%	4.7%	-10.2%	1.9%	-11.0%	-18.5%	-10.0%
Int'l Developed Equity	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-1.5%	-1.2%	1.4%	-8.0%	-0.1%	-4.9%	-12.5%	-13.8%
Emerging Market Equity	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	1.4%	-8.0%	-1.1%	-8.7%	4.1%	-2.7%	-7.5%	-14.6%
US Aggregate	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	-1.5%	-0.2%	0.0%	-0.8%	0.6%	1.8%	1.6%	0.0%
US High Yield	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-0.9%	1.0%	2.4%	-1.6%	-0.9%	-2.1%	-4.5%	-2.1%
US Long Treasuries	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-3.3%	0.3%	-2.9%	-3.0%	1.9%	5.5%	4.2%	-1.8%
EM Local Credit	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	15.2%	4.4%	-10.4%	-1.8%	-2.0%	2.8%	1.3%	2.1%	-6.2%
Global Credit	-5.3%	-5.3%	-4.1%	2.7%	-0.6%	3.3%	2.1%	7.4%	1.4%	-2.8%	-0.9%	-1.1%	0.3%	2.0%	1.2%	-1.2%
Commodities	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-0.4%	0.4%	-2.0%	-2.2%	-0.6%	-6.9%	-9.4%	-11.2%

Source: Bloomberg, Barclays, S&P, Russell, MSCI, JP Morgan, Credit Suisse

S&P 500 = US Large Cap
Russell 2500 = US Small/Mid Cap
MSCI EAFE = International Developed Equity
MSCI EM = Emerging Market Equity
Bloomberg Barclays Aggregate = US Aggregate
Bloomberg Barclays High Yield = US HY
Bloomberg Barclays Long Treasury = US Long Treasuries
GBI-EM Global Diversified = EM Local Credit
Barclays Global Aggregate = Global Credit
Bloomberg Commodity = Commodities



CALENDAR YEAR INDEX PERFORMANCE

	2009	2010	2011	2012	2013	2014	2015	2016	2017	Q1	Q2	Q3	Oct	Nov	Dec	Q4	YTD
S&P 500	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-0.8%	3.4%	7.7%	-6.8%	2.0%	-9.0%	-13.5%	-4.4%
Russell 1000	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	21.7%	-0.7%	3.6%	7.4%	-7.1%	2.0%	-9.1%	-13.8%	-4.8%
Russell 2000	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	14.6%	-0.1%	7.8%	3.6%	-10.9%	1.6%	-11.9%	-20.2%	-11.0%
Russell 2500	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-0.2%	5.7%	4.7%	-10.2%	1.9%	-11.0%	-18.5%	-10.0%
MSCI EAFE	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-1.5%	-1.2%	1.4%	-8.0%	-0.1%	-4.9%	-12.5%	-13.8%
MSCI EM	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	1.4%	-8.0%	-1.1%	-8.7%	4.1%	-2.7%	-7.5%	-14.6%
MSCI ACWI	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	24.0%	-1.0%	0.5%	4.3%	-7.5%	1.5%	-7.0%	-12.8%	-9.4%
Private Equity*	13.7%	19.7%	7.9%	12.5%	20.6%	12.7%	9.6%	8.3%	19.9%	3.3%	4.8%	-	-	-	-	-	8.2%
BC TIPS	11.4%	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	3.0%	-0.8%	0.8%	-0.8%	-1.4%	0.5%	0.5%	-0.4%	-1.3%
BC Municipal Bond	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	5.4%	-1.1%	0.9%	-0.2%	-0.6%	1.1%	1.2%	1.7%	1.3%
BC Muni High Yield	32.7%	7.8%	9.2%	18.1%	-5.5%	13.8%	1.8%	3.0%	9.7%	0.6%	3.1%	0.8%	-1.3%	0.7%	0.9%	0.3%	4.8%
BC US Corp High Yield	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-0.9%	1.0%	2.4%	-1.6%	-0.9%	-2.1%	-4.5%	-2.1%
BC US Aggregate	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	-1.5%	-0.2%	0.0%	-0.8%	0.6%	1.8%	1.6%	0.0%
BC Global Aggregate	2.6%	5.2%	6.4%	1.6%	-4.0%	-0.5%	-3.6%	1.6%	7.5%	1.4%	-2.8%	-0.9%	-1.1%	0.3%	2.0%	1.2%	-1.2%
BC Long Treasuries	-12.9%	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-3.3%	0.3%	-2.9%	-3.0%	1.9%	5.5%	4.2%	-1.8%
BC US Long Credit	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	12.2%	-3.8%	-2.7%	1.3%	-3.6%	-0.4%	2.5%	-1.6%	-6.8%
BC US STRIPS 20+ Yr	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	13.7%	-4.6%	0.9%	-4.7%	-5.3%	2.4%	7.8%	4.6%	-4.1%
JPM GBI-EM Glob Div	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	15.2%	4.4%	-10.4%	-1.8%	-2.0%	2.8%	1.3%	2.1%	-6.2%
JPM EMBI Glob Div	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	10.1%	-1.7%	-3.5%	2.3%	-2.2%	-0.4%	1.4%	-1.3%	-4.3%
CS Leveraged Loan	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	9.9%	4.2%	1.6%	0.8%	1.9%	0.0%	-0.8%	-2.3%	-3.1%	1.1%
CS Hedge Fund	18.6%	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	1.2%	7.1%	0.5%	0.1%	0.6%	-2.6%	-0.6%	-	-	-2.0%
BBG Commodity	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-0.4%	0.4%	-2.0%	-2.2%	-0.6%	-6.9%	-9.4%	-11.2%
Alerian MLP	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	-6.5%	-11.1%	11.8%	6.6%	-8.0%	-0.8%	-9.4%	-17.3%	-12.4%
FTSE NAREIT Eq REITs	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	5.2%	-8.2%	10.0%	0.8%	-3.0%	4.7%	-8.2%	-6.7%	-4.6%



Source: Bloomberg, Barclays, Alerian, Nareit, MSCI, JP Morgan, Credit Suisse, Thomson One *Private Equity return represents calendar year pooled IRR and is subject to a one quarter lag

TRAILING ANNUAL INDEX PERFORMANCE

		Equi	ty				
	Dec-18	Q4	YTD	1 YR	3 YR	5 YR	10 YR
Global Equity	-7.0%	-12.8%	-9.4%	-9.4%	6.6%	4.3%	9.5%
US Large Cap	-9.0%	-13.5%	-4.4%	-4.4%	9.3%	8.5%	13.1%
US Small/Mid Cap	-11.0%	-18.5%	-10.0%	-10.0%	7.3%	5.1%	13.2%
Int'l Developed Equity	-4.9%	-12.5%	-13.8%	-13.8%	2.9%	0.5%	6.3%
Emerging Market Equity	-2.7%	-7.5%	-14.6%	-14.6%	9.2%	1.6%	8.0%

Rates/Credit								
	Dec-18	Q4	YTD	1 YR	3 YR	5 YR	10 YR	
Global Aggregate	2.0%	1.2%	-1.2%	-1.2%	2.7%	1.1%	2.5%	
US Aggregate	1.8%	1.6%	0.0%	0.0%	2.1%	2.5%	3.5%	
US Credit	1.5%	-0.2%	-2.5%	-2.5%	3.3%	3.3%	5.9%	
US High Yield	-2.1%	-4.5%	-2.1%	-2.1%	7.2%	3.8%	11.1%	
EM Local Debt	1.3%	2.1%	-6.2%	-6.2%	5.9%	-1.0%	3.5%	

Real Assets									
	Dec-18	Q4	YTD	1 YR	3 YR	5 YR	10 YR		
Commodities	-6.9%	-9.4%	-11.2%	-11.2%	0.3%	-8.8%	-3.8%		
MLPs	-9.4%	-17.3%	-12.4%	-12.4%	-1.1%	-7.3%	9.5%		



Source: Bloomberg, Barclays, MSCI, S&P, Russell, JP Morgan, Alerian

TRAILING ANNUAL INDEX PERFORMANCE

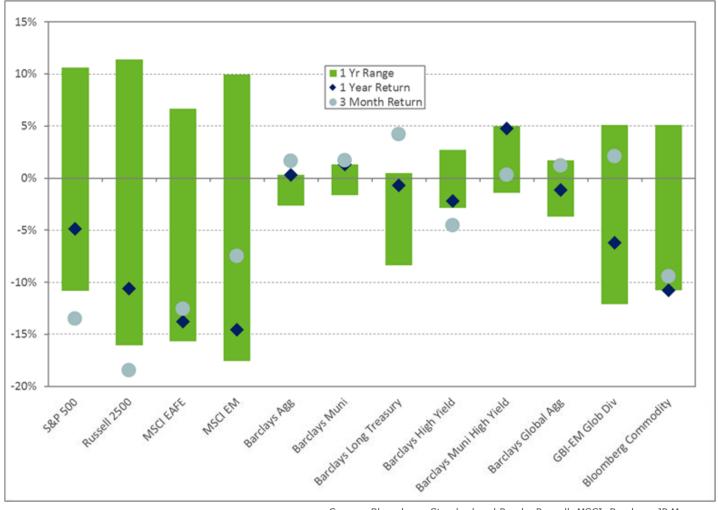
Equity								
	Dec-18	Q4	YTD	1 YR	3 YR	5 YR	10 YR	
MSCI ACWI	-7.0%	-12.8%	-9.4%	-9.4%	6.6%	4.3%	9.5%	
S&P 500	-9.0%	-13.5%	-4.4%	-4.4%	9.3%	8.5%	13.1%	
Russell 1000	-9.1%	-13.8%	-4.8%	-4.8%	9.1%	8.2%	13.3%	
Russell 2000	-11.9%	-20.2%	-11.0%	-11.0%	7.3%	4.4%	12.0%	
Russell 2500	-11.0%	-18.5%	-10.0%	-10.0%	7.3%	5.1%	13.2%	
MSCI EAFE	-4.9%	-12.5%	-13.8%	-13.8%	2.9%	0.5%	6.3%	
MSCI EM	-2.7%	-7.5%	-14.6%	-14.6%	9.2%	1.6%	8.0%	

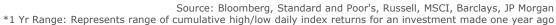
Credit							
	Dec-18	Q4	YTD	1 YR	3 YR	5 YR	10 YR
BC Global Agg	2.0%	1.2%	-1.2%	-1.2%	2.7%	1.1%	2.5%
BC US Agg	1.8%	1.6%	0.0%	0.0%	2.1%	2.5%	3.5%
BC Corp Credit	1.5%	-0.2%	-2.5%	-2.5%	3.3%	3.3%	5.9%
BC US HY	-2.1%	-4.5%	-2.1%	-2.1%	7.2%	3.8%	11.1%
BC Muni	1.2%	1.7%	1.3%	1.3%	2.3%	3.8%	4.9%
BC Muni HY	0.9%	0.3%	4.8%	4.8%	5.8%	6.5%	9.1%
BC TIPS	0.5%	-0.4%	-1.3%	-1.3%	2.1%	1.7%	3.6%
BC 20+ STRIPS	7.8%	4.6%	-4.1%	-4.1%	3.4%	9.3%	3.6%
BC Long Treasuries	5.5%	4.2%	-1.8%	-1.8%	2.6%	5.9%	4.1%
BC Long Credit	2.5%	-1.6%	-6.8%	-6.8%	4.9%	5.1%	7.4%
BC Govt/Credit 1-3 Yr	0.8%	1.2%	1.6%	1.6%	1.2%	1.0%	1.5%
CS Lev Loan	-2.3%	-3.1%	1.1%	1.1%	5.0%	3.3%	8.3%
JPM EMBI Glob Div	1.4%	-1.3%	-4.3%	-4.3%	5.2%	4.8%	8.2%
JPM GBI-EM Glob Div	1.3%	2.1%	-6.2%	-6.2%	5.9%	-1.0%	3.5%

Real Assets								
	Dec-18	Q4	YTD	1 YR	3 YR	5 YR	10 YR	
BBG Commodity	-6.9%	-9.4%	-11.2%	-11.2%	0.3%	-8.8%	-3.8%	
Alerian MLP	-9.4%	-17.3%	-12.4%	-12.4%	-1.1%	-7.3%	9.5%	
FTSE NAREIT Equity REITs	-8.2%	-6.7%	-4.6%	-4.6%	2.9%	7.9%	12.1%	



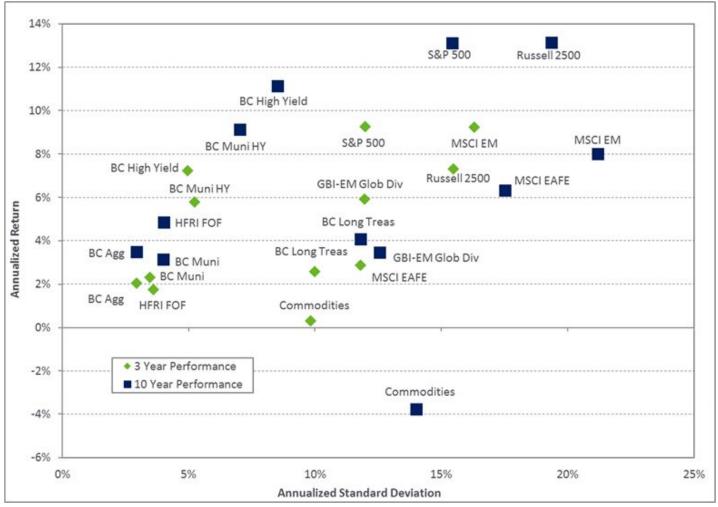
SHORT-TERM PERFORMANCE SUMMARY







LONG-TERM PERFORMANCE SUMMARY



Source: Bloomberg, Standard and Poor's, Russell, MSCI, Barclays, JP Morgan



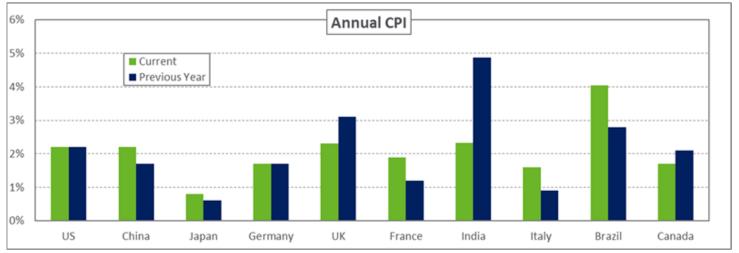
MACRO

NEPC, LLC —

INFLATION



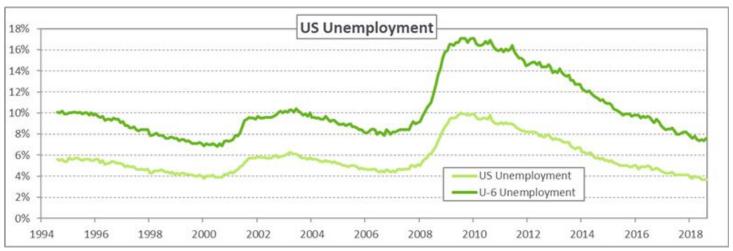
Source: Bureau of Labor Statistics, Bloomberg, NEPC



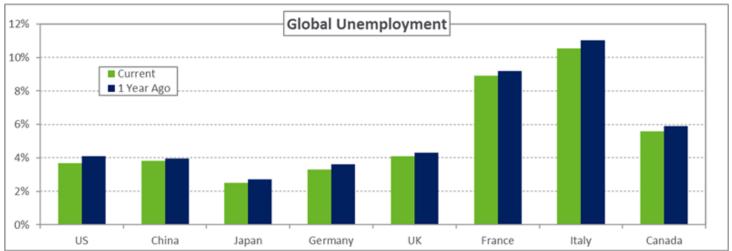
Source: Bureau of Labor Statistics, National Bureau of Statistics of China, Ministry of Internal Affairs and Communications (Japan), German Federal Statistics Office, UK Office for National Statistics, National Statistics Office of France, India Central Statistical Organization, ISTAT, IBGE, STCA, Bloomberg



UNEMPLOYMENT



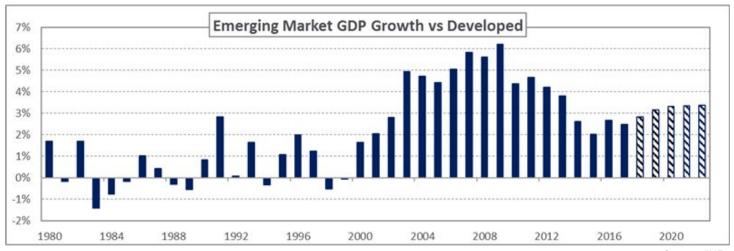
Source: Bureau of Labor Statistics, Bloomberg



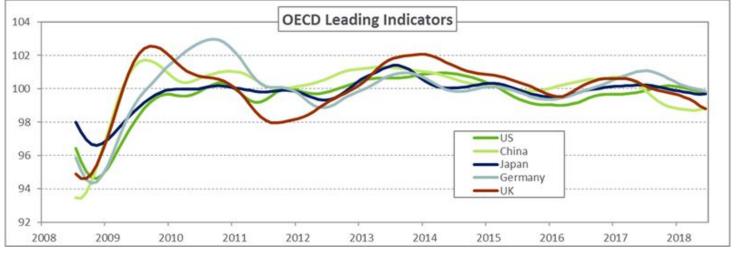
Source: Bureau of Labor Statistics, STA, National Bureau of Statistics of China, Ministry of Internal Affairs and Communications (Japan), German Federal Statistics Office, UK Office for National Statistics, National Statistics Office of France, ISTAT, IBGE, Bloomberg



ECONOMIC INDICATORS



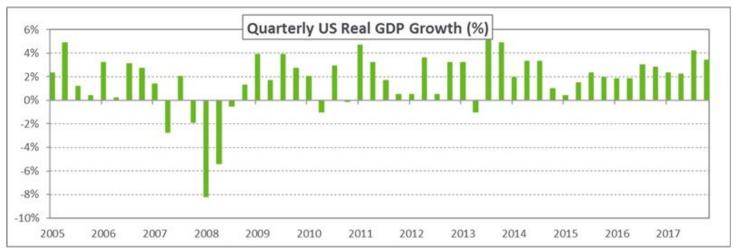
Source: IMF



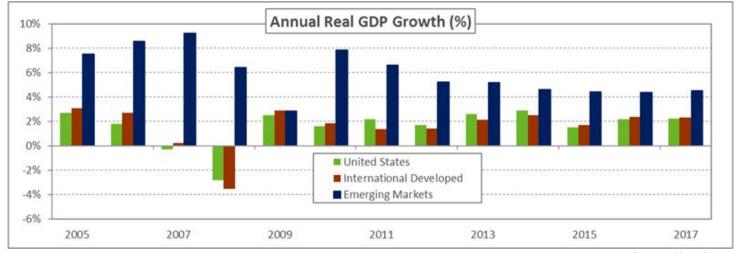
Source: OECD, Bloomberg



GROSS DOMESTIC PRODUCT

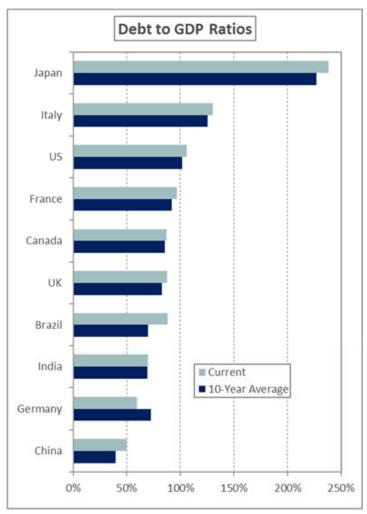


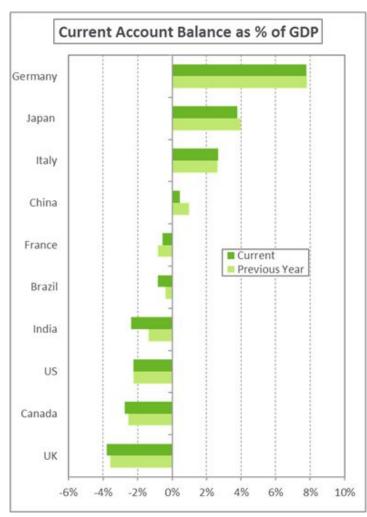
Source: Bloomberg





GROSS DOMESTIC PRODUCT METRICS

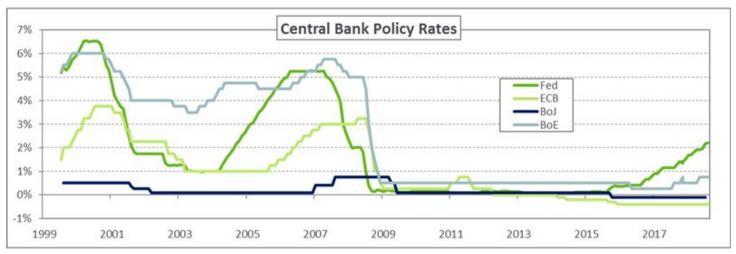




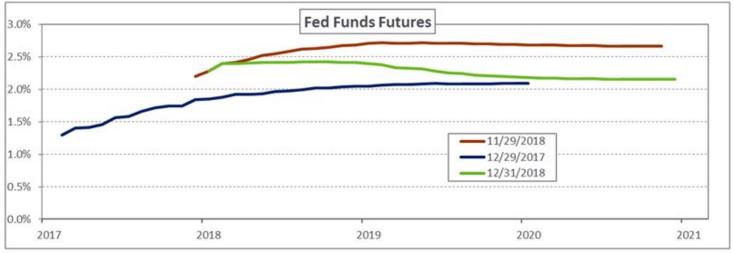




CENTRAL BANK RATES



Source: Federal Reserve, ECB, Bank of Japan, Bank of England, Bloomberg





CENTRAL BANK BALANCE SHEETS







CURRENCIES

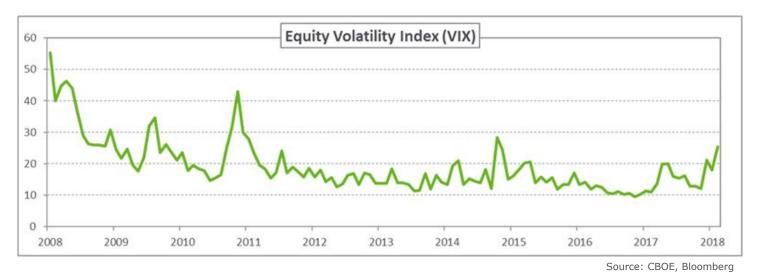
			% Change Relative to USD	
Currencies	Spot	1 Month	YTD	1 Year
Euro	1.15	1.3%	-4.5%	-4.5%
British Pound	1.28	0.0%	-5.6%	-5.6%
Japanese Yen	109.69	3.5%	2.7%	2.7%
Swiss Franc	0.98	1.6%	-0.8%	-0.8%
Australian Dollar	0.70	-3.5%	-9.7%	-9.7%
Chinese Yuan	6.88	1.2%	-5.4%	-5.4%
Brazilian Real	3.87	-0.2%	-14.6%	-14.6%
Russian Ruble	69.72	-3.9%	-17.3%	-17.3%
Indian Rupee	69.77	-0.3%	-8.5%	-8.5%
Mexican Peso	19.65	3.6%	0.0%	0.0%
South African Rand	14.35	-3.3%	-13.7%	-13.7%

Source: Bloomberg





VOLATILITY



250 Treasury Volatility Index
200
150
100
2008 2010 2012 2014 2016 2018



Source: Merrill Lynch, Bloomberg

Source: Deutsche Bank, Bloomberg



EQUITY

NEPC, LLC —

EQUITY INDEX PERFORMANCE





Source: Russell, Bloomberg

Source: MSCI, Bloomberg



Source: MSCI, Bloomberg Represents returns in USD

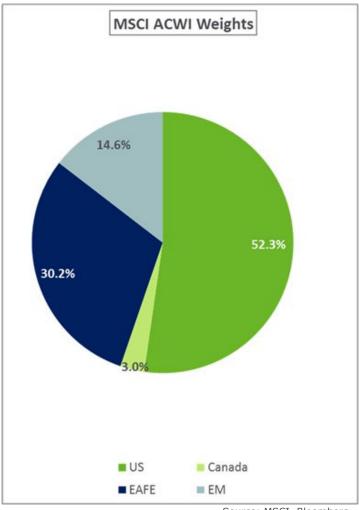


INDEX COMPOSITION

	MTD	QTD	YTD	Index Weight
S&P 500	-9.0%	-13.5%	-4.4%	100%
Cons Disc	-8.4%	-16.5%	0.4%	10.0%
Cons Staples	-9.2%	-5.4%	-9.2%	7.5%
Energy	-12.7%	-24.0%	-18.8%	5.4%
Financials	-11.3%	-13.3%	-13.5%	12.7%
Health Care	-8.6%	-8.8%	5.9%	15.8%
Industrials	-10.7%	-17.4%	-13.8%	9.3%
Info Tech	-8.5%	-17.4%	-0.7%	20.0%
Materials	-7.0%	-12.5%	-15.2%	2.8%
Real Estate	-7.6%	-4.1%	-3.3%	3.0%
Telecom	-7.3%	-13.3%	-13.7%	10.2%
Utilities	-4.1%	1.1%	3.0%	3.4%

	MTD	QTD	YTD	Index Weight
MSCI ACWI	-7.0%	-12.7%	-9.0%	100%
Cons Disc	-7.0%	-14.4%	-8.3%	10.8%
Cons Staples	-6.1%	-6.6%	-10.5%	8.4%
Energy	-9.0%	-20.2%	-13.3%	6.0%
Financials	-7.9%	-11.9%	-15.7%	17.7%
Health Care	-8.1%	-9.6%	1.7%	11.8%
Industrials	-7.9%	-15.6%	-14.4%	10.7%
Info Tech	-7.6%	-17.1%	-5.8%	14.1%
Materials	-3.5%	-13.4%	-16.0%	5.0%
Real Estate	-4.9%	-4.0%	-7.7%	3.2%
Telecom	-6.0%	-6.2%	-10.9%	8.9%
Utilities	-2.0%	0.7%	1.4%	3.4%

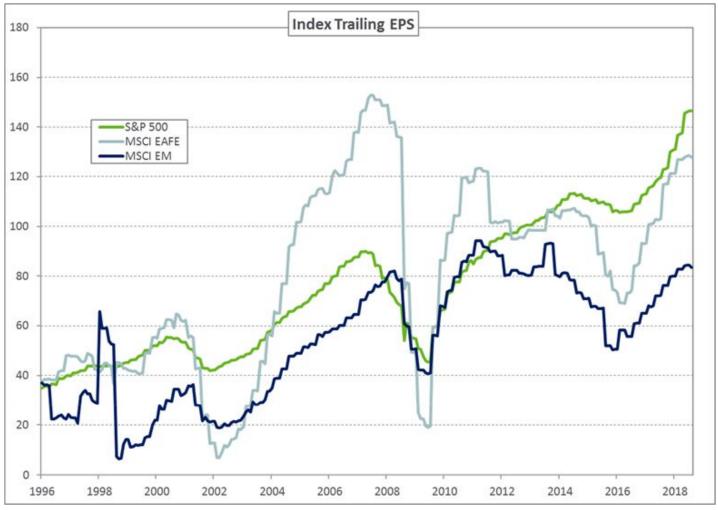
Source: S&P, MSCI, Bloomberg



Source: MSCI, Bloomberg



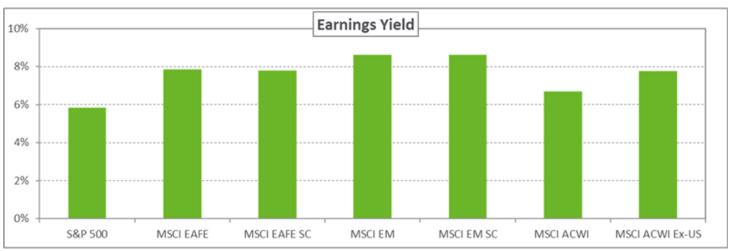
EARNINGS



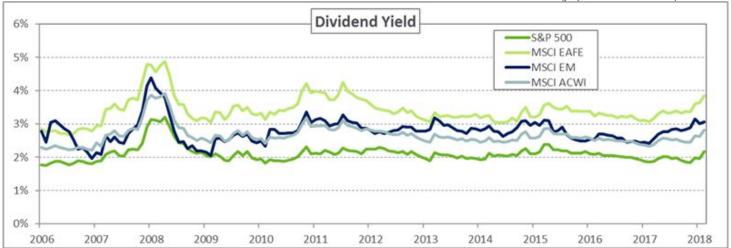




YIELDS



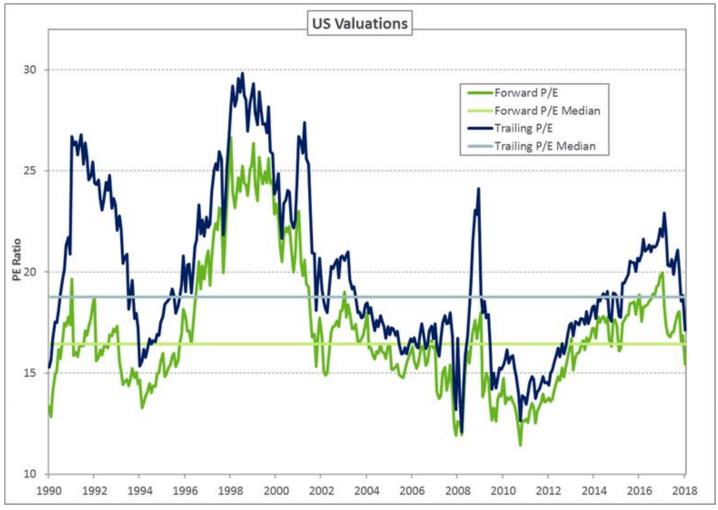
Source: S&P, MSCI, Bloomberg Earnings yield calculated as 1/PE Ratio

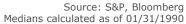


Source: S&P, MSCI, Bloomberg



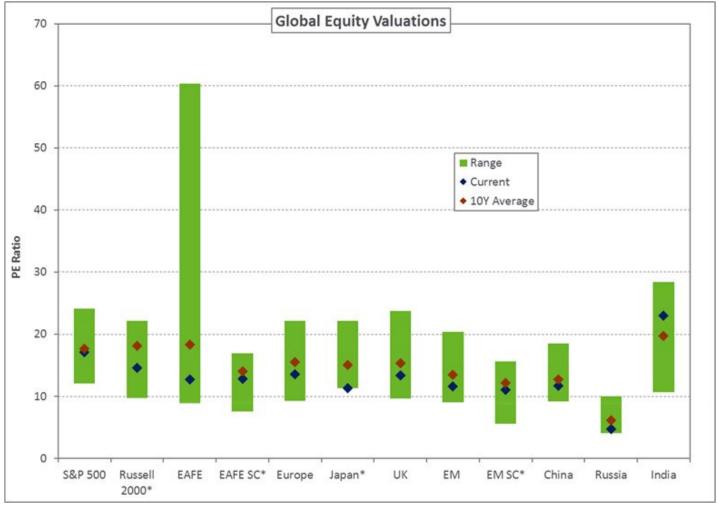
US EQUITY VALUATIONS







GLOBAL EQUITY VALUATIONS





Source: S&P, Russell, MSCI, Bloomberg, NEPC *Denotes the use of index-adjusted positive PE ratio Ranges calculated using trailing 10-year figures

CREDIT

NEPC, LLC —

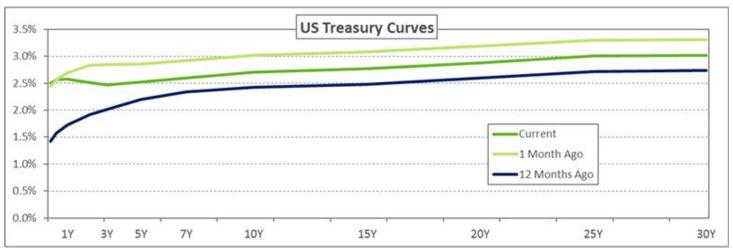
FIXED INCOME CHARACTERISTICS

		Averages		To	otal Returns (%	6)
	Yield to Worst	Spread (bps)	Duration (Years)	1-Month	YTD	1-Year
Barclays Aggregate	3.3%	54	5.9	1.8%	1.6%	0.0%
Barclays Treasury	2.6%	-	6.1	2.2%	2.6%	0.9%
Barclays Agency	2.8%	16	4.0	1.4%	1.9%	1.3%
Barclays MBS	3.4%	35	4.7	1.8%	2.1%	1.0%
Barclays ABS	3.0%	47	2.3	0.9%	1.3%	1.7%
Barclays CMBS	3.4%	86	5.3	1.6%	1.7%	0.8%
Barclays Corp IG	4.2%	153	7.1	1.5%	-0.2%	-2.5%
Barclays Muni	2.7%	-	6.2	1.2%	1.7%	1.3%
Barclays HY Muni	5.0%	-	8.9	0.9%	0.3%	4.8%
Barclays TIPS	2.8%	-	5.3	0.5%	-0.4%	-1.3%
Barclays HY	8.0%	526	4.0	-2.1%	-4.5%	-2.1%
Barclays Global Agg	2.0%	55	7.0	2.0%	1.2%	-1.2%
JPM EMBI Glob Div	7.0%	434.61	7.1	1.3%	-1.3%	-4.3%
JPM CEMBI Broad	5.3%	337.93	4.5	0.7%	0.0%	-1.6%
JPM GBI - EM	6.5%	-	5.1	1.3%	2.1%	-6.2%

Source: Barclays, JPM, Bloomberg



TREASURIES



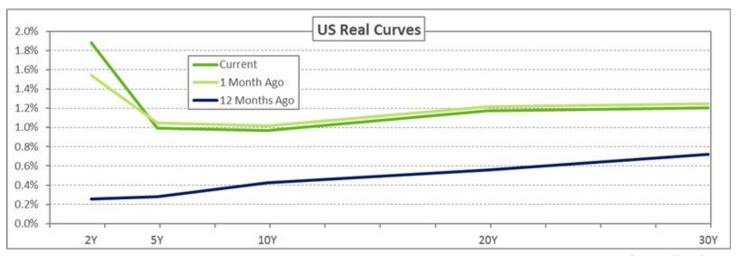
Source: Bloomberg

		Yield (%)		Total Return (%)				
	Current	1 Month Ago	12 Months Ago	1 Month	12 Months			
3M Treasury	2.51%	2.45%	1.42%	0.19%	1.83%			
6M Treasury	2.57%	2.56%	1.57%	0.22%	1.92%			
2Y Treasury	2.51%	2.83%	1.92%	0.81%	1.40%			
5Y Treasury	2.52%	2.86%	2.20%	1.86%	1.42%			
10Y Treasury	2.70%	3.02%	2.42%	3.01%	0.00%			
30Y Treasury	3.02%	3.31%	2.74%	5.94%	-2.72%			

Source: Barclays, Bloomberg



REAL YIELDS



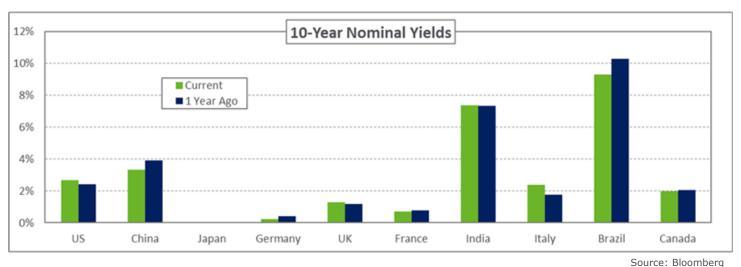
Source: Bloomberg

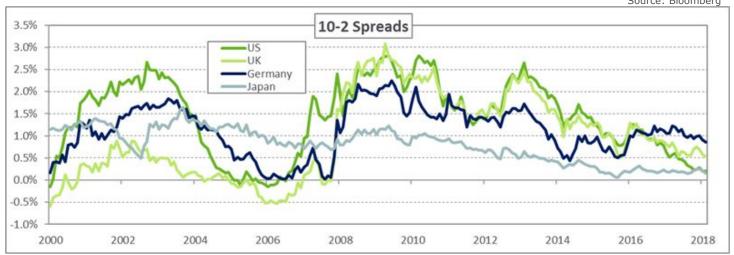
		Real Rates		Breake	en Rates
	Current	1 Month Ago	12 Months Ago	Current	12 Months Ago
2Y Treasury	1.88%	1.54%	0.25%	0.66%	1.56%
5Y Treasury	0.99%	1.05%	0.28%	1.49%	1.88%
10Y Treasury	0.97%	1.02%	0.42%	1.71%	1.98%
20Y Treasury	1.17%	1.22%	0.56%	1.66%	1.86%
30Y Treasury	1.21%	1.25%	0.72%	1.82%	2.02%

Source: Barclays, Bloomberg



NOMINAL YIELDS

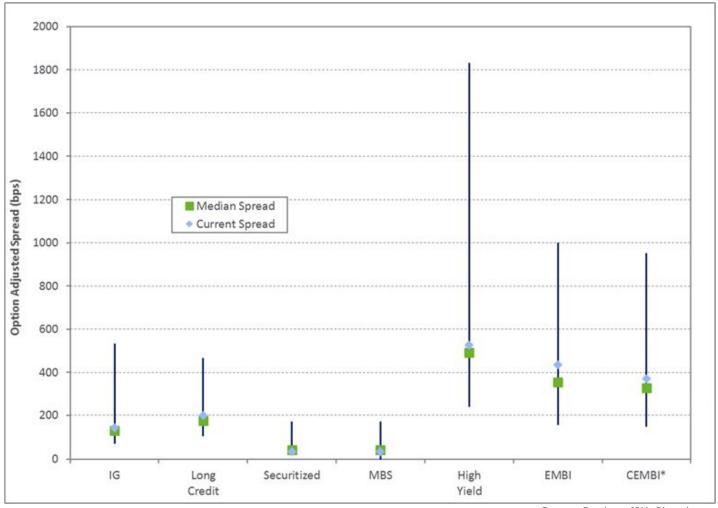




Source: Bloomberg



CREDIT SPREADS





Source: Barclays, JPM, Bloomberg Data range: 01/31/2000 through month-end *JPM CEMBI calculated since 12/31/2001

REAL ASSETS

NEPC, LLC —

REAL ASSETS INDEX PERFORMANCE

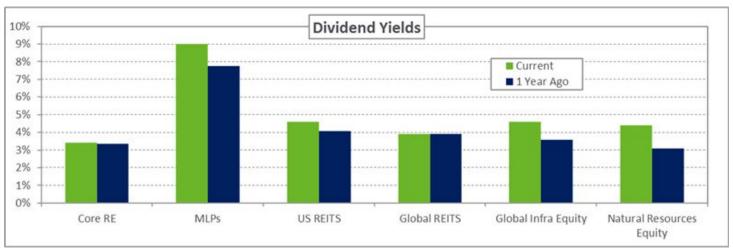
Index	1 Month	3 Month	YTD	1 Year	3 Year	5 Year
Bloomberg Commodity Index	-6.9%	-9.4%	-11.2%	-11.2%	0.3%	-8.8%
Bloomberg Sub Agriculture Index	-2.4%	0.2%	-10.8%	-10.8%	-6.8%	-9.1%
Coffee	-5.1%	-3.1%	-26.5%	-26.5%	-15.2%	-10.5%
Corn	-0.5%	2.7%	-4.6%	-4.6%	-8.9%	-11.9%
Cotton	-8.3%	-6.9%	-7.3%	-7.3%	4.9%	-1.3%
Soybean	-1.4%	2.7%	-13.4%	-13.4%	-3.4%	-6.2%
Soybean Oil	-1.6%	-5.5%	-20.8%	-20.8%	-7.9%	-10.6%
Sugar	-6.1%	8.1%	-26.1%	-26.1%	-12.2%	-14.9%
Wheat	-2.2%	-2.5%	3.5%	3.5%	-11.7%	-13.5%
Bloomberg Sub Energy	-18.7%	-25.8%	-12.7%	-12.7%	-1.0%	-18.5%
Brent Crude	-9.5%	-34.6%	-14.9%	-14.9%	6.8%	-19.1%
Heating Oil	-7.7%	-27.9%	-15.7%	-15.7%	9.0%	-14.7%
Natural Gas	-33.0%	0.0%	-0.1%	-0.1%	-11.2%	-21.8%
Unleaded Gas	-7.3%	-37.4%	-28.3%	-28.3%	-7.8%	-17.4%
WTI Crude Oil	-10.8%	-37.5%	-20.5%	-20.5%	-3.6%	-21.9%
Bloomberg Sub Industrial Metals	-5.1%	-8.7%	-19.5%	-19.5%	7.7%	-3.2%
Aluminum	-6.3%	-10.9%	-16.9%	-16.9%	6.2%	-2.2%
Copper	-5.4%	-6.2%	-21.2%	-21.2%	5.6%	-6.0%
Nickel	-4.7%	-15.1%	-16.4%	-16.4%	5.5%	-6.3%
Zinc	-2.9%	-3.8%	-21.4%	-21.4%	17.1%	3.7%
Bloomberg Sub Precious Metals	5.8%	6.8%	-4.6%	-4.6%	5.1%	-0.9%
Gold	4.7%	7.2%	-2.8%	-2.8%	5.7%	0.7%
Silver	9.5%	5.4%	-10.2%	-10.2%	2.7%	-5.5%
Bloomberg Sub Livestock	-0.9%	0.7%	-1.7%	-1.7%	-0.4%	-2.2%
Lean Hogs	-9.5%	-2.4%	-11.0%	-11.0%	-3.9%	-8.9%
Live Cattle	3.0%	1.9%	2.6%	2.6%	1.2%	1.6%

Source: Bloomberg

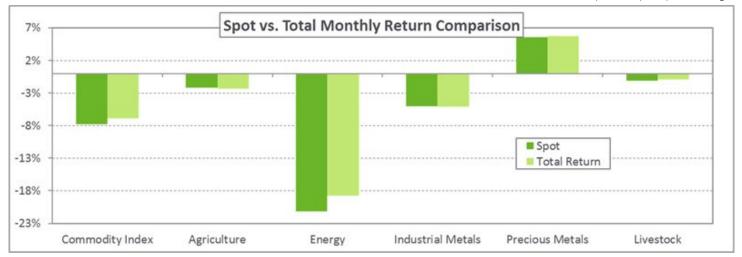
Bloomberg subindex total return indices reflects the return of the underlying one month commodity futures price movements



INCOME YIELD



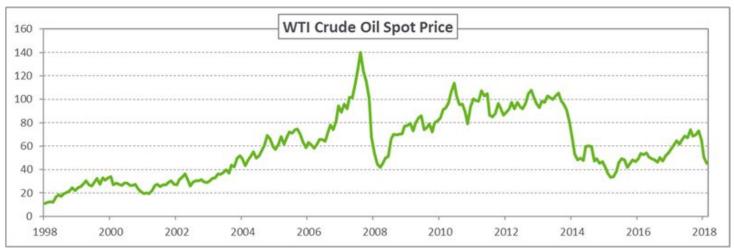
Source: Alerian, NAREIT, S&P, Bloomberg



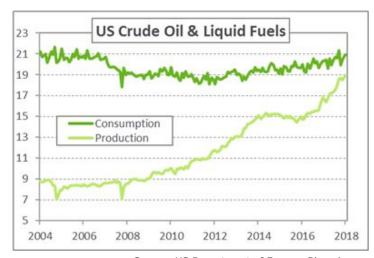
Source: Bloomberg, NEPC



OIL MARKETS



Source: New York Mercantile Exchange, Bloomberg



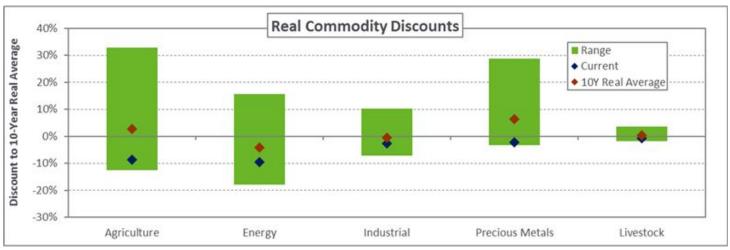
World Crude Oil & Liquid Fuels Consumption Production

Source: US Department of Energy, Bloomberg

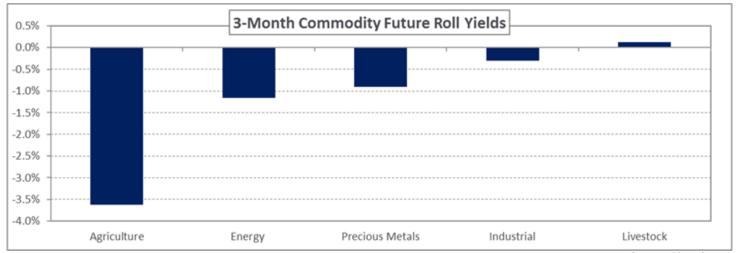
Source: OECD, Bloomberg



VALUATIONS



Source: Bloomberg, NEPC



Source: Bloomberg



INVESTMENT GUIDELINES

Sprucegrove U.S. International Pooled Fund

The Fund seeks to maximize the long-term rate of return while seeking to preserve investment capital
by investing primarily in equity and quasi-equity securities of companies with more value characteristics
located in developed markets in the Europe, Australasia and the Far East ("EAFE") Index and to
outperform the index, net of fees and achieve a high ranking relative to similar funds over a full market
cycle.

Walter Scott & Partners International Fund

The Fund will invest in equity securities that meet certain quantitative and qualitative investment criteria and will seek long-term capital appreciation. The Fund will tend to focus on those industries or sectors with more growth characteristics and experiencing upper quartile economic growth and may avoid industries which are in secular economic decline. The Fund seeks to outperform the MSCI Europe, Australasia and the Far East ("EAFE") Index net of fees, and achieve a high ranking relative to similar funds over a full market cycle.

Blackrock U.S. Debt Index Fund

The U.S. Debt Index Fund shall be invested and reinvested primarily in a portfolio of Debt Securities
with the objective of approximating as closely as practicable the total rate of return of the market for
Debt Securities as defined by the Barclays Capital/Bloomberg U.S. Aggregate Bond Index.

Western Asset Management Core Plus Fixed Income Separate Account

The objective of the Portfolio is to provide above-average total return in a manner that is consistent
with the typical rate-of-return volatility exhibited by broad market fixed income portfolios. The Fund will
seek to outperform the Bloomberg Barclays U.S. Aggregate Index, net of fees, over a full market cycle.

Reams Unconstrained Fixed Income Separate Account

The Portfolio will be broadly diversified across markets, sectors, securities, and maturities in a manner consistent with accepted standards of prudence. The objective of the Portfolio is to maximize risk-adjusted total return by systematically pursuing relative value opportunities throughout all sectors of the fixed income market. The Portfolio will seek returns in excess of the Bloomberg/Barclays U.S Aggregate Bond Index and/or the three month London Interbank Offered Rate ("LIBOR") in U.S. dollars plus 3% net of fees with an expected risk volatility goal of approximately 4 to 6% over a full market cycle.



INVESTMENT GUIDELINES

Loomis, Sayles & Company Multisector Full Discretion Separate Account

The fixed income portfolio should be broadly diversified across markets, sectors, securities, and maturities in a manner consistent with accepted standards of prudence. The objective of the Portfolio is to provide above-average total return in a manner that is consistent with the typical rate-of-return volatility exhibited by broad market fixed income portfolios. The return of the Manager should exceed that of the custom benchmark (30% of the rate of return of the Citigroup High-Yield Index, 5% of the rate of return of the J.P. Morgan Non-U.S. Hedged Bond Index and 65% of the rate of return of the Bloomberg Barclays U.S. Aggregate Bond Index), net of fees, over a full market cycle.

Loomis, Sayles & Company Strategic Alpha Fund

The objective of the Fund is to provide absolute returns in excess of the Bloomberg/Barclays U.S
 Aggregate Bond Index and/or the three month London Interbank Offered Rate ("LIBOR") in U.S. dollars
 plus 3% net of fees with an expected risk volatility goal of approximately 4 to 6% over a full market
 cycle.

Bridgewater Associates All Weather Portfolio

The investment objective of the Fund is to seek to provide attractive returns with relatively limited risks, with no material bias to perform better or worse in any particular type of economic environment. In other words, the portfolio seeks to perform approximately as well in rising or falling inflation periods, or in periods of strong or weak economic growth. To achieve this objective, the Fund holds investments in different asset classes that have different biases to economic conditions. The Manager will seek to outperform the CPI + 4% (Unadjusted) benchmark net of fees over a full market cycle.

Tortoise Energy Infrastructure Master Limited Partnership

The Manager will invest in master limited partnerships with an investment approach that emphasizes a long-term, buy-and-hold philosophy with low turnover in an effort to achieve a portfolio characterized by high current income, high growth and low volatility. The Manager invests primarily in long-haul pipelines and gathering & processing pipelines. The Manager will seek to outperform the Wells Fargo MLP Index net of fees over a full market cycle.



INVESTMENT GUIDELINES

PGIM Real Estate Property Investment Separate Account

PRISA is a broadly diversified equity real estate portfolio that invests primarily in existing, income-producing properties with strong cash flow that is expected to increase over time and thereby provide the potential for capital appreciation. The Fund's performance objective is to produce a total return each year that meets or exceeds the National Council of Real Estate Investment Fiduciaries Fund Index – Open-End Diversified Core Equity ("NCREIF-ODCE") net of fees, while maintaining the benefits of a broadly diversified, core real estate portfolio.

UBS Realty Investors Trumbull Property Fund

The Fund seeks to provide investors with strategic market access to high-quality private commercial real estate with the financial objective of providing superior risk-adjusted returns across the real estate cycles. Maximize the quality and growth of the Fund's income by acquiring and aggressively managing high quality assets in major US metropolitan markets to minimize risk through diversification by property type, geographic location and economic sector. The Fund's performance objective is to outperform the National Council of Real Estate Investment Fiduciaries Fund Index – Open-End Diversified Core Equity ("NCREIF-ODCE") index net of fees, and a 5% real rate of return (inflation-adjusted return) over a full market cycle.



Alpha - Measures the relationship between the fund performance and the performance of another fund or benchmark index and equals the excess return while the other fund or benchmark index is zero.

Alpha Jensen - The average return on a portfolio over and above that predicted by the capital asset pricing model (CAPM), given the portfolio's beta and the average market return. Also known as the abnormal return or the risk adjusted excess return.

Annualized Excess Return over Benchmark - Annualized fund return minus the annualized benchmark return for the calculated return.

Annualized Return - A statistical technique whereby returns covering periods greater than one year are converted to cover a 12 month time span.

Beta - Measures the volatility or systematic risk and is equal to the change in the fund's performance in relation to the change in the assigned index's performance.

Information Ratio - A measure of the risk adjusted return of a financial security, asset, or portfolio.

Formula:

(Annualized Return of Portfolio - Annualized Return of Benchmark)/Annualized Standard Deviation(Period Portfolio Return - Period Benchmark Return). To annualize standard deviation, multiply the deviation by the square root of the number of periods per year where monthly returns per year equals 12 and quarterly returns is four periods per year.

R-Squared – Represents the percentage of a fund's movements that can be explained by movements in an index. R-Squared values range from 0 to 100. An R-Squared of 100 denotes that all movements of a fund are completely explained by movements in the index.

Sharpe Ratio - A measure of the excess return or risk premium per unit of risk in an investment asset or trading strategy.

Sortino Ratio - A method to differentiate between good and bad volatility in the Sharpe Ratio. The differentiation of up and down volatility allows the calculation to provide a risk adjusted measure of a security or fund's performance without upward price change penalties.

Formula:

Calculation Average (X-Y)/Downside Deviation (X-Y) * 2Where X=Return Series X Y = Return Series Y which is the risk free return (91 day T-bills) **Standard Deviation** - The standard deviation is a statistical term that describes the distribution of results. It is a commonly used measure of volatility of returns of a portfolio, asset class, or security. The higher the standard deviation the more volatile the returns are.

Formula:

(Annualized Return of Portfolio – Annualized Return of Risk Free) / Annualized Standard Deviation (Portfolio Returns)

Tracking Error - Tracking error, also known as residual risk, is a measure of the degree to which a portfolio tracks its benchmark. It is also a measure of consistency of excess returns. Tracking error is computed as the annualized standard deviation of the difference between a portfolio's return and that of its benchmark.

Formula:

Tracking Error = Standard Deviation $(X-Y) * \sqrt{(\# of periods per year)}$ Where X = periods portfolio return and <math>Y = the period's benchmark returnFor monthly returns, the periods per year = 12 For quarterly returns, the periods per year = 4

Treynor Ratio - A risk-adjusted measure of return based on systematic risk. Similar to the Sharpe ratio with the difference being the Treynor ratio uses beta as the measurement of volatility.

Formula:

(Portfolio Average Return - Average Return of Risk-Free Rate)/Portfolio Beta

Up/Down Capture Ratio - A measure of what percentage of a market's returns is "captured" by a portfolio. For example, if the market declines 10% over some period, and the manager declines only 9%, then his or her capture ratio is 90%. In down markets, it is advantageous for a manager to have as low a capture ratio as possible. For up markets, the higher the capture ratio the better. Looking at capture ratios can provide insight into how a manager achieves excess returns. A value manager might typically have a lower capture ratio in both up and down markets, achieving excess returns by protecting on the downside, whereas a growth manager might fall more than the overall market in down markets, but achieve above-market returns in a rising market.

UpsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Period Benchmark Return is > = 0

DownsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Benchmark < 0

Data Source: InvestorForce



Of Portfolios/Observations1 – The total number of data points that make up a specified universe

Allocation Index³ - The allocation index measures the value added (or subtracted) to each portfolio by active management. It is calculated monthly: The portfolio asset allocation to each category from the prior month-end is multiplied by a specified market index.

Asset Allocation Effect² - Measures an investment manager's ability to effectively allocate their portfolio's assets to various sectors. The allocation effect determines whether the overweighting or underweighting of sectors relative to a benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is over weighted in a sector that outperforms the benchmark and underweighted in a sector that underperforms the benchmark. Negative allocation occurs when the portfolio is over weighted in a sector that underperforms the benchmark and under weighted in a sector that outperforms the benchmark.

Agency Bonds (Agencies)³ - The full faith and credit of the United States government is normally not pledged to payment of principal and interest on the majority of government agencies issuing these bonds, with maturities of up to ten years. Their yields, therefore, are normally higher than government and their marketability is good, thereby qualifying them as a low risk-high liquidity type of investment. They are eligible as security for advances to the member banks by the Federal Reserve, which attests to their standing.

Asset Backed Securities (ABS)³ - Bonds which are similar to mortgagebacked securities but are collateralized by assets other than mortgages; commonly backed by credit card receivables, auto loans, or other types of consumer financing.

Attribution³ - Attribution is an analytical technique that allows us to evaluate the performance of the portfolio relative to the benchmark. A proper attribution tells us where value was added or subtracted as a result of the manager's decisions.

Average Effective Maturity⁴ - For a single bond, it is a measure of maturity that takes into account the possibility that a bond might be called back to the issuer.

For a portfolio of bonds, average effective maturity is the weighted average of the maturities of the underlying bonds. The measure is computed by weighing each bond's maturity by its market value with respect to the portfolio and the likelihood of any of the bonds being called. In a pool of mortgages, this would also account for the likelihood of prepayments on the mortgages.

Batting Average¹ - A measurement representing an investment manager's ability to meet or beat an index.

Formula: Divide the number of days (or months, quarters, etc.) in which the manager beats or matches the index by the total number of days (or months, quarters, etc.) in the period of question and multiply that factor by 100.

Brinson Fachler (BF) Attribution¹ - The BF methodology is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance. The main advantage of the BF methodology is that rather than using the overall return of the benchmark, it goes a level deeper than BHB and measures whether the benchmark sector, country, etc. outperformed/or underperformed the overall benchmark.

Brinson Hood Beebower (BHB) Attribution¹ - The BHB methodology shows that excess return must be equal to the sum of all other factors (i.e., allocation effect, selection effect, interaction effect, etc.). The advantage to using the BHB methodology is that it is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance.

Corporate Bond (Corp) ⁴ - A debt security issued by a corporation and sold to investors. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations. In some cases, the company's physical assets may be used as collateral for bonds.

Correlation¹ - A range of statistical relationships between two or more random variables or observed data values. A correlation is a single number that describes the degree of relationship between variables.

Data Source: InvestorForce, Interaction Effect Performance Attribution, NEPC, LLC, Investopedia, Hedgeco.net



Coupon⁴ – The interest rate stated on a bond when it is issued. The coupon is typically paid semiannually. This is also referred to as the "coupon rate" or "coupon percent rate."

Currency Effect¹ - Is the effect that changes in currency exchange rates over time affect excess performance.

Derivative Instrument³ - A financial obligation that derives its precise value from the value of one or more other instruments (or assets) at the same point of time. For example, the relationship between the value of an S&P 500 futures contract (the derivative instrument in this case) is determined by the value of the S&P 500 Index and the value of a U.S. Treasury bill that matures at the expiration of the futures contract.

Downside Deviation¹ - Equals the standard deviation of negative return or the measure of downside risk focusing on the standard deviation of negative returns.

Formula:

Annualized Standard Deviation (Fund Return - Average Fund Return) where average fund return is greater than individual fund returns, monthly or quarterly.

Duration³ - Duration is a measure of interest rate risk. The greater the duration of a bond, or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates. A bond's duration is inversely related to interest rates and directly related to time to maturity.

Equity/Debt/Cash Ratio¹ – The percentage of an investment or portfolio that is in Equity, Debt, and/or Cash (i.e. A 7/89/4 ratio represents an investment that is made up of 7% Equity, 89% Debt, and 4% Cash).

Foreign Bond³ - A bond that is issued in a domestic market by a foreign entity, in the domestic market's currency. A foreign bond is most often issued by a foreign firm to raise capital in a domestic market that would be most interested in purchasing the firm's debt. For foreign firms doing a large amount of business in the domestic market, issuing foreign bonds is a common practice.

Hard Hurdle⁵ – is a hurdle rate that once beaten allows a fund manager to charge a performance fee on only the funds above the specified hurdle rate. **High-Water Mark⁴** - The highest peak in value that an investment fund/ account has reached. This term is often used in the context of fund manager compensation, which is performance based. Some performance-based fees only get paid when fund performance exceeds the high-water mark. The high-water mark ensures that the manager does not get paid large sums for poor performance.

Hurdle Rate⁴ - The minimum rate of return on an investment required, in order for a manager to collect incentive fees from the investor, which is usually tied to a benchmark.

Interaction Effects² - The interaction effect measures the combined impact of an investment manager's selection and allocation decisions within a sector. For example, if an investment manager had superior selection and over weighted that particular sector, the interaction effect is positive. If an investment manager had superior selection, but underweighted that sector, the interaction effect is negative. In this case, the investment manager did not take advantage of the superior selection by allocating more assets to that sector. Since many investment managers consider the interaction effect to be part of the selection or the allocation, it is often combined with the either effect.

Median³ - The value (rate of return, market sensitivity, etc.) that exceeds onehalf of the values in the population and that is exceeded by one-half of the values. The median has a percentile rank of 50.

Modified Duration³ - The percentage change in the price of a fixed income security that results from a change in yield.

Mortgage Backed Securities (MBS)³ - Bonds which are a general obligation of the issuing institution but are also collateralized by a pool of mortgages.

Municipal Bond (Muni) ⁴ - A debt security issued by a state, municipality or county to finance its capital expenditures.

Net Investment Change¹ – Is the change in an investment after accounting for all Net Cash Flows.

Performance Fee⁴ - A payment made to a fund manager for generating positive returns. The performance fee is generally calculated as a percentage of investment profits, often both realized and unrealized.

Data Source: ¹InvestorForce, ²Interaction Effect Performance Attribution, ³NEPC, LLC, ⁴Investopedia, ⁵Hedgeco.net



Policy Index³ - A custom benchmark designed to indicate the returns that a passive investor would earn by consistently following the asset allocation targets set forth in this investment policy statement.

Price to Book (P/B)⁴ - A ratio used to compare a stock's market value to its book value. It is calculated by dividing the current closing price of the stock by the latest quarter's book value per share, also known as the "price-equity ratio".

Price to Earnings (P/E)³ - The weighted equity P/E is based on current price and trailing 12 months earnings per share (EPS).

Price to Sales (P/S)⁴ - A ratio for valuing a stock relative to its own past performance, other companies, or the market itself. Price to sales is calculated by dividing a stock's current price by its revenue per share for the trailing 12 months.

Return on Equity (ROE)⁴ - The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

Selection (or Manager) Effect² - Measures the investment manager's ability to select securities within a given sector relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by the manager's allocation to the sector. The weight of the sector in the portfolio determines the size of the effect—the larger the sector, the larger the effect is, positive or negative.

Soft Hurdle rate⁵ – is a hurdle rate that once beaten allows a fund manager to charge a performance fee based on the entire annualized return.

Tiered Fee¹ – A fee structure that is paid to fund managers based on the size of the investment (i.e. 1.00% fee on the first \$10M invested, 0.90% on the next \$10M, and 0.80% on the remaining balance).

Total Effects² - The active management (total) effect is the sum of the selection, allocation, and interaction effects. It is also the difference between the total portfolio return and the total benchmark return. You can use the active management effect to determine the amount the investment manager has added to a portfolio's return.

Total Return¹ - The actual rate of return of an investment over a specified time period. Total return includes interest, capital gains, dividends, and distributions realized over a defined time period.

Universe3 - The list of all assets eligible for inclusion in a portfolio.

Upside Deviation - Standard Deviation of Positive Returns

Weighted Avg. Market Cap. ⁴ - A stock market index weighted by the market capitalization of each stock in the index. In such a weighting scheme, larger companies account for a greater portion of the index. Most indexes are constructed in this manner, with the best example being the S&P 500.

Yield (%)³ - The current yield of a security is the current indicated annual dividend rate divided by current price.

Yield to Maturity³ -The discount rate that equates the present value of cash flows, both principal and interest, to market price.

Data Source: ¹InvestorForce, ²Interaction Effect Performance Attribution, ³NEPC, LLC, ⁴Investopedia, ⁵Hedgeco.net



INFORMATION DISCLAIMER

- Past performance is no guarantee of future results.
- The goal of this report is to provide a basis for monitoring financial markets. The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.
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Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month
 after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is
 presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC
 cannot guarantee that any plan will achieve its targeted return or meet other goals.



PRELIMINARY MONTHLY PERFORMANCE REPORT

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

January 31, 2019

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Anthony Ferrara, CAIA, Consultant
Michael Miranda, CFA, Senior Analyst





BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund	5,453,930,124	100.0	100.0	5.3	0.8	-1.7	9.9	6.6	10.6	7.9	Apr-94
Policy Index				<u>5.5</u>	<u>0.5</u>	<u>-1.5</u>	<u>9.9</u>	<u>7.0</u>	<u>10.3</u>	<u>7.9</u>	Apr-94
Over/Under				-0.2	0.3	-0.2	0.0	-0.4	0.3	0.0	
60% MSCI ACWI (Net) / 40% FTSE WGBI				5.3	-0.3	-4.7	8.1	4.5	7.8		Apr-94
60% S&P 500 / 40% BBgBarc Aggregate				5.2	1.7	-0.2	9.2	7.6	10.6	8.2	Apr-94
Total Fund ex Parametric	5,401,685,393	99.0		5.2	0.2	-2.2	9.7	6.4	10.4	7.8	Apr-94
Total Fund ex Private Equity	5,074,668,164	93.0		5.7	0.3	-2.5	9.6	6.2		8.2	Jan-12
Policy Index				<u>5.5</u>	<u>0.5</u>	<u>-1.5</u>	<u>9.9</u>	<u>7.0</u>	<u>10.3</u>	<u>8.9</u>	Jan-12
Over/Under				0.2	-0.2	-1.0	-0.3	-0.8		-0.7	
Total US Equity	1,606,986,991	29.5	28.0	8.5	0.2	-2.2	14.5	10.5	15.5	9.1	Dec-93
Russell 3000				<u>8.6</u>	<u>-0.3</u>	<u>-2.3</u>	<u>14.2</u>	<u>10.4</u>	<u>15.1</u>	<u>9.4</u>	Dec-93
Over/Under				-0.1	0.5	0.1	0.3	0.1	0.4	-0.3	
Western U.S. Index Plus	203,979,609	3.7		8.7	0.7	-2.7	14.8	11.4	17.9	5.6	May-07
S&P 500				<u>8.0</u>	<u>0.6</u>	<u>-2.3</u>	<u>14.0</u>	<u>11.0</u>	<u>15.0</u>	<u>7.3</u>	<i>May-</i> 07
Over/Under				0.7	0.1	-0.4	8.0	0.4	2.9	-1.7	
Blackrock Russell 1000 Index	1,341,426,461	24.6		8.4	0.3	-2.1				9.5	May-17
Russell 1000				<u>8.4</u>	<u>0.3</u>	<u>-2.2</u>	<u>14.1</u>	<u>10.7</u>	<u>15.2</u>	<u>9.5</u>	May-17
Over/Under				0.0	0.0	0.1				0.0	
Blackrock Russell 2500 Index	61,580,921	1.1		11.5	-4.8	-2.5				6.8	May-17
Russell 2500 Over/Under				<u>11.5</u> 0.0	<u>-4.8</u> 0.0	<u>-2.6</u> 0.1	<u>14.4</u>	<u>8.0</u>	<u>15.5</u>	<u>6.8</u> 0.0	May-17

Policy Index: Currently, 28% Russell 3000, 20% BBgBarc US Aggregate, 15% MSCI ACWI ex U.S., 10%MSCI ACWI, 10% Russell 3000 Index + 3%, 10% CPI+4% Index, and 7% NCREIF ODCE Real Estate Index.

Prior to January 2016 the Total U.S. Equity Benchmark was a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Non-US Equity	882,483,224	16.2	15.0	7.2	-3.7	-11.3	10.4	3.9	8.9	6.2	Mar-94
MSCI ACWI ex USA				<u>7.6</u>	<u>-4.1</u>	<u>-12.6</u>	<u>9.6</u>	<u>3.1</u>	<u>8.3</u>	<u>5.0</u>	Mar-94
Over/Under				-0.4	0.4	1.3	0.8	8.0	0.6	1.2	
MSCI EAFE				6.6	-5.5	-12.5	7.7	2.7	8.1	4.6	Mar-94
MSCI ACWI ex USA NR LCL				6.4	-3.8	-7.2	8.3	6.1	9.1		Mar-94
MSCI EAFE NR LCL				5.5	-5.2	-7.2	6.6	5.6	8.8	4.6	Mar-94
BlackRock ACWI ex-U.S. Index	450,259,814	8.3		7.6	-4.8	-12.8	9.8	3.4	8.9	2.3	Mar-07
MSCI ACWI ex USA IMI				<u>7.6</u>	<u>-4.8</u>	<u>-13.0</u>	<u>9.6</u>	<u>3.2</u>	<u>8.7</u>	<u>2.1</u>	<i>Mar-</i> 07
Over/Under MSCI ACWI ex USA NR LCL				0.0 6.4	0.0 -3.8	0.2 -7.2	0.2 8.3	0.2 6.1	0.2 9.1	0.2 2.9	Mar-07
Sprucegrove	221,059,241	4.1		8.0	-3.8	-7.2 -11.8	12.8	4.1	9.7	7.2	Mar-07 Mar-02
MSCI ACWI ex USA	221,059,241	4.1		6.0 <u>7.6</u>	-3.3 <u>-4.1</u>	-11.6 -12.6	9.6	4.1 3.1	9.7 <u>8.3</u>	6.1	Mar-02
Over/Under				7.0 0.4	0.8	0.8	3.2	<u>3. <i>1</i></u> 1.0	<u>0.5</u> 1.4	<u>0. 1</u> 1.1	IVIAI-UZ
MSCI EAFE				6.6	-5.5	-12.5	7.7	2.7	8.1	5.5	Mar-02
MSCI ACWI ex USA NR LCL				6.4	-3.8	-7.2	8.3	6.1	9.1	5.0	Mar-02
MSCI EAFE NR LCL				5.5	-5.2	-7.2	6.6	5.6	8.8	4.2	Mar-02
Hexavest	89,484,208	1.6		6.4	-1.7	-8.9	6.6	2.6		3.7	Dec-10
MSCI EAFE	, - ,			6.6	<u>-5.5</u>	-12.5	<u>7.7</u>	2.7	8.1	4.1	Dec-10
Over/Under				-0.2	3.8	3.6	-1.1	-0.1		-0.4	
MSCI EAFE NR LCL				5.5	-5.2	-7.2	6.6	5.6	8.8	6.5	Dec-10
Walter Scott	121,679,961	2.2		4.6	-2.3	-6.6	11.1	5.8		5.3	Dec-10
MSCI ACWI ex USA				<u>7.6</u>	<u>-4.1</u>	<u>-12.6</u>	<u>9.6</u>	<u>3.1</u>	<u>8.3</u>	<u>3.2</u>	Dec-10
Over/Under				-3.0	1.8	6.0	1.5	2.7		2.1	
MSCI ACWI ex USA NR LCL				6.4	-3.8	-7.2	8.3	6.1	9.1	5.9	Dec-10
MSCI EAFE				6.6	-5.5	-12.5	7.7	2.7	8.1	4.1	Dec-10
Total Global Equity	588,535,380	10.8	10.0	7.9	-1.7	-7.1	12.1	6.3	9.6	5.8	May-05
MSCIACWI				<u>7.9</u>	<u>-1.8</u>	<u>-7.5</u>	<u>11.6</u>	<u>6.7</u>	<u>11.3</u>	<u>6.5</u>	May-05
Over/Under				0.0	0.1	0.4	0.5	-0.4	-1.7	-0.7	
BlackRock MSCI ACWI Equity Index	588,535,380	10.8		7.9	-1.7	-7.1	12.1	7.2		9.6	Aug-12
MSCI ACWI				<u>7.9</u>	<u>-1.8</u>	<u>-7.5</u>	<u>11.6</u>	<u>6.7</u>	<u>11.3</u>	<u>9.2</u>	Aug-12
Over/Under				0.0	0.1	0.4	0.5	0.5		0.4	



TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Private Equity	379,261,961	7.0	10.0	0.0	8.4	16.2	14.2	15.2		14.7	Jan-12
Russell 3000 + 3%				<u>8.8</u>	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>17.0</u>	Jan-12
Over/Under				-8.8	7.0	15.5	-3.4	1.5		-2.3	
Cambridge Associates Global All PE (Qtr Lag)				0.0	8.1	16.6	13.6	12.8	11.1	13.1	Jan-12
Adams Street Global Fund Series	173,039,730	3.2		0.0	9.4	19.6	13.2	13.9		13.5	Jan-12
Russell 3000 + 3%				<u>8.8</u>	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>17.0</u>	Jan-12
Over/Under				-8.8	8.0	18.9	-4.4	0.2		-3.5	
Harbourvest	84,036,426	1.5		-0.2	10.0	14.7	17.2	19.7		19.5	Aug-13
Russell 3000 + 3%				<u>8.8</u>	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>14.2</u>	Aug-13
Over/Under				-9.0	8.6	14.0	-0.4	6.0		5.3	
Pantheon Global Secondary Funds	39,845,681	0.7		0.0	8.7	17.3	18.9	15.8		13.3	Jan-12
Russell 3000 + 3%				<u>8.8</u>	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>17.0</u>	Jan-12
Over/Under				-8.8	7.3	16.6	1.3	2.1		-3.7	
Drive Capital Fund	6,918,344	0.1		0.0	1.6	-2.5				-27.6	Sep-16
Russell 3000 + 3%				<u>8.8</u>	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>14.8</u>	Sep-16
Over/Under				-8.8	0.2	-3.2				-42.4	
Abbott Secondary Opportunities	12,219,909	0.2		0.0	26.0	26.0	-			23.8	Jan-18
Russell 3000 + 3%				<u>8.8</u>	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>5.7</u>	Jan-18
Over/Under				-8.8	24.6	25.3				18.1	
CVI Credit Value Fund	10,498,082	0.2		-2.1	0.2	2.5	-			2.3	Jan-18
Russell 3000 + 3%				<u>8.8</u>	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>5.7</u>	Jan-18
Over/Under				-10.9	-1.2	1.8				-3.4	
Clearlake Capital Partners V	4,658,973	0.1		0.0	32.9		-			29.7	Mar-18
Russell 3000 + 3%				<u>8.8</u>	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>4.3</u>	Mar-18
Over/Under				-8.8	31.5					25.4	
Battery Ventures XII	4,454,818	0.1		0.0	-8.0					-8.0	Apr-18
Russell 3000 + 3%				<u>8.8</u>	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>6.1</u>	Apr-18
Over/Under				-8.8	-9.4					-14.1	

Please Note:

Private Equity performance is shown on a time-weighted return basis. Values are cash adjusted with current month cash flows.



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TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Insight Venture Partners X	10,035,627	0.2		0.0	-5.7					-5.7	May-18
Russell 3000 + 3% Over/Under				<u>8.8</u> -8.8	<u>1.4</u> -7.1	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>5.5</u> -11.2	May-18
GTCR Fund XII	5,444,354	0.1		0.0	-42.2					-42.2	Jun-18
Russell 3000 + 3% Over/Under				<u>8.8</u> -8.8	<u>1.4</u> -43.6	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>2.3</u> -44.5	Jun-18
Buenaventure One, LLC	17,820,574	0.3		0.0	-0.8					-0.8	Jul-18
Russell 3000 + 3% Over/Under				<u>8.8</u> -8.8	<u>1.4</u> -2.2	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>1.4</u> -2.2	Jul-18
ECI 11	1,570,841	0.0		26.5						23.3	Dec-18
Russell 3000 + 3% Over/Under				<u>8.8</u> 17.7	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>-1.0</u> 24.3	Dec-18
Buenaventure Two, LLC	55,928	0.0		0.0						0.0	Dec-18
Russell 3000 + 3% Over/Under				<u>8.8</u> -8.8	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>-1.0</u> 1.0	Dec-18
Monroe Capital Private Credit Fund III	6,001,831	0.1		0.0						0.0	Dec-18
Russell 3000 + 3% Over/Under				<u>8.8</u> -8.8	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>-1.0</u> 1.0	Dec-18
The Resolute Fund IV L.P	2,047,844	0.0		7.6						7.6	Jan-19
Russell 3000 + 3% Over/Under				<u>8.8</u> -1.2	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>	<u>8.8</u> -1.2	Jan-19
GGV Capital VII L.P.	508,000	0.0									Feb-19
Russell 3000 + 3% Over/Under				<u>8.8</u>	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>		Feb-19
GGV Discovery II, L.P.	105,000	0.0									Feb-19
Russell 3000 + 3% Over/Under				<u>8.8</u>	<u>1.4</u>	<u>0.7</u>	<u>17.6</u>	<u>13.7</u>	<u>18.5</u>		Feb-19

Please Note: Private Equity performance is shown on a time-weighted return basis. Values are cash adjusted with current month cash flows. GGV Capital VII L.P. and GGV Discovery II L.P. funded 1/22/2019.



VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE EQUITY LIMITED PARTNERSHIP PERFORMANCE

													Since Incept	ion
		Initial		Capital	Outstanding									Total Value to
Fund Name	Vintage Year	Investment Date	Commitment	Called to Date ¹	Commitment 1	Call Ratio	Add'l Fees ²	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	to Paid In Multiple (DPI)	Paid In Multiple (TVPI)
Abbott Secondary Opportunities, LP.	2017	12/21/2017	\$25,000,000	\$13,348,706	\$12.014.011	53%		\$2,625,000	\$12,219,907	\$14,844,907	\$1,496,201	20.3%	0.2x	1.11x
ABRY Partners IX	2019	12/6/2018	\$7.600.000	-	\$7,600,000	0%			-	-	-		_	-
Adams Street 2010 U.S. Fund	2010	5/21/2010	\$42,500,000	\$37,442,500	\$5,057,500	88%	\$15,213	\$25,869,869	\$36,820,450	\$62,690,319	\$25,232,606	13.9%	0.69x	1.67x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	\$25,500,000	\$22,325,249	\$3,174,751	88%	\$1,589	\$16,269,043	\$16,978,823	\$33,247,866	\$10,921,028	11.3%	0.73x	1.49x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	\$8,500,000	\$7,633,000	\$867,000	90%	\$0	\$2,030,308	\$9,914,136	\$11,944,444	\$4,311,444	11.0%	0.27x	1.56x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$8,066,500	\$433,500	95%	\$6,697	\$9,077,781	\$5,568,073	\$14,645,854	\$6,572,657	13.6%	1.13x	1.82x
Adams Street 2013 Global Fund	2013	6/27/2013	\$75,000,000	\$56,625,000	\$18,375,000	76%	\$10,728	\$8,075,792	\$70,923,287	\$78,999,079	\$22,363,351	11.4%	0.14x	1.4x
Adams Street 2016 Global Fund	2016	12/22/2016	\$60,000,000	\$28,200,000	\$31,800,000	47%	\$0	\$3,621,043	\$28,506,158	\$32,127,201	\$3,927,201	17.9%	0.13x	1.14x
Adams Street Co-Investment Fund IV A	2018	9/24/2018	\$30,000,000	\$4,567,808	\$25,500,000	15%	\$67,808		\$4,500,000	\$4,500,000	-\$67,808	-4.5%	_	0.99x
Astorg VII	2019	12/17/2018	\$8,809,493		\$8,809,493	0%	_		_	-	_		_	-
Battery Ventures XII	2018	2/1/2018	\$9,050,000	\$2,781,065	\$6,268,935	31%	\$0	\$0	\$2,652,756	\$2,652,756	-\$128,309	-13.0%	0x	0.95x
Battery Ventures XII Side Fund	2018	2/1/2018	\$5,050,000	\$1,828,605	\$3,221,395	36%	\$0	\$0	\$1,802,063	\$1,802,063	-\$26,542	-5.1%	0x	0.99x
Buenaventure One, LLC	2018	1/5/2018	\$57,172,500	\$18,355,590	\$38,816,910	32%		\$403,156	\$17,820,572	\$18,223,728	-	-2.0%	-	0.99x
CapVest Equity Partners IV	2018	7/11/2018	\$12,613,592	-	\$12,613,592	0%			-	-	-	-	-	-
Clearlake Capital Partners V	2017	12/22/2017	\$9,950,000	\$3,976,011	\$5,974,799	40%	\$46,158	\$38,823	\$4,619,260	\$4,658,083	\$635,914	36.1%	0.01x	1.17x
CVI Credit Value Fund IV	2017	12/31/2017	\$30,000,000	\$10,500,000	\$19,500,000	35%		\$6,147	\$10,498,081	\$10,504,228	\$4,228	0.1%	0x	1x
Drive Capital Fund II	2016	9/1/2016	\$15,000,000	\$7,461,666	\$7,541,544	50%	\$3,210	\$0	\$6,918,344	\$6,918,344	-\$546,532	-7.3%	0x	0.93x
ECI 11	2018	7/5/2018	\$9,794,342	\$1,252,530	\$8,541,812	0%			\$1,194,197	\$1,194,197		-27.4%		0.95x
GGV Capital VII	2018	8/15/2018	\$10,160,000	\$508,000	\$9,652,000	0%			\$508,000	\$508,000	_		_	1x
GGV Capital VII Plus	2018	8/15/2018	\$2,540,000	-	\$2,540,000	0%			-	-	_			-
GGV Discovery II	2018	8/15/2018	\$2,100,000	\$105,000	\$1,995,000	0%			\$105,000	\$105,000	_		_	1x
GTCR Fund XII	2017	9/29/2017	\$30,000,000	\$6,423,000	\$23,672,792	21%	-	\$264,502	\$4,482,886	\$4,747,388	-\$1,675,612	-67.2%	0.04x	0.74x
HarbourVest - Dover Street VIII	2013	5/30/2013	\$67,500,000	\$60,834,954	\$6,750,000	90%	\$84,954	\$66,622,008	\$26,778,256	\$93,400,264	\$32,480,356	21.0%	1.1x	1.54x
HarbourVest - Dover Street IX	2016	12/16/2016	\$60,000,000	\$31,800,000	\$28,200,000	53%	\$0	\$7,282,016	\$32,485,052	\$39,767,068	\$7,967,068	33.3%	0.23x	1.25x
HarbourVest - PRTNS CO INVEST IV L.P.	2017	6/2/2017	\$30,000,000	\$22,428,591	\$7,768,149	75%	\$0	\$1,736,653	\$24,886,761	\$26,623,414	\$4,194,823	14.6%	0.08x	1.19x
HarbourVest - PRTNS CO INVEST V L.P.	2018	7/31/2018	\$35,000,000		\$35,000,000	0%	-			-	_		-	
Hellman & Friedman Capital Partners IX	2018	9/28/2018	\$19,800,000	-	\$19,800,000	0%	-	-	-	-	-	-	-	-
Insight Venture Partners X	2017	10/13/2017	\$25,000,000	\$10,250,000	\$14,750,000	41%	-	\$8,561	\$10,035,624	\$10,044,185	-\$205,815	-4.4%	0x	0.98x
M/C Partners VIII	2018	4/2/2018	\$10,000,000	-	\$10,000,000	0%	-	-	-	-	-	-	-	-
Monroe Capital Private Credit Fund III	2018	9/5/2018	\$25,000,000	\$6,250,000	\$18,750,000	0%		\$248,169	\$6,001,831	\$6,250,000	-	0.0%	-	1x
Pantheon Global Secondary Fund IV	2010	8/20/2010	\$15,000,000	\$9,960,000	\$5,040,000	66%	\$0	\$12,450,001	\$3,342,817	\$15,792,818	\$5,832,818	14.0%	1.25x	1.59x
Pantheon Global Secondary Fund V	2015	2/26/2015	\$50,000,000	\$33,566,509	\$16,433,491	67%	(\$162,514)	\$9,600,205	\$36,490,269	\$46,090,474	\$12,686,479	19.4%	0.29x	1.37x
The Resolute Fund IV	2018	5/2/2018	\$20,000,000	\$1,903,855	\$18,096,145	0%		-	\$2,047,844	\$2,047,844	-	62.2%	-	1.08x
Riverside Micro-Cap Fund V	2018	8/21/2018	\$10,000,000	-	\$10,000,000	0%	-	-	-	-	-	-	-	
Total VCERA Private Equity Program	-	5/21/2010	\$852,139,927	\$408,394,139	\$444,557,819	48%	\$73,843	\$166,229,077	\$378,100,447	\$544,329,524	\$135,975,556	14.5%	0.41x	1.33x

^{1.} Includes recycled/recallable distributions received to date.



Add'l Fees represents notional interest paid/(received).

^{2.} Add'l Fees for Pantheon Global Secondary Fund V includes notional interest paid/(received) and management fee rebates paid to VCERA.

Note: Private equity performance data is reported net of fees.

Performance shown is based on 1/31/2019 statement of investments produced by Abbott Capital.

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total US Fixed Income	1,025,335,781	18.8	20.0	1.3	2.6	1.8	3.4	2.6	6.5	5.7	Feb-94
BBgBarc US Aggregate TR Over/Under				<u>1.1</u> 0.2	<u>2.7</u> -0.1	<u>2.3</u> -0.5	<u>2.0</u> 1.4	<u>2.4</u> 0.2	<u>3.7</u> 2.8	<u>5.2</u> 0.5	Feb-94
BlackRock U.S. Debt Fund	277,081,703	5.1		1.1	2.8	2.3	2.0	2.5	3.8	5.0	Nov-95
BBgBarc US Aggregate TR Over/Under				<u>1.1</u> 0.0	<u>2.7</u> 0.1	<u>2.3</u> 0.0	<u>2.0</u> 0.0	<u>2.4</u> 0.1	<u>3.7</u> 0.1	<u>5.0</u> 0.0	Nov-95
Western	301,896,008	5.5		1.6	3.1	1.9	3.4	3.6	6.2	5.9	Dec-96
BBgBarc US Aggregate TR Over/Under				<u>1.1</u> 0.5	<u>2.7</u> 0.4	<u>2.3</u> -0.4	<u>2.0</u> 1.4	<u>2.4</u> 1.2	<u>3.7</u> 2.5	<u>5.0</u> 0.9	Dec-96
Reams	314,686,325	5.8		0.9	2.2	1.8	3.6	1.4	7.0	5.1	Sep-01
Reams Custom Index Over/Under				<u>0.2</u> 0.7	<u>1.5</u> 0.7	<u>2.4</u> -0.6	<u>1.5</u> 2.1	<u>1.0</u> 0.4	<u>3.0</u> 4.0	<u>3.8</u> 1.3	Sep-01
BBgBarc US Aggregate TR 3-Month LIBOR + 3%				1.1 0.5	2.7 3.3	2.3 5.5	2.0 4.6	2.4 4.1	3.7 3.7	4.2 4.8	Sep-01 Sep-01
Loomis Strategic Alpha	47,265,900	0.9		1.5	1.1	1.4	4.1	2.6		2.6	Jul-13
BBgBarc US Aggregate TR Over/Under				<u>1.1</u> 0.4	<u>2.7</u> -1.6	<u>2.3</u> -0.9	<u>2.0</u> 2.1	<u>2.4</u> 0.2	<u>3.7</u>	<u>2.5</u> 0.1	Jul-13
3-Month LIBOR + 3%				0.5	3.3	5.5	4.6	4.1	3.7	4.0	Jul-13
Loomis Sayles Multi Strategy	84,405,844	1.5		1.9	2.8	0.9	6.1	4.2	9.0	6.1	Jul-05
Loomis Custom Index Over/Under				<u>2.1</u> -0.2	<u>2.6</u> 0.2	<u>2.1</u> -1.2	<u>4.2</u> 1.9	<u>3.0</u> 1.2	<u>5.7</u> 3.3	<u>4.8</u> 1.3	Jul-05
BBgBarc US Govt/Credit TR				1.2	2.7	1.9	2.1	2.5	3.7	3.9	Jul-05

Reams Custom Index: Merrill Lynch 3 Month Libor Constant Maturity Index, prior to February 2013 the Barclays Aggregate.

Loomis Custom Index: 65% BBgBarc US Aggregate, 30% Citigroup High Yield Market Index and 5% JPM Non-US Hedged Bond Index.



TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Real Estate	433,137,514	7.9	7.0	0.0	3.2	6.9	6.6	8.8	5.3	7.8	Mar-94
NCREIF ODCE Net Over/Under				<u>0.0</u> 0.0	<u>3.4</u> -0.2	<u>7.4</u> -0.5	<u>7.3</u> -0.7	<u>9.4</u> -0.6	<u>6.0</u> -0.7	<u>8.1</u> -0.3	Mar-94
Prudential Real Estate	156,400,478	2.9		0.0	4.0	8.2	7.8	10.0	6.1	6.3	Jun-04
NCREIF ODCE Net Over/Under NCREIF ODCE				<u>0.0</u> 0.0 0.0	3.4 0.6 3.9	7.4 0.8 8.3	7.3 0.5 8.2	9.4 0.6 10.4	<u>6.0</u> 0.1 7.0	7.1 -0.8 8.1	Jun-04 Jun-04
UBS Real Estate	276,737,035	5.1		0.0	2.8	6.2	5.9	8.0	5.8	7.3	Mar-03
NCREIF ODCE Net Over/Under	210,101,000	0.1		<u>0.0</u> 0.0	3.4 -0.6	7.4 -1.2	7.3 -1.4	9.4 -1.4	6.0 -0.2	7.3 0.0	Mar-03
NCREIF ODCE				0.0	3.9	8.3	8.2	10.4	7.0	8.3	Mar-03
Total Real Assets	430,335,899	7.9	10.0	6.9	-1.0	-2.6	7.5	2.3		4.0	Apr-13
CPI + 4% (Unadjusted) Over/Under				<u>0.5</u> 6.4	<u>2.2</u> -3.2	<u>5.6</u> -8.2	<u>6.1</u> 1.4	<u>5.5</u> -3.2		<u>6.2</u> -2.2	Apr-13
Bridgewater All Weather Fund	312,221,845	5.7		4.5	-0.5	-1.3	7.3	4.1		4.5	Aug-13
CPI + 5% (Unadjusted) Over/Under				<u>0.6</u> 3.9	<u>2.8</u> -3.3	<u>6.6</u> -7.9	<u>7.1</u> 0.2	<u>6.5</u> -2.4		<u>6.4</u> -1.9	Aug-13
Tortoise Energy Infrastructure	118,114,054	2.2		13.8	-2.1	-6.0	8.2	-1.9		8.0	Apr-13
Tortoise MLP Index Over/Under				<u>13.4</u> 0.4	<u>-0.6</u> -1.5	<u>-7.0</u> 1.0	<u>8.7</u> -0.5	<u>-4.6</u> 2.7		<u>-2.8</u> 3.6	Apr-13
Overlay	107,853,375	2.0	0.0								
Parametric Abbott Capital Cash	52,244,731 55,608,643	1.0 1.0									

Total Real Estate Benchmark: NCREIF ODCE; prior to January 2006, the NCREIF Property Index.

Real Estate managers and NCREIF ODCE are valued on a quarterly basis. Performance is not applicable in mid-quarter months, therefore 0% return is shown.

Real Estate Valuation is as of 12/31/2018.



TOTAL FUND

		Cash Flow S	ummary				
			Month E	Ending January 31,	2019		
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Abbott Capital Cash	\$17,799,143	\$60,582,165	-\$22,911,584	\$37,670,581	\$0	\$138,919	\$55,608,643
Abbott Secondary Opportunities	\$12,219,909	\$0	\$0	\$0	\$0	\$0	\$12,219,909
Adams Street Global Fund Series	\$173,586,029	\$20,400	-\$566,699	-\$546,299	\$0	-\$1	\$173,039,730
Battery Ventures XII	\$3,157,998	\$1,296,820	\$0	\$1,296,820	\$0	\$0	\$4,454,818
BlackRock ACWI ex-U.S. Index	\$418,477,871	\$0	\$0	\$0	-\$39,188	\$31,781,942	\$450,259,814
BlackRock MSCI ACWI Equity Index	\$545,347,212	\$0	\$0	\$0	-\$21,285	\$43,188,169	\$588,535,380
Blackrock Russell 1000 Index	\$1,297,680,697	\$0	-\$60,000,000	-\$60,000,000	-\$11,595	\$103,745,764	\$1,341,426,461
Blackrock Russell 2500 Index	\$55,224,796	\$0	\$0	\$0	-\$1,026	\$6,356,125	\$61,580,921
BlackRock U.S. Debt Fund	\$274,110,828	\$0	\$0	\$0	-\$12,569	\$2,970,875	\$277,081,703
Bridgewater All Weather Fund	\$298,783,262	\$0	\$0	\$0	-\$98,380	\$13,438,583	\$312,221,845
Buenaventure One, LLC	\$17,820,574	\$0	\$0	\$0	\$0	\$0	\$17,820,574
Buenaventure Two, LLC	\$55,928	\$0	\$0	\$0	\$0	\$0	\$55,928
Clearlake Capital Partners V	\$4,658,973	\$0	\$0	\$0	\$0	\$0	\$4,658,973
CVI Credit Value Fund	\$10,718,254	\$0	\$0	\$0	\$0	-\$220,172	\$10,498,082
Drive Capital Fund	\$5,811,980	\$1,106,364	\$0	\$1,106,364	\$0	\$0	\$6,918,344
ECI 11	\$1,241,760	\$0	\$0	\$0	\$0	\$329,081	\$1,570,841
GGV Capital VII L.P.	\$0	\$508,000	\$0	\$508,000	\$0	\$0	\$508,000
GGV Discovery II, L.P.	\$0	\$105,000	\$0	\$105,000	\$0	\$0	\$105,000
GTCR Fund XII	\$3,569,355	\$1,875,000	\$0	\$1,875,000	\$0	-\$1	\$5,444,354
Harbourvest	\$84,171,685	\$0	\$0	\$0	\$0	-\$135,259	\$84,036,426
Hexavest	\$84,046,977	\$0	\$0	\$0	-\$33,995	\$5,437,232	\$89,484,208
Insight Venture Partners X	\$10,035,627	\$0	\$0	\$0	\$0	\$0	\$10,035,627

GGV Capital VII L.P. and GGV Discovery II L.P. funded 1/22/2019.



TOTAL FUND

	Month Ending January 31, 2019								
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value		
Loomis Sayles Multi Strategy	\$82,827,595	\$0	\$0	\$0	-\$26,935	\$1,578,249	\$84,405,844		
Loomis Strategic Alpha	\$46,548,032	\$0	\$0	\$0	-\$15,755	\$717,867	\$47,265,900		
Monroe Capital Private Credit Fund III	\$6,001,831	\$0	\$0	\$0	\$0	\$0	\$6,001,831		
Pantheon Global Secondary Funds	\$39,845,681	\$0	\$0	\$0	\$0	\$0	\$39,845,681		
Parametric	\$48,131,642	\$0	\$0	\$0	-\$5,395	\$4,113,090	\$52,244,731		
Prudential Real Estate	\$156,400,478	\$0	\$0	\$0	\$0	\$0	\$156,400,478		
Reams	\$311,909,321	\$0	\$0	\$0	-\$45,586	\$2,777,005	\$314,686,325		
Sprucegrove	\$204,625,925	\$0	\$0	\$0	-\$65,637	\$16,433,316	\$221,059,241		
The Resolute Fund IV L.P	\$1,903,855	\$0	\$0	\$0	\$0	\$143,989	\$2,047,844		
Tortoise Energy Infrastructure	\$103,756,384	\$0	\$0	\$0	-\$61,518	\$14,357,670	\$118,114,054		
UBS Real Estate	\$276,737,035	\$0	\$0	\$0	\$0	\$0	\$276,737,035		
Walter Scott	\$116,202,702	\$0	\$0	\$0	-\$82,715	\$5,477,259	\$121,679,961		
Western	\$297,084,068	\$0	\$0	\$0	-\$50,237	\$4,811,940	\$301,896,008		
Western U.S. Index Plus	\$187,644,466	\$0	\$0	\$0	-\$37,997	\$16,335,143	\$203,979,609		
Total	\$5,198,137,872	\$65,493,749	-\$83,478,283	-\$17,984,534	-\$609,814	\$273,776,786	\$5,453,930,124		



Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank.
 Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month
 after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is
 presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC
 cannot guarantee that any plan will achieve its targeted return or meet other goals.





February 25, 2019

Board of Retirement Ventura County Employees' Retirement Association 1190 South Victoria Avenue, #200 Ventura, CA 93003

SUBJECT: REINSTATEMENT TO ACTIVE MEMBERSHIP: STEVEN A. KIRKBY

Dear Board Members,

Staff recommends that VCERA retired member, Steven A. Kirkby, be reinstated to active membership, pursuant to Government Code Sections 31680.4 & 31680.5. Mr. Kirkby has filed his application for reinstatement pursuant to Section 31680.4 and has provided a physician's statement indicating he is not incapacitated form performing the duties of the position, and a letter from the Ventura County Probation Agency indicating an offer of full-time employment and successful clearance of background and medical exams.

Staff will be pleased to answer any questions you may have on this item at the Business meeting of February 25, 2019.

Sincerely,

Linda Webb

Retirement Administrator



February 25, 2019

Board of Retirement Ventura County Employees' Retirement Association 1190 South Victoria Avenue, Suite 200 Ventura, CA 93003

SUBJECT: REQUEST TO ENGAGE SEGAL FOR INTERNAL REVENUE CODE (IRC) 415 LIMIT

CALCULATIONS IN AN AMOUNT NOT TO EXCEED \$110,000

Dear Board Members,

The Internal Revenue Code (IRC) Section 415(b) limits the amount of retirement benefits that may be paid to an individual from a tax-qualified defined benefit plan. This limit is set each calendar year by the Internal Revenue Service (IRS), and the 2019 limit is currently \$225,000. Once the IRS establishes a new annual 415 limit, VCERA's actuary, Segal Consulting (Segal), reviews a list of retirees that VCERA has identified as those whose benefit may potentially exceed the limit. To date, the actuary has identified and confirmed two retirees whose benefits have exceeded this limit and appropriate adjustments have been or will be made.

The process of identifying retirees whose benefits may exceed the 415 limits was recently refined during the implementation of VCERA's pension administration system when staff worked with Segal to create an IRC 415 screening report using initial identification parameters. Some of these parameters include service type, age at retirement, retirement option, and marital status.

The new 415 initial screening was first utilized in 2018 and it identified approximately 110 members whose benefits potentially exceed the 415 limits. It is necessary for Segal to perform additional testing for the each of these members to determine if their benefits actually exceed the 415 limit. (VCERA's tax counsel, Hanson Bridgett, confirms the need for this testing.) A "Grandfathering" provision is also considered for members hired prior to January 1, 1990, where a higher limit may be applied, based on the plan formula in effect on October 14, 1987. The estimated cost for the actuary to perform testing for this group is \$110,000, and will be absorbed in the current year's budget. For those members whose benefits do exceed the 415 limit, other than those whose excess benefits are related solely to the \$27.50 supplemental benefit, additional testing may be required on an annual basis.

<u>RECOMMENDED ACTION</u>: AUTHORIZE STAFF TO ENGAGE SEGAL CONSULTING TO PERFORM 415 TESTING IN AN AMOUNT NOT TO EXCEED \$110,000.

I would be pleased to respond to any questions on this matter at our February 25, 2019 meeting.

Sincerely,

Linda Webb

Retirement Administrator

1190 S. VICTORIA AVENUE, SUITE 200 • VENTURA, CA 93003 PHONE: 805-339-4250 • FAX: 805-339-4269 • WWW.VCERA.ORG



February 25, 2019

Board of Retirement Ventura County Employees' Retirement Association 1190 Victoria Avenue, Suite 200 Ventura, CA 93003

SUBJECT: MID-YEAR BUDGET UPDATE FOR FISCAL YEAR 2018-19

Dear Board Members:

With respect to the adopted budget, fifty percent of the fiscal year ending June 30, 2019, is complete; consequently, we have a reasonable estimate of the financial status for the year. The attached Budget Summary (Attachment A) reflects actual expenditures through December 31, 2018, as well as year-end projected expenditures based on staff's estimates.

<u>Salaries & Employee Benefits:</u> Overall Salaries and Employee Benefits is projected to be under budget by approximately \$128,000. The savings realized are mostly due to timing in the hiring of the IT Chief Technology Officer (CTO) and Communications/Public Information Officer (PIO). The salary savings from the CTO (\$81,100) are offset with increased expenditures in *Professional Services* (\$68,100) for the outsourced IT resource within the *Services and Supplies* expenditure category.

Services & Supplies: Overall Services & Supplies is projected to be over budget at fiscal year-end by approximately \$40,500. Most of the budget overrun is due to Actuary-415 calculation (\$111,100), Legal (\$46,600), Other Professional Services (\$19,300), and Travel-Due Diligence Staff (\$5,300), offset by cost savings in object line accounts Training/Travel for Staff and Trustees (\$58,400), Non-Capital Equipment (\$23,900), Hearing Officers (\$20,100), and Non-Capital Furniture (\$9,900). The Actuary-415 cost overrun is for services of the actuary to perform calculations of pension benefits in compliance with IRS code 415 maximum pension benefit. (Note: This expenditure is a pending request on today's agenda.) The Legal category cost overrun of \$46,600 is due to more than anticipated needs within the Investment budget. Specifically, Investment legal costs are anticipated to be higher than budget by \$81,700, to cover additional legal services required for the private equity program, offset by administrative legal costs projected to be \$40,000 lower than anticipated.

The *Other Professional Services* is \$19,300 higher than budget due to continued use of outsourced IT resource, due first to vacancy and then for knowledge transition to CTO, offset with savings in *Salaries and Benefits* within the *IT-Admin CAP* budget and elimination of services for annual benefit statements, which will now be performed by VCERA's PIO. The *Travel Due Diligence Staff* object line is projected to be higher due to additional staff members participating in scheduled due diligence of VCERA's custodian State Street.

MID-YEAR BUDGET UPDATE FOR FISCAL YEAR 2018-19

February 25, 2019 Page 2 of 2

The Training/Travel for Staff and Trustee category cost savings of \$58,400 is due to less than anticipated needs within the Administrative and Investment budgets. The Non-Capital Equipment and Non-Capital Furniture category cost savings of \$33,800 is due to staff's efforts to minimize incurring such expenditures until a decision is made on VCERA's office space. Hearing Officers savings are due to less than anticipated activity related to disability cases. The remaining service and supplies variances are minor.

<u>Technology</u>: The *Information Technology* budget is projected to be over budget by approximately \$36,100. This is due in part to *Technology Application Support* projected to be over budget by \$45,700, due to staff's inadvertent exclusion for County IT desktop support services in the *IT-Non-CAP* adopted budget. In addition, *Technology Data Communication* is projected to be over budget by \$3,200 due to an increase in cost for County IT provided services and office dedicated internet service. This was offset with savings in *Technology Software* and *Technology Software Support* due to less need than budgeted.

Recommended Action:

- 1. Receive and file the mid-year projection.
- 2. Authorize Staff to process the following net Budgetary Adjustments between operating budgets:

DECREASE – Salaries & Benefits	\$76,700
INCREASE – Service & Supplies	\$40,500
INCREASE – Technology	\$36,200

If necessary, Staff will return to the Board after year end, and if required, request appropriation adjustments between object levels to close out the year.

I would be happy to respond to any questions you may have on this matter.

Sincerely,

Henry C. Solis, CPA Chief Financial Officer

Attachment

Attachment

Ventura County Employees' Retirement Association Budget Summary Fiscal Year 2018-2019 (Combined) Year-To-Date through December 31, 2018 and Projected through Fiscal Year Ending June 30, 2019

	Adopted 2019 Budget	Adjusted 2019 Budget	Expended Fiscal Year to Date	Projected Jan - June	Projected June 30, 2019	Available Balance	Percent Expended
Salaries and Benefits							_
Regular Salary	\$3,215,800.00	\$3,215,800.00	\$1,402,657.92	\$1,746,531.78	\$3,149,189.70	\$66,610.30	97.93%
Extra-Help/Temporary Services	158,500.00	158,500.00	56,173.64	102,300.00	158,473.64	26.36	99.98%
Supplemental Payments	63,500.00	63,500.00	23,914.63	32,286.20	56,200.83	7,299.17	88.51%
Vacation Redemption	146,800.00	146,800.00	134,752.72	0.00	134,752.72	12,047.28	91.79%
Retirement Contributions	546,000.00	546,000.00	231,233.58	302,029.83	533,263.41	12,736.59	97.67%
OASDI Contribution	196,700.00	196,700.00	62,900.45	118,846.00	181,746.45	14,953.55	92.40%
FICA-Medicare	55,500.00	55,500.00	22,440.93	36,302.84	58,743.77	(3,243.77)	105.84%
Medical Insurance Life Insurance	327,600.00 1,100.00	327,600.00 1,100.00	131,567.00 537.85	185,864.00 651.00	317,431.00 1,188.85	10,169.00 (88.85)	96.90% 108.08%
Unemployment Insurance	2,300.00	2,300.00	978.64	1,245.17	2,223.81	76.19	96.69%
Mgmt Disability Insurance	23,500.00	23,500.00	9,052.02	12,941.80	21,993.82	1,506.18	93.59%
Workers Compensation Insurance	23,600.00	23,600.00	10,993.73	12,768.16	23,761.89	(161.89)	100.69%
401K Plan Contribution	81,700.00	81,700.00	34,271.92	41,333.57	75,605.49	6,094.51	92.54%
Total Salaries & Benefits	\$4,842,600.00	\$4,842,600.00	\$2,121,475.03	\$2,593,100.35	\$4,714,575.38	\$128,024.62	97.36%
Services & Supplies							
Board Member Stipend	\$13,200.00	\$13,200.00	\$5,000.00	\$7,700.00	\$12,700.00	\$500.00	96.21%
Other Professional Services	173,800.00	173,800.00	85,589.05	107,510.00	193,099.05	(19,299.05)	111.10%
Auditing	51,400.00	51,400.00	31,934.94	19,400.00	51,334.94	65.06	99.87%
Hearing Officers	50,000.00	50,000.00	875.00	29,000.00	29,875.00	20,125.00	59.75%
Legal	275,000.00	275,000.00	148,147.80	173,500.00	321,647.80	(46,647.80)	116.96%
Election Services	12,000.00	12,000.00	0.00	4,900.00	4,900.00	7,100.00	40.83%
Actuary-Valuation	61,000.00	61,000.00	30,500.00	30,500.00	61,000.00	0.00	100.00%
Actuary-GASB 67	13,000.00	13,000.00	13,000.00	0.00 110.000.00	13,000.00	0.00	100.00%
Actuary 415 Calculation	0.00 0.00	0.00 0.00	1,076.00 0.00	0.00	111,076.00 0.00	(111,076.00) 0.00	#DIV/0! #DIV/0!
Actuary-Assump/Exp Actuary-Misc Hrly Consult	16,000.00	16,000.00	364.00	10,000.00	10,364.00	5,636.00	#DIV/0! 64.78%
Actuary-Actuarial Audit	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!
Printing	33,000.00	33,000.00	5,687.97	27,300.00	32,987.97	12.03	99.96%
Postage	70,000.00	70,000.00	26,385.92	43,600.00	69,985.92	14.08	99.98%
Telephone	0.00	0.00	0.00	0.00	0.00	0.00	#DIV/0!
Copy Machine	3,000.00	3,000.00	981.69	2,000.00	2,981.69	18.31	99.39%
General Liability	15,100.00	15,100.00	7,542.50	7,600.00	15,142.50	(42.50)	100.28%
Fiduciary Liability	86,000.00	86,000.00	83,609.01	0.00	83,609.01	2,390.99	97.22%
Cost Allocation Charges	30,200.00	30,200.00	15,099.00	15,100.00	30,199.00	1.00	100.00%
Education Allowance	4,000.00	4,000.00	4,000.00	0.00	4,000.00	0.00	100.00%
Training/Travel-Staff	76,100.00	76,100.00	19,734.23	26,000.00	45,734.23	30,365.77	60.10%
Training/Travel-Trustee	53,500.00	53,500.00	7,420.23 3,052.26	18,000.00	25,420.23	28,079.77 (5,252.26)	47.51% 167.34%
Travel-Due Diligence-Staff Travel-Due Diligence-Trustee	7,800.00 13,400.00	7,800.00 13,400.00	4,229.30	10,000.00 8,000.00	13,052.26 12,229.30	1,170.70	91.26%
Mileage-Staff	4,800.00	4,800.00	1,332.82	2,500.00	3,832.82	967.18	79.85%
Mileage -Trustee	5,000.00	5,000.00	1,084.12	1,600.00	2,684.12	2,315.88	53.68%
Mileage-Due Diligence-Staff	1,000.00	1,000.00	143.01	400.00	543.01	456.99	54.30%
Mileage-Due Diligence-Trustee	1,000.00	1,000.00	49.05	400.00	449.05	550.95	44.91%
Auto Allowance	6,900.00	6,900.00	3,450.00	3,450.00	6,900.00	0.00	100.00%
Facilities-Security	2,700.00	2,700.00	1,579.40	1,575.00	3,154.40	(454.40)	116.83%
Facilities-Maint & Repairs	2,300.00	2,300.00	150.00	900.00	1,050.00	1,250.00	45.65%
Equipment-Maint & Repairs	2,000.00	2,000.00	0.00	1,000.00	1,000.00	1,000.00	50.00%
General Office Expense	10,400.00	10,400.00	2,252.70	4,000.00	6,252.70	4,147.30	60.12%
Books & Publications	2,500.00	2,500.00 18,000.00	581.78	1,150.00	1,731.78	768.22 4,067.28	69.27%
Office Supplies Memberships & Dues	18,000.00 13,500.00	13,500.00	4,932.72 12,388.00	9,000.00 2,200.00	13,932.72 14,588.00	4,067.28 (1,088.00)	77.40% 108.06%
Bank Service Charges	1,500.00	1,500.00	12,388.00 627.95	900.00	14,588.00	(1,088.00)	101.86%
Offsite Storage	4,800.00	4,800.00	3,842.45	2,800.00	6,642.45	(1,842.45)	138.38%
Rents/Leases-Structures	217,600.00	217,600.00	107,309.22	109,800.00	217,109.22	490.78	99.77%
Non-Capital Equipment	23,900.00	23,900.00	0.00	0.00	0.00	23,900.00	0.00%
Non-Capital Furniture	15,000.00	15,000.00	125.00	5,000.00	5,125.00	9,875.00	34.17%
Depreciation /Amortization	1,460,600.00	1,460,600.00	730,296.96	730,296.96	1,460,593.92	6.08	100.00%
Total Services & Supplies	\$2,851,000.00	\$2,851,000.00	\$1,364,374.08	\$1,527,081.96	\$2,891,456.04	(\$40,456.04)	101.42%
Total Sal, Ben, Serv & Supp	\$7,693,600.00	\$7,693,600.00	\$3,485,849.11	\$4,120,182.31	\$7,606,031.42	\$87,568.58	98.86%

Attachment

Ventura County Employees' Retirement Association Budget Summary Fiscal Year 2018-2019 (Combined) Year-To-Date through December 31, 2018 and Projected through Fiscal Year Ending June 30, 2019

	Adopted 2019 Budget	Adjusted 2019 Budget	Expended Fiscal Year to Date	Projected Jan - June	Projected June 30, 2019	Available Balance	Percent Expended
Technology							
Technology Hardware	\$67,100.00	\$67,100.00	\$34,902.42	\$28,000.00	\$62,902.42	\$4,197.58	93.74%
Technology Hardware Support	0.00	0.00	3,968.32	0.00	3,968.32	(3,968.32)	#DIV/0!
Technology Software	214,600.00	214,600.00	40,240.78	166,000.00	206,240.78	8,359.22	96.10%
Technology Software Support	15,500.00	15,500.00	8,147.97	3,300.00	11,447.97	4,052.03	73.86%
Technology Systems Support	266,800.00	266,800.00	131,273.75	135,300.00	266,573.75	226.25	99.92%
Technology Infrastruct Support	500.00	500.00	339.98	200.00	539.98	(39.98)	108.00%
Technology Application Support	310,400.00	310,400.00	102,642.85	253,500.00	356,142.85	(45,742.85)	114.74%
Technology Data Communication	55,700.00	55,700.00	26,502.49	32,400.00	58,902.49	(3,202.49)	105.75%
Total Technology	\$930,600.00	\$930,600.00	\$348,018.56	\$618,700.00	\$966,718.56	(\$36,118.56)	103.88%
Congtingency	\$688,100.00	\$688,100.00	\$0.00	\$0.00	\$0.00	\$688,100.00	0.00%
Total Current Year	\$9,312,300.00	\$9,312,300.00	\$3,833,867.67	\$4,738,882.31	\$8,572,749.98	\$739,550.02	92.06%



180 Howard Street Suite 1100 San Francisco, CA 94105-6147 T 415-263-8200 www.segalco.com

John W. Monroe ASA, MAAA, EA Vice President & Actuary jmonroe@segalco.com

January 23, 2019

Ms. Linda Webb Retirement Administrator Ventura County Employees' Retirement Association 1190 South Victoria Avenue, Suite 200 Ventura, CA 93003

Re: Ventura County Employees' Retirement Association Cost-of-Living Adjustments (COLA) as of April 1, 2019

Dear Linda:

We have determined the cost-of-living adjustments for the Association in accordance with Section 31870.1, as provided in the enclosed exhibit.

The cost-of-living factor to be used by the Association on April 1, 2019 is determined by comparing the December CPI for the Los Angeles-Long Beach-Anaheim Area¹ (with 1982-84 as the base period) in each of the past two years. The ratio of the past two December indices, 267.631 in 2018 and 259.220 in 2017, is 1.0324. The County Law section cited above indicates that the resulting percentage change of 3.24% should be rounded to the nearest one-half percent, which is 3.0%. Please note the above cost-of-living adjustment calculated using established procedures for VCERA may result in adjustments different from those calculated using alternative procedures by other systems.

The actual cost-of-living adjustment is dependent on tier. The CPI adjustment to be applied on April 1, 2019 is provided in Column (4) of the enclosed exhibit. The COLA bank on April 1, 2019 is provided in Column (5).

Please give us a call if you have any questions.

namo

Sincerely,

John Monroe

MAM/gxk Enclosure

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Benefits, Compensation and HR Consulting. Member of The Segal Group. Offices throughout the United States and Canada

Formerly the Los Angeles-Riverside-Orange County Area.

Ventura County Employees' Retirement Association Cost-Of-Living Adjustment As of April 1, 2019

(1) (2)(3)(4)(5)April 1, 2018 April 1, 2019 CPI CPI CPI Accumulated Accumulated Retirement Date Carry-over Change* Rounded** Used*** Carry-over**** All Tier 1 and Safety Section 31870.1 Maximum Annual COLA 3.0% 50.5% 3.0% On or Before 4/1/1975 3.24% 3.0% 50.5% 04/02/1975 04/01/1976 43.0% 3.24% 3.0% 3.0% 43.0% to 04/02/1976 to 04/01/1977 35.5% 3.24% 3.0% 3.0% 35.5% 04/02/1977 04/01/1978 32.0% 3.24% 3.0% 3.0% 32.0% to 04/02/1978 28.0% 3.24% 3.0% 3.0% 28.0% to 04/01/1979 04/02/1979 to 04/01/1980 23.5% 3.24% 3.0% 3.0% 23.5% 04/02/1980 04/01/1981 15.5% 3.24% 3.0% 3.0% 15.5% to 04/02/1981 to 04/01/1982 3.0% 3.24% 3.0% 3.0% 3.0% 0.5% 04/02/1982 to 04/01/2018 0.5% 3.24% 3.0% 3.0%

3.24%

3.0%

3.0%

0.0%

to

04/02/2018

04/01/2019

^{*} Based on ratio of December 2018 CPI to December 2017 CPI for the Los Angeles - Long Beach - Anaheim Area.

^{**} Based on CPI change rounded to nearest one-half percent.

^{***} These are the cost-of-living adjustment factors to be applied on April 1, 2019.

^{****} These are the carry-over of the cost-of-living adjustments that have not been used on April 1, 2019.



February 25, 2019

Board of Retirement Ventura County Employees' Retirement Association 1190 South Victoria Avenue, Suite 200 Ventura, CA 93003

SUBJECT: AUTHORIZATION FOR TRUSTEE SHAPIRO TO ATTEND THE INTERNATIONAL FOUNDATION OF EMPLOYEE BENEFIT PLAN (IFEBP), NEW TRUSTEES INSTITUTE – LEVEL I, SAN FRANCISCO, CA, JUNE 24 - 26, 2019.

Dear Board Members:

Trustee Shapiro has requested authorization to attend the International Foundation of Employee Benefit Plan (IFEBP), New Trustees Institute – Level I. The course is scheduled for June $24^{th} - 28^{th}$, and the estimated cost to attend is approximately \$3,000, including registration, airfare, hotel, meals and other related expenses.

Staff & Trustee Shapiro will be pleased to respond to any questions you may have on this matter at February 25, 2019 disability and business meeting.

Sincerely,

Linda Webb

Retirement Administrator

NEW TRUSTEES INSTITUTE—

LEVEL I: CORE CONCEPTS LEVEL II: CONCEPTS IN PRACTICE



About the International Foundation

Born of the need for trustees to be educated on their fiduciary responsibilities, the International Foundation of Employee Benefit Plans is the **largest educational association** providing objective, accurate and timely benefits education and information.

The International Foundation **provides benefits education** through courses, conferences, customized training, personalized research, live and recorded webcasts, online peer networking, publications, survey

results, e-learning, books and daily industry news delivery.





Bring these programs to your organization!

New Trustees Institute is available as part of our on-site education offering.

TO LEARN MORE, VISIT www.ifebp.org/onsite-education.

2

Education Path for Multiemployer Trustees

R E C O M M E N D E D EDUCATION PATH FOR MULTIEMPLOYER TRUSTEES

Serving as a multiemployer trustee in today's world requires a deep understanding of wide-ranging issues—complex regulations, legislation, health care systems, investment strategies and more.

The International Foundation offers expanded, targeted education for trustees. Need-to-know basics are presented in Level I: Core Concepts, and how these concepts are applied is reviewed in Level II: Concepts in Practice.

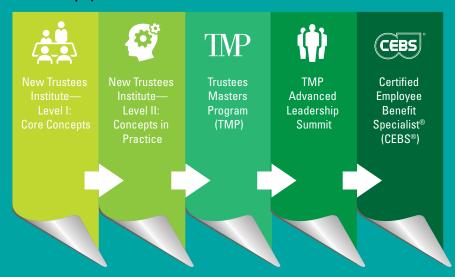
Once trustees have the base level of education and several cycles of board meetings under their belt, the Advanced Trustees and Administrators Institute, part of the Trustees and Administrators Institutes, keeps trustees informed of developments affecting pension and health plans.

Throughout the span of a trustee's service to a fund, several specialty conferences dedicated to specific areas of employee benefits are available to enhance their knowledge. These conferences outline the latest legal and legislative happenings within the industry as well as present best practices for health and pension plan management.

As trustees become adept in their fiduciary duties, they are encouraged to participate in the Trustees Masters Program (TMP). Designed for trustees with five or more years of experience, TMP delves into strategic fund issues. The pinnacle of the trustee path is the TMP Advanced Leadership Summit, which looks to the future of trusteeship.

Finally, the highest level of education is the esteemed CEBS designation. The suggested progression of trustee education is mapped below.

U.S. Multiemployer Trustee Education Path



www.ifebp.org/newtrustees

February 18-20, 2019

Lake Buena Vista (Orlando), Florida Meeting #02-1902NT

Hotel: Disney's Yacht & Beach Club Resorts

Room Rate: \$289 single/double

June 24-26, 2019

San Francisco, California Meeting #09-1909NT

Hotel: Hilton San Francisco Union Square

Room Rate: \$299 single/double

October 19-21, 2019

San Diego, California (Held immediately prior to the Annual Employee Benefits Conference.)

Meeting #01-19N8

Hotel: Visit www.ifebp.org/sandiegohotels. Room Rate: Various rates, \$400 deposit

Program Fees*

\$1,515 members | \$1,845 nonmembers

*These early registration fees apply up to six weeks prior to the first day of the program.

eveloped by trustees
for trustees, this
program lays the groundwork
for those new to health,
pension or other multiemployer
benefit funds. Trustees will
hear from several different
multiemployer practitioners,
including accountants,
actuaries, attorneys, administrators
and other trustees, who will explain
the need-to-know basics of fiduciary
responsibility and trust fund
management as detailed on page 5.





Legal/Legislative

- Legal and legislative framework
- ERISA
- Two-hat structure
- Governing documents
- Key governmental agencies

- Required communication
- Fiduciary and co-fiduciary obligations
- Duty to monitor fees
- Liability insurance

Health Care

- Terminology
- Funding and resources
- Prescription drugs
- Legal framework
- Legislative and regulatory requirements

- ACA
- Basic health care financial information
 - Plan types
- HIPAA

Retirement

- Terminology
- Defined benefit plans
- Defined contribution plans
- Pension reform legislation
- Role of the actuary

- Funding methods
- Assumptions
- Plan design (traditional)
- Administration

Investments

- Terminology
- Modern portfolio theory
- Asset allocation
- Asset classes

- Investment policies
- Institutional vs. individual portfolios
- Investment managers

Governance/Administration

- How to be a good trustee
- Trustee meetings/ agendas/minutes
- Working with professionals
- Trustee orientation

- Financial statements
- Dealing with two-hat dilemma
- Role of administrator
- Payroll audits

Who Should Attend

Newly appointed multiemployer trustees or those seeking a refresher. It is recommended Level I be completed before attending Level II.

www.ifebp.org/trusteeslevel2

February 16-17, 2019

Lake Buena Vista (Orlando), Florida (Held immediately prior to the Trustees and Administrators Institutes.)

Meeting #02-19N6

Hotel: Disney's Yacht & Beach Club Resorts

Room Rate: \$289 single/double



October 19-20, 2019

San Diego, California (Held immediately prior to the Annual Employee Benefits Conference.)

Meeting #01-19N9

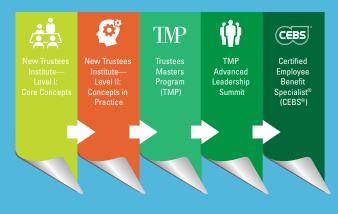
Hotel: Visit www.ifebp.org/sandiegohotels. Room Rate: Various rates, \$400 deposit

Program Fees*

\$1,515 members | \$1,845 nonmembers

*These early registration fees apply up to six weeks prior to the first day of the program.

I leaves off, Level II:
Concepts in Practice explores
how the topics introduced
in Level I apply to trust fund
management. Developed and
presented by experienced
multiemployer fund



trustees, administrators and advisors, this institute provides the practical information a trustee needs to know.

While Level I introduces the wide range of topics trustees are expected to know, Level II digs deeper into each area and provides small-group discussion of real-world examples. Those completing Level II will have a firmer grasp of their fiduciary responsibilities and trust fund management.

Governance/Administration

- Mitigating fraud
- Trustee expenses
- Prohibited transactions

- Deadlocks and arbitration
- Policies and procedures
- Using your professionals effectively

Investments

- Alternative investment classes
- Hedging strategies
- Benchmarks
- Monitoring managers

- Hiring/firing managers
- Role and use of consultants
- Changing asset allocations

Health Care

- Utilization review
- Pharmacy management
- Communications

- Wellness initiatives
- Emerging trends and recent regulations

Retirement

- Plan redesign
- Fees (DB/DC)
- Withdrawal liability

Plan assumptionsFinancial literacy

Session topics are subject to change. Class size is limited.

Siass size is illiliteu.

Who Should Attend

Multiemployer trustees with two to three years of experience who have taken New Trustees Institute—Level I:

Core Concepts or those seeking a refresher

www.ifebp.org/trusteesadministrators

February 18-20, 2019

Lake Buena Vista (Orlando), Florida Meeting #02-1902

Hotel: Disney's Yacht & Beach Club Resorts Room Rate: \$289 single/double

June 24-26, 2019

San Francisco, California Meeting #09-1909

Hotel: Hilton San Francisco Union Square

Room Rate: \$299 single/double

he Advanced Trustees and Administrators Institute is offered in February and June each year as part of the Trustees

Program Fees*

\$1,515 members | \$1,845 nonmembers

*These early registration fees apply up to six

weeks prior to the first day of the program.

and Administrators Institutes. This conference is designed to keep experienced trustees informed of the latest industry trends, legal and regulatory changes, and best practices as well as to bring new ideas to light. Attendees gain a deeper understanding of how to run their pension and health and welfare funds.

Developed by active trustees, administrators and professional advisors, each session is designed to address current issues faced by trustees, providing the relevant context and information for you to make sound decisions for your fund.

The topics for this conference change yearly in order to address the latest issues facing trustees.

Sample 2019 Topics

- Economic update
- Legislative update— Retirement funds
- Understanding your insurance options
- Legislative update— Health funds
- Properly communicating retirement options
- Health care trends
- Tackling prohibited employment
- Cybersecurity—Be aware
- Pharmacy benefits
- Payroll audits and delinquencies
- The opioid crisis
- The challenges of withdrawal liability

- Mental health
- Running effective trust fund meetings
- Ancillary benefits options
- DOL/IRS audits
- Effective trust fund administration
- Guided open forum—Trustees
- Guided open forum—
 Administrators
- Changes in retiree health
- What to expect from your investment consultants and managers
- The trustee-administrator relationship
- Auditing the auditor

More About the Trustees and Administrators Institutes

For nearly five decades, this program has served as the cornerstone of education for multiemployer trustees and administrators. Sessions are designed to meet the needs of both trustees and administrators, whether they are fairly new to serving on a fund or have decades of experience. Attended by hundreds, the conference is large enough to offer a variety of sessions yet small enough that you won't get lost in the crowd.

Who Should Attend

Experienced multiemployer trustees with two or more years of experience who have attended the New Trustees programs are encouraged to attend the Advanced Trustees and Administrators Institute.

Another Great Opportunity to Learn

ANNUAL EMPLOYEE BENEFITS CONFERENCE October 20-23, 2019 | San Diego, California

October 20-23, 2019 | San Diego, California San Diego Convention Center www.ifebp.org/usannual

The largest educational event of its kind, the Annual Conference brings together thousands of trustees and administrators and their professional advisors. More than 100 sessions are offered—and not one is sponsored, ensuring the content you receive is free from sales pitches. Sessions are led by more than 200 trustees, administrators and experts from the field. You'll hear from others who have walked in your shoes and who understand the challenges you face. Takeaway points are provided with every session, and the exhibit hall has more than 200 service





Additional Resources for Trustees

www.ifebp.org/trusteeresource

After the conference ends, keep the information you need at your fingertips with the Trustee Resource Center. Organized by key topics, this online compendium reviews all of the basics. Resources are continually added.





Trustee Handbook: A Guide to Labor-Management Employee Benefit Plans Eighth Edition, #7761 Lawrence R. Beebe, Editor and Contributor www.ifebp.org/trusteehandbook

The essential reference tool for trustees, administrators and others who serve multiemployer benefit plans, this book covers a variety of practical topics as well as tips, checklists, sample materials and short summaries of critical legal decisions.

Attendees of New Trustees Institute—Level I will receive one copy of this book as part of their registration. Quantity discounts start at ten copies! Purchase additional copies online.

New cancellation policies effective for 2019 education programs

Cancel and transfer fees are based on registration fee paid: 60+ days of meeting is 10%; 31-59 days of meeting is 25%; within 30 days of meeting is 50%. Hotel deposit is forfeited for cancellations/transfers received within 3 days (5 days for Disney properties) of arrival. Registration fee is forfeited once program commences. For details, see www.ifebp.org/policies. Requests made for continuing education credit do not guarantee administration of credit. For further information on continuing education credit, please call (262) 786-6710, option 2.



Educational sessions at this program can qualify for CEBS compliance credit. Visit www.cebs.org/compliance for additional information.



Nonprofit Org.
U.S. POSTAGE PAID
INTERNATIONAL FOUNDATION
OF EMPLOYEE BENEFIT PLANS



18700 West Bluemound Road Brookfield, WI 53045 www.ifebp.org

TO LEARN MORE OR
REGISTER, VISIT
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ED181358



February 25, 2019

Board of Retirement Ventura County Employees' Retirement Association 1190 South Victoria Avenue, Suite 200 Ventura, CA 93003

SUBJECT: AUTHORIZATION FOR CHIEF TECHNOLOGY OFFICER TO ATTEND THE PRISM (PUBLIC RETIREMENT INFORMATION SYSTEMS MANAGEMENT) CONFERENCE, MAY 11TH TO MAY 15, 2019 IN INDIANAPOLIS, INDIANA

Dear Board Members:

Staff requests authorization for Chief Technology Officer, Leah Oliver, to attend the PRISM (Public Retirement Information Systems Management) Conference, May 11-15 in Indianapolis, Indiana. The provided agenda shows the topics to be covered, some of which are of specific interest to VCERA considering current and anticipated technology trends, strategic planning, lessons learned and challenges. The cost to attend is approximately \$3,500 including registration, travel, lodging and other related expenses. Note that this amount is below the budgeted amount anticipated for conference attendance.

VCERA staff will be pleased to respond to any questions you may have on this matter at the February 25, 2018 Business Meeting.

Sincerely,

Linda Webb

Retirement Administrator

PRISM - 2019 Conference: "The Pursuit of Better Better Processes, Better Technology, Better Pensions"			
	May 12 - 15, 2019 JW Marriott Indianapolis		
	Saturday, May 11th		
8:00 - 1:00 1:00 - 5:00	Board of Director's Meeting	Room 300	
1:00 - 5:00	Completion of Board Assignments	Room 106	
	Sunday, May 12th		
2:00 - 5:00	Registration	White River E-F Foyer	
4:30 - 5:00	New Member Orientation	White River A	
4:30 - 5:00	Meeting with Sponsors	White River B	
6:00 - 9:00	Welcome Reception at JW Marriott	White River Foyer E-F / A-D & White River F	
	Monday, May 13th		
7:00 - 8:00	Breakfast	White River E	
8:00 - 8:25	President's Welcome and President-Elect's Introduction	White River E	
8:25 - 9:40	Monday Keynote: "Don't Just Accept Change, Embrace It!"	White River E	
9:40 - 9:50	Break	White River F	
	Breakout "It's Not A Matter of If, But WhenCybersecurity Best Practices"	White River A-B	
9:50 - 10:50	Breakout "Facility Relocation Lessons Learned"	White River C-D	
	Breakout "Embracing Change Top Down"	Room 101/2	
10:50 - 11:00	Break		
	Breakout "It's Not A Matter of If, But WhenCybersecurity Best Practices"	White River A-B	
11:00 - 12:00	Breakout "Facility Relocation Lessons Learned"	White River C-D	
	Breakout "Embracing Change Top Down"	Room 101/2	
12:00 - 1:00	LUNCH	White River E	
1:00 - 4:00	Member Roundtable and Sponsor Introductions	White River A-D	
	Break	White River F	
4:00 - 4:50	Sponsor and Member Consultations	White River F	
	End of Sessions		
6:00 - 10:00	Dinner / Networking Event	Dinner	
		Page 1 of	

	May 12 - 15, 2019	
	JW Marriott Indianapolis	
	Tuesday, May 14th	
7:15 - 8:15	Breakfast	White River E
8:15 - 9:30	Tuesday Keynote "Future Forces: Digital Transformation Shaping the New World of Work"	White River E
9:30 - 9:45	Break	White River F
	Breakout "Creating an Effective 5-year Strategic Plan"	White River A-B
9:45 - 10:45	Breakout "Build Process in Preparation for the Next Generation of IT"	White River C-D
	Breakout "Employer Information Systems Project Lessons Learned"	Room 101/2
10:45 - 11:00	Break	White River F
	Breakout "Creating an Effective 5-year Strategic Plan"	White River A-B
11:00 - 12:00	Breakout "Build Process in Preparation for the Next Generation of IT"	White River C-D
	Breakout "Employer Information Systems Project Lessons Learned"	Room 101/2
12:00 - 1:00	Lunch	White River E
	Breakout "ECM Replacement & Innovation Project Lessons Learned"	White River A-B
1:00 - 2:00	Breakout #2 Content TBD	White River C-D
	Breakout #3 Content TBD	Room 101/2
2:00 - 2:15	Break	White River F
	Breakout "ECM Replacement & Innovation Project Lessons Learned"	White River A-B
2:15 - 3:15	Breakout #2 Content TBD	White River C-D
	Breakout #3 Content TBD	Room 101/2
	End of Sessions	
3:30 - 4:30	Member Business Meeting and Officer Elections	White River E
6:00 - 9:30	Dinner / Networking Event	Dinner
0.00 - 7.00	Diffiel / Networking Eveni	Page 2

PRISM - 2019 Conference: "The Pursuit of Better Better Processes, Better Technology, Better Pensions"			
	May 12 - 15, 2019		
	JW Marriott Indianapolis		
	Wednesday, May 15th		
8:00 - 9:15	Breakfast	White River E	
	Breakout #1 Content TBD	White River A-B	
9:15 - 10:30	Breakout #2 Content TBD	White River C-D	
	Breakout #3 Content TBD	Room 101/2	
10:30 - 10:45	Break	White River F or E-F Foyer	
	Breakout #1 Content TBD	White River A-B	
10:45 - 12:00	Breakout #2 Content TBD	White River C-D	
	Breakout #3 Content TBD	Room 101/2	
12:00 - 1:00	Lunch	White River E	
	"Birds of a Feather" Sessions		
	Small Breakout #1 Data Security/Physical Security	Room 101	
1:00 - 1:55	Small Breakout #2 Cloud Lessons Learned	Room 102	
	Small Breakout #3 Disaster Recovery Tips and Tricks	White River C	
Small Breakout #4 Innovation Concepts White River D			
1:55 - 2:05	Break		
	Small Breakout #1 Mobile App Development	Room 101	
2:05 - 3:00	Small Breakout #2 Business Intelligence	Room 102	
	Small Breakout #3 Telecommuting/Work from Home Concepts	White River C	
0.00	Small Breakout #4 Telecom VOIP/SIP/CRM etc.	White River D	
3:00	Conference Concludes	D 105	
3:00 - 6:00	Board of Directors Meeting	Room 105	
	Thursday, May 16th		
8:00 - 12:00 Board of Directors Meeting Room 300			
		Page 3 of 3	



March 25, 2019

Board of Retirement Ventura County Employees' Retirement Association 1190 South Victoria Avenue, Suite 200 Ventura, CA 93003

SUBJECT: REQUEST FOR AUTHORIZATION FOR TRUSTEE ATTENDANCE FOR DUE DILIGENCE VISIT TO NEPC IN REDWOOD CITY AND PANTHEON IN SAN FRANCISCO

Dear Board Members:

A due diligence visit to VCERA's investment consultant, NEPC, and to VCERA private equity secondaries fund of funds manager PANTHEON is targeted for March 18 in Redwood City and San Francisco, respectively.

The estimated cost per traveler is around \$700, including airfare, hotel, meals and other related expenses.

Staff requests designation/confirmation of attendees and approval of corresponding costs, so travel arrangements may be completed.

Respectfully submitted,

Daniel P. Gallagher

Dan Gallagher

Chief Investment Officer



SACRS Administrators From: Sulema H. Peterson, SACRS

Re: SACRS Spring Conference 2019 – Conference Information

Join us! Online conference registration and hotel reservations are open for the State Association of County Retirement Systems (SACRS) Spring 2019 Conference. The conference is being held May 7-10 and is a can't miss, four-day event in sunny Lake Tahoe, California. It's your chance to network with over 700 like-minded colleagues, brush up on the latest investment strategies, and get current on pension-related legislation. Expect dynamic speakers, valuable trustee training, and the opportunity to share best practices with your professional peers.

The Resort at Squaw Creek rests at the base of Squaw Valley USA, site of the 1960 Winter Olympics, and just minutes from California's North Lake Tahoe. The hotel has a dramatic lobby, through its floor-to-ceiling windows, overlooks a cascading waterfall and the breathtaking Sierra Nevada Mountains. Resort rooms and suites are complete with resortstyle kitchens and fireplaces.

We hope you can head up the mountain early to experience beautiful Northern California! Recreation enthusiasts love the resort's true ski-in, ski-out lodging, 18-hole championship golf course, on-site cross-country ski center, fly fishing center, ice-skating rink, heated swimming pools, waterslide, and scenic hiking and biking trails.

And if that's not enough, the resort also features its own shopping promenade, four distinct restaurants as well as other dining venues, a full-service spa, a complete health and fitness center, and Mountain Buddies, a comprehensive children's program.

In this packet, we've provided the following information to assist your System's administrative staff with:

- **Hotel Information**
- **Transportation Information**
- Conference Registration Information
- Cancelation Policy for Hotel and Conference

Looking forward to seeing you in May. Please don't hesitate to contact me at Sulema@sacrs.org or (916) 441-1850 for questions, assistance or additional information.

Best,

Sulema

Sulema H. Peterson, SACRS Administrator



HOST HOTEL INFORMATION

Book your hotel as soon as possible and no later than April 15 to secure the SACRS discounted room rate, discounted rate is subject to availability. SACRS has discounted room rates for attendees at the following hotel;

Resort at Squaw Creek 400 Squaw Creek Road Olympic Valley, CA 96146 destinationhotels.com/squawcreek (530) 412-7034 Hotel

Conference Room Rate (not including tax & service fees)

Deluxe Guest - \$189 Fireplace Suite - \$209 Deluxe Fireplace Suite - \$229

Resort Fee - \$15 per room per night

Valet Parking Rate - \$40 day (subject to change)

Self-Parking Rate - Complimentary with reservation (subject to change)

Group Reservations - (800) 404-5544 SACRS Spring 2019 Booking Link

The Village at Squaw Valley - Overflow Hotel

1750 Village East Road Olympic Valley, CA 96146 (530) 584-1000 Hotel (844) 263-4958 Reservations (SACRS does not have discounted rooms at the Village at Squaw Valley)

HOTEL WAITING LIST

If you are unable to reserve a room at the host hotel and want to be added to the hotel waiting list, please submit your request by filling out this form. Placement on the waiting list does not guarantee a reservation. As rooms become available we will assign to attendees on the list in the order received.

HOST HOTEL RESERVATION AND CANCELLATION POLICY

When reservations are made, the Hotel will require a deposit equal to the room rate and tax for the first night for each reservation. An individual's deposit is refundable to that individual if the Hotel receives notice of an individual's cancellation at least seven (7) days prior to scheduled arrival.



HOST HOTEL RESERVATION AND CANCELLATION POLICY (CONTINUED)

The equivalent of the attendee's entire stay will be billed to the attendee's credit card for each attendee who does not arrive or if a reservation is canceled less than seven (7) days prior to arrival. An attendee who departs prior to their confirmed departure date will be charged for the unused balance of their stay.

CHECK-IN/CHECK-OUT:

Check-in will begin at 4:00 p.m. on arrival day. The Bell Captain can arrange to check baggage for those arriving early and for guests attending functions on their day of departure. Check-out is by 11:00 a.m. on departure day.

TRANSPORTATION INFORMATION

Resort at Squaw Creek is conveniently located 42 miles west of the Reno/Tahoe International Airport, 200 miles east of San Francisco and 100 miles east of Sacramento via Interstate 80 with access to Highway 89 south. Limousine/shuttle service can be arranged for guests.

RENO-TAHOE INTERNATIONAL AIRPORT

2001 E. Plumb Lane Reno, NV 89502

COMPLIMENTARY HOTEL SHUTTLE SERVICE

SACRS is providing complimentary hotel shuttle service to-from the Reno Tahoe International Airport/Resort at Squaw Creek for SACRS Attendees beginning Monday, May 6 thru Friday May 10. When registering for the conference, be sure to complete the SACRS Shuttle Service reservation for each attendee. During the heavy arrival & departure days, Tuesday, May 7 for arrivals and Friday, May 10 for departures, the service will run on the half hour. Service during the non-arrival/departure days will be subject to the flight arrival pattern at RTI and on a need basis. The Squaw Creek Shuttle pick up area can be found exiting the airport along the curbside, outside the "D" Doors located North of Baggage Claim. When you see SACRS shuttle, please approach the vehicle and board. (Be advised the shuttle may not stop in front of you.)



CONFERENCE REGISTRATION INFORMATION

CONFERENCE REGISTRATION FEE

System Members (Trustees & Staff) \$120.00 per attendee

CONFERENCE REGISTRATION

Online registration is open; please visit the SACRS.ORG website to register your System's attendees. Conference brochures will be e-mailed to your System; you may also complete a paper form for each attendee and mail along with payment to SACRS, Attn: Sulema Peterson 1415 L Street, Suite 1000, Sacramento, CA 95814.

CANCELLATIONS

Conference Cancellation Policy

In order to receive a Conference Registration refund, you must cancel your registration by April 1. Please email cancellation to: Sulema@sacrs.org

SACRS Hotel Cancellation Policy

Due to the high demand for rooms at the host hotel, any hotel room cancellations made after April 15 will incur a fee of \$50 per cancellation from SACRS. Many systems book more rooms than needed and cancel last minute. This late cancellation creates a shortage of rooms for Trustees and staff members. The last-minute cancellation does not guarantee that SACRS will be able to utilize the room. We are then penalized by the hotel for unfilled room nights.

Name changes between same system staff/trustees will not incur the fee nor will medically necessary cancellations. We ask that if you need to cancel prior to April 15, e-mail SACRS first at sulema@sacrs.org. We can utilize your cancellation for an attendee on the waiting list

CONFERENCE ATTIRE

Dress is Resort Casual – SACRS recommends warm layers during the day and Ski/Down jacket for outdoor evening. Historically, "Jeans" have not been included as appropriate attire at any time during SACRS conferences. However, recognizing the cooler temperatures in Lake Tahoe, SACRS will allow "Jeans" during official conference hours for the Spring 2019 Conference. One of the great things about the Tahoe area is the weather. Most days in Tahoe are sunny and clear. In the summer it can be quite warm during the day; however, the temperature can drop very quickly as the sun sets or a storm rolls in. It's a good idea to always have extra layers and sunscreen on hand when you venture out. The Tahoe area experiences quite a bit of wind, especially if you are on Lake Tahoe. In the spring and fall there can still be occasional snowfall and cold temperatures so make sure you're prepared with warm clothing. Be sure to pack gloves, mittens, comfortable walking shoes, cold weather outdoor attire, a hat and warm layers.



CONFERENCE ATTIRE (continued)

The breakfast, lunch and reception events will be hosted outside on turf-lawn, please wear appropriate shoes for turf-lawn dining. The Wednesday evening event theme is "Casino Royale", evening cocktail dress attire is requested.

WEATHER

The average temperature for the Olympic Valley area in May;

- Daytime Highs: 56F 58F
- Evening Lows: 32F 33F

Attendees should plan on cool mornings, sunny mid-afternoon and temperature drop in the evenings.

ROAD/HIGHWAY CONDITIONS

Nevada Department of Transportation (NDOT): www.nevadadot.com California Department of Transportation (CalTrans): www.dot.ca.gov

Get Across 80: www.getacross80.com







TUESDAY, MAY 7, 2019

1:00PM - 6:30PM	Registration	
3:00PM - 5:00PM	Disability	TBD
3:00PM - 5:00PM	Sexual Harassment Prevention Training for Local Agency Officials (AB1661)	Speakers: John Kennedy and Allison Callaghan, Nossaman
3:00PM - 5:00PM	Ethics Training for Trustees and Staff	Speaker: Ashley Dunning, Nossaman
5:30PM - 6:30PM	SACRS Welcome Reception	

WEDNESDAY, MAY 8, 2019

6:45AM – 7:45AM	SACRS Yoga	
	Fitting in fitness when away from home is often difficult, but not during SACRS 2019 Spring Conference! We bring a yoga class onsite to start your day the right way. This class, led by a certified yoga instructor, is intended for everyone, beginner to expert. Yoga mats, water, and towels provided. Preregistration is required, and the costs is \$10 per person. This session is open to all registered conference attendees.	
7:30AM – 8:30AM	SACRS Breakfast	
7:30AM – 6:00PM	SACRS Registration	
8:30 – 9:00AM	General Session Welcome	Speaker: Dan McAllister, SACRS President
9:00 – 10:00AM	General Session	Speaker: Don Ezra, Russell Investments
10:00AM – 10:30AM	SACRS Networking Break	
10:30AM – 11:30AM	General Session	Speaker: Kristina Hooper, Invesco







11:30AM – 12:30PM	General Session	Speakers: Yu Ming, Nikko Asset Management and Xiangrong Jin, Goldman Sachs
12:30PM – 1:45PM	SACRS Lunch	
2:00PM - 3:00PM	General Session	TBD
3:15PM – 5:00PM	Ops/Benefits & Disability Breakout	Moderator: Arlene Owens, Los Angeles CERA
3:15PM – 5:00PM	Affiliate Breakout Many CIOs and investment staff from across the SACRS plans will participate in a session to describe their investment challenges, opportunities, and key strategies in need to meet their long-term investment goals. This will be a 90-minute session in a speed dating type format.	Moderator: Ben Lazarus, Parametric
3:15PM – 5:00PM	Attorney Breakout	TBD
3:15PM – 5:00PM	Internal Auditors Breakout	Moderator: Harsh Jadhav, Alameda CERA
3:15PM – 5:00PM	Administrators Breakout	Moderator: Eric Stern, Sacramento CERS
3:15PM – 5:00PM	Investment Breakout	Moderator: Tim Price, Contra Costa CERA
3:15PM – 5:00PM	Trustee Breakout	Speakers: Rich White, SACRS Past President and Gabe Rodrigues, SACRS Past Vice President Moderator: Kathryn Cavness, Mendocino CERA
3:15PM – 5:00PM	Safety Breakout	TBD
3:15PM – 5:00PM	Admin Staff Breakout	Moderator: Aimee Morton, Kern CERA







4:30PM – 5:30PM	SACRS Legislative Committee Meeting	Moderator: Eric Stern, Sacramento CERS & Dave Nelsen, Alameda CERA
6:30PM – 9:30PM	SACRS Annual Wednesday Night Event – CASINO ROYALE - Feeling Lucky? SACRS invites you to enjoy a night at the CASINO ROYALE! Enjoy a night of fun, dinner and casino games. All registered conference attendees are invited to this hosted event. Dress to impress, evening cocktail attire requested.	

Thursday, May 9, 2019

	Your morning starts off with an additional opportunity for teambuilding and networking, while enjoying the early morning mountain air. A SACRS tradition, the 5K (3.1 miles) Fun Run course is the perfect way to get energized for the conference day ahead. Designed for the walker, jogger, or runner, the course is slightly elevated and paved. Pre-registration is required and costs \$10 per person. Pocket maps, Fun Run t-shirt, water, and snack at the end of the course will be provided.	
7:30AM – 8:30AM	SACRS Breakfast	
7:30AM – 5:00PM	SACRS Registration	
	General Session Welcome, Volunteer Awards	Speaker: Dan McAllister, SACRS President
9:00AM – 10:00AM	General Session	Speaker: General Wesley Clark
10:00AM – 10:30AM	SACRS Networking Break	
10:30AM – 11:30AM	General Session	TBD
11:30AM – 12:30PM	, <u> </u>	Speaker: Stanley Lezman, American Realty Advisors







12:30PM – 1:45PM	SACRS Lunch	
2:00PM – 3:00PM		Speaker: Robert Failla, Lazard Asset Management
2:00PM - 3:00PM	Concurrent Session B – OPEN	TBD
2:00PM – 3:00PM	Concurrent Session C – PEPRA – What's Next for the 'California Rule'? Public Employee Pensions as Vested Rights	TBD
	The California Supreme Court will issue its decision CalFIRE v. CalPERS by March 4. At least four other vested rights cases will be decided next. This panel includes lead counsel on several of the pending cases and can provide a balanced and thoughtful presentation of topics that are, are not, being addressed by the California Supreme Court.	
3:00PM - 3:30PM	SACRS Networking Break	
3:30PM – 4:30PM	Concurrent Session A - Why Public Fund Investors Should Consider Renewable Energy	Speaker: Armin Sandhoevel, PhD, CIO, Allianz Global Investors
	Wind and solar energy are now competitive with traditional power generation, even without subsidies. The U.S. energy mix is undergoing a massive transformation, through the buildout of renewable energy infrastructure. We believe this creates an opportunity too big for investors to ignore.	
3:30PM – 4:30PM	Concurrent Session B – Legislative Update 2019	Speakers: Trent Smith and Mike Robson, SACRS Lobbyists
		Moderators: Eric Stern, Sacramento CERS and Dave Nelsen, Alameda CERA
3:30PM – 4:30PM	Concurrent Session C – Private Equity: Primary Investment Opportunities and Considerations	Speaker: Jay Nayak, Callan LLC
	Whether currently invested or considering new allocations, access to the best private equity funds isn't everything. Some of the most	







	important decisions are made prior to the first capital commitment.	
4:30PM – 5:30PM	SACRS Education Committee Meeting	Moderator: JJ Popowich, SACRS Education Committee Chair
4:30PM – 5:30PM	SACRS Nominating Committee Meeting	Moderator: Ray McCray, SACRS Nominating Committee Chair
5:30PM - 6:30PM	SACRS Reception	

Friday, May 10, 2019

7:30AM – 8:30AM	SACRS Breakfast	
8:30AM – 8:45AM	General Session Welcome	Speaker: Dan McAllister, SACRS President
8:45AM – 9:45AM	General Session	TBD
9:45AM – 10:00AM	SACRS Networking Break	
10:00AM – Adj	SACRS Business Meeting	Speakers: SACRS Board of Directors



November 16, 2018

To: SACRS Trustees & SACRS Administrators/CEO's

From: Ray McCray, SACRS Immediate Past President, Nominating Committee Chair

SACRS Nominating Committee

Re: SACRS Board of Director Elections 2019-2020 Elections

SACRS BOD 2019-2020 election process will begin January 2019. Please review the following timeline and distribute to your Board of Trustees.

DEADLINE	DESCRIPTION
March 1, 2019	Any regular member may submit nominations for the election of a
	Director to the Nominating Committee, provided the Nominating
	Committee receives those nominations prior to the first Business
	Day after March 1 of each calendar year. Nominations shall not
	be accepted from the floor on the day of the election.
March 25, 2019	The Nominating Committee will report a final ballot to each
	regular member County Retirement System prior to March 25
May 10, 2019	Nomination Committee to conduct elections during the SACRS
	Business Meeting at the Spring Conference (May 7-10, 2019)
May 10, 2019	Board of Directors take office for 1 year

Per SACRS Bylaws, Article VIII, Section 1. Board of Director and Section 2. Elections of Directors:

Section 1. Board of Directors. The Board shall consist of the officers of SACRS as described in Article VI, Section 1, the immediately Past President, and two (2) regular members.

- A. Immediate Past President. The immediate Past President, while he or she is a regular member of SACRS, shall also be a member of the Board. In the event the immediate Past President is unable to serve on the Board, the most recent Past President who qualifies shall serve as a member of the Board.
- B. Two (2) Regular Members. Two (2) regular members shall also be members of the Board.

Section 2. Elections of Directors. Any regular member may submit nominations for the election of a Director to the Nominating Committee, provided the Nominating Committee receives those nominations prior to the first Business Day after March 1 of each calendar year. Nominations shall not be accepted from the floor on the day of the election.

The Nominating Committee will report a final ballot to each regular member County Retirement System prior to March 25.

The Administrator of each regular member County Retirement System shall be responsible for communicating the Nominating Committee's recommended ballot and final ballot to each trustee and



placing the election of SACRS Directors on his or her board agenda. The Administrator shall acknowledge the completion of these responsibilities with the Nominating Committee.

Director elections shall take place during the first regular meeting of each calendar year. The election shall be conducted by an open roll call vote, and shall conform with Article V, Sections 6 and 7 of these Bylaws.

Newly elected Directors shall assume their duties at the conclusion of the meeting at which they are elected, with the exception of the office of Treasurer. The incumbent Treasurer shall co-serve with the newly elected Treasurer through the completion of the current fiscal year.

Interested candidates should submit their letter of intent and the form included in this letter to the Nomination Committee no later than the cut-off dates listed in the schedule.

The elections will be held at the SACRS Spring Conference May 7-10, 2019 at the Resort at Squaw Creek, Lake Tahoe, CA. Elections will be held during the Annual Business meeting on Friday, May 10, 2019.

If you have any questions, please contact me at Ray McCray, raym1@sbcglobal.net or (209) 471- 4472.

Thank you for your prompt attention to this timely matter.

Sincerely,

Ray McCray

Ray McCray, San Joaquin CERA Trustee **SACRS Nominating Committee Chair**

CC: **SACRS Board of Directors**

> **SACRS Nominating Committee Members** Sulema H. Peterson, SACRS Administrator



SACRS Nomination Submission Form SACRS Board of Directors Elections 2019-2020

All interested candidates must complete this form and submit along with a letter of intent. Both the form and the letter of intent must be submitted no later than March 1, 2019. Please submit to the Nominating Committee Chair at raym1@sbcglobal.net AND to SACRS at sulema@sacrs.org. If you have any questions, please feel free to contact Sulema Peterson at SACRS at (916) 441-1850.

Name of Candidate		
Candidate Contact		
Information		
(Please include - Phone		
Number, Email Address		
and Mailing Address)		
Name of Retirement		
System Candidate		
Currently Serves On		
Current Position On		
Candidates Retirement		
Board (Chair, Alternate,		
Retiree, General Elected,		
Etc)		
Applying for SACRS	o President	
Board of Directors	 Vice President 	
Position (select only one)	 Treasurer 	
	 Secretary 	
	Regular Member	
Brief Rio		
Brief Bio		



MARCH 27-29, 2019

UCLA LUSKIN CONFERENCE CENTER LOS ANGELES, CA



Advanced Principles of Pension Management

for Trustees

FOR THE CALIFORNIA ASSOCIATION OF PUBLIC RETIREMENT SYSTEMS

Advanced Principles of Pension Management

for Trustees

ADVANCED PRINCIPLES OF PENSION MANAGEMENT

The Advanced course is about building trustee skills and strengthening board governance. Pension trustees have many opportunities to learn about the disciplines required to run a pension system: institutional investing, actuarial science, benefits law, etc. But another highly important area of knowledge is the business of being a trustee and of contributing to a well-functioning board. The **CALAPRS Advanced Principles of Pension Management** course exposes veteran trustees to the most effective pension management thinking to help them enhance their service to their retirement systems.

COURSE RATINGS

100% of last year's participants agreed that the course would "enhance their performance and leadership abilities as a board member," and that they would, "recommend the program to their colleagues."

THE PROGRAM

Course attendees will hear from and discuss issues with top-level presenters in the areas of board/staff roles, governance, pension law, economic forecasting and actuarial science.

CURRICULUM | YOUR COURSE OF STUDY

Over the course of two days, attendees will be immersed in a powerful learning process—acquiring the skills they need to lead their organizations effectively.



The 2019 Program will cover:

- o Policy-Based Boards
- o Effective Planning
- Economics Forecasting Methods and the annual forecast of the UCLA Anderson School
- o Good Governance & the Investment Team
- Wearing the Right Hat at the Right Time The Fiduciary Duties of Public Pension System Board Members
- Advanced Actuarial Principles

PARTICIPANTS | WHO IS RIGHT FOR THE PROGRAM?

The program is designed for an experienced group of trustees. Trustees should have already acquired a basic understanding of board governance practices, actuarial and investment principles, and fiduciary responsibility. CALAPRS recommends that newer trustees first attend the trustee training course at Pepperdine University entitled: "Principles of Pension Management for Trustees" which is specifically designed for new trustees. The course was previously held at Stanford University.

CALAPRS | 575 MARKET ST., STE. 2125, SAN FRANCISCO, CA 94105 | P: 415.764.4860 | INFO@CALAPRS.ORG | WWW.CALAPRS.ORG

EXPERIENCE UCLA'S TRADITION OF EXCELLENCE AT THE LUSKIN CONFERENCE CENTER

In the heart of UCLA's vibrant campus, the new UCLA Meyer and Renee Luskin Conference Center is set amid iconic campus buildings and the exhilarating backdrop of daily student life. The Luskin Conference Center is a place where the best academic minds, innovators, researchers, political leaders, and societal visionaries meet to exchange ideas that help shape the world.



The UCLA Luskin Conference Center is an ideal central meeting place where California's public pension trustees can gather for a transformational academic experience that transcends the acquisition of knowledge, skills, and tools—and fosters professional, intellectual, and personal development.

Participants will receive a Certificate of Completion for this program.

PROGRAM DATES March 27-29, 2019

LEARNING COMMITMENT

Active involvement in all classroom sessions, case discussions, and other program activities is expected. Participants devote considerable time and intellect to the learning experience. Therefore, they must be free of outside responsibilities during the two days of the program.

THE FACULTY

The Advanced Principles Program is taught by a faculty of highly regarded experts and experienced professionals in the field of public pension management.

TUITION

Program tuition is \$3,100 for CALAPRS members and \$3,400 for non-members and includes all lodging, meals, and materials. Tuition must be paid in full by March 8, 2019.

ACCOMMODATIONS

Program tuition includes all meals and lodging on the nights of March 27 and 28, 2019 at the acclaimed UCLA Luskin Conference Center, located at 425 Westwood Plaza, Los Angeles, CA. To ensure full participation, all participants are required to stay on-site in the provided private, comfortable hotel rooms.

REGISTRATION

Applications must be received by February 15, 2019. Since space is limited, CALAPRS reserves the right to limit the number of trustees accepted from each retirement system, if need be.

Advanced Principles of Pension Management for Trustees

March 27-29, 2019 Los Angeles, CA

APPLICATION FOR ENROLLMENT

Due by February 15, 2019

Applications must be received by February 15, 2018. Since space is limited, CALAPRS reserves the right to limit the number of trustees accepted from each retirement system, if need be. Accepted applicants will be notified via email on February 20, 2019

Applicant Qualifications: The Advanced Principles Program is designed for an experienced group of trustees. In evaluating readiness for this program, trustees should have already acquired a basic understanding of board governance practices, actuarial and investment principles, and fiduciary responsibility. CALAPRS recommends that newer trustees first attend the initial trustee training course at Pepperdine University entitled: "Principles of Pension Management for Trustees" that is specifically designed for new trustees. The course was previously held at Stanford University.

Applicant Information			
Trustee's Name (for certificate/name badge):			
Retirement System:			
Trustee Type: ☐ Elected ☐ Appointed ☐ Ex-Officio	Date Became a Trustee: Date Current Term Expires:		
Trustee's Mailing Address:			
Trustee's Phone :	Trustee's Email:		
Emergency Contact (name, phone):			
Dietary Restrictions (if any):			
Administrative Contact (name, email):			
☐ I have <u>e-mailed</u> this applicant's biography (≤150 words) to register@calaprs.org for printing in the attendee materials.			
Applicant Signature			
If admitted, I agree to attend the Advanced Principles program in full and acknowledge that missing one or more sessions may result in forfeiture of my Certificate of Completion, as determined by the Faculty.			
Trustee Signature (required)	Date <u>:</u>		
Administrator Approval			
Administrator Name:	Email:		
Administrator Signature (required):			
Tuition Payment			
☐ \$3.100 CALAPRS Member ☐ \$3.400 Non-member			

Program tuition must be paid in full by March 8, 2019. Tuition includes all meals, materials, and mandatory lodging for all participants for the nights of March 27 and 28 in the UCLA Luskin Conference Center. Payable by check only made out and mailed to "CALAPRS". A separate invoice will not be sent.



If, due to a disability, you have any special needs, call 415-764-4860 to let us know. We will do our best to accommodate your needs.



Mail, email or fax form and payment to **CALAPRS**

575 Market Street, Suite 2125 San Francisco, CA 94105

Phone: 415-764-4860 Fax: 415-764-4915 register@calaprs.org www.calaprs.org