# **VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**

# **BOARD OF RETIREMENT**

# **BUSINESS MEETING**

# **FEBRUARY 22, 2021**

# <u>AGENDA</u>

**PLACE:** In Accordance with the Governor's Executive Order N-29-20 (3), the Members of the Board will be participating via teleconference. Pursuant to Government Code §54954.3, members of the public, to the extent required by law, will have the opportunity to directly address the Board concerning the below mentioned business.

The public may listen to the Public Session and offer comments by calling: 213-338-8477, using Meeting ID: 971-9477-5524. Persons may also submit written comments to publiccomment@vcera.org prior to and during the Board meeting. Please include your name, agenda item, the last 4 numbers of the telephone number that will be used to call in, and your comment. Public comment emails will be read into the record or summarized if lengthy.

**<u>TIME</u>**: 9:00 a.m.

#### ITEM:

I. CALL TO ORDER

#### II. APPROVAL OF AGENDA

<u>NOTE</u>: It is anticipated that Item VIII.A., *Consideration of Adoption of Further Resolution on Implementation of Supreme Court Decision in Alameda*, will be considered following Item IV. Consent Agenda, pending Board approval of the meeting agenda.

#### III. APPROVAL OF MINUTES

Α.	Business Meeting of January 25, 2021.	3 – 18
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#### IV. CONSENT AGENDA

- A. Approve Regular and Deferred Retirements and Survivors Continuances for the 28 29 Month of January 2021.
- B. Receive and File Report of Checks Disbursed in January 2021. 30 32
- C. 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 December 31, 2020.

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		VCERA – Dan Gallagher, Chief Investment Officer. NEPC – Alan Martin.	
	A.	Preliminary Performance Report Month Ending January 31, 2021. RECOMMENDED ACTION: Receive and file.	95 – 113
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	C.	NEPC 2021 Investment Outlook – Capital Market Assumptions. RECOMMENDED ACTION: Receive and file.	211 – 262
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	Α.	Review & Discussion of Personnel Review Committee Appointments.	
		1. Letter from Chair Sedell.	263
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	A.	Consideration of Adoption of Further Resolution on Implementation of Supreme Court Decision in <i>Alameda.</i> <b>RECOMMENDED ACTION: Approve.</b>	
		1. Letter from Ad Hoc Litigation Committee.	264
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IX.	<u>CL</u>	OSED SESSION	
	A.	CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION (Government Code section 54956.9(a)) Name of Case: Ventura County Employees' Retirement Association v. County of Ventura, et. al, Case No.: VENCI00546574.	

- X. INFORMATIONAL
- XI. PUBLIC COMMENT
- XII. STAFF COMMENT
- XIII. BOARD MEMBER COMMENT
- XIV. ADJOURNMENT

# **VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**

# **BOARD OF RETIREMENT**

# **BUSINESS MEETING**

# **JANUARY 25, 2021**

# **MINUTES**

# TRUSTEES<br/>PRESENT:Mike Sedell, Chair, Public Member<br/>Arthur E. Goulet, Vice-Chair, Retiree Member<br/>Steven Hintz, Treasurer-Tax Collector<br/>Aaron Grass, Safety Employee Member<br/>Cecilia Hernandez-Garcia, General Employee Member<br/>Kelly Long, Public Member<br/>Tommie E. Joe, Public Member<br/>Jordan Roberts, General Employee Member<br/>Sim Tang-Paradis, Public Member<br/>Robert Ashby, Alternate Safety Employee Member<br/>Will Hoag, Alternate Retiree Member

#### TRUSTEES ABSENT:

- STAFF<br/>PRESENT:Linda Webb, Retirement Administrator<br/>Henry Solis, Chief Financial Officer<br/>Julie Stallings, Chief Operations Officer<br/>Dan Gallagher, Chief Investment Officer<br/>Leah Oliver, Chief Technology Officer<br/>Lori Nemiroff, General Counsel<br/>Josiah Vencel, Retirement Benefits Manager<br/>Jess Angeles, Communications Officer<br/>Chris Ayala, Program Assistant
- **PLACE:** In Accordance with the Governor's Executive Order N-29-20 (3), the Members of the Board will be participating via teleconference. Pursuant to Government Code §54954.3, members of the public, to the extent required by law, will have the opportunity to directly address the Board concerning the below mentioned business.

**<u>TIME</u>**: 9:00 a.m.

#### **JANUARY 25, 2021**

#### ITEM:

#### I. CALL TO ORDER

Chair Sedell called the Business meeting of January 25, 2021, to order at 9:04 a.m.

#### II. APPROVAL OF AGENDA

Chair Sedell proposed the following changes agenda. He proposed the Board hear items I through VI, and then advance to agenda items XI and XI., Old Business and New Business, followed by item IX., Actuarial Valuation, item XII.B. Cost of Living Adjustment for 2021, then item X., the Comprehensive Annual Financial Report (CAFR). Then, the Board would hear item VII., Investment Manager Presentations and item VIII., Investment Information, followed by the remainder of the agenda items.

MOTION: Approved as Amended.

Moved by Hintz seconded by Roberts

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell No: -Absent: -Abstain: -

#### III. WELCOME OF NEW TRUSTEES TO BOARD OF RETIREMENT

Welcome of Newly Elected Safety Member, Aaron Grass and Newly Appointed Public Member, Sim Tang-Paradis.

Chair Sedell welcomed to the Board newly-elected Safety Member Trustee, Aaron Grass, and newly-appointed Public Member, Sim Tang-Paradis.

#### IV. REQUEST FOR RECONSIDERATION OF PREVIOUS BOARD ACTION

- A. Request for Reconsideration of Previous Board Action of December 14, 2020, on Appointment of Chair and Vice Chair.
  - 1. Letter from Trustee Ashby

Trustee Ashby said that he appreciated the Board's time in hearing his request for reconsideration. He noted that many trustees were new, and he himself still felt still fairly new. At the previous meeting on December 14<sup>th</sup>, the appointment of Chair and Vice-Chair item was heard near the end of that long meeting. After the meeting's conclusion, in retrospect he felt that due process had not been served with that item, because only one nomination was made, and the Board was not asked if there were any other nominations. The lone nomination had been approved quickly, and as he reflected back, he believed it was rushed and not considered cautiously and carefully, as most were likely eager to conclude the long meeting. Further, trustees should extend courtesy to one another, and when one had an interest in a position on the Board, they should make that interest known to the others, so that when nominations were presented it would not catch the others by surprise, and better ensure everything was above board. Therefore, the reason for the reconsideration request was because there had not been an opportunity for someone to make an additional nomination.

#### **JANUARY 25, 2021**

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Trustee Long requested keeping the positions as they stood with respect to the Chair and Vice-Chair nominations, and that rotation of positions was a good thing.

Trustee Roberts said that he believed that it was good for the Board to discuss reconsideration, though he had full confidence both Chair Sedell and Vice-Chair Goulet would do a good job in leading the Board.

Trustee Tang-Paradis asked if the minutes for December 14<sup>th</sup> meeting regarding the appointment of Chair and Vice-Chair accurately reflected that there were "discussions" by the Board during that item prior to the vote.

Ms. Webb replied that because the discussion took place after the vote and was limited to Trustee Goulet's explanation of why he voted no, the reference to a discussion would be removed as a correction for the minutes of December 14<sup>th</sup>.

Chair Sedell noted that he had left that meeting before that vote, alerting Ms. Webb by text at the time and had not known that he would be nominated as Chair until after the meeting. In the future he thought it would be best if any trustees needed to leave a meeting early, to speak up and let the rest of the trustees know.

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

<u>MOTION</u>: Approve Request for Reconsideration of Previous Board Action of December 14, 2020, on Appointment of Chair and Vice Chair.

Moved by Ashby seconded by Roberts

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Joe, Roberts No: Hintz, Long, Tang-Paradis, Sedell Absent: -Abstain: -

B. Reconsideration of Previous Board Action of December 14, 2020, of Appointment of Chair and Vice Chair.

Chair Sedell then called for nominations for an appoint to the Chair position.

Trustee Long nominated Trustee Sedell for Chair for calendar year 2021. She also asked if she could nominate Trustee Goulet as Vice-Chair.

Chair Sedell replied that the Board would first vote on a Chair and then on a Vice-Chair.

Trustee Long then clarified that her nomination was for Trustee Sedell as Chair for calendar year 2021.

Chair Sedell then asked if there were any other nominations.

Trustee Ashby nominated Trustee Goulet for Chair for calendar year 2021.

Chair Sedell asked again if there were any other nominations. Hearing none, he then asked if Trustee Goulet had any comments.

Trustee Goulet replied that he did not have any comments other than he appreciated the reconsideration.

Trustee Sedell stated he was pleased to be selected as Chair because he had wanted to foster a better relationship with all of VCERA's stakeholders, particularly in light of the recent dissension in regard to the Alameda decision. He wanted everyone to move forward together, and to and in a collegial fashion with the County and other stakeholders. He had nothing against Trustee Goulet but felt that he could take the Board in a smoother direction going forward and asked for the Board's support.

Trustee Goulet responded to Chair Sedell's comments, as they seemed to indicate that Trustee Goulet had not worked collegially with the other Board members, with which he would disagree. He had been on the Board more than 15 years, and his experience exceeded any other Board member. Having only been the Chair for 6 months following the unfortunate death of former Chair Bill Wilson, he was unsure to what "direction" Chair Sedell was referring. Although he was a retired member, he did not advocate retiree issues, and approached all Board issues on the basis of facts and knowledge. He also served on 2 committees at the State Association of California Retirement Systems (SACRS). Trustee Goulet believed he had done a good job as the Chair and was shocked that he was not approached before the meeting to ask if he wished to continue as Chair.

Trustee Ashby remarked that such discussion was what should have occurred at the December 14<sup>th</sup> meeting when the item was first heard by the Board. He had a good relationship with both trustees, and just wanted to ensure due process. He expressed appreciation of the candor and honesty expressed.

Trustee Roberts said that he echoed Trustee Ashby, and mending fences was a two-way street between the County and VCERA. He urged whoever was elected Chair to focus on forging a path forward. He thanked Trustee Goulet for his leadership through a difficult time in the previous year, especially given the Alameda Decision.

Trustee Long said she too would like to ensure that whoever served as Chair and Vice-Chair would strive to work together for the good of the employees and stakeholders.

MOTION: Appoint Chair and Vice Chair for Calendar Year 2021 through Roll Call Vote.

Moved by Ashby seconded by Roberts

Vote: Motion carried Yes: Goulet voted for Goulet, Hernandez-Garcia voted for Sedell, Hintz voted for Sedell, Long voted for Sedell, Joe voted for Sedell, Roberts voted for Sedell, Tang-Paradis voted for Sedell, Sedell voted for Sedell No: -Absent: -

Abstain: Grass

#### V. APPROVAL OF MINUTES

A. Disability & Business Meeting of December 14, 2020.

**JANUARY 25, 2021** 

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Ms. Webb identified the proposed corrections to the minutes which had been e-mailed to Trustees prior to the meeting.

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

MOTION: Approve Revised Minutes.

Moved by Goulet seconded by Hintz

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell, No: -Absent: -Absent: -

#### VI. CONSENT AGENDA

- A. Approve Regular and Deferred Retirements and Survivors Continuances for the Month of December 2020.
- B. Receive and File Report of Checks Disbursed in December 2020.
- C. Receive and File Budget Summary Admin. Disability for FY 2020-21 Month Ending December 31, 2020.
- D. Receive and File Budget Summary Combined for FY 2020-21 Month Ending December 31, 2020.
- E. Receive and File Statement of Fiduciary Net Position, Statement of Changes in Fiduciary Net Position, Schedule of Investments and Cash Equivalents, and Schedule of Investment Management Fees for the Period Ending November 30, 2020.

Trustee Joe asked for an explanation of a voided check and reissued check shown in item VI.B., *Receive and File Report of Checks Disbursed in December 2020.* 

Mr. Solis said that VCERA's December office lease payment issued in November, was cancelled in early December after the landlord sent a notice that it had not been received. Staff had voided the initial check and reissued another.

MOTION: Approve Consent Agenda.

Moved by Hintz seconded by Long

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell No: -Absent: -Abstain: -

Following the vote on the item, the Board advanced to agenda item XI.B., "Request for Approval of Amendment to Contract with Brentwood I.T. to Increase Hourly Rate."

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#### VII. INVESTMENT MANAGER PRESENTATIONS

A. Receive Annual Investment Presentation, Prudential Real Estate Investors – PGIM, Frank Garcia and Steve Moen.

Frank Garcia and Steve Moen reviewed Prudential Real Estate Investors – PGIM's organizational changes, and discussed the firm's investment outlook, the PRISA Fund's portfolio strategy, composition, and investment performance.

#### VIII. INVESTMENT INFORMATION

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

- A. Request to Approve Consent to Assignment of Investment Advisory Agreement with Parametric from Eaton Vance to Morgan Stanley. **RECOMMENDED ACTION: Approve.** 
  - 1. Staff Letter by C.I.O., Dan Gallagher.
  - 2. Parametric Cover Letter and Consent of Assignment.
  - 3. Morgan Stanley/Eaton Vance Joint Press Release, and Parametric Press Release.

Mr. Gallagher requested that the Board approve a consent to assign VCERA's investment management agreement with Parametric, which was VCERA's overlay manager. Morgan Stanley had acquired Eaton Vance, Parametric's parent company, and for Parametric to continue managing VCERA's portfolio, the consent to assign the contract was required because of the change in control.

<u>MOTION</u>: Approve the Assignment of the Investment Advisory Agreement with Parametric and Authorize the Board Chair or Retirement Administrator to Execute the Attached Consent Form.

Moved by Joe seconded by Goulet

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell No: -Absent: -Absent: -

- B. U.S. Executive Order 13959. RECOMMENDED ACTION: Receive and file.
  - 1. Staff Letter by C.I.O., Dan Gallagher.
  - 2. U.S. Executive Order 13959.

Mr. Gallagher referenced a U.S. Government-issued order to divest investments in 35 specified Chinese companies identified by the U.S. Government as supporting the Chinese military. He noted that in addition to the four VCERA managers referenced in the memo, two of VCERA's equity index funds had some minor exposure as well. He reported that all these managers had

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since liquidated their exposures and had done so with no measurable financial impact to the portfolio.

MOTION: Receive and File.

Moved by Joe seconded by Roberts

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell, No: -Absent: -

Abstain: -

# C. Preliminary Performance Report Month Ending December 31, 2020. **RECOMMENDED ACTION: Receive and file.**

Mr. Martin provided a brief presentation regarding the preliminary performance of VCERA's investment portfolio for the month ending December 31, 2020.

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

MOTION: Receive and File.

Moved by Joe seconded by Hintz

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell, No: -Absent: -Abstain: -

Following the vote on the item, the Board advanced to agenda item XIII.A., "CALAPRS Virtual General Assembly Notice."

#### IX. ACTUARIAL INFORMATION

- Review and Approval of Annual Actuarial Valuation Report as of June 30, 2020 Segal Consulting, Paul Angelo.
   RECOMMENDED ACTION: Approve.
  - 1. June 30, 2020 Actuarial Valuation Report.

Mr. Angelo presented the Annual Actuarial Valuation Report for 2020.

MOTION: Approve.

Moved by Long seconded by Roberts

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell, No: -Absent: -

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Abstain: -

- B. Review of GAS 67 Actuarial Valuation Report as of June 30, 2020 Segal Consulting, Paul Angelo.
   RECOMMENDED ACTION: Receive and File.
  - 1. June 30, 2020 GAS 67 Actuarial Valuation Report.

Mr. Angelo also presented the GAS 67 Actuarial Valuation Report for 2020.

MOTION: Receive and File.

Moved by Hintz seconded by Long

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell, No: -Absent: -Abstain: -

Following the vote on the item, the Board advanced to agenda item XII.B., "VCERA Cost-of-Living Adjustments (COLA) as of April 1, 2021."

#### X. <u>COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR)</u>

- A. June 30, 2020 Comprehensive Annual Financial Report (CAFR) Brown Armstrong, Rosalva Flores and Alaina Vandermade.
   RECOMMENDED ACTION: Receive and file.
  - 1. Comprehensive Annual Financial Report June 30, 2020.
  - 2. Brown Armstrong Report to the Board of Retirement.
  - 3. Brown Armstrong Presentation by Rosalva Flores and Alaina Vandermade.

Ms. Flores and Ms. Vandermade presented the Comprehensive Annual Financial Report for 2020.

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

MOTION: Approve.

Moved by Hintz seconded by Grass

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell, No: -Absent: -Abstain: -

Following the vote on the item, the Board returned to agenda item VII.A., "Receive Annual Investment Presentation, Prudential Real Estate Investors – PGIM, Frank Garcia and Steve Moen."

#### **JANUARY 25, 2021**

#### XI. OLD BUSINESS

- A. Request for Approval of Amendment to Contract with Brentwood I.T. to Increase Hourly Rate. **RECOMMENDED ACTION: Approve.** 
  - 1. Memorandum from C.T.O., Leah Oliver to Retirement Administrator, Linda Webb.
  - 2. Proposed Amended Contract (Redline).

Ms. Webb said in December 2020, the Board approved staff's request to extend the contract term and no changes to the previously-approved Not to Exceed (NTE) limit were requested. However, staff's request did not communicate that Brentwood's rates had increased slightly. Staff and Brentwood have agreed to propose that the new rate would only apply to newly-assigned tasks, and the previous rate would apply to previously-assigned unfinished tasks. Again, staff was not requesting an increase to the previously approved NTE limit.

Trustee Joe asked if staff knew about the increased rates prior to December.

Ms. Webb replied no, that only when staff was executing the amendment with Mr. Ford of Brentwood I.T. did he relate that his rate had recently increased. She said it was her oversight to not ask Mr. Ford for the status of his rates before bringing the item to the Board in December, and she done so, that would have been explained in December.

Trustee Joe thanked Ms. Webb for the explanation.

Trustee Goulet remarked that Brentwood I.T. had rescued VCERA a few times and supported the rate increase for new tasks.

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

<u>MOTION</u>: Approve Request for Approval of Amendment to Contract with Brentwood I.T. to Increase Hourly Rate.

Moved by Goulet seconded by Tang-Paradis

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell, No: -Absent: -Abstain: -

#### XII. <u>NEW BUSINESS</u>

- A. Recommendation to Acknowledge Ms. Ramirez's Submission of a Declaration to Become a Member, Pursuant to GC 31553, and Approve Application for Reinstatement to Active Membership, Pursuant to GC 31680.4 & 31680.5. RECOMMENDED ACTION: Approve.
  - 1. Staff Letter.

#### **JANUARY 25, 2021**

2. Declaration to Enter VCERA Membership and Application for Reinstatement to Active Membership from Maria C. Ramirez

Ms. Webb said that occasionally, the VCERA Board received petitions for reinstatement from retired members wishing to return to active service, as allowed by Government Code section 31680.4. She asked Chief Operations Officer, Julie Stallings to explain Ms. Ramirez's situation and request.

Ms. Stallings said that Ms. Ramirez, a current VCERA retiree receiving retirement benefits, had filed for reinstatement under Government Code section 31680.4. The active position to which Ms. Ramirez was returning was as a Ventura County Supervisor, gave her the statutory right to membership under Government Code section 31553. Given these facts, staff waived the requirement for the reinstatement petition to include a medical certification that indicated the member was not incapacitated from the performance of the position's duties. Staff recommended that the Board acknowledge the filing of Ms. Ramirez's declaration to become a VCERA member for her prospective service and approve her application for reinstatement.

Trustee Goulet asked what Tier Ms. Ramirez would return to if reinstated by the Board.

Ms. Nemiroff replied that Ms. Ramirez would return to the tier that she was in prior to her retirement. Ms. Nemiroff later clarified the reasons for this conclusion during staff comment.

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

<u>MOTION</u>: Approve Acknowledgement of Ms. Ramirez's Declaration to Enter VCERA Membership, Pursuant to GC 31553, and Approve Application for Reinstatement to Active Membership, Pursuant to GC 31680.4 & 31680.5.

Moved by Roberts seconded by Grass

Vote: Motion carried

Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell, No: -

Absent: -

Abstain: -

Following the vote on the item, the Board advanced to agenda item XI.C., "Consideration of Amendments to VCERA Management Employees' Resolution and Compensation Schedule & Appointment of Compensation Review Committee."

# B. VCERA Cost-of-Living Adjustments (COLA) as of April 1, 2021. **RECOMMENDED ACTION: Approve.**

1. Actuary's Annual COLA Analysis.

Mr. Angelo said that each year Segal reviewed the December to December, Consumer Price Index (CPI) for Los Angeles, Long Beach and Anaheim area. They then took the ratio of that index and noted that it had gone up from 275.553 in 2019 to 279.560 in 2020, which was about 1.45% and rounded to the nearest one half percent, would mean that the members eligible for the COLA increase would receive a 1.50% increase in April 2021.

MOTION: Approve.

#### **JANUARY 25, 2021**

Moved by Long seconded by Joe

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell No: -Absent: -Abstain: -

Following the vote on the item, the Board returned to agenda item X.A., "June 30, 2020 Comprehensive Financial Report (CAFR) – Brown Armstrong, Rosalva Flores and Alaina Vandermade."

- C. Consideration of Amendments to VCERA Management Employees' Resolution and Compensation Schedule & Appointment of Compensation Review Committee. **RECOMMENDED ACTION: Approve.** 
  - 1. Letter from Chair.
  - 2. Request from VCERA Senior Management Regarding Pending Market-Based Adjustment Study
    - a. Letter from Former Chair Wilson to Board of Retirement, Dated January 6, 2020.

Chair Sedell said this was a cleanup item related to the Management Employees' Resolution. He noted that currently the reimbursable amount for professional memberships and licenses for covered executive employees was set at \$150, which was less than the allowable amount in the County of Ventura's Management Resolution. He recommended allowing some flexibility to allow for times when executive staff had a justifiable need for another membership or license. Currently, such requests must be brought to the Board for approval. He recommended that the limit should be changed to \$400 with \$200 of that amount to be subject to the discretion of the Retirement Administrator.

Chair Sedell also stated his intent to appoint an ad hoc Compensation Review Committee to review compensation of the covered executive employees. The Committee would be asked to propose a market based compensation review plan to the entire Board, which would likely involve an outside firm.

In summary, he asked that the Board approve the recommendations to amend the VCERA Employees Management Resolution as proposed with the proposed \$400 limit for memberships and licenses, and in accordance with Section 304 of the VCERA Resolution, authorize the Chair to appoint an ad hoc Compensation Review Committee to examine compensation for the executive positions. If those two recommendations were approved, he would ask for volunteers to serve on the committee.

Trustee Hintz then motioned to approve the recommended action.

Trustee Goulet said that he believed that there should be a correction on one of the items mentioned.

Trustee Hintz then withdrew his motion.

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Trustee Goulet referenced the proposed correction to Section 505, which stated that the maximum would be \$200 for memberships and required licenses, but later in the second paragraph it had been proposed that the limit be increased to \$400. He suggested the amended language say that the Retirement Administrator could authorize in excess of \$200, if he or she deemed it necessary, up to a maximum of \$400.

Ms. Webb asked Trustee Goulet would approve of corrected language saying, "in excess of the \$200 allowed, to a maximum of \$400".

Trustee Goulet said yes.

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

<u>MOTION</u>: Approve Recommendation to Amend VCERA Management Employees' Resolution Section 505 with Correction; in Accordance with Section 304 of the VCERA Resolution, Authorize the Chair to Appoint an Ad Hoc Compensation Review Committee to Examine Executive Compensation.

Moved by Hintz seconded by Goulet

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell, No: -Absent: -Abstain: -

Chair Sedell asked if any trustees were willing to serve on the Compensation Review Committee.

After considering Trustee comments, Chair Sedell appointed Trustees Goulet, Hoag and Joe to the Ad Hoc Compensation Review Committee.

- D. Establishment of Personnel Review Committee.
  - 1. Staff Letter.

Chair Sedell said the Board was tasked with coordinating the annual review of the 3 VCERA executives who report directly to the Board, which were the Retirement Administrator, the General Counsel and the Chief Investment Officer. The Personnel Review Committee was appointed annually for a limited term to conduct the reviews, bringing back the results to the Board in Closed Session for discussion. He asked for volunteers willing to serve on the committee.

Trustee Grass, Trustee Hernandez-Garcia, and Trustee Tang-Paradis volunteered to serve on the committee.

Chair Sedell then appointed Trustees, Grass, Hernandez-Garcia and Tang-Paradis to the Personnel Review Committee.

- E. SACRS 2021-2022 Board of Director Nominations.
  - 1. SACRS Notice.

#### **JANUARY 25, 2021**

Chair Sedell said that there was no action by the Board regarding the item.

- F. Quarterly Retirement Administrator's Report for October December 2020. **RECOMMENDED ACTION: Receive and file.** *To be Provided.*
- G. Quarterly Chief Investment Officer's Report for October December 2020. **RECOMMENDED ACTION: Receive and file.**

Ms. Webb said that her quarterly report reviewed the highlights from the 4<sup>th</sup> quarter of 2020 and she did not believe either her report or the Chief Investment Officer's report yielded any surprises. However, they would be happy to answer any questions.

Trustee Joe asked Ms. Webb if quarterly goals were set prior to the presentation of her quarterly report.

Ms. Webb replied that traditionally the year's organizational goals were proposed and approved by the Board through the annual Business Plan. Specific Board policies identified what both the Business Plan and Retirement Administrator's quarterly reports should contain. Thus, the Administrator's quarterly reports covered the required topics, and reflected the quarter's main highlights, issues and events. The Board could direct changes to the format, or for more in-depth information on any topic. So no, unlike the Business Plan, the quarterly report was not based on specific quarterly goals but served as an update of major activities.

Chair Sedell said the Personnel Review Committee could recommend changes to future quarterly reports from the Retirement Administrator or the C.I.O.

Trustee Joe noted the report related that staff job duties were taking longer to complete because of the need for manual processing of some calculations that related to the Alameda Decision. He then asked what help the Board could provide to make things more automated.

Ms. Webb replied that the V3 pension administration system was an automated one, but it was based on pre-Alameda methodology. Some system programming changes would need to be updated to prevent manual calculations. However, given the pending litigation on the ultimate implementation of *Alameda*, reprogramming needed to occur after they were resolved. In the meantime, staff must calculate employee pensions with and without those items to inform members of their approximate benefit under both scenarios. After the declaratory relief action was resolved, staff could then proceed with the programming changes to automate. Further, programming changes on the Auditor-Controller's side would be necessary as well, so the effort would be done in coordination with the Auditor-Controller's office.

Trustee Joe noted the report also mentioned that Retirement Applications use to take 30 to 60 days to process, but because of the additional manual calculations related to the Alameda Decision, it was now taking 30 - 90 days. He then asked if she knew when staff could get back to the 30 - 60 days processing timeframe.

Ms. Webb replied that improvement of that turnaround time could occur only after the outstanding issues were resolved. However, staff had brought a recommendation to the Board in an effort to avoid or diminish delays caused by the manual calculations. Twice the Board had decided against it because they prefer information based on both possible outcomes to be provided to the members, even if it took longer for staff to process. Staff would continue to follow that direction until either the Board changed it, or the declaratory relief efforts settled the issue.

#### **JANUARY 25, 2021**

Chair Sedell referenced the Board's previous pledge to staff to support additional help, though he acknowledged that bringing a new hire up to speed would take time. He restated the Board's support of staff to do its work.

Ms. Webb said that staff appreciated the Board's support, and indeed the learning curve for any new or temporary specialists would be very substantial, so the burden really fell on the existing staff. Staff's anticipated request for extra help would focus on removing certain administrative duties from the specialists to free up time for them to work on the manual calculations.

Trustee Roberts said that he knew of retired members that had returned to work at his office. So, perhaps there were retired VCERA employees who might be interested in returning to VCERA as extra help.

Ms. Webb replied that there were very few VCERA retirees who would be able to step back in and do those manual calculations, though it was an area to explore.

Trustee Joe said that he had a similar question regarding the Chief Investment Officer's quarterly report. It listed the investment activities and the investments that were made and presentations, but he wanted to know if there were certain goals that were to be met.

Mr. Gallagher replied that his primary goal was to move the Board's asset allocation forward. The two largest areas of movement were in private equity and private credit, as VCERA continued to build out those programs. Also, the Board had a regular annual schedule of investment manager presentations and those managing in excess of \$100 million, reported directly to the Board annually. So, his quarterly report listed those items as well as recent fee reductions, the monitoring existing investments, reviewing new investment opportunities, and ensuring the Board was kept appraised of any significant issues.

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

<u>MOTION</u>: Receive and File the Quarterly Reports from the Retirement Administrator and Chief Investment Officer

Moved by Roberts seconded by Goulet

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Long, Joe, Roberts, Tang-Paradis, Sedell, No: -Absent: -Abstain: -

The Board took a break at 10:30 a.m.

The Board returned from break at 10:37 a.m.

The Board then returned to agenda item V.A., "Review and Approval of Annual Actuarial Valuation Report as of June 30, 2020 – Segal Consulting, Paul Angelo."

#### XIII. INFORMATIONAL

#### A. CALAPRS Virtual General Assembly Notice.

Ms. Webb noted that the event included Ethics Training which is one of 2 required subject areas of trustee education that must be completed every 2 years, the other being Sexual Harassment Prevention. Also, several Trustees were due to take the Sexual Harassment Prevention Training course, so staff was exploring options to provide that training.

#### XIV. PUBLIC COMMENT

None.

#### XV. STAFF COMMENT

Ms. Webb informed the Board that there had been one COVID-19 case reported among VCERA staff since last quarter. However, that employee had since then recovered, and because this employee had been working remotely, no other staff members were exposed.

Ms. Webb also reminded the new trustees to provide or update their Board photos and short biographies for VCERA's website.

Ms. Nemiroff clarified her earlier response to Trustee Goulet's question regarding Supervisor Ramirez's reinstatement. She had said that Ms. Ramirez would return to the tier she was in at the time she first retired, which was correct, but it would be more accurate to say that Ms. Ramirez would return to the tier in effect prior to December 31, 2012, which was right before PEPRA was implemented. This was also the same way reciprocal members were handled, which was why Ms. Ramirez would be going into General Tier II as opposed to PEPRA Tier II. The County had not adopted the section that would allow reinstated employees to return to their original tier, rather, the County had adopted a section that said that reinstated employees would be put into the current plan that applies to new employees. PEPRA later came into effect on January 1, 2013 and defined what a "new member" was. VCERA determined that a reinstated member did not fall under that definition and consequently, reinstated legacy employees have been placed into the legacy tier in effect on December 31, 2012. Therefore, the answer was still correct, and Ms. Ramirez would be going back to General Tier II.

Mr. Gallagher informed the Board that at the next meeting Mr. Martin would be presenting the Capital Market Assumptions report with the expected rates of return, standard deviations and correlations which form the basis for preforming an Asset Allocation Review. This will help prepare for the Asset Liability Study presentation in March, which was presented to the Board once every 3 to 5 years, so those would be 2 very important meetings.

#### XVI. BOARD MEMBER COMMENT

Chair Sedell said he believed the biographies that Ms. Webb had mentioned in Staff Comment, were important. As trustees were unable to meet in person as a result of COVID, it would help get them become familiar with each other. He restated his wish to have collaboration with each other, the County, and various stakeholders going forward.

#### XVII. ADJOURNMENT

The Chair adjourned the meeting at 12:38 p.m.

#### **JANUARY 25, 2021**

**MINUTES PAGE 16** 

Respectfully submitted,

LINDA WEBB, Retirement Administrator

Approved,

MIKE SEDELL, Chair

## **VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**

# **BOARD OF RETIREMENT**

# DISABILITY MEETING

# **FEBRUARY 8, 2021**

# **MINUTES**

Mike Sedell, Chair, Public Member
Arthur E. Goulet, Vice-Chair, Retiree Member
Steven Hintz, Treasurer-Tax Collector
Aaron Grass, Safety Employee Member
Cecilia Hernandez-Garcia, General Employee Member
Kelly Long, Public Member
Tommie E. Joe, Public Member
Jordan Roberts, General Employee Member
Sim Tang-Paradis, Public Member
Robert Ashby, Alternate Safety Employee Member
Will Hoag, Alternate Retiree Member

#### TRUSTEES ABSENT:

- STAFF<br/>PRESENT:Henry Solis, Chief Financial Officer<br/>Julie Stallings, Chief Operations Officer<br/>Dan Gallagher, Chief Investment Officer<br/>Lori Nemiroff, General Counsel<br/>Leah Oliver, Chief Technology Officer<br/>Josiah Vencel, Retirement Benefits Manager<br/>Nancy Jensen, Retirement Benefits Specialist<br/>Jess Angeles, Communications Officer<br/>Chris Ayala, Program Assistant
- **PLACE:** In Accordance with the Governor's Executive Order N-29-20 (3), the Members of the Board will be participating via teleconference. Pursuant to Government Code §54954.3, members of the public, to the extent required by law, will have the opportunity to directly address the Board concerning the below mentioned business.

**<u>TIME</u>**: 9:00 a.m.

#### **FEBRUARY 8, 2020**

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#### ITEM:

#### I. CALL TO ORDER

Chair Sedell called the Disability Meeting of February 8, 2021, to order at 9:01 a.m.

#### II. APPROVAL OF AGENDA

MOTION: Approve.

Moved by Hintz seconded by Goulet

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Joe, Long, Roberts, Tang-Paradis, Sedell No: -Absent: -Abstain: -

#### III. RECEIVE AND FILE PENDING DISABILITY APPLICATION STATUS REPORT

Chair Sedell stated that he believed that the Pending Disability Application Status Report should be brought back to the Board because of the new format on Master Page 38, since the Board had not discussed this new format and he had some questions.

MOTION: Receive and File.

Moved by Roberts seconded by Hintz

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Joe, Long, Roberts, Tang-Paradis, Sedell No: -Absent: -Abstain: -

#### IV. APPLICATIONS FOR DISABILITY RETIREMENT

- A. Application for Service-connected Disability Retirement—Oseguera, Emilia; Case No. 15-023.
  - 1. Petition for Reconsideration with Attachments, filed by Emilia Oseguera, Applicant, dated December 14, 2020.
  - 2. Opposition to Petition for Reconsideration, filed by Stephen D. Roberson, Attorney for Respondent, County of Ventura-Risk Management, dated January 7, 2021.
  - 3. Findings and Decision Regarding Employee Application for Disability Retirement to Deny the Application for Service-connected Disability, filed by Hearing Officer Robert Klepa, dated June 26, 2020.
  - 4. Hearing Notice, dated January 14, 2021.

#### **FEBRUARY 8, 2020**

MINUTES PAGE 3

Stephen Roberson, Attorney at Law and Catherine Laveau were present on behalf of County of Ventura-Risk Management. Josiah Vencel and Nancy Jensen were present on behalf of VCERA. The applicant, Emilia Oseguera, was also present.

Ms. Oseguera made a brief summary statement.

Mr. Roberson also made a brief summary statement.

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

MOTION: Deny the Petition for Reconsideration.

Moved by Hintz seconded by Hernandez-Garcia

Vote: Motion carried Yes: Grass, Goulet, Hintz, Joe, Long, Roberts, Tang-Paradis, Sedell No: Hernandez-Garcia Absent: -Abstain: -

- B. Application for Service-connected Disability Retirement—Mendoza, Alberto A.; Case No. 16-018.
  - 1. Petition for Reconsideration with Attachments, filed by Steven R. Rosales, Attorney for Applicant, dated January 18, 2021.
  - 2. Opposition to Petition for Reconsideration, filed by Stephen D. Roberson, Attorney for Respondent, County of Ventura-Risk Management, dated January 29, 2021.
  - 3. Proposed Findings of Fact and Recommended Decision to Deny the Application for Service-connected Disability, filed by Hearing Officer Humberto Flores, dated October 22, 2020.
  - 4. Hearing Notice, dated February 1, 2021.

Stephen Roberson, Attorney at Law and Catherine Laveau were present on behalf of County of Ventura-Risk Management. Josiah Vencel and Nancy Jensen were present on behalf of VCERA. Steven R. Rosales, Attorney at Law, was present on behalf of applicant, Alberto Mendoza, who was also present.

Mr. Rosales made a brief summary statement.

Mr. Roberson also made a brief summary statement.

MOTION: Deny the Application for Reconsideration.

Moved by Hintz seconded by Roberts

Vote: Motion carried Yes: Grass, Goulet, Hintz, Joe, Long, Roberts, Tang-Paradis, Sedell No: -

#### **FEBRUARY 8, 2020**

Absent: -Abstain: Hernandez-Garcia

- C. Application for Service-connected Disability Retirement—Matsuura, Steven R.; Case No. 19-019.
  - 1. Employer's Statement of Position, submitted by County of Ventura-Risk Management, in support of the Application for Service-connected Disability Retirement, dated January 19, 2021.
  - 2. Supporting Documentation for Employer's Statement of Position.
  - 3. Application for Service-connected Disability Retirement, filed by Thomas Wicke, Attorney for Applicant, dated April 22, 2019.
  - 4. Hearing Notice, dated February 2, 2021.

Catherine Laveau was present on behalf of County of Ventura-Risk Management Josiah Vencel and Nancy Jensen were present on behalf of VCERA. Thomas Wicke, Attorney at Law, was present on behalf of applicant, Steven R. Matsuura, who was not present.

Mr. Wicke made a brief summary statement.

Ms. Catherine Laveau also made a brief summary statement.

MOTION: Approve Application for Service-connected Disability Retirement.

Moved by Roberts seconded by Tang-Paradis

Vote: Motion carried

Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Joe, Long, Roberts, Tang-Paradis, Sedell

No: -

Absent: -

Abstain: -

- D. Application for Service-connected Disability Retirement—Hill, Rebecca K.; Case No. 19-025.
  - 1. Staff Recommendation to Grant the Application for Service-connected Disability Retirement, dated January 12, 2021.
  - 2. Supporting Documentation for Staff Recommendation.
  - 3. Application for Service-connected Disability Retirement, filed by Applicant, dated June 14, 2019.
  - 4. Hearing Notice, dated January 13, 2021.

Josiah Vencel and Nancy Jensen were present on behalf of VCERA. The applicant, Rebecca Hill was also present.

**FEBRUARY 8, 2020** 

MINUTES PAGE 5

Ms. Hill declined to make a statement.

Mr. Vencel made a brief summary statement.

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

MOTION: Approve Staff Recommendation to Grant Service-connected Disability Retirement.

Moved by Roberts seconded by Grass

Vote: Motion carried Yes: Grass, Hernandez-Garcia, Hintz, Joe, Long, Roberts, Sedell No: -Absent: -Abstain: Goulet, Tang-Paradis

#### V. OLD BUSINESS

None.

#### VI. <u>NEW BUSINESS</u>

- A. Request for Trustee Hernandez-Garcia to Attend the CALAPRS Virtual General Assembly, March 8 – 9, 2021.
   RECOMMENDED ACTION: Approve.
  - 1. Staff Letter.
  - 2. CALAPRS Virtual General Assembly Agenda.

<u>MOTION</u>: Approve Request for Trustee Hernandez-Garcia to Attend the CALAPRS Virtual General Assembly.

Moved by Hintz seconded by Tang-Paradis

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Hintz, Joe, Long, Roberts, Tang-Paradis, Sedell No: -Absent: -Absent: -

#### VII. INFORMATIONAL

None.

#### VIII. PUBLIC COMMENT

None.

# IX. STAFF COMMENT

**FEBRUARY 8, 2020** 

**MINUTES** PAGE 6

Mr. Solis informed the Board that normally CFO would present the Mid-Year Budget projection at the February Business meeting, however the item would be delayed because of the impact due to recent employee's retirement in the Fiscal Department and additional coverage and responsibilities for the CFO during the Retirement Administrator's anticipated short absence. Therefore, staff was planning to present the item at the Disability meeting in March.

Chair Sedell said that he hoped the next Board agenda would have item to discuss the appointment of a Finance Committee and Audit Committee. He then asked if any of the Trustees were interested in serving on one of those committees, to please let him or Ms. Webb know.

#### Χ. **BOARD MEMBER COMMENT**

None.

#### XI. ADJOURNMENT

The Chair adjourned the meeting at 9:52 a.m.

Respectfully submitted,

LINDA WEBB, Retirement Administrator

Approved,

MIKE SEDELL. Chair

## **VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**

# **BOARD OF RETIREMENT**

# SPECIAL MEETING

# **FEBRUARY 16, 2021**

# **MINUTES**

TRUSTEES	Mike Sedell, Chair, Public Member
PRESENT:	Arthur E. Goulet, Vice-Chair, Retiree Member
	Steven Hintz, Treasurer-Tax Collector
	Aaron Grass, Safety Employee Member-
	Cecilia Hernandez-Garcia, General Employee Member
	Kelly Long, Public Member
	Tommie E. Joe, Public Member
	Jordan Roberts, General Employee Member
	Sim Tang-Paradis, Public Member-
	Robert Ashby, Alternate Safety Employee Member
	Will Hoag, Alternate Retiree Member

#### TRUSTEES ABSENT:

- STAFF<br/>PRESENT:Henry Solis, Chief Financial Officer<br/>Julie Stallings, Chief Operations Officer<br/>Dan Gallagher, Chief Investment Officer<br/>Lori Nemiroff, General Counsel<br/>Leah Oliver, Chief Technology Officer<br/>Josiah Vencel, Retirement Benefits Manager<br/>Nancy Jensen, Retirement Benefits Specialist<br/>Jess Angeles, Communications Officer<br/>Chris Ayala, Program Assistant
- **PLACE: Please take notice that:** The Chair of the Board of Retirement, pursuant to Government Code §54956, hereby calls a Special Meeting to take place on February 16, at 2:00 P.M. In Accordance with the Governor's Executive Order N-29-20 (3) The Members of the Board will be participating via teleconference. Pursuant to Government Code §54954.3, members of the public, to the extent required by law, will have the opportunity to directly address the Board concerning the below mentioned business.
- **<u>TIME</u>**: 2:00 p.m.

#### BOARD OF RETIREMENT SPECIAL MEETING

**FEBRUARY 16, 2021** 

#### ITEM:

#### I. <u>CALL TO ORDER</u>

Chair Sedell called the Special meeting of February 16, 2021 to order at, 2:00 p.m.

Chair Sedell proposed amending the agenda by moving item V., "Public Comment", to be heard before item III., "Closed Session", to allow a request for Public Comment by the County of Ventura.

#### II. APPROVAL OF AGENDA

MOTION: Approve as Amended.

Moved by Roberts seconded by Long

Vote: Motion carried Yes: Ashby, Goulet, Hernandez-Garcia, Hintz, Joe, Long, Roberts, Sedell No: -Absent: Tang-Paradis Abstain: -

Following the vote on the item, the Board advanced to agenda item V., "Public Comment."

#### III. CLOSED SESSION

A. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION (Government Code section 54956.9(a)) Name of Case: Ventura County Employees' Retirement Association v. County of Ventura, et. al, Case No.: VENCI00546574

The Board went into Closed Session at 2:11 p.m.

#### IV. PUBLIC SESSION

A. Report of Action Taken in Closed Session.

Following Closed Session, Chair Sedell called the Open Session meeting back to order at 3:55 p.m.

Trustee Long did not return to Open Session.

Trustees Tang-Paradis and Grass joined the meeting shortly after the beginning of Public Comment.

Ms. Nemiroff said that there was no reportable action from the Closed Session meeting, and that Trustee Long had recused herself from the Closed Session.

MOTION: For Adjournment.

Moved by Roberts seconded by Joe

Vote: Motion carried Yes: Grass, Goulet, Hernandez-Garcia, Joe, Roberts, Tang-Paradis, Sedell No: -Absent: Hintz, Long

#### BOARD OF RETIREMENT SPECIAL MEETING

#### **FEBRUARY 16, 2021**

MINUTES PAGE 3

Abstain: -

#### V. PUBLIC COMMENT

Emily Gardner, Principal Assistant County Counsel for the County of Ventura, provided the following public comment. Ms. Gardner said that it was her understanding that although the Board would not be voting on the Flex Credit issue at this meeting, they would be receiving recommendations and advice from their Counsels and the Ad Hoc Litigation Committee regarding options available to the Board, which she believed were not the only options available to the Board. Recalling the vigorous debate on the subject at the October 12, 2020, disability meeting, there were different interpretations regarding the Alameda Decision and it was the County's position, as well as the position of many of the unions, that the Alameda Decision did not require the Board to take any action in regard to the flex credit. The Court's decision did not change anything in respect to the flex credit or in-kind benefits, so any argument that not taking action was somehow a breach of the Board's fiduciary duty, or that they were exposing themselves to a personal liability if they refused to exclude the flex credit, was simply not true. The Board had the discretion to oppose the recommendations from their counsel, with regard to the exclusion of the flex credit, and could continue to include the flex credit in compensation earnable as they had done since 1989. Even if other counties started to exclude the flex credit, the Board was still not bound to do the same.

Ms. Gardner continued that the Board did not have to continue seeking declaratory relief and any characterization that the County's or the Court's demur was forcing the Board to adopt a resolution to exclude the flex credit would be false. They also did not need to proceed with the litigation, since the Board was not being forced into any position. Therefore, to revisit the issue regarding their fiduciary duty, they were only required to act reasonably and to do their due diligence. One of those options was to include the flex credit, and though they were not voting on the issue today, it was still the County's position that they should continue to include the flex credit.

Following public comment, the Board returned to agenda item III., "Closed Session."

#### VI. ADJOURNMENT

The Chair adjourned the meeting at 3:56 p.m.

Respectfully submitted,

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LINDA WEBB, Retirement Administrator

Approved,

MIKE SEDELL, Chair

January 2021										
FIRST NAME	LAST NAME	G/S	DATE OF MEMBERSHIP	BENEFIT SERVICE *	DEPARTMENT	EFFECTIVE DATE				
<b>REGULAR RETIREMEN</b>	NTS:									
CLARA LOUISE	ADAIKKALAM	G	7/25/1999	21.13	VENTURA COUNTY LIBRARY	12/31/2020				
MARY GILES	ANDRADE	G	12/19/2004	14.70	HEALTH CARE AGENCY	12/5/2020				
PAUL E	BELL	G	9/17/2001	19.27	FIRE PROTECTION DISTRICT	12/26/2020				
LINDA KAY	BELLAMY	G	4/7/1985	35.45	AGRICULTURAL COMMISSIONER	12/1/2020				
MICHAEL F	BUDZINSKI	G	1/25/1998	22.91	GENERAL SERVICES AGENCY	1/2/2021				
JULIE ANNE	CHRISTIE	G	3/6/1988	32.03	SUPERIOR COURT	12/5/2020				
ANTONIO GANDER	GALIMBA	G	6/29/2008	12.42	SHERIFF'S OFFICE	12/1/2020				
PHILLIPPE JON	GALITZ	S	8/14/1994	24.76	SHERIFF'S OFFICE	11/15/2020				
ROBIN	GRENVILLE	G	11/29/1999	20.99	PUBLIC WORKS AGENCY	12/4/2020				
PATRICIA ANN	GUTIERREZ	S	9/26/2004	17.89	PROBATION AGENCY	11/20/2020				
THERESA	LUBIN	G	6/12/1988	34.19	GENERAL SERVICES AGENCY	12/12/2020				
KERRY ANN	MAGNER-VARELA	G	1/9/2011	3.68 *	HEALTH CARE AGENCY	12/31/2020				
					(DEFERRED)					
DENISE MICHELLE	MALAN	G	4/23/2006	14.53	SUPERIOR COURT	12/25/2020				
CARMEN D	MARQUEZ	G	2/25/1996	24.54	DISTRICT ATTORNEY	12/12/2020				
BENNY R	MARTINEZ	G	3/23/1986	3.64 *	TREASURER-TAX COLLECTOR	12/17/2020				
					(DEFERRED)					
LISA ANN	MCPHEETERS	G	1/24/1999	15.07	HEALTH CARE AGENCY	12/15/2020				
					(DEFERRED)					
JOE F	MOORE	S	10/22/1995	25.17	PROBATION AGENCY	12/1/2020				
JOAN	MURAN	G	12/24/1989	28.03	HEALTH CARE AGENCY	12/13/2020				
PEGGY S	MURILLO	G	12/8/2013	6.90	HEALTH CARE AGENCY	12/12/2020				
NICOLLE J	NIEMANN	S		9.52	FIRE PROTECTION DISTRICT	12/1/2020				
					(DRO NON-MEMBER)					
ALICE	PATTON	S	7/11/1999	17.61	SHERIFF'S OFFICE	12/2/2020				
					(DEFERRED)					
GUADALUPE	REYES	G	11/13/1988	31.79	HUMAN SERVICES AGENCY	12/1/2020				
DIONICIO CASAREZ	RODRIGUEZ	G	3/18/2001	18.05	PUBLIC WORKS AGENCY	12/31/2020				
JACK DAVID	SNYDER	G	4/13/2014	5.02	RESOURCE MANAGEMENT AGENCY	12/8/2020				
					(DEFERRED)					
MARILYN THERESE	VILLEGAS	G	5/10/1992	28.57	SHERIFF'S OFFICE	12/5/2020				
LINDA DELORES	VIVIAN	G	7/11/1999	40.28	DISTRICT ATTORNEY	12/19/2020				
MARC KARL	WEBER	S	11/1/1998	21.77	PROBATION AGENCY	12/31/2020				
FELECEIA MONIQUE	WILLIAMS-BROWN	G	7/31/1994	5.18 *	PROBATION AGENCY (DEFERRED)	12/1/2020				
JOHN CARVAJAL	ZARAGOZA	G	2/1/2009	11.86	BOARD OF SUPERVISORS	12/16/2020				

#### REPORT OF REGULAR AND DEFERRED RETIREMENTS AND SURVIVORS CONTINUANCES

January 2021										
FIRST NAME	LAST NAME	G/S	DATE OF MEMBERSHIP	BENEFIT SERVICE *	DEPARTMENT	EFFECTIVE DATE				
DEFERRED RETIREME	NTS:									
PAOLA	ARREDONDO	S	9/24/2017	3.05 **	PROBATION AGENCY	10/18/2020				
ALAINA M	BALDWIN	G	10/4/2020	0.09	SHERIFF'S OFFICE	11/17/2020				
ALEJANDRO	CASILLAS	G	8/7/2011	8.08	SHERIFF'S OFFICE	12/3/2020				
LAURIE S	CHAMBERS	G	4/2/2020	0.48	HEALTH CARE AGENCY	11/9/2020				
CHRISTIAN J	COLE	G	10/4/2020	0.05	SHERIFF'S OFFICE	11/7/2020				
ANISSA L	DARTER	G	12/3/2017	2.97	RESOURCE MANAGEMENT AGENCY	11/28/2020				
MAIA C	DUBINSKY	G	12/15/2019	0.89	AUDITOR-CONTROLLER	11/14/2020				
ANTHONY D	DUQUE	G	6/28/2020	0.39	SUPERIOR COURT	11/21/2020				
SABRINA N	FRAIUO	G	9/8/2020	0.19	GENERAL SERVICES AGENCY	11/19/2020				
HAYLEY E	FURLONG	G	8/23/2020	0.21	HEALTH CARE AGENCY	11/20/2020				
ELIZABETH E	GEORGE	G	6/28/2020	0.44 *	HUMAN SERVICES AGENCY	12/12/2020				
ADRIAN	GONZALEZ	G	1/5/2014	6.82	PUBLIC WORKS AGENCY	11/5/2020				
LISA M	GRIFFITHS	G	5/19/2019	1.43	HEALTH CARE AGENCY	11/14/2020				
SUSAN M	GUFFEE	G	4/1/2018	2.36	AGING AREA AGENCY	11/21/2020				
JOSEPH	GUOKAS	G	4/18/1999	18.79	HUMAN SERVICES AGENCY	11/7/2020				
ANNA C	HAAS	G	8/4/2003	13.68	HEALTH CARE AGENCY	11/15/2020				
STARLA B	HENNES	G	4/14/2013	0.02	HEALTH CARE AGENCY	12/11/2020				
LORENA B	HERNANDEZ	S	3/22/2020	0.64	PROBATION AGENCY	11/23/2020				
DESTINY L	JAMES	G	10/11/2015	5.06	HEALTH CARE AGENCY	11/7/2020				
ALI	LAKHDAR-HAMINA	G	2/19/1989	31.92	AIR POLLUTION CONTRAL DISTRICT	12/18/2020				
EVELYN V	LEON	G	2/28/2016	3.91	AUDITOR-CONTROLLER	11/7/2020				
ANN MICHELLE	MCKINLEY	G	3/26/2006	14.64	CHILD SUPPORT SERVICES	11/19/2020				
GEORGE D	MEIER	G	3/26/2017	3.64	HEALTH CARE AGENCY	11/21/2020				
DANIEL C	POWELL	G	3/30/2014	6.59	HEALTH CARE AGENCY	11/20/2020				
KERI A	RUSHING-KING	G	5/20/2018	2.40	HUMAN SERVICES AGENCY	11/18/2020				
SANAZ S	SHIRAZI	G	5/17/2020	0.41	HUMAN SERVICES AGENCY	11/11/2020				
JOAQUIN A	SOTO	G	7/26/2020	0.31	FIRE PROTECTION DISTRICT	11/24/2020				
LAUREN F	STEAD	G	7/25/2010	9.88	HEALTH CARE AGENCY	11/5/2020				
GINA V FRANCES D	THEISSEN THOMAS	G G	12/26/2010 2/6/2017	2.54 3.77	HUMAN SERVICES AGENCY RESOURCE MANAGEMENT AGENCY	11/20/2020 11/21/2020				
MONIQUE C	WARE	G	2/12/2018	2.73	PUBLIC WORKS AGENCY	11/11/2020				
JEFF R	YOKOMIZO	Ğ	7/2/2017	3.17	HEALTH CARE AGENCY	11/6/2020				
KAMEEL A	ZREIK	G	7/26/2020	0.32	FIRE PROTECTION DISTRICT	11/24/2020				
SURVIVORS' CONTINU	ANCES:									
RAFAELA	CASILLAS									
STELLA D	HERRERA									
MARIE B	FRICK									
VICTORIA RM	HREHA									
MATTHEW T	INGAMELLS									
RAMONA R	THOMAS									
* = Excludes reciprocal service or service from any previous retirements										

#### REPORT OF REGULAR AND DEFERRED RETIREMENTS AND SURVIVORS CONTINUANCES

\*\* = Member establishing reciprocity

Date: Time: User:	Thursday, Febr 11:52AM 101602	uary 18, 2021		Ve	heck Regis	Retireme ster - Stand As of: 2/18/20	ard			Page: Report: Company:	1 of 3 03630.rpt VCERA
Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Period To Post Cl	Ref Nbr	Dос Туре	Invoice Number	Invoice Date		Discount Taken	Amount Paid
Company	: VCER	A									
Acct / Sub: 028844	10300 CK	1/6/2021	000000 COMPUWAVE COMPUWAVE	07-21	001648	VO	IT	1/5/2021		0.00	1,149.00
028844	СК	1/6/2021	COMPUWAVE COMPUWAVE	07-21	001649	VO	IT	1/5/2021		0.00	3,637.02
028845	СК	1/6/2021	PUBLICPENS PUBLIC PENSION FINANCIAL FO	07-21	001650	VO	ADMIN EXP	1/5/2021	Check Total	0.00	<b>4,786.02</b> 200.00
028845	CK	1/6/2021	PUBLICPENS PUBLIC PENSION FINANCIAL FO	07-21	001651	VO	ADMIN EXP	1/5/2021		0.00	200.00
028846	СК	1/6/2021	SEGALCONSU SEGAL CONSULTING	07-21	001652	VO	ACTUARY FEES	1/5/2021	Check Total	0.00	<b>400.00</b> 31,500.00
028847	СК	1/6/2021	SOFTWAREON SOFTWARE ONE	07-21	001653	VO	IT	1/5/2021		0.00	61.28
028848	СК	1/6/2021	SPRUCEGROV SPRUCEGROVE INVESTMENT M	07-21	001654	VO	INVESTMENT FEES	1/5/2021		0.00	67,400.83
028849	СК	1/6/2021	STATEBAROF THE STATE BAR OF CALIFORNIA	07-21	001655	VO	ADMIN EXP	1/5/2021		0.00	515.00
028850	СК	1/6/2021	STROUDDESI STROUD DESIGN, INC	07-21	001656	VO	ADMIN EXP	1/5/2021		0.00	4,375.00
028851	СК	1/6/2021	TIMEWARNER TIME WARNER CABLE	07-21	001657	VO	IT	1/5/2021		0.00	294.99
028852	СК	1/6/2021	WESTCOASTA WEST COAST AIR CONDITIONIN	07-21	001658	VO	IT	1/5/2021		0.00	125.00
028853	СК	1/13/2021	ACCESSINFO ACCESS INFORMATION PROTEC	07-21	001659	VO	ADMIN EXP	1/13/2021		0.00	405.46
028854	СК	1/13/2021	BANKOFAMER BUSINESS CARD	07-21	001660	VO	ADMIN/IT	1/13/2021		0.00	793.84
028855	СК	1/13/2021	BROWNARMST BROWN ARMSTRONG	07-21	 001661	VO	ADMIN EXP	1/13/2021		0.00	4,930.00

Date: Time: User:	Thursday, Febr 11:52AM 101602	ruary 18, 2021		,		ra County Check Regis Period: 07-21	ter - Stand	ard		Page: Report: Company:	2 of 3 03630.rpt VCERA
Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Per To Post	iod Closed	Ref Nbr	Doc Туре	Invoice Number	Invoice Date	Discount Taken	Amount Paid
028856	СК	1/13/2021	DIGITALDEP DIGITAL DEPLOYMENT	07-21		001662	VO	IT	1/13/2021	0.00	650.00
028857	СК	1/13/2021	HARRISWATE HARRIS WATER CONDITIONING	07-21		001663	VO	ADMIN EXP	1/13/2021	0.00	64.50
028858	СК	1/13/2021	HEXAVEST HEXAVEST INC.	07-21		001664	VO	INVESTMENT FEES	1/13/2021	0.00	102,131.86
028859	СК	1/13/2021	LINEASOLUT LINEA SOLUTIONS	07-21		001665	VO	ADMIN EXP	1/13/2021	0.00	9,872.36
028860	СК	1/13/2021	NEPC NEPC, LLC	07-21		001666	VO	INVESTMENT FEES	1/13/2021	0.00	77,500.00
028861	СК	1/13/2021	TEAMLEGAL TEAM LEGAL, INC.	07-21		001667	VO	DISABILITY EXP	1/13/2021	0.00	511.15
028862	СК	1/13/2021	THOMSONREU THOMSON REUTERS- WEST	07-21		001668	VO	ADMIN EXP	1/13/2021	0.00	508.25
028863	СК	1/27/2021	ADP ADP, LLC	07-21		001669	VO	ADMIN EXP	1/27/2021	0.00	2,696.27
028864	СК	1/27/2021	ATTMOBILIT AT&T MOBILITY	07-21		001670	VO	IT	1/27/2021	0.00	370.47
028865	СК	1/27/2021	BRENTWOODI BRENTWOOD IT	07-21		001671	VO	IT	1/27/2021	0.00	2,695.00
028866	СК	1/27/2021	GHODADRANE NEIL S. GHODADRA, MD	07-21		001672	VO	DISABILITY EXP	1/27/2021	0.00	2,900.00
028867	СК	1/27/2021	HANSONBRID HANSON BRIDGETT LLP	07-21		001673	VO	LEGAL FEES	1/27/2021	0.00	7,007.00
028868	СК	1/27/2021	LOOMISSAYL LOOMIS, SAYLES & COMPANY, I	07-21 L		001674	VO	INVESTMENT FEES	1/27/2021	0.00	133,209.87

Date: Time: User:	Thursday, Fel 11:52AM 101602	oruary 18, 2021	Ventura County Retirement Assn <u>Check Register - Standard</u> Period: 07-21 As of: 2/18/2021							Page: Report: Company:	3 of 3 03630.rpt VCERA
Check Nbr	Checl Type		Vendor ID Vendor Name	_ Pe To Post	eriod Closed	Ref Nbr	Dос Туре	Invoice Number	Invoice Date	Discount Taken	Amount Paid
028869	СК	1/27/2021	MFDAILYCOR M.F. DAILY CORPORATION	07-21		001675	VO	ADMIN EXP	1/27/2021	0.00	21,092.45
028870	СК	1/27/2021	NOSSAMAN NOSSAMAN LLP	07-21		001676	VO	LEGAL FEES	1/27/2021	0.00	24,564.74
028871	СК	1/27/2021	REAMSASSET SCOUT INVESTMENTS, INC	07-21		001677	VO	INVESTMENT FEES	1/27/2021	0.00	147,783.00
028872	СК	1/27/2021	SHREDITUSA SHRED-IT	07-21		001678	VO	ADMIN EXP	1/27/2021	0.00	130.36
028873	СК	1/27/2021	THOMSONREU THOMSON REUTERS- WEST	07-21		001680	VO	ADMIN EXP	1/27/2021	0.00	508.25
028874	СК	1/27/2021	TIMEWARNER TIME WARNER CABLE	07-21		001679	VO	IT	1/27/2021	0.00	294.99
028875	СК	1/27/2021	WALTERSCOT BNY MELLON INV MGMT CAYM	07-21 IA		001681	VO	INVESTMENT FEES	1/27/2021	0.00	277,670.13

Check Count:

32

Acct Sub Total: 927,748.07

	Company Disc Total	0.00	Company Total	927,748
Total:	32	927,748.07		
Mask	0	0.00		
Zero	0	0.00		
Stub	0	0.00		
Void	0	0.00		
Electronic Payment	0	0.00		
Hand	0	0.00		
Regular	32	927,748.07		
Check Type	Count	Amount Paid		

#### Ventura County Employees' Retirement Association Statement of Fiduciary Net Position As Of December 31, 2020 (Unaudited)

#### Assets Cash & Cash Equivalents \$200,645,165 Receivables Interest and Dividends 3,669,963 Securities Sold 19,920,612 Miscellaneous 22,005 **Total Receivables** 23,612,580 Investments at Fair Value **Domestic Equity** 2,025,220,056 Non U.S. Equity 1,095,860,295 780,924,031 **Global Equity** Private Equity 703,861,290 **Fixed Income** 1,066,242,322 Private Credit 149,636,866 **Real Assets** 904,073,350 Cash Overlay 126,856 **Total Investments** 6,725,945,065 Capital Assets, Net of Accumulated Depreciation & Amortization 10,288,516 **Total Assets** 6,960,491,326 Liabilities Securities Purchased 45,662,572 Accounts Payable 2,086,324 Tax Withholding Payable 3,657,290 Deferred Revenue (PrePaid Contributions) 67,652,368 **Total Liabilities** 119,058,555 Net Position Restricted for Pensions \$6,841,432,771

#### Ventura County Employees' Retirement Association Statement of Changes in Fiduciary Net Position For the Six Months Ending December 31, 2020 (Unaudited)

#### ADDITIONS

Contributions	
Employer \$87,274	,968
Employee 38,879	,436
Total Contributions	126,154,404
Investment Income	
Net Appreciation (Depreciation) in Fair Value of Investments 955,591	,565
Interest Income 9,653	,091
Dividend Income 3,683	,472
Other Investment Income 3,997	,568
Real Estate Operating Income, Net 8,083	
	,495
Total Investment Income 981,160	,408
Less Investment Expenses	
Management & Custodial Fees 13,128	,493
Other Investment Expenses 206	,147
Securities Lending Borrower Rebates 23	,549
	,325
Totat Investment Expenses 13,405	,513
Net Investment Income/(Loss)	967,754,895
Total Additions	1,093,909,298
DEDUCTIONS	
Benefit Payments 161,518	,555
Member Refunds and Death Benefit Payments 1,541	,148
Administrative Expenses 2,813	,683
Other Expenses 1,455	,212
Total Deductions	167,328,598
Net Increase/(Decrease)	926,580,701
Net Position Restricted For Pensions	
Beginning of Year (Restated due to Audit Adjustment)	5,914,852,071
Ending Balance	\$6,841,432,772

#### Ventura County Employees' Retirement Association Investments, Cash, and Cash Equivalents As of December 31, 2020 (Unaudited)

	Investments	Cash & Cash Equivalents
Equity		<u> </u>
Domestic Equity		
Blackrock - Russell 1000	1,686,419,384	0
Blackrock - Russell 2500	84,736,799	0
Western Asset Enhanced Equity Index Plus	254,063,874	51,523,641
Total Domestic Equity	2,025,220,056	51,523,641
Non U.S. Equity		
Blackrock - ACWI ex - US	568,537,973	0
Hexavest	94,582,105	0
Sprucegrove	251,477,366	0
Walter Scott	181,262,851	0
Total Non U.S. Equity	1,095,860,295	0
Global Equity		
Blackrock - ACWI Index	780,924,031	0
Total Global Equity	780,924,031	0
Private Equity		
Abry Partners	5,153,457	0
Abbott Secondaries	15,916,673	0
Adam Street	214,252,397	0
CapVest Equity Partners	842,026	0
Advent Int'l	4,419,336	0
Astorg	2,867,026	0
Battery Ventures	22,144,582	0
Buenaventure One	70,689,185	0
Buenaventure Two	611,227	0
Clearlake Investors	17,196,281	0
GGV Capital	10,453,272	0
Drive Capital	27,682,252	0
Flexpoint	1,601,340	0
ECI 11 GP LP	3,411,405	0
Genstar Capital	5,214,571	0
Great Hill	1,736,339	0
Green Equity Investors	1,974,297	0
GTCR Fund XII	19,989,994	0
Harbourvest	138,769,065	0
Hellman & Friedman		0
	9,471,726	
Insight Ventures	39,260,472	0
MC Partners	2,653,349	0
Oak/HC/FT	10,547,335	0
Pantheon	47,680,000	0
Resolute Fund IV LP	20,095,808	0
The Riverside Fund V LP	3,251,673	0
TA XIII-A	5,699,260	0
Vitruvian IV	276,941	0
Total Private Equity	703,861,290	0

#### Ventura County Employees' Retirement Association Investments, Cash, and Cash Equivalents As of December 31, 2020 (Unaudited)

	Investments	Cash & Cash Equivalents
Fixed Income		
Blackrock - Bloomberg Barclays Aggregate Index	179,368,681	0
Loomis Sayles Multi Sector	88,348,891	2,028,540
Loomis Sayles Strategic Alpha	48,408,923	0
Reams	344,088,437	451
Reams - US Treasury	92,137,500	73,308
Western Asset Management	313,889,890	6,979,851
Total Fixed Income	1,066,242,322	9,082,149
Private Credit		
Arcmont	9,552,906	0
Bridge Debt Strategies	23,529,184	0
Carval	29,919,343	0
Monroe Capital	21,258,604	0
Pimco Corporate Opportunities	65,376,829	0
Total Private Credit	149,636,866	0
Real Assets		
Bridgewater All Weather	382,311,135	0
Brookfield Infrastructure	23,936,811	0
HarbourVest Real Assets	3,855,893	0
LaSalle	17,141,238	0
Prudential Real Estate	168,998,678	0
Tortoise (MLPs)	57,785,633	269,393
UBS Realty	250,043,963	0
Total Real Assets	904,073,350	269,393
Parametric (Cash Equitization)	126,856	86,021,000
State Street Bank and Trust		49,868,527
County of Ventura Treasury		3,880,455
Total Investments, Cash, and Cash Equivalents	\$6,725,945,065	\$200,645,165

#### Ventura County Employees' Retirement Association Schedule of Investment Management Fees For The Six Months Ending December 31, 2020 (Unaudited)

Equity Managers	
Domestic Equity	A== 000
Blackrock - Russell 1000	\$77,922
Blackrock - Russell 2500	5,421
Western Asset Enhanced Equity Index Plus	237,853
Total Domestic Equity	321,195
Non U.S. Equity	
Blackrock - ACWI ex - US	254,450
Hexavest	201,413
Sprucegrove	380,673
Walter Scott	540,817
Total Non U.S. Equity	1,377,354
Global Equity	
Blackrock - ACWI Index	141,987
Total Global Equity	141,987
Private Equity	
Abbott Secondary Opportunities	114,773
Abry Partners	106,000
Adams Street	950,307
Advent Int'l	75,000
Astorg	84,289
Battery Ventures	260,394
Clearlake	46,412
Drive Capital	207,709
ECI 11 GP LP	96,757
Flexpoint	106,500
Genstar Capital	3,686
GGV Capital	153,250
Great HIIIs Partners	0
GTCR XII/A & B	222,920
Harbourvest	2,264,117
Hellman & Friedman	43,808
Insight Venture Partners	185,852
Oak/HC/FT	185,926
Pantheon	273,184
Resolute Fund	137,967
Riverside	162,002
ΤΑ ΧΙΙΙ-Α	0
Total Private Equity	5,680,854

#### Ventura County Employees' Retirement Association Schedule of Investment Management Fees For The Six Months Ending December 31, 2020 (Unaudited)

Fixed Income Managers	
Blackrock Bloomberg Barclays Aggregate Index	45,975
Loomis Sayles Multi Sector	168,451
Loomis Sayles Strategic Alpha	93,506
Reams Asset Management	291,374
Reams US Treasury	4,127
Western Asset Management	268,206
Total Fixed Income	871,640
Private Credit	
Arcmont	124,192
Bridge Debt Strategies	125,000
Carval Investors	168,300
Monroe Capital	
Pimco	303,814
Total Private Credit	721,306
Real Assets	
	202 011
Bridgewater All Weather Brookfield Infrastructure	322,811
HarbourVest Real Assets	372,321 116,986
LaSalle	450,000
Prudential Real Estate Advisors	
	702,544 189,740
Tortoise (MLPs)	838,014
UBS Realty	
Total Real Assets	2,992,415
Cash Overlay (Parametric)	125,825
Securities Lending	
Borrower's Rebate	23,549
Management Fees	47,325
Total Securities Lending	70,873
Other	
Investment Consultant (NEPC)	155,000
Investment Consultant (Abbott Capital)	575,941
Investment Custodian (State Street)	164,976
Total Other Fees	895,917
Total Investment Management Fees	\$13,199,366
Total Investment Management Fees	φ13,199,300



Global Private Equity Portfolio Review

February 22, 2021

Presented by: Dave Brett and Scott Hazen, CFA®



LEADING WITH FORESIGHT ™

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# **Confidentiality Statement and Other Important Considerations**

As of February 2021



Adams Street Partners has provided this presentation (the "Presentation") to the recipient on a confidential and limited basis. This Presentation is not an offer or sale of any security or investment product or investment advice. Offerings are made only pursuant to a private offering memorandum containing important information regarding risk factors, performance, and other material aspects of the applicable investment; the information contained herein should not be used or relied upon in connection with the purchase or sale of any security.

Statements in the Presentation are made as of the date of the Presentation unless stated otherwise, and there is no implication that the information contained herein is correct as of any time subsequent to such date. All information with respect to primary and secondary investments of Adams Street Partners' funds (the "Funds") or Adams Street Partners' managed accounts (collectively, the "Investments"), the Investments' underlying portfolio companies, Fund portfolio companies, and industry data has been obtained from sources believed to be reliable and current, but accuracy cannot be guaranteed.

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The internal rate of return (IRR) data and multiples provided in the Presentation are calculated as indicated in the applicable notes to the Presentation, which notes are an important component of the Presentation and the performance information contained herein. IRR performance data may include unrealized portfolio investments; there can be no assurance that such unrealized investments will ultimately achieve a liquidation event at the value assigned by Adams Street Partners or the General Partner of the relevant Investment, as applicable. Any fund-level net IRRs and net multiples presented herein for the 2015 Global Program Funds and all subsequently formed commingled Funds reflect the use of the Fund's capital call credit line (or, in the case of an Adams Street Global Fund, capital call credit lines of the underlying Funds) and are calculated using limited partner capital call dates, rather than the earlier dates on which the investment was made using the line of credit. The use of such dates generally results in higher net IRR and net multiple figures could be material.

Any target returns presented herein are based on Adams Street Partners models. There is no guarantee that targeted returns will be realized or achieved or that an investment strategy will be successful. Investors should keep in mind that the securities markets are volatile and unpredictable. There are no guarantees that the historical performance of an investment, portfolio, or asset class will have a direct correlation with its future performance.

Past performance is not a guarantee of future results. Projections or forward-looking statements contained in the Presentation are only estimates of future results or events that are based upon assumptions made at the time such projections or statements were developed or made. There can be no assurance that the results set forth in the projections or the events predicted will be attained, and actual results may be significantly different from the projections. Also, general economic factors, which are not predictable, can have a material impact on the reliability of projections or forward-looking statements.

References to the Investments and their underlying portfolio companies and to the Funds should not be considered a recommendation or solicitation for any such Investment, portfolio company, or Fund. Any case studies included in this presentation are for illustrative purposes only and have been selected to provide, among other things, examples of investment strategy and/or deal sourcing. These investments do not represent all the investments that may be selected by Adams Street Partners with respect to a particular asset class or a particular Fund or account.

## Introduction





#### David Brett Partner & Head of Co-Investments

Education: University of Illinois, BS University of Chicago Booth School of Business, MBA

Years of Investment/ Operational Experience: 36



#### Scott Hazen, CFA<sup>®</sup> Partner, Investor Relations

Education: University of Notre Dame, BBA, *magna cum laude* University of Chicago Booth School of Business, MBA

Years of Investment/ Operational Experience: 29

3

# **Topics for Discussion**



	Page
Adams Street Update	5
VCERA Portfolio Review	9
A Focus on Co-investments	18
Ways to Access Adams Street	26
Appendix	28

Adams Street Update

# We Have a Global Footprint



Adams Street Partners is a global private markets investment manager with \$44 billion of assets under management across five dedicated strategies: **primary investments**, **secondary investments**, **co-investments**, **growth equity** and **private credit**. With ten offices located around the world, we have an excellent vantage point to access potential areas of growth.



# Experienced, Cohesive, and Strategically Integrated Platform





Jeff Diehl Managing Partner & Head of Investments 27 Years of Experience\*



Chairman 43 Years of Experience\*

#### PRIMARY INVESTMENTS - \$29.8BN AUM

Provider of LP capital commitments to sponsors since 1979



- Kelly Meldrum 1070+ funds
- Partner & Head of • 340+ GP Primary Investments relationships
- 36 Years of Experience\* 510+ advisory boards
  - 27 Professionals

#### GROWTH EQUITY - \$2.2BN AUM

Robin Murrav

Growth Equity

Provider of long-term capital to growth stage companies since 1972



290+ companies Partner & Head of 10 Professionals

Investments 34 Years of Experience\*



#### SECONDARY INVESTMENTS - \$6.9BN AUM

Purchaser of secondary LP interests since 1986



Jeff Akers Partner & Head of Secondary Investments 23 Years of Experience\*

- 480+ funds 200+ GP
- relationships
- . 14 Professionals

#### CO-INVESTMENTS - \$3.0BN AUM

Provider of direct equity co-investments to sponsor-backed transactions since 1989



- **David Brett** Partner & Head of **Co-Investments** 36 Years of Experience\*
- 160+ companies
- 110+ GP
  - relationships 9 Professionals

PRIVATE CREDIT - \$2.9BN AUM<sup>2</sup> Provider of debt financing solutions to private equity-

backed transactions



Bill Sacher . 250+ GP Partner & Head of relationships **Private Credit** 11 Professionals 36 Years of

\*Investment and Operational As of September 30, 2020

- Firmwide AUM is as of September 30, 2020; does not include the more recent private credit closings or private credit leverage as referenced herein with respect to the private credit strategy. 1.
- AUM for Private Credit consists of total capital committed by investors (except with respect to funds for which the investment period has ended, in which case NAV is used) plus deployed and anticipated leverage. 2.

Capital committed by investors is \$2.0bn (updated to reflect applicable investor capital commitments closed upon between 3/31/2020 and 10/25/2020).

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# Deep Expertise Around the World

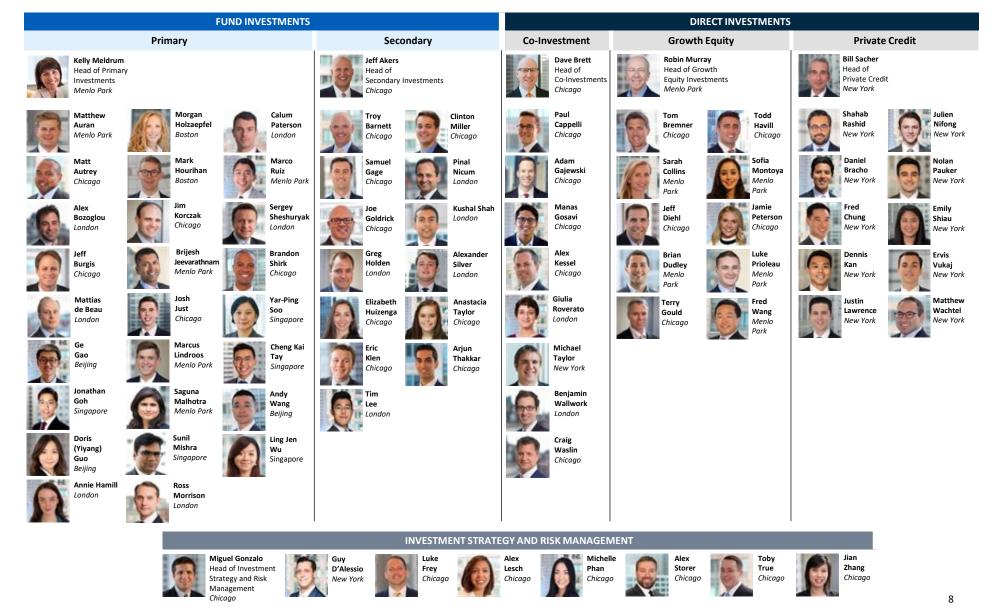




Jeff Diehl Managing Partner & Head of Investments Chicago



Chairman



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**VCERA Portfolio Review** 



Adams Street Private Equity Program

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

	1 Year net IRR	3 Year net IRR	5 Year net IRR	Since inception net IRR
VCERA	19.5%	16.5%	14.5%	13.8%
MSCI ACWI	11.0%	7.7%	10.8%	9.0%

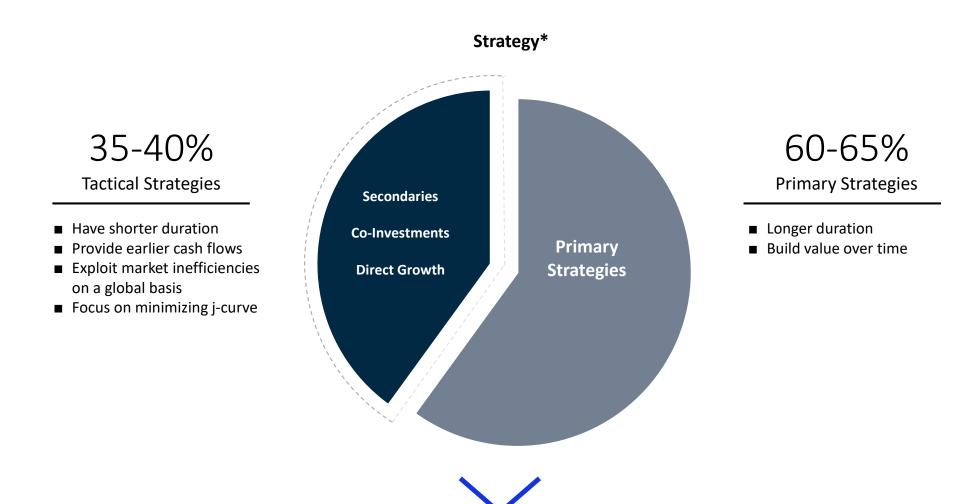
- VCERA has built a successful PE program through a disciplined investment pace
- Globally diversified portfolio across strategies and sub-asset classes
- Portfolio has grown significantly since inception:
  - \$187 million paid-in
  - \$102 million received in distributions
  - \$211 million in remaining value
  - 1.7x Total Value to Paid-In Capital

#### VCERA IS A STRATEGICALLY IMPORTANT RELATIONSHIP TO ADAMS STREET PARTNERS

# **Building Value While Maximizing IRR**

Constructing VCERA's Global Private Equity Program





**Target Net Return:** MSCI ACWI<sup>1</sup> + 400 bps\*\*

\* 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 2020 Global Private Equity Program will achieve returns in the targeted range. 11

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



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

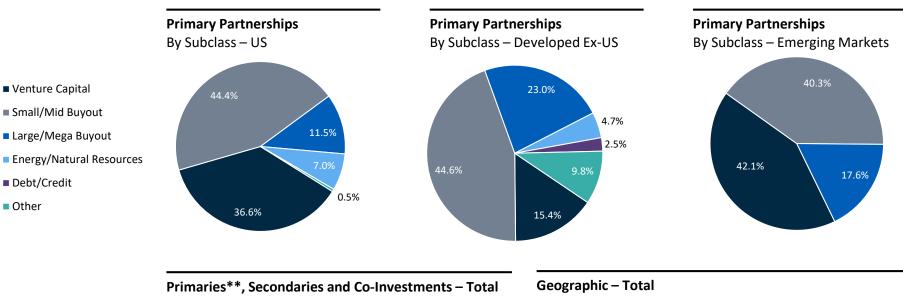
Total portfolio as of September 30, 2020

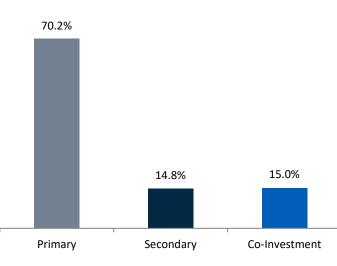
										Total
			Market	Distributions	Total			Net IRR		Value /
		Amount	Value	Received	Value	Net IRR	Net IRR	Since	Inception	Amount
-	Subscription	Drawn	(NAV)	(D)	(NAV + D)	1-Year	3-Year	Inception	Date	Drawn
ASP 2010 Global Program	\$85,000,000	\$75,569,249	\$68,663,157	\$76,500,041	\$145,163,198	23.52%	17.59%	14.11%		1.92x
ASP 2010 US Fund	\$42,500,000	\$37,442,500	\$37,003,120	\$40,599,892	\$77,603,012	30.03%	20.21%	15.73%	5/2010	2.07x
ASP 2010 Non-US Developed Fund	\$25,500,000	\$22,325,249	\$16,715,345	\$21,963,688	\$38,679,033	19.69%	16.69%	12.74%	5/2010	1.73x
ASP 2010 Emerging Markets Fund	\$8,500,000	\$7,633,000	\$10,410,283	\$3,564,439	\$13,974,722	13.39%	12.18%	11.37%	1/2011	1.83x
ASP 2010 Direct Fund	\$8,500,000	\$8,168,500	\$4,534,409	\$10,372,022	\$14,906,431	11.13%	11.80%	12.54%	5/2010	1.82x
ASP 2013 Global Fund	\$75,000,000	\$61,350,000	\$82,341,378	\$20,799,168	\$103,140,546	16.67%	15.94%	12.82%	6/2013	1.68x
ASP 2016 Global Fund	\$60,000,000	\$37,380,000	\$44,474,129	\$4,801,064	\$49,275,193	15.16%	14.05%	15.18%	8/2016	1.32x
ASP Program Participant Total	\$220,000,000	\$174,299,249	\$195,478,664	\$102,100,273	\$297,578,937	18.79%	16.34%	13.76%		1.71x
Co-Investment IV A	\$30,000,000	\$12,720,000	\$15,934,408	\$0	\$15,934,408	32.90%	N/A	20.51%	9/2018	1.25x
Grand Total	\$250,000,000	\$187,019,249	\$211,413,072	\$102,100,273	\$313,513,345	19.50%	16.46%	13.84%		1.68x

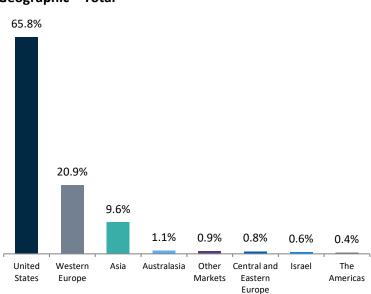
As of 9/30/2020	Drawn / Subscription	Distributions/ Drawn Capital	Total Value/ Drawn Capital
2010 Program	89%	1.01x	1.92x
2013 Program	82%	0.34x	1.68x
2016 Program	62%	0.13x	1.32x
Co-Investment IV	42%	na	1.25x
Grand Total	75%	0.55x	1.68x

October 1, 2020 – February 10, 2021	
Draws: \$6,619,500	
Distributions: \$7,234,006	

Diversification of investment commitments\* Total portfolio as of September 30, 2020







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

\*\* Primaries include direct Growth Funds

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#### Annualized General Partnership Returns (net of their fee and carry)

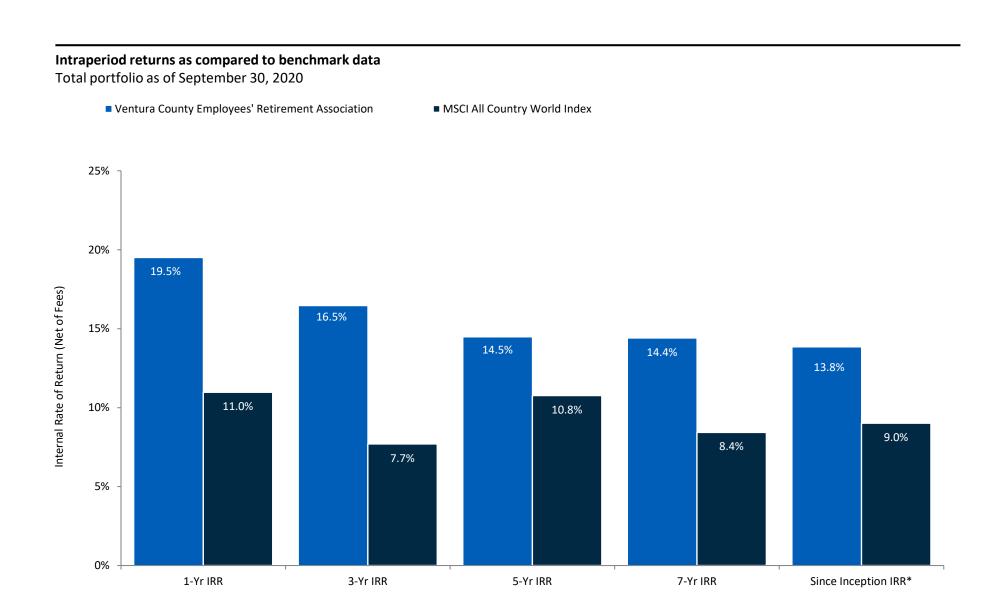
As of September 30, 2020

	Subclass Allocation		Underlying Partnership IRRs		ip IRRs
	Committed %	NAV %	3-Year	5-Year	Since Inception
All Private Equity	100.0%	100.0%	17.4%	15.7%	16.1%
Venture Capital	27.9%	43.2%	23.0%	16.7%	18.2%
Early/Seed Stage	11.7%	23.2%	28.4%	20.4%	23.7%
Later/Multi Stage	16.2%	20.1%	18.0%	13.4%	14.7%
Non-Venture Capital	72.1%	56.8%	13.8%	15.0%	14.7%
Buyout - Small/Mid	41.7%	35.9%	18.3%	18.9%	17.5%
Buyout - Large/Mega	19.7%	14.6%	15.0%	15.7%	16.6%
Other*	10.7%	6.2%	-4.4%	0.7%	2.0%
Primaries**	70.2%	81.2%	20.1%	18.0%	17.7%
Secondaries	14.8%	6.8%	6.2%	7.6%	13.4%
Co-Investments	15.0%	12.0%	19.0%	21.4%	21.6%

#### STRATEGIC OVERWEIGHTS TO VENTURE AND SMALL/MID BUYOUTS HAVE DRIVEN STRONG PORTFOLIO RETURNS

\* Other includes Energy/Natural Resources, Debt/Credit, and Special Situations

\*\* Primaries include direct Growth Equity Funds

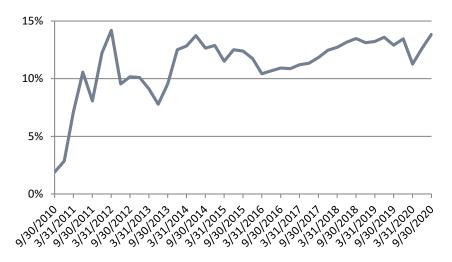






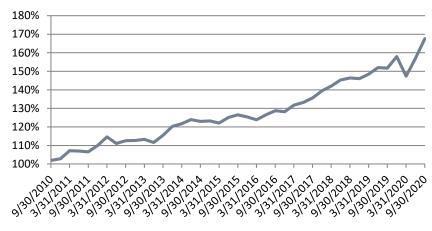
#### Net IRR

As of September 30, 2020



#### Net TVPI

As of September 30, 2020



#### Net DPI

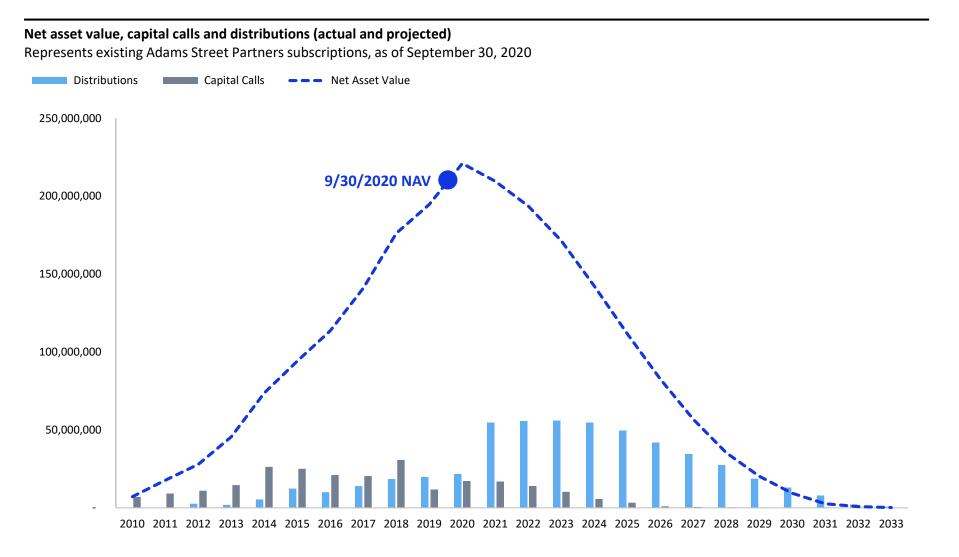
As of September 30, 2020



- Portfolio moved quickly through j-curve due to secondaries, value now being driven by maturing primaries
- Portfolio is 100% committed and 75% drawn
- Distribution activity continues to ramp up, now at 55% of drawn capital



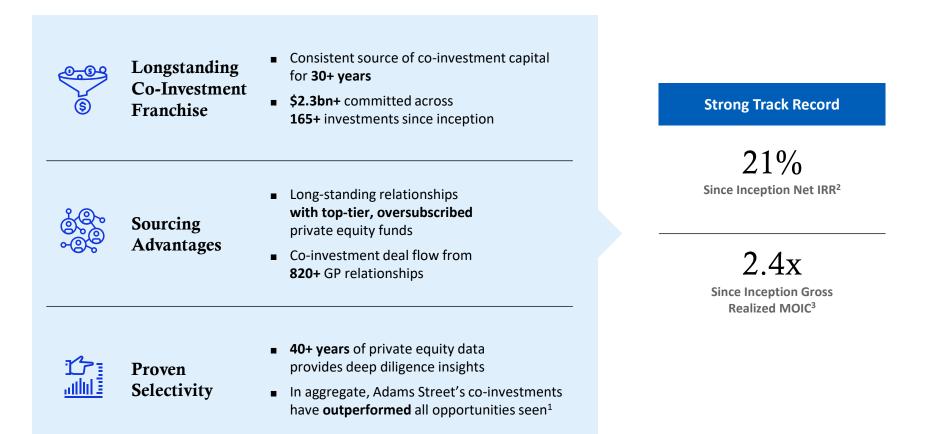
#### NAV expected to plateau in 2020/2021, and then decline as expected distributions increase and calls decrease



A Focus on Co-Investments

## Adams Street Co-Investment Advantage





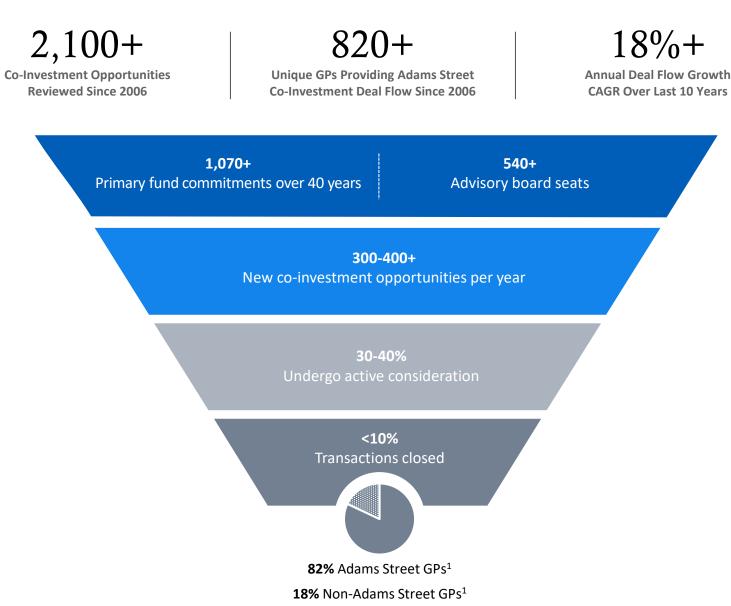
#### 1. See the slide entitled "The Impact of Being Selective" for detailed analysis in this presentation.

- 2. 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. Co-Investment Funds includes a separate account (1992-1998), Co-Investment I (2006), II (2009), III (2014), IV (2018) and Select (2018).
- 3. Composite since inception performance of all realized co-investments, including co-investments made by vehicles other than dedicated co-investment funds; multiples are gross of Adams Street's fees, carried interest and expenses, which reduce returns to investors. Inception date as of September 5, 1989. 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.

Past performance is not a guarantee of future results. There can be no guarantee that unrealized investments included in this data will ultimately be liquidated at values reflected herein. Composite performance does not reflect performance of any particular Adams Street fund or any investor in an Adams Street fund. For net performance of Adams Street's dedicated co-Investment funds and co-investments made outside dedicated co-investment funds/separate accounts, see the slide "Direct Co-Investment Track Record" included in this presentation.

# Access to High Quality Co-Investment Opportunities





# The Impact of Being Selective

Adams Street co-investment performance versus all opportunities seen

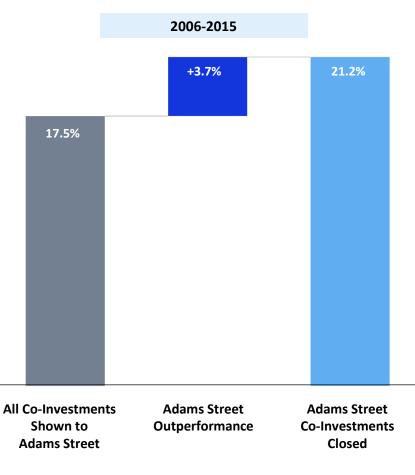


#### Adams Street originates high quality deal flow from top-tier GP relationships

 Co-investments completed by Adams Street together with other co-investment opportunities shown to us by Adams Street GPs from 2006 – 2015 ("All Deals") have delivered an estimated 17.5% IRR to-date based on a typical 4-year assumed investment period

#### The Co-investment team's underwriting process has historically resulted in strong selection

 The deals selected by the team during this period generated estimated excess returns of 370 bps (relative to "All Deals")



#### **Proven Deal Selection Has Generated Excess Returns** *Illustrative Analysis Using Estimated Gross IRR*

Performance data as of as of 6/30/20.

For important disclosure regarding the performance data shown above, see the slide entitled "Notes to The Impact of Being Selective."

The illustrative IRR is an estimated gross IRR for both selected ASP Co-Investments (see footnote 1) and All Deals (see footnote 1). This IRR is based on the assumption that all ASP Co-Investments and All Deals have (i) the same bite size, (ii) a 4-year hold period, and (iii) exit at a gross MOIC equal to the average vintage gross MOIC for the year in which the investment was made. The illustrative IRR is hypothetical and is not intended to reflect actual returns or Adams Street performance, but rather to illustrate the time-weighted returns differential between ASP Co-Investments and All Deals, all other factors being equal (investment size, hold period, etc.).

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



As of September 30, 2020

LONG-TERM	\$2.3bn	21%	2.4x
TRACK RECORD	Committed	Since Inception Net IRR for	Since Inception Gross MOIC
OF SUCCESS	To-Date <sup>1</sup>	Co-Investment Funds <sup>2</sup>	for Realized Deals <sup>3</sup>

	1989- 2000	2001- 2010	2011- Present	2006	2009	2014	2018
		vestments Outsid Dedicated Funds <sup>4</sup>	le of	Fund I \$251mm	Fund II \$263mm	Fund III⁵ \$342mm	Fund IV <sup>5</sup> \$522mm
Net IRR <sup>6</sup>	31.9%	12.6%	18.6%	5.1%	25.0%	17.8%	20.5%*
PME <sup>7</sup>	14.0% <sup>8</sup>	7.0% <sup>8</sup>	9.6%	3.8% <sup>8</sup>	11.2% <sup>8</sup>	9.3%	10.3%*
Net Multiple <sup>9</sup>	2.38x	1.72x	1.56x	1.44x	2.30x	1.73x	1.25x*

\* VCERA net returns and applicable PME

The page entitled "Notes to Performance: Long-Term, Consistent Record of Success," included in the presentation, includes the footnotes and is an important component of this performance data. For Adams Street Co-Investment Select Fund performance, please see the page entitled "Direct Co-Investment Track Record" included in the presentation.

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**Behind Plan** 

3

\$24

\$23

5%

Total

36

\$339

\$431

100%

## Fund IV Portfolio Update

Breakout

Potential

4

\$54

\$99

23%

**On Track** 

29

\$260

\$309

72%

As of September 30, 2020

(\$ in millions)

Companies

**Total Value** 

**Invested Capital** 

% of Total Value



#### STATUS UPDATE

- Fund IV is demonstrating strong early performance and tracking to our expectations
- Fund IV gross MOIC of 1.3x<sup>2,3,4</sup>
- Funds IV is 81% committed as of December 2020



Note: Portfolio categorizations in the above chart reflect Adams Street Co-investment team current view on the status of the portfolio, which is subject to change. There is no guarantee that performance will continue on track.

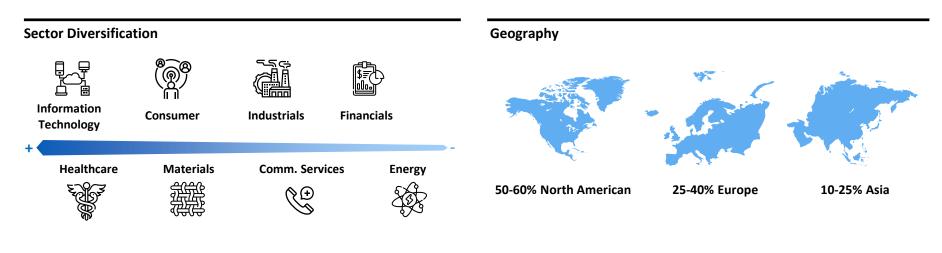
- 1. Logos reflect a select sample of Fund IV portfolio companies. A complete list of Fund IV portfolio companies is available upon request.
- 2. Composite performance of portfolio companies in each fund; this is not to be confused with fund-level performance. Composite multiples are gross of Adams Street fees, carried interest and expenses, which reduce returns to investors.
- 3. MOIC is the sum of all distributions and net asset value in relation to the original cost of the company.
- 4. The page entitled "Direct Co-Investment Track Record" included in the presentation, is an important component of this performance data.

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

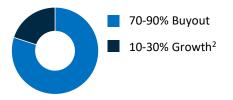
# Illustrative Portfolio Construction – Co-Investment Fund V



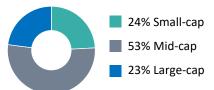




#### **Investment Stage**



#### Historical Co-Investments by Company Enterprise Value<sup>3</sup>



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

- 1. The targeted net IRR is net of fees, carried interest and expenses; there can be no guarantee that the Co-Investment Fund V will achieve this target.
- 2. Growth equity defined as a transaction where typically the primary use of proceeds is for business expansion purposes and often results in minority ownership.
- 3. Defined by enterprise values <\$500mm (Small-cap), \$500mm to \$3.5bn (Mid-cap), and > 3.5bn (Large-cap) at time of acquisition for all deals since 2006 as of June 30, 2020.

Ways to Access Adams Street

# **Investment Capabilities**



Direct Investing					Fund Investing			
PRIVATE CREDIT FUND II	Capacity: \$2bn Target Net Return*: Varies by strategy	Geography: Mainly US		US SMALL MARKET BUYOUT FUND II	<b>Capacity:</b> \$350mm - \$400mm <b>Target Net Return*:</b> 15%+	Geography: Mainly US		
	ity-backed middle-market companie cture or that focus primarily on 1st l			A portfolio of buyout funds w value, and opportunistic second	hich targets US companies with \$2 ndaries and co-investments	00mm or less in enterprise		
GROWTH EQUITY FUND VII	Capacity: \$300mm Target Net Return*: 15%+	Geography: Mainly US & Western Europe		ASIA FUND 2020	Capacity: \$200mm - \$350mm Target Net Return*: 15%+	Geography: Mainly Asia		
Time-tested strategy investin	g in growth-stage technology and h	ealthcare companies			enture, and growth equity funds w xposure to secondary and co-investion of the secondary and co-investigation of the secondary and co-investigation of the second of the s			
LEADERS FUND 2020	Capacity: \$200mm Target Net Return*: 15-20%+	Geography: Global		VENTURE INNOVATION FUND III	Capacity: \$525mm Target Net Return*: 15%+	Geography: Global		
A portfolio of highly sought-a capital managers	A portfolio of highly sought-after venture co-investment opportunities from select venture capital managers				A portfolio of primary funds that provides meaningful exposure to the world's most innovative and disruptive companies early in their development. Includes exposure to select venture secondaries			
CO-INVESTMENT FUND V	Capacity: \$1bn Target Net Return*: 15%+	<b>Geography:</b> Mainly US & Western Europe		GLOBAL SECONDARY FUND 7	Capacity: \$1.5bn Target Net Return*: 15%+	Geography: Global		
Co-investments alongside be mega cap portfolio companie	st-in-class GPs directly into buyout a	and growth mid, large, and		Targeted, high-conviction app	roach to secondary purchases of p	rivate equity fund interests		
		Co	ompre	hensive				
	ANNUAL O PROGRAM			Omm Geograp Surn*: 14-18%	<b>hy:</b> Global			
	•	sive program integrating prir by time, subclass, and geogra		econdary, growth equity, and co-ir	nvestments			
	$\wedge$			$\wedge$	$\sim$			
	Customized Solutions & Capabilities							

Adams Street can construct customized portfolio solutions based on a client's investment goals across strategy, subclass, geography, and sector. Adams Street currently manages \$11.2bn in AUM<sup>2</sup> for 37 clients.

\* All references to targeted annual net returns (after Adams Street Partners' fees, expenses and carried interest) are only targets. There can be no guarantee that Adams Street Partners will achieve returns in the targeted range.

1. Consists of a US Partnership Fund, a Non-US Partnership Fund, and a Direct Growth Equity Fund.

2. As of June 30, 2020. Represents # of clients that have one or more separate account or fund of one mandates. Excludes commitments made to Adams Street Partners commingled funds.

# Appendix

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



As of September 30, 2020

- 1. Reflects dollars committed from Adams Street Direct Co-Investment Fund, Adams Street Co-Investment Fund II, Adams Street Co-Investment Fund IV, and Adams Street Co-Investment Select plus all dollars invested in co-investments since 1989 by separate accounts and funds other than the Adams Street Partners dedicated co-investment funds.
- 2. 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. Co-Investment Funds includes a separate account (1992-1998), Co-Investment I (2006), II (2009), III (2014), IV (2018) and Select (2018). Composite performance does not reflect performance of any particular Adams Street fund or any investor in an Adams Street fund.
- 3. Composite since inception performance of all realized co-investments, including co-investments outside dedicated co-investment funds; multiples are gross of Adams Street's fees, carried interest and expenses, which reduce returns to investors. Inception date as of September 5, 1989. 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 performance does not reflect performance of any particular Adams Street fund or any investor in an Adams Street fund.
- 4. 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. The net IRR and net multiple are calculated for the investment periods 1989-2000, 2001-2010 and 2011-September 30, 2020 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 fund 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 13.2%<sup>9</sup>.
- 5. Adams Street Co-Investment Fund III is comprised of Adams Street Co-Investment Fund III A and Adams Street Co-Investment Fund IV is comprised of Adams Street Co-Investment Fund IV A and Adams Street Co-Investment Fund IV B. Adams Street Co-Investment Select is comprised of Adams Street Co-Investment Select A and Adams Street Co-Investment Select B.
- 6. 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 and IV, net IRR also reflects the use of a capital call credit line and is calculated using limited partner capital call dates, rather than the earlier dates on which the investment was made using the line of credit. The use of such dates generally results in higher net IRR calculations, and the related differences in net IRR figures could be material.
- 7. Public Market Equivalent (PME) is calculated using the MSCI ACWI Index. The PME calculation is based on net IRR cash flows, which reflect the payment of Adams Street Partners' fees, carried interest and expenses.
- 8. 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.
- 9. 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 and IV, Net Multiple also reflects the use of a capital call credit line.

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.

# Notes to "The Impact of Being Selective"



Performance data as of June 30, 2020.

- 1. Reflects the average gross IRR from 51 Adams Street selected co-investments ("ASP Co-Investments) during 2006-15 vs. the average gross IRR for 167 co-investments offered to Adams Street including ASP Co-Investments and all other deals offered to Adams Street from GPs where Adams Street is invested in the underlying fund ("All Deals") during the period. For each time period, the data is based on deals where it was possible, based on Adams Street record keeping, to track subsequent investment performance that a co-investment would have delivered, i.e. excludes investments where the GP fund return for the investment would not correspond to the return Adams Street funds would have realized had they invested. It also excludes Asia co-investments where there is more limited data available.
- 2. IRRs are gross of Adams Street Partners' management fees, carried interest and expenses, the inclusion of which would reduce returns to investors. Because the data included herein is based on a specific subset of investments (i.e., co-investments), and is presented with respect to such subset across multiple funds/separate accounts, each making a variety of investments, providing net returns with respect to such investments is not feasible.. Performance data shown is composite performance of the deals described herein; does not reflect performance of any Adams Street fund or any investor in an Adams Street fund. For net performance of Adams Street's dedicated co-investment funds and co-investments made in other portfolios, see "Direct Co-Investment Interest Record" slide. There can be no guarantee that unrealized investments included in this data will ultimately be liquidated at the values reflected therein. Past performance is not a guarantee of future results.





## **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 coinvestments, 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.

In 2020 Dave co-authored a whitepaper entitled "Co-Investments: Strategies for Capital Deployment."

Dave is Chair of the Adams Street Partners Co-Investment Committee and a member of the Executive Committee.

Education: University of Illinois, BS University of Chicago Booth School of Business, MBA

Investment/operational experience: 36 years





## Scott Hazen, CFA<sup>®</sup> 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.

#### Education:

University of Notre Dame, BBA, *magna cum laude* University of Chicago Booth School of Business, MBA

Investment/operational experience: 29 years



For limited distribution to institutional and professional investors only

# Trumbull Property Fund (TPF)

Presented to: Ventura County Employees' Retirement Association

Real estate investment funds



1177 Avenue of Americas, New York, NY

February 22, 2021

# Paul M. Canning

#### Senior Portfolio Manager Managing Director



Years of investment industry experience: 40

Education: Trinity College (US), BA

Paul Canning is the Senior Portfolio Manager for the Trumbull Property Fund (TPF) for Real Estate US, a business which forms part of Real Estate & Private Markets within UBS Asset Management. TPF is the firm's largest open-end real estate account. Paul is also a member of the firm's Strategy Team and Investment Committee.

Prior to joining the TPF team in 2018, Paul was the Senior Portfolio Manager for the Trumbull Property Growth & Income Fund. Paul led the fund since its inception in 2006. The Fund was a top quartile performer among open-end funds<sup>1</sup> during his tenure. He also led investing activity of a separate account for a major institutional investor and oversaw operation and liquidation of two accounts for non-US investors.

Previously, Paul was the head of the firm's national property disposition program. From 2001 to 2005 he directed the sale of 37 properties with gross proceeds of approximately USD 1 billion. Paul joined the Firm's predecessor organization in 1991 as an asset manager. He directed operation of a portfolio of commercial properties encompassing all major property types in markets across the US.

For the first eleven years of his career Paul worked with two development companies. His initial experience was as a project manager for redevelopment of inner-city residential properties for a non-profit development corporation. He then transitioned to Partner for urban renovation projects at a Northeastern US commercial real estate firm.

Paul presently serves on the Housing Committee of the Capital Region Development Authority in Hartford CT.

Note: As at March 2020. <sup>1</sup>Source: MSCI as of December 31, 2017.



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# Mia Y. Dennis

#### Portfolio and Client Services Officer Director



Years of investment industry experience: 23

Education: University of California at Davis (US), BA Mia Dennis is a member of the Portfolio and Client Services Unit for Real Estate US, a business which forms part of Real Estate & Private Markets within UBS Asset Management. She is located in the San Francisco office. Mia's primary responsibility is investor relations and new business development in the Western region.

Mia has 20 years of experience working in various capacities in the real estate investment management industry. Her prior experience includes acquisitions, asset management, loan originations, consulting and client service.

Prior to joining UBS, Mia spent six years at Callan Associates as a real estate consultant for pension plans nationwide. She also has worked for AEW and J.P. Morgan as a real estate specialist in client services.

Mia holds her Series 7 and 66 licenses with the Financial Industry Regulatory Authority (FINRA).

Note: As at February 2020



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## General risk disclosure

Certain sections of this presentation that relate to future prospects are forward looking statements and are subject to certain risks and uncertainties that could cause actual results to differ materially. This material is designed to support an in-person presentation, is not intended to be read in isolation, and does not provide a full explanation of all the topics that are presented and discussed.

An investment in real estate will involve significant risks and there are no assurances against loss of principal resulting from real estate investments or that the portfolio's objectives will be attained.

This is not a recommendation. Investors must have the sophistication to independently evaluate investment risks and to exercise independent judgment in deciding to invest in real estate funds. Investors must also have the financial ability and willingness to accept and bear the risks, including, among other things:

- **Risk of illiquidity.** Real estate is an illiquid investment and the account may not be able to generate sufficient cash to meet withdrawal requests from investors. Redemptions may be delayed indefinitely;
- **Risks of investing in real estate.** These risks include adverse changes in economic conditions (local, national, international), occupancy levels and in environmental, zoning, and other governmental laws, regulations, and policies;
- Use of leverage. Leverage will increase the exposure of the real estate assets to adverse economic factors, such as rising interest rates, economic downturns, or deteriorations in the condition of the properties or their respective markets and changes in interest rates; and
- Limitations on the transfer of fund units. There is no public market for interests in any of our funds and no such market is expected to develop in the future.
- Legal & Taxation. Investors should consult their own legal and tax advisers for potential US and/or local country legal or tax implications on any investment

Investors should evaluate all risk and uncertainties before making any investment decision. Risks are detailed in the respective fund's offering memorandum.

# Table of contents

### General risk disclosure

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Section 2	Trumbull Property Fund (TPF)	_ 7
	2.A Appendix	_19

Section 1 Investment Results



# TPF investment results for Ventura County Employees' Plan

Periods ending December 2020

			Market	12 months	3 years	5 years	10 years	Since Inception
		Redemptions/	Value	ended	ended	ended	ended	3/31/03 to
Year	Deposit	Distributions	12/31/20	12/31/20	12/31/20	12/31/20	12/31/20	12/31/20
-		\$ in thousands						
2003	54,000							
2004	10,000							
2005		10,000						
2009		1,013						
2010	30,000							
2011	30,000							
2013		5,421						
2014		1,356						
2020		6,503						
	\$124,000	\$24,293	\$250,044	(4.6)%	(0.5)%	2.0%	6.2%	6.2%
			ODCE (net)	0.3%	4.0%	5.3%	8.9%	6.7%

\*Client Net IRRs are dollar-weighted and after fees that were deducted from the account. Past performance is not indicative of future results. This is not an official statement of your account. Refer to your client statement and the quarterly TPF report. Time Weighted Returns are available upon request.



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# Section 2 Trumbull Property Fund (TPF)



## Dedicated and experienced team

Portfolio Managers average 26 years of industry experience



Paul Canning - Managing Director Senior Portfolio Manager TPF Core Diversified Portfolio

40 years of industry experience, 29 with UBS



Mario Maturo - Executive Director Senior Portfolio Manager Non Strategic Portfolio

21 years of industry experience, 15 with UBS



Pam Thompson - Executive Director Portfolio Manager 29 years of industry experience, 18 with UBS



Lan Seto - Director Portfolio Analytics 18 years of industry experience, 14 with UBS



Jason Lewis – Executive Director Portfolio Manager 15 years of industry experience, <1 with UBS



Trevor Condren – Director Associate Portfolio Manager 8 years of industry experience, 1 with UBS

As of January 2021 Source: UBS Asset Management, Real Estate & Private Markets (REPM).



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# Trumbull Property Fund strategy

Proven open-ended core fund that provides competitive risk adjusted returns

### **Strategy/Characteristics**

>>	Broad Diversification	Top down allocations: research driven
$\gg$	Low Leverage	Debt flexibility, tactical deployment
>>	Low Risk Profile	Overweight low cap ex sectors; selective value-added investing
>>	Stable Income	87% of total return from income since inception
>>	Focused Sustainability	Leader in US diversified funds <sup>1</sup> , economically justified

### **Execution**

Actively managed, diversified core RE fund

Stable income with growth driven by market and asset selection

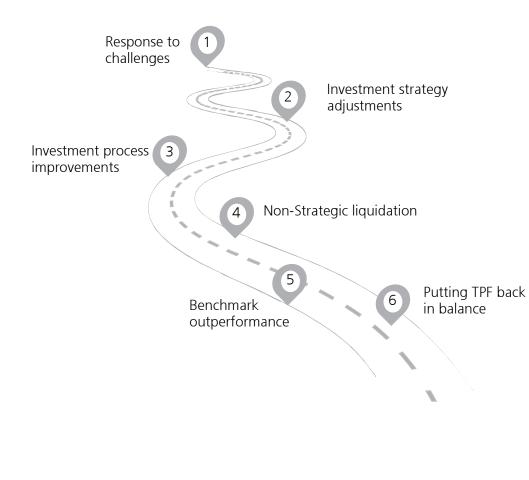
Competitive total returns across market cycles



Data as of December 31, 2020. Source: UBS Asset Management, Real Estate & Private Markets (REPM). <sup>1</sup>Source: GRESB as of 2020. TPF is ranked #12 out of 47 US diversified funds. Past performance is not indicative of future results.



## Positioning TPF for the future





Museum Tower Apartments, Charlotte, NC



Becknell Industrial, Fairfield, OH



# Response to challenges

Fund and team transformation

### Transformation

- Leadership
  - CEO Matt Johnson
  - Head of Transactions Rod Chu
- Non-strategic asset pool with dedicated PM
- Loyalty and Top up fee programs in place
- Investment process changes implemented
- Evaluating other liquidity sources

### **Investment process**

- Benchmark (ODCE) focus
- Quarterly strategy reviews

<sup>1</sup>Gross Real Estate Assets as of December 31, 2020.

• Streamlined investment committees

Source: UBS Asset Management, Real Estate & Private Markets (REPM).



- Sales activity consistent with Investment Strategy
  - Accelerated Sales

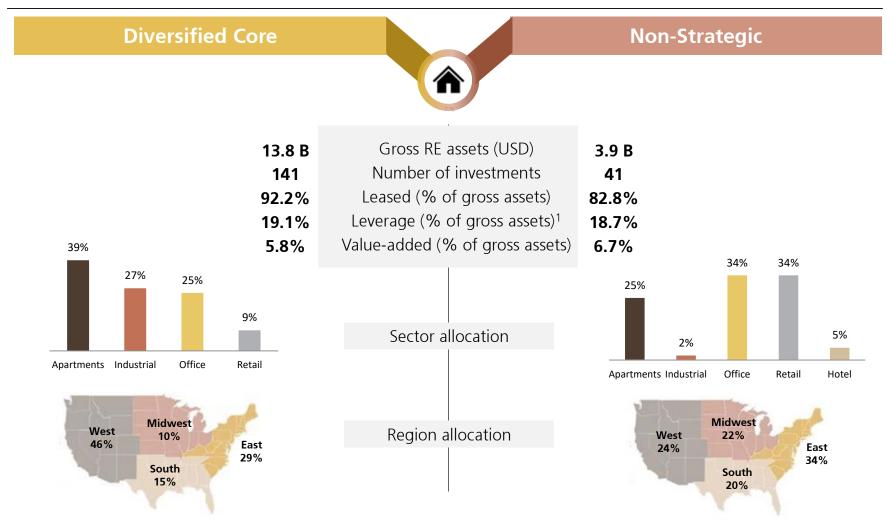


Residences at Port Jefferson, Port Jefferson, NY



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## TPF Diversified Core & Non-Strategic



Data as of December 31, 2020. Source: UBS Asset Management, Real Estate & Private Markets (REPM). <sup>1</sup>.Fund level debt is allocated to Diversified Core at 78% and Non-Strategic at 22% based on 4Q20 total asset value of each group.



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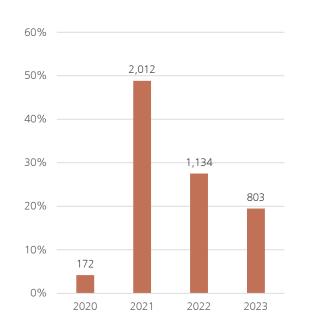
## Non-Strategic asset disposition forecast

### Sales update

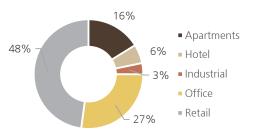
- 80% of the remaining portfolio will be divested by end of 2022
- Disposition forecast assumes a continued recovery in the capital markets
- Plan 28 Non-Strategic assets to be sold by year end 2021.
- Sector strategy remains the primary reason for sale, driven by the retail assets.
- Planned 2021 retail sales of USD 963 million based on current gross market value.

### Breakdown by sale year (USD)<sup>1</sup>

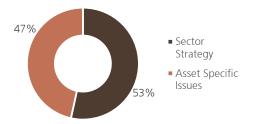
Based on GMV in millions as of 12/31/20



**2021 Sales Plan Breakdown by property type** Based on GMV as of 12/31/20



**Breakdown by reason for sale** Based on GMV as of 12/31/20



Data as of December 31, 2020. The asset sales plan is a forecast, based on best information available today. However, the impact of the pandemic and other market forces may impact sales volumes, such that the level of actual sales may vary. <sup>1</sup>Sale years updated as of February 10, 2021. 2020 reflects sold assets at TPF share of gross sale price. Source: UBS Asset Management, Real Estate & Private Markets (REPM).



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## TPF performance vs. NFI-ODCE

#### TPF provides competitive income return 12 — 4Q20 Net Returns TPF NFI-ODCE 0.73 0.71 Income 8 +7.38 +7.38-0.39 Appreciation -2.81 ♦ 5.27 -2.08 1.10 Total 4 % Returns ♦ 1.90 0.34 0.34 0 -4 -4.74 -4.74 -8 Current Market Cycle 1 Year 5 Years Since Inception 1Q20 - 4Q20 1Q1978 TPF Net Income TPF Appreciation NFI-ODCE Net Income NFI-ODCE Appreciation Total Return

Data as of December 31, 2020. Source: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source of NFI-ODCE. Notes: Returns supplement the Firm's Equity Composite previously provided or included herein. See required notes pages at the end of this section or presentation. Past performance is not indicative of future results. A "full market cycle" is defined as a period of time from a peak valuation through a trough and a return to a new peak.

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## TPF portfolio strategy (4Q20)

### **Return objective**

Outperform NFI-ODCE over any Full Market Cycle

### Sector targets

Seek no more than a 35% absolute difference from ODCE

(%)	Current	TPF target	NFI-ODCE <sup>1</sup>
Apartments	36	36	27
Industrial	21	26	20
Office	27	28	34
Retail	15	10	15
Hotel/Other	1	0	4
	100	100	100

### **Region targets**

No regional OW/UW called for, focus on rebalancing metro allocations

(%)	Current	TPF target	NFI-ODCE <sup>1</sup>
East	30	31	31
West	41	42	42
South	16	19	19
Midwest	13	8	8
	100	100	100



8737 Dice Road, Santa Fe Springs, CA



Citation Club Apartments, Delray Beach, FL

Data as of December 31, 2020. Source: UBS Asset Management, Real Estate & Private Markets (REPM). <sup>1</sup>NCREIF is the source for ODCE data. ODCE data as of September 30, 2020. Percentages are based on gross market value of real estate investments. A "full market cycle" is defined as a period of time from a peak valuation through a trough and a return to a new peak. Totals may not add due to rounding.

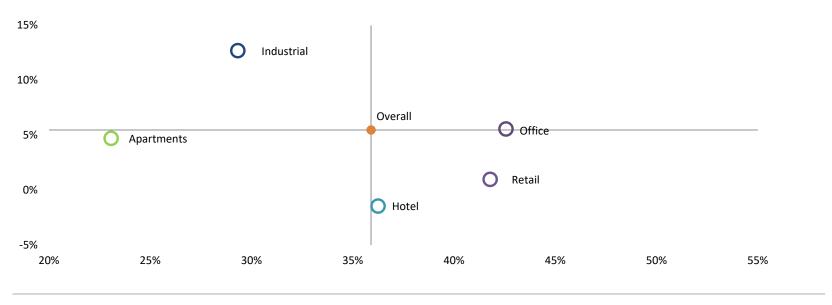


# TPF focus - higher allocation to low capex sectors

Low capex assets have provided superior returns with lower volatility

- Multifamily and Industrial assets require lower capex
- Retail, Office and Hotel assets require greater capex

### 5-year average capex & annualized total return



Data as of December 31, 2020. NCREIF is the source of ODCE-NPI. Past performance is not indicative of future results. "Capex" is an abbreviation for Capital Expenditures, which includes all leasing and property capital expenditures.



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## **TPF** sector strategies

We are turning the portfolio





Data as of December 31, 2020

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## Capital flows

- Redemption pool
- Redemptions
- Income distributions
- Investment management fee programs

### Balancing needs of all investors

- TPF offers quarterly liquidity to all investors
- All redemption requests are treated equally
- Each quarter's redemption payment is determined after considering portfolio operating needs
- The Fund continues to execute its investment strategy



Cumberland Park Apartments, Orlando, FL



Shoppes at Blackstone Valley, Millbury, MA (mortgage payoff)

Source: UBS Asset Management, Real Estate & Private Markets (REPM). Notes: <sup>1</sup>Investors may request redemption of all or a portion of their units (subject to sufficient liquidity) on a quarterly basis. There is no limit on how often an investor may withdraw assets, subject to other constraints described below. Investors who wish to redeem units must notify UBS Realty in writing at least sixty (60) days prior to the relevant withdrawal date. The Fund does not offer guaranteed liquidity.



# Section 2.A Trumbull Property Fund (TPF) Appendix

## **UBS Realty Investors Equity Composite**

		Year-end									Asset	% of
_		Composite	Total Firm	c	Gross of fees (%)			Net of fees (%)	Range	of	weighted	Composite
	Number of	Net Assets	Net Assets	Income	Appreciation	Total	Benchmark	Total	Gross Retu	r <b>ns (%)</b>	standard	assets valued
Year	accounts	(USD millions)	(USD millions)	return	(depreciation)	return	return (%)	return	Max	Min	deviation	externally <sup>(1)</sup>
2010	8	9,687	12,107	7.10	9.37	16.95	16.36	15.92	42.0	4.7	3.20	100
2011	8	12,404	15,241	5.57	8.20	14.10	15.99	12.96	35.3	8.6	2.88	100
2012	9	14,679	17,325	5.45	5.07	10.73	10.94	9.63	25.8	(2.5)	2.53	100
2013	9	16,114	19,206	5.22	5.40	10.83	13.94	9.71	26.5	(38.7)	2.68	100
2014	9	18,788	22,252	5.21	6.61	12.07	12.50	10.94	35.8	6.7	2.46	100
2015	7	21,383	25,379	5.06	8.11	13.47	15.02	12.33	26.3	8.6	2.05	100
2016	7	22,534	26,744	4.77	2.99	7.86	8.77	6.80	23.2	7.2	2.15	100
2017	7	22,455	26,974	4.61	1.93	6.61	7.62	5.75	14.5	2.7	1.20	100
2018	7	21,767	27,131	4.57	2.56	7.22	8.35	6.38	12.5	(22.6)	2.63	100
2019	6	19,451	24,984	4.71	(5.08)	(0.55)	5.34	(1.33)	16.0	(2.1)	3.69	100

**1. Compliance Statement** Real Estate & Private Markets, Real Estate US (the "Firm") claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. The Firm has been independently verified since January 1, 1993. Verification assesses whether (1) the Firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the Firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. The UBS Realty Investors Equity Composite has been independently examined for the periods January 1, 2010 through December 31, 2019. The verification and performance examination report is available upon request.

2. The Firm The Firm is defined as UBS Realty Investors LLC and UBS Farmland Investors LLC, together Real Estate & Private Markets, Real Estate US. Both entities are registered with the US Securities and Exchange Commission as investment advisors. The Total Firm Gross Assets at December 31, 2019 were USD 30.2 billion, representing the fair value of total Firm assets held under management. Total Firm Net Assets represent the Total Firm Assets held under management less the fair value of liabilities.

**3. The Composite** The UBS Realty Investors Equity Composite (the "Composite") was created in 2005. All results are presented in US dollars. A complete list and description of Firm composites is available upon request. The Composite comprises all fee-paying, non-taxable discretionary accounts that invest primarily in equity real estate including, but not limited to, the following property types: apartments, office, retail, industrial, and hospitality. The strategy of the accounts in the Composite is to acquire investments in US commercial and multifamily real estate (core and value-added properties) expected to provide attractive risk-adjusted returns consisting of current income and capital appreciation. As of December 31, 2019, mortgage assets constituted USD 0.7 billion of Composite Net Assets. Since October 2003, a sub-adviser has managed the cash for some pooled accounts included in the Composite. Composite dispersion for any year is represented by both the range and the asset-weighted standard deviation of the gross total returns of the accounts that were in the Composite for the entire calendar year. Discretion is broadly defined as the Firm having discretion over the selection, capitalization, asset management, and disposition of investments within the parameters of a given mandate.

**4. Valuation** An independent appraisal of the underlying real estate for each investment is performed at least annually and includes a complete property inspection and market analysis. Starting October 1, 2009, independent appraisals are generally completed every quarter for most of the underlying real estate investments. For real estate investments that are held in funds where appraisals are not performed on a quarterly basis, the underlying real estate is typically scheduled to be appraised twice a year. In the interim quarters, updated property and market information is reviewed. If this review indicates a potential material change in the value, the valuation is then updated by the independent appraiser. If this review indicates that any change in value is likely not material, the value is determined to remain unchanged. Valuations of real estate and debt use significant unobservable inputs. In general, each annual property appraisal includes at least an income approach using a discounted cash flow model and a sales comparison approach, which are considered in determining a final value conclusion. All appraisals are certified by members of the Appraisal Institute who hold the MAI designation. Third-party debt is stated at fair value. The valuation of debt is taken into consideration when determining the estimated fair value of the equity in the related investment.

Source: UBS Asset Management, Real Estate & Private Markets (REPM). Past performance is not indicative of future results. (1)Generally for those assets held longer than six months.



## UBS Realty Investors Equity Composite

**5. Calculation of Performance** Returns reflect the impact of leverage, which averaged approximately 16.2% of gross asset value (net asset value plus debt) during 2010 through 2019, and approximately 19.5% in 2019. Leverage has consisted primarily of mortgage loans payable that are collateralized by the related real estate investment. The extent to which leverage is used varies by account strategy and may include either portfolio or property level debt. Expenditures, including tenant improvements and leasing commissions, that extend the useful life or represent additional capital investments benefiting future periods, are capitalized as a component of cost. Annual returns are time-weighted rates of return calculated by linking quarterly returns. The sum of income and appreciation (depreciation) may not equal total returns due to the linking of quarterly returns. Gross of fees returns are presented before all management fees, but after third-party expenses. Net returns are presented net of the management fees, performance fees and third-party expenses. The policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

6. Investment Management Fees Management fees differ by account and reflect the complexity and value of services chosen, anticipated size, and the number and type of investments involved. Depending upon the services, the fee may represent any one or a combination of: fixed flat amounts; a percentage of purchase price, earnings, assets under management, or of sales proceeds; or incentive fees based on performance. The fee for investment in one of the Firm's commingled funds can be up to 190bps per annum on net asset value based upon the fee scale and the investor's share of net asset value in the fund and other UBS Realty sponsored funds as of the beginning of the quarter with an incentive fee charged on various performance hurdles, for example, 15% above a 7% real return over sequential 3-year periods, subject to certain clawback provisions depending on the performance of the fund. Please see the applicable fee schedule(s) appropriate to the product or services being presented.

**7. Benchmark** Effective May 2009, the Firm changed the benchmark retroactively from the property-level National Council of Real Estate Investment Fiduciaries ("NCREIF") Property Index ("NPI") to a fund-level Index, the NCREIF Fund Index-Open End Diversified Core Equity ("NFI-ODCE" or the "Index"). The Firm believes a fund-level index provides a more meaningful comparison for a fund-level composite. The NFI-ODCE, first published mid-2005, is a capitalization-weighted, time-weighted, fund-level return index beginning as of the first quarter of 1978, inclusive. It is presented gross of fees. As of December 31, 2019, the NFI-ODCE consisted of 24 active funds with total net assets of USD 206.4 billion. The NFI-ODCE leverage ratio at December 31, 2019 was 21.5%.

8. Market Conditions (Supplemental Information) For commercial real estate, 2010 through 2013 marked a period of recovery from the Great Recession. By late-2013, total returns on stabilized properties had recouped losses, led by steady income growth and low supply growth across the broad market. After six years of double-digit returns led by above-average appreciation, the NFI-ODCE reported a gross return of 8.8% during 2016, followed by an average of 7.1% between 2017 and 2019. Since inception in 1978, the NFI-ODCE reported a gross return of 8.6%. The Coronavirus Pandemic (or "COVID-19") has created economic disruption and uncertainty. Potential future impacts of COVID-19 on US commercial real estate markets and investments are difficult to assess at this time.

Source: UBS Asset Management, Real Estate & Private Markets (REPM). Past performance is not indicative of future results.



## **TPF** Required notes

Returns herein, unless otherwise noted, are presented gross of fees.

The Fund's participating mortgages and those construction loans converting to participating mortgages are secured by properties operated by sponsors that the advisor has deemed creditworthy. The Fund does not own these properties.

Returns for periods greater than one year are annualized. For the period ending December 31, 2020 TPF's net total returns for the quarter, one-, three-, five-, ten-, twenty-year periods and since inception were -2.08%, -4.74%, -0.60%, 1.90%, 6.14%, 5.87% and 7.38% respectively, after the deduction of management fees, but before the deduction of contract charges. Contract charges were only applicable through February 29, 2008. TPF returns reflect the reinvestment of income. Returns and dollars are USD denominated.

Information on fees is available in the ADV Part 2 for UBS Realty Investors LLC and is also available upon request. As fees are deducted quarterly, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, on an account with a 1% annual fee, if the gross performance is 10%, the compounding effect of the fees will result in a net performance of approximately 8.93%.

The Total Expense Ratio (TER) of the Trumbull Property Fund for the rolling four quarters ended September 30, 2020 would be:

TER (Fund expenses after investment management fees / Average GAV) = 0.88%. (a) Returns are based on a time-weighted rate of return methodology. (b) The TER is prepared for informational purposes only based on our understanding of the calculation. (c) TPF is accounted for in conformity with U.S. generally accepted accounting principles (U.S. GAAP). (d) TER expenses primarily include Fund level advisory fees (both deducted by the Fund and directly billed to investors), audit and tax fees, appraisal and other third-party valuation service fees for the Trumbull Property Fund. Property level expenses (e.g., utilities, maintenance, real estate taxes) are excluded from the TER calculation.

Indices are shown for informational purposes only as they are well-recognized measures rather than because there is a close relationship between the investments contained in, and the performance of REPM-US' Funds and the components of these indices. The investment profile, credit risk and volatility of such indices may be materially different than the portfolios of the Fund shown and generally do not reflect the reinvestment of dividends or deduction of management or other fees. In no circumstances may this document or any of the information included herein (including any forecast, value, index or other calculated amount ("Values")) be used for any of the following purposes: (i) valuation or accounting purposes; (ii) to determine the amounts due or payable, the price or the value of any financial instrument, investment fund or financial contract; or (iii) to measure the performance of any investment fund or other financial instrument including, without limitation, for the purpose of tracking the return or performance of any Value or of defining the asset allocation of portfolio or of computing performance fees. **NFI-ODCE (Source NCREIF)** is a fund-level, capitalization weighted index of open-ended diversified core equity commercial real estate funds that includes cash balances and leverage and is reported gross of fees. The degree of leverage used varies among the funds included in NFI-ODCE. At December 31, 2020 the Preliminary NFI-ODCE consisted of 25 active funds with total net assets of USD 207.8 billion.

The NCREIF Property Index (NPI), source NCREIF, is a property-level index, which consists of existing properties only (development projects and participating mortgages are excluded), excludes cash balances and leverage, and other non-property related assets, liabilities, income and expenses.

There is no assurance that the financial objective will ultimately be realized and the possibility of loss does exist. There is no guarantee that the investment strategy will perform as expected. Property photos shown in this presentation represent some examples of Fund investments. These types of investments may not be available or selected by the Fund in the future.

Mission-driven and investor-led, GRESB is the environmental, social and governance (ESG) benchmark for real assets. GRESB works in collaboration with the industry to provide standardized and validated ESG data to the capital markets. The 2019 real estate benchmark covers more than 1,000 property companies, real estate investment trusts (REITs), funds, and developers. Coverage for infrastructure includes 500 infrastructure funds and assets. Combined, GRESB represents USD 4.5 trillion in real asset value. More than 100 institutional investors, with over USD 22 trillion AUM, use GRESB data to monitor their investments, engage with their managers, and make decisions that lead to a more sustainable real asset industry.

Energy Star is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices. To celebrate the 15th Year of ENERGY STAR for Buildings, the EPA recognized UBS Realty Investors LLC as a Premier Member of the 2014 ENERGY STAR Certification Nation for certifying 38 buildings that year. To earn certification, a building must achieve an Energy Star rating of 75 of higher.

Please note that past performance is not a guide to the future. The value of investments and the income received may go down as well as up, and investors may not get back the original amount invested.

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## Risks

- Investors should be aware that return objectives are subject to a number of assumptions and factors, a change in any of which could adversely affect returns. Accordingly, investors should note the limitations of an objective.
- Investments in direct real estate and real estate funds involve a high degree of risk. For instance, events in 2008 and 2009 such as the deterioration of credit markets and increased volatility have resulted in a historically unprecedented lack of liquidity and decline in asset values. The value of investments and income from them may increase or decrease. Investors must have the financial ability and willingness to accept and bear the risks (including, among other things, the risk of loss of investment) that are characteristic of real estate investing and investing in commingled fund for an indefinite period of time. Among the risks to be considered are:
  - **Risks of investing in real estate.** Risks include adverse changes in market and economic conditions, zoning, and other governmental laws, regulations, and policies, occupancy levels and the ability to lease space, and environmental risks, and risk of uninsured losses.
  - Debt investment risk. Risk includes risks of borrower defaults, bankruptcies, fraud and special hazard losses that are not covered by standard hazard insurance
  - **Restrictions on redemption and transferability of shares or units; illiquidity.** Real estate is an illiquid investment and the account may not be able to generate sufficient cash to meet withdrawal requests from investors.
  - Reliance on controlling persons and third parties. The exercise of control over an entity can impose additional risks and the fund can experience a significant loss. The risk of third parties includes a conflict between their objectives and those of the account or fund.
  - Use of leverage. Leverage will increase the exposure of the real estate assets to adverse economic factors, such as rising interest rates, economic downturns, or deteriorations in the condition of the properties or their respective markets and changes in interest rates
  - Legal & Taxation. Investors should consult their own legal and tax advisers for potential US and/or local country legal or tax implications on any investment
  - **Currency risk.** The funds and accounts managed by UBS Realty Investors LLC are denominated in US Dollars. There is a potential for loss due to currency fluctuations for non-US investors.
  - Lack of diversification. Individually managed accounts and funds in their initial investment periods may have investments that are relatively large compared to the account's or fund's anticipated total value. Any limit to diversification increases risk because the unfavorable performance of even a single investment might have an adverse effect on the aggregate return.
  - **Unspecified investments**. There can be no assurance that the advisor will be able to continually locate and acquire assets meeting the fund or account's objective. Competition for assets may generally reduce the number of suitable prospective assets available.
- In considering an investment in a commingled real estate fund, prospective investors must rely on their own examination of the partnership agreement, private placement memorandum, and all terms of the offering, including merits and details of these and other risks involved. If there are any discrepancies in fund terms between this presentation and the private placement (offering) memorandum, the memorandum shall prevail.
- This is not a recommendation to invest in any product or services. Investors must have the sophistication to independently evaluate investment risks and to exercise independent judgment in deciding whether or not to invest in real estate and real estate funds.

## Contact information



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www.ubs.com/realestate

Together, UBS Realty Investors LLC, UBS Farmland Investors LLC, and UBS Fund Services (USA) LLC, subsidiaries of UBS AG, comprise Real Estate US.



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### **PRELIMINARY MONTHLY PERFORMANCE REPORT**

## **Ventura County Employees' Retirement Association**



January 31, 2021

Allan Martin, Partner Dan Hennessy, CFA, CAIA, Senior Consultant Michael Miranda, CFA, Senior Consulting Specialist Corey Robinson, CAIA, Consulting 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	6,856,822,582	100.0	100.0	-0.3	17.1	13.4	7.8	11.1	8.7	8.2	Apr-94
Policy Index				<u>-0.3</u>	<u>16.6</u>	<u>14.3</u>	<u>8.7</u>	<u>11.6</u>	<u>9.0</u>	<u>8.4</u>	Apr-94
Over/Under				0.0	0.5	-0.9	-0.9	-0.5	-0.3	-0.2	
60% MSCI ACWI (Net) / 40% FTSE WGBI				-0.8	15.7	13.6	6.7	10.0	6.4	6.7	Apr-94
60% S&P 500 / 40% BBgBarc Aggregate				-0.9	12.6	12.9	9.6	11.5	9.8	8.7	Apr-94
Total Fund ex Parametric	6,772,419,216	98.8		-0.3	16.9	12.9	7.5	10.9	8.5	8.2	Apr-94
Total Fund ex Private Equity	6,143,133,591	89.6		-0.4	16.3	12.7	7.3	10.8		9.1	Jan-12
Policy Index				<u>-0.3</u>	<u>16.6</u>	<u>14.3</u>	<u>8.7</u>	<u>11.6</u>	<u>9.0</u>	<u>10.1</u>	Jan-12
Over/Under				-0.1	-0.3	-1.6	-1.4	-0.8		-1.0	
Total US Equity	1,994,682,881	29.1	25.0	-0.6	24.1	19.7	12.4	16.8	13.6	9.9	Dec-93
Russell 3000				<u>-0.4</u>	<u>24.7</u>	<u>20.5</u>	<u>12.4</u>	<u>16.7</u>	<u>13.5</u>	<u>10.2</u>	Dec-93
Over/Under				-0.2	-0.6	-0.8	0.0	0.1	0.1	-0.3	
Western U.S. Index Plus	293,101,204	4.3		-1.2	23.6	16.5	11.7	16.7	14.1	7.6	May-07
S&P 500				<u>-1.0</u>	<u>20.9</u>	<u>17.2</u>	<u>11.7</u>	<u>16.2</u>	<u>13.5</u>	<u>9.0</u>	May-07
Over/Under				-0.2	2.7	-0.7	0.0	0.5	0.6	-1.4	
Blackrock Russell 1000 Index	1,614,780,395	23.5		-0.7	23.6	20.0	12.6			15.4	May-17
Russell 1000				<u>-0.8</u>	<u>23.4</u>	<u>19.8</u>	<u>12.5</u>	<u>16.7</u>	<u>13.6</u>	<u>15.3</u>	May-17
Over/Under				0.1	0.2	0.2	0.1			0.1	
Blackrock Russell 2500 Index	86,801,281	1.3		2.4	38.2	25.5	11.1			13.0	May-17
Russell 2500				<u>2.5</u>	<u>38.2</u>	<u>25.5</u>	<u>11.1</u>	<u>16.1</u>	<u>12.1</u>	<u>13.0</u>	May-17
Over/Under				-0.1	0.0	0.0	0.0			0.0	

Policy Index: Currently, 25% Russell 3000, 20% BBgBarc US Aggregate, 16% MSCI ACWI ex U.S., 10% MSCI ACWI, 15% Russell 3000 Index + 3%, 6% CPI+2%, and 8% 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	1,090,709,091	15.9	16.0	-0.5	24.2	12.4	2.9	10.6	5.3	6.5	Mar-94
MSCI ACWI ex USA				<u>0.2</u>	<u>24.6</u>	<u>14.0</u>	<u>3.1</u>	<u>10.5</u>	<u>4.8</u>	<u>5.5</u>	Mar-94
Over/Under				-0.7	-0.4	-1.6	-0.2	0.1	0.5	1.0	
MSCI EAFE				-1.1	20.3	8.9	2.2	8.8	5.2	5.0	Mar-94
MSCI ACWI ex USA NR LCL				0.9	17.6	8.7	4.5	9.3	6.9		Mar-94
MSCI EAFE NR LCL				-0.4	12.3	1.7	2.4	7.0	6.6	4.8	Mar-94
BlackRock ACWI ex-U.S. Index	569,481,905	8.3		0.2	25.3	14.7	3.2	10.8	5.2	3.7	Mar-07
MSCI ACWI ex USA IMI				<u>0.2</u>	<u>25.4</u>	<u>14.4</u>	<u>3.0</u>	<u>10.6</u>	<u>5.0</u>	<u>3.5</u>	Mar-07
Over/Under				0.0	-0.1	0.3	0.2	0.2	0.2	0.2	
MSCI ACWI ex USA NR LCL	010 701 000			0.9	17.6	8.7	4.5	9.3	6.9	4.0	Mar-07
Sprucegrove	249,764,822	3.6		-0.7	30.5	8.9	-0.4	10.0	4.9	7.0	Mar-02
MSCI ACWI ex USA				0.2	<u>24.6</u>	<u>14.0</u> -5.1	<u>3.1</u>	<u>10.5</u>	<u>4.8</u>	<u>6.7</u>	Mar-02
Over/Under MSCI EAFE				-0.9 -1.1	5.9 20.3	-5.1 8.9	-3.5 2.2	-0.5 8.8	0.1 5.2	0.3 <i>6.0</i>	Mar-02
MSCI EAFE MSCI ACWI ex USA NR LCL				-1.1 0.9	20.3 17.6	0.9 8.7	2.2 4.5	0.0 9.3	5.2 6.9	6.0 5.6	Mar-02 Mar-02
MSCI ACWI BX USA NR LCL MSCI EAFE NR LCL				-0.4	12.3	0.7 1.7	4.0 2.4	9.3 7.0	6.6	5.0 4.5	Mar-02 Mar-02
Hexavest	92,804,154	1.4		-0.4	11.3	-2.0	-2.2	4.5	3.0	4.0	Dec-10
MSCIEAFE	32,004,134	1.4		<u>-1.1</u>	<u>20.3</u>	8.9	<u>-2.2</u>	4.5 <u>8.8</u>	5.2	5.4	Dec-10
Over/Under				-0.8	<u>-9.0</u>	-10.9	-4.4	-4.3	-2.2	-2.2	20010
MSCI EAFE NR LCL				-0.4	12.3	1.7	2.4	7.0	6.6	6.7	Dec-10
Walter Scott	178,658,210	2.6		-1.5	19.5	19.5	10.5	14.6	8.2	8.1	Dec-10
MSCI ACWI ex USA	,			<u>0.2</u>	24.6	14.0	3.1	10.5	4.8	<u>4.9</u>	Dec-10
Over/Under				-1.7	-5.1	5.5	7.4	4.1	3.4	3.2	
MSCI ACWI ex USA NR LCL				0.9	17.6	8.7	4.5	9.3	6.9	6.9	Dec-10
MSCI EAFE				-1.1	20.3	8.9	2.2	8.8	5.2	5.4	Dec-10
Total Global Equity	777,516,422	11.3	10.0	-0.4	23.6	17.5	8.3	14.1	9.0	7.1	May-05
MSCI ACWI				<u>-0.5</u>	<u>23.4</u>	<u>17.0</u>	<u>7.9</u>	<u>13.6</u>	<u>8.9</u>	<u>7.7</u>	May-05
Over/Under				0.1	0.2	0.5	0.4	0.5	0.1	-0.6	
BlackRock MSCI ACWI Equity Index	777,516,422	11.3		-0.4	23.6	17.5	8.3	14.0		11.3	Aug-12
MSCI ACWI				<u>-0.5</u>	<u>23.4</u>	<u>17.0</u>	<u>7.9</u>	<u>13.6</u>	<u>8.9</u>	<u>10.9</u>	Aug-12
Over/Under				0.1	0.2	0.5	0.4	0.4		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	713,688,991	10.4	15.0	0.3	24.4	21.2	16.4	15.1		15.1	Jan-12
Private Equity Benchmark				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.8</u>	<u>18.5</u>	Jan-12
Over/Under				0.5	-2.4	-2.8	0.7	-5.0		-3.4	
C A Global All PE (Qtr Lag)				0.0	20.5	14.9	13.0	12.6	12.8	12.7	Jan-12
Adams Street Global Fund Series	213,523,674	3.1		0.0	23.8	20.1	16.5	13.9		13.8	Jan-12
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>18.5</u>	Jan-12
Over/Under				0.2	-3.0	-3.9	0.8	-6.2		-4.7	
Harbourvest	129,884,376	1.9		-0.1	25.3	13.7	15.5	16.7		18.6	Aug-13
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>16.7</u>	Aug-13
Over/Under				0.1	-1.5	-10.3	-0.2	-3.4		1.9	
Pantheon Global Secondary Funds	48,918,540	0.7		0.0	13.8	7.9	7.5	12.2		10.9	Jan-12
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>18.5</u>	Jan-12
Over/Under				0.2	-13.0	-16.1	-8.2	-7.9		-7.6	
Drive Capital Fund II	20,622,517	0.3		0.0	-1.0	12.3	18.8			-5.3	Sep-16
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>18.9</u>	Sep-16
Over/Under				0.2	-27.8	-11.7	3.1			-24.2	
Abbott Secondary Opportunities	15,865,241	0.2		0.0	25.7	30.4	24.5			23.7	Jan-18
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>17.3</u>	Jan-18
Over/Under				0.2	-1.1	6.4	8.8			6.4	
Clearlake Capital Partners V	12,564,561	0.2		0.0	31.3	34.1				36.7	Mar-18
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>17.6</u>	Mar-18
Over/Under				0.2	4.5	10.1				19.1	
Battery Ventures XII	18,093,916	0.3		0.0	33.7	47.1				13.4	Apr-18
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>18.9</u>	Apr-18
Over/Under				0.2	6.9	23.1				-5.5	
Insight Venture Partners X	38,815,047	0.6		1.2	44.8	49.0				21.1	May-18
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>19.3</u>	May-18
Over/Under				1.4	18.0	25.0				1.8	

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



## **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
GTCR Fund XII	19,414,214	0.3		0.0	48.2	55.6				-11.1	Jun-18
Russell 3000 + 3% Over/Under				<u>-0.2</u> 0.2	<u>26.8</u> 21.4	<u>24.0</u> 31.6	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>18.6</u> -29.7	Jun-18
Buenaventure One, LLC	70,689,207	1.0		0.0	17.0	16.9				8.9	Jul-18
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>18.8</u>	Jul-18
Over/Under				0.2	-9.8	-7.1				-9.9	
ECI 11	8,351,490	0.1		35.0	82.8	55.6				41.8	Dec-18
Russell 3000 + 3% Over/Under				<u>-0.2</u> 35.2	<u>26.8</u> 56.0	<u>24.0</u> 31.6	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>21.4</u> 20.4	Dec-18
The Resolute Fund IV L.P	19,869,406	0.3		0.0	35.9	60.0				57.7	Jan-19
Russell 3000 + 3% Over/Under				<u>-0.2</u> 0.2	<u>26.8</u> 9.1	<u>24.0</u> 36.0	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>28.1</u> 29.6	Jan-19
GGV Capital VII L.P.	7,326,100	0.1		0.0	6.9	7.8				-8.0	Feb-19
Russell 3000 + 3% Over/Under				<u>-0.2</u> 0.2	<u>26.8</u> -19.9	<u>24.0</u> -16.2	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>24.1</u> -32.1	Feb-19
GGV Discovery II, L.P.	1,477,718	0.0		0.0	7.0	11.2				4.0	Feb-19
Russell 3000 + 3% Over/Under				<u>-0.2</u>	<u>26.8</u> -19.8	<u>24.0</u> -12.8	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>24.1</u>	Feb-19
Drive Capital Overdrive Fund I	6,865,353	0.1		0.2	-19.8 48.3	-12.8				-20.1 21.3	May-19
Russell 3000 + 3%	0,000,000	0.1		0.0 <u>-0.2</u>	46.3 <u>26.8</u>	45.4 <u>24.0</u>	 <u>15.7</u>	 <u>20.1</u>	 <u>16.9</u>	<u>21.3</u> <u>21.2</u>	May-19 May-19
Over/Under				<u>-0.2</u> 0.2	<u>20.0</u> 21.5	<u>24.0</u> 21.4	<u>10.7</u>	<u>20.1</u>	<u>10.9</u>	0.1	May-19
Riverside Micro Cap Fund V, LP	3,251,671	0.0		0.0	10.1	1.7				-16.7	May-19
Russell 3000 + 3% Over/Under				<u>-0.2</u> 0.2	<u>26.8</u> -16.7	<u>24.0</u> -22.3	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>21.2</u> -37.9	May-19
GGV Capital VII Plus, LP	1,853,353	0.0		0.0	15.8	15.7				9.3	Jun-19
Russell 3000 + 3% Over/Under				<u>-0.2</u> 0.2	<u>26.8</u> -11.0	<u>24.0</u> -8.3	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>27.1</u> -17.8	Jun-19

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

### **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
Astorg VII L.P.	3,457,975	0.1		-1.9	60.7	47.2				-8.8	Jul-19
Russell 3000 + 3% Over/Under				<u>-0.2</u> -1.7	<u>26.8</u> 33.9	<u>24.0</u> 23.2	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>23.2</u> -32.0	Jul-19
M/C Partners Fund VIII LP. Limited Partnership	2,653,350	0.0		-1.7	9.2	-27.9				-32.0	Jul-19
Russell 3000 + 3%	2,000,000	0.0		<u>-0.2</u>	26.8	-21.9	 15.7	20.1	 16.9	-33.0 <u>23.2</u>	Jul-19
Over/Under				0.2	-17.6	- <u>51.9</u>	10.1	20.1	10.3	- <u>56.2</u>	501-15
Genstar Capital Partners IX	3.377.222	0.0		0.2	27.3	25.6				-30.2	Aug-19
Russell 3000 + 3%	0,011,222	0.0		<u>-0.2</u>	26.8	<u>23.0</u>	15.7	20.1	16.9	<u>23.2</u>	Aug-19
Over/Under				<u>-0.2</u> 0.2	0.5	1.6	<u>10.1</u>	20.1	10.3	<u>20.2</u>	Aug-13
Genstar IX Opportunities Fund I	1,649,234	0.0		-0.3	13.0	12.5				7.8	Aug-19
Russell 3000 + 3%	,,-			-0.2	26.8	24.0	15.7	20.1	16.9	23.2	Aug-19
Over/Under				-0.1	-13.8	-11.5				-15.4	0
ABRY Partners IX, LP	5,096,839	0.1		0.0	24.6	-12.9				-20.6	Sep-19
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	16.9	<u>26.3</u>	Sep-19
Over/Under				0.2	-2.2	-36.9				-46.9	
Advent International GPE IX LP	4,099,737	0.1		0.0	33.0	33.0				16.7	Nov-19
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>25.9</u>	Nov-19
Over/Under				0.2	6.2	9.0				-9.2	
Drive Capital Fund III LP	2,254,487	0.0		0.0	10.1	-9.0				-7.8	Dec-19
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>23.7</u>	Dec-19
Over/Under				0.2	-16.7	-33.0				-31.5	
Oak HC/FT Partners III LP	10,491,077	0.2		0.0	16.3	8.8				2.7	Dec-19
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>23.7</u>	Dec-19
Over/Under				0.2	-10.5	-15.2				-21.0	
TA XIII A LP	5,699,260	0.1		0.0	21.6	11.6				1.8	Dec-19
Russell 3000 + 3%				<u>-0.2</u>	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>22.2</u>	Dec-19
Over/Under				0.2	-5.2	-12.4				-20.4	



## **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
Dover Street X, LP	10,272,992	0.1		-0.5	56.5	39.2				39.2	Feb-20
Russell 3000 + 3% Over/Under				<u>-0.2</u> -0.3	<u>26.8</u> 29.7	<u>24.0</u> 15.2	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>24.0</u> 15.2	Feb-20
Hellman & Friedman CP IX	9,369,156	0.1		0.0	26.9					-2.5	Apr-20
Russell 3000 + 3% Over/Under				<u>-0.2</u> 0.2	<u>26.8</u> 0.1	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>55.8</u> - <mark>58.3</mark>	Apr-20
Clearlake Capital Partners VI	7,401,296	0.1		0.0	11.7					11.7	Jun-20
Russell 3000 + 3% Over/Under				<u>-0.2</u> 0.2	<u>26.8</u> -15.1	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>30.0</u> -18.3	Jun-20
Flexpoint Fund IV	1,496,237	0.0		0.0	10.7					10.7	Jun-20
Russell 3000 + 3% Over/Under				<u>-0.2</u> 0.2	<u>26.8</u> -16.1	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>30.0</u> -19.3	Jun-20
Battery Ventures XIII	4,396,013	0.1		0.0	2.2					2.2	Jun-20
Russell 3000 + 3% Over/Under				<u>-0.2</u> 0.2	<u>26.8</u> -24.6	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>30.0</u> -27.8	Jun-20
Green Equity Investors VIII, L.P.	1,955,243	0.0		-2.5						-2.5	Nov-20
Russell 3000 + 3% Over/Under				<u>-0.2</u> -2.3	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>17.5</u> -20.0	Nov-20
CapVest Private Equity Partners IV, SCSp	861,491	0.0		-0.7						1.6	Dec-20
Russell 3000 + 3% Over/Under				<u>-0.2</u> -0.5	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>4.5</u> -2.9	Dec-20
Great Hill Equity Partners VII	780,349	0.0		0.0						0.0	Jan-21
Russell 3000 + 3% Over/Under				<u>-0.2</u> 0.2	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>-0.2</u> 0.2	Jan-21
Vitruvian Investment Partners IV	276,157	0.0		-0.7						-0.7	Jan-21
Russell 3000 + 3% Over/Under				<u>-0.2</u> -0.5	<u>26.8</u>	<u>24.0</u>	<u>15.7</u>	<u>20.1</u>	<u>16.9</u>	<u>-0.2</u> -0.5	Jan-21



## **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	968,261,037	14.1	15.0	-0.4	4.1	9.1	6.5	5.6	4.7	5.9	Feb-94
BBgBarc US Aggregate TR Over/Under				<u>-0.7</u> 0.3	<u>0.6</u> 3.5	<u>4.7</u> 4.4	<u>5.5</u> 1.0	<u>4.0</u> 1.6	<u>3.8</u> 0.9	<u>5.3</u> 0.6	Feb-94
BlackRock U.S. Debt Fund	178,096,988	2.6		-0.7	0.6	4.8	5.5	4.0	3.8	5.2	Nov-95
BBgBarc US Aggregate TR Over/Under				<u>-0.7</u> 0.0	<u>0.6</u> 0.0	<u>4.7</u> 0.1	<u>5.5</u> 0.0	<u>4.0</u> 0.0	<u>3.8</u> 0.0	<u>5.1</u> 0.1	Nov-95
Western	306,398,096	4.5		-0.9	3.1	7.6	6.8	5.8	5.2	6.2	Dec-96
BBgBarc US Aggregate TR Over/Under				<u>-0.7</u> -0.2	<u>0.6</u> 2.5	<u>4.7</u> 2.9	<u>5.5</u> 1.3	<u>4.0</u> 1.8	<u>3.8</u> 1.4	<u>5.2</u> 1.0	Dec-96
Reams	344,577,567	5.0		0.1	5.8	11.5	6.5	5.7	4.4	5.5	Sep-01
Reams Custom Index Over/Under				<u>0.2</u> -0.1	<u>0.3</u> 5.5	<u>0.6</u> 10.9	<u>1.8</u> 4.7	<u>1.5</u> 4.2	<u>1.9</u> 2.5	<u>3.6</u> 1.9	Sep-01
BBgBarc US Aggregate TR 3-Month LIBOR + 3%				-0.7 0.4	0.6 2.0	4.7 3.7	5.5 4.8	4.0 4.5	3.8 3.9	4.5 4.8	Sep-01 Sep-01
Loomis Strategic Alpha	48,408,923	0.7		0.0	8.0	10.1	4.9	5.1		3.7	Jul-13
BBgBarc US Aggregate TR Over/Under				<u>-0.7</u> 0.7	<u>0.6</u> 7.4	<u>4.7</u> 5.4	<u>5.5</u> -0.6	<u>4.0</u> 1.1	<u>3.8</u>	<u>3.8</u> -0.1	Jul-13
3-Month LIBOR + 3%				0.4	2.0	3.7	4.8	4.5	3.9	4.1	Jul-13
Loomis Sayles Multi Strategy	90,779,464	1.3		-0.4	7.1	11.0	6.8	7.6	6.2	6.6	Jul-05
Loomis Custom Index Over/Under				<u>-0.4</u> 0.0	<u>3.9</u> 3.2	<u>5.5</u> 5.5	<u>5.6</u> 1.2	<u>5.5</u> 2.1	<u>4.5</u> 1.7	<u>5.2</u> 1.4	Jul-05
BBgBarc US Govt/Credit TR				-1.0	0.5	5.3	6.0	4.5	4.1	4.5	Jul-05
Treasuries	91,007,561	1.3	2.0	-1.5	-2.7	5.9				8.3	Apr-19
Reams 10-Year Treasuries	91,007,561	1.3		-1.5	-2.7	5.9				8.3	Apr-19
BBgBarc US Treasury 7-10 Yr TR Over/Under				<u>-1.1</u> -0.4	<u>-2.1</u> -0.6	<u>5.4</u> 0.5	<u>6.8</u>	<u>3.7</u>	<u>4.5</u>	<u>7.8</u> 0.5	Apr-19

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
Private Debt	152,012,743	2.2	3.0	0.3	13.2	7.3	6.8			6.6	Jan-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps Over/Under				<u>0.8</u> -0.5	<u>10.8</u> 2.4	<u>6.5</u> 0.8	<u>6.7</u> 0.1			<u>6.8</u> -0.2	Jan-18
CVI Credit Value Fund	29,484,576	0.4		1.5	18.1	2.8	5.1			4.9	Jan-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	20,101,010			<u>0.8</u>	<u>10.8</u>	<u>6.5</u>	<u>6.7</u>			<u>6.8</u>	Jan-18
Over/Under				0.7	7.3	-3.7	-1.6			-1.9	
Monroe Capital Private Credit Fund III	21,258,594	0.3		0.0	11.5	11.2				10.3	Dec-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>0.8</u>	<u>10.8</u>	<u>6.5</u>	<u>6.7</u>			<u>8.3</u>	Dec-18
Over/Under				-0.8	0.7	4.7				2.0	
Bluebay Direct Lending Fund III	9,863,562	0.1		0.0	7.2	8.2				8.2	Apr-19
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>0.8</u>	<u>10.8</u>	<u>6.5</u>	<u>6.7</u>			<u>7.6</u>	Apr-19
Over/Under				-0.8	-3.6	1.7				0.6	
Pimco Private Income Fund	60,401,935	0.9		0.0	11.0	11.3				8.9	Nov-19
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>0.8</u>	<u>10.8</u>	<u>6.5</u>	<u>6.7</u>			<u>7.6</u>	Nov-19
Over/Under				-0.8	0.2	4.8				1.3	
Bridge Debt Strategies III Limited Partner	23,529,177	0.3		0.0	16.3	2.6				2.4	Jan-20
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>0.8</u>	<u>10.8</u>	<u>6.5</u>	<u>6.7</u>			<u>6.4</u>	Jan-20
Over/Under				-0.8	5.5	-3.9				-4.0	
PIMCO Corp Opps Fund III	4,974,898	0.1		0.0	15.8					33.8	May-20
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>0.8</u>	<u>10.8</u>	<u>6.5</u>	<u>6.7</u>			<u>16.7</u>	May-20
Over/Under				-0.8	5.0					17.1	
Torchlight Debt Fund VII, L.P.	2,500,000	0.0		0.0						0.0	Jan-21
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>0.8</u>	<u>10.8</u>	<u>6.5</u>	<u>6.7</u>			<u>0.8</u>	Jan-21
Over/Under				-0.8						-0.8	

## **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	429,734,245	6.3	8.0	0.0	-1.0	-2.7	1.4	3.4	7.4	7.1	Mar-94
NCREIF ODCE Net				<u>0.0</u>	<u>1.4</u>	<u>0.3</u>	<u>4.0</u>	<u>5.3</u>	<u>8.9</u>	<u>7.6</u>	Mar-94
Over/Under				0.0	-2.4	-3.0	-2.6	-1.9	-1.5	-0.5	
Prudential Real Estate	168,998,678	2.5		0.0	1.7	2.1	5.4	6.2	9.8	6.0	Jun-04
NCREIF ODCE Net				<u>0.0</u>	<u>1.4</u>	<u>0.3</u>	<u>4.0</u>	<u>5.3</u>	<u>8.9</u>	<u>6.5</u>	Jun-04
Over/Under				0.0	0.3	1.8	1.4	0.9	0.9	-0.5	
NCREIF ODCE				0.0	1.8	1.2	4.9	6.2	9.9	7.5	Jun-04
UBS Real Estate	243,594,337	3.6		0.0	-2.4	-4.7	-0.5	1.9	6.2	6.0	Mar-03
NCREIF ODCE Net				<u>0.0</u>	<u>1.4</u>	<u>0.3</u>	<u>4.0</u>	<u>5.3</u>	<u>8.9</u>	<u>6.7</u>	Mar-03
Over/Under				0.0	-3.8	-5.0	-4.5	-3.4	-2.7	-0.7	
NCREIF ODCE				0.0	1.8	1.2	4.9	6.2	9.9	7.7	Mar-03
LaSalle Income + Growth VIII Limited Partnership	17,141,229	0.2		0.0	-6.9					-19.0	Mar-20
NCREIF ODCE Net				<u>0.0</u>	<u>1.4</u>	<u>0.3</u>	<u>4.0</u>	<u>5.3</u>	<u>8.9</u>	<u>0.3</u>	Mar-20
Over/Under				0.0	-8.3					-19.3	
NCREIF ODCE				0.0	1.8	1.2	4.9	6.2	9.9	1.2	Mar-20

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

Total Real Assets Benchmark CPI + 4% from inception until 6/30/2019; CPI +2% from 6/30/2019 to present.

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.

## **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 Assets	470,490,760	6.9	6.0	0.5	12.2	0.4	1.5	6.0		3.9	Apr-13
Real Assets Index Over/Under				<u>0.6</u> -0.1	<u>2.6</u> 9.6	<u>3.4</u> -3.0	<u>4.8</u> -3.3	<u>5.4</u> 0.6	<u>7.5</u>	<u>5.7</u> -1.8	Apr-13
Bridgewater All Weather Fund	381,188,273	5.6		-0.3	12.4	7.5	6.4	8.6		6.1	Aug-13
CPI + 5% (Unadjusted) Over/Under				<u>0.8</u> -1.1	<u>4.4</u> 8.0	<u>6.5</u> 1.0	<u>6.9</u> -0.5	<u>7.1</u> 1.5		<u>6.6</u> -0.5	Aug-13
Tortoise Energy Infrastructure	61,514,790	0.9		5.6	12.7	-21.5	-12.7	-2.2		-3.8	Apr-13
Tortoise MLP Index Over/Under				<u>7.2</u> -1.6	<u>19.7</u> -7.0	<u>-17.5</u> -4.0	<u>-11.1</u> -1.6	<u>-0.6</u> -1.6	<u>-1.5</u>	<u>-5.5</u> 1.7	Apr-13
Brookfield Infra Fund IV B LP	23,931,805	0.3		0.0	3.1					3.1	Apr-20
CPI + 2% (Unadjusted) Over/Under				<u>0.6</u> - <mark>0.6</mark>	<u>2.6</u> 0.5	<u>3.4</u>	<u>3.8</u>	<u>4.0</u>	<u>3.8</u>	<u>3.0</u> 0.1	Apr-20
Harbourvest Real Assets Fund IV L.P.	3,855,892	0.1									
CPI + 2% (Unadjusted) Over/Under				<u>0.6</u>	<u>2.6</u>	<u>3.4</u>	<u>3.8</u>	<u>4.0</u>	<u>3.8</u>	<u>3.4</u>	Sep-19
Overlay	168,718,852	2.5	0.0								
Parametric Abbott Capital Cash	84,403,366 84,315,486	1.2 1.2									

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



### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE EQUITY LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Vintage Year	Initial	Commitment	Capital Called to	Outstanding Commitment	Call	Add'l	Distributions	Valuation	Total Value	Net Benefit	IRR	Distributions to Paid In	Total Value to Paid In
Fund Name	vintage rear	Date	Commitment	Date <sup>1</sup>	1	Ratio	Fees <sup>2</sup>	to Date	valuation	iotai value	Net benefit	IKK	Multiple (DPI)	Multiple (TVPI)
Abbott Secondary Opportunities, LP.	2017	12/21/2017	\$25,000,000	\$23,974,362		96%	-	\$16,750,000	\$15,865,243	\$32,615,243	\$8,640,881	22.2%	0.7x	1.36x
Abbott Secondary Opportunities II, LP.	2020	1/31/2020	\$25,000,000	-	\$25,000,000	-		\$0	\$605,838	\$605,838	-	-		
ABRY Partners IX	2019	12/6/2018	\$10,600,000	\$5,478,498	\$5,121,502	52%	-		\$5,096,839	\$5,096,839	(\$381,659)	-7.0%		0.93x
Adams Street 2010 U.S. Fund Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010 2010	5/21/2010 5/21/2010	\$42,500,000 \$25,500,000	\$37,442,500 \$22,962,749	\$5,057,500 \$2,537,251	88% 90%	\$15,213 \$1,589	\$42,488,544 \$23,288,863	\$35,114,468 \$16.027.670	\$77,603,012 \$39,316,533	\$40,145,299 \$16.352.195	15.3% 12.4%	1.13x 1.01x	2.07x 1.71x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2010	\$25,500,000	\$22,962,749 \$7,633,000	\$2,537,251 \$867,000	90% 90%	\$1,569	\$23,200,003 \$4,596,756	\$9,377,966	\$39,310,533 \$13,974,722	\$6,341,722	12.4%	0.6x	1.83x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$8,168,500	\$331,500	96%	\$6.697	\$10.372.022	\$4,534,409	\$14,906,431	\$6,731,234	12.4%	1.27x	1.82x
Adams Street 2013 Global Fund	2010	6/27/2013	\$75,000,000	\$61,350,000	\$13,650,000	82%	\$10,728	\$20,799,168	\$82,341,378	\$103,140,546		12.1%	0.34x	1.68x
Adams Street 2016 Global Fund	2016	12/22/2016	\$60,000,000	\$39,492,000	\$20,508,000	66%		\$4,801,064	\$46,586,129	\$51,387,193	\$11,895,193	13.0%	0.12x	1.3x
Adams Street Co-Investment Fund IV A	2018	9/24/2018	\$30,000,000	\$16,684,931	\$13,410,000	56%	\$67,808		\$19,804,408	\$19,804,408	\$3,051,669	15.0%		1.19x
Advent International GPE IX	2019	5/23/2019	\$10,000,000	\$3,674,971	\$6,325,029	37%		\$319,600	\$4,099,736	\$4,419,336	\$744,365	23.6%		1.2x
Astorg VII	2019	12/17/2018	\$9,215,008	\$3,094,116	\$6,120,892	34%			\$2,846,303	\$2,846,303	(\$247,813)	-14.3%		0.92x
Battery Ventures XI	2018	2/1/2018	\$9,050,000	\$7,672,590	\$1,377,410	85%		-	\$10,582,899	\$10,582,899	\$2,910,309	20.8%		1.38x
Battery Ventures XII Side Fund	2018	2/1/2018	\$5,050,000	\$4,469,755	\$580,245	89%		-	\$7,511,022	\$7,511,022	\$3,041,267	33.7%		1.68x
Battery Ventures XIII	2020	2/11/2020	\$9,240,000	\$2,439,360	\$6,800,640	26%	-	-	\$2,433,803	\$2,433,803	(\$5,557)	-0.6%	-	1x
Battery Ventures XIII Side Fund Buenaventure One. LLC	2020 2018	2/11/2020 1/5/2018	\$6,160,000 \$160,429,500	\$1,850,464 \$60,430,590	\$4,309,536 \$99,998,910	30% 38%	-	 \$403.156	\$1,962,209 \$70,689,186	\$1,962,209 \$71,092,341	\$111,745 \$10,661,751	20.8% 13.4%	 0.01x	1.06x 1.18x
CapVest Equity Partners IV	2018	7/11/2018	\$160,429,500 \$13,346,009	\$60,430,590 \$826,432	\$99,998,910 \$12,519,577	38% 6%	-	\$403,156	\$70,689,186 (\$247,248)	\$71,092,341 (\$247,248)	\$10,661,751	-100.0%	0.01X	1.18x -0.3x
Charlesbank Equity Fund X	2019	11/20/2020	\$24,000,000	φ020,432 −	\$12,519,577 \$24,000,000	0%	-	-	(\$247,246)	(\$247,246)	-	-100.0%	-	-0.3x
Charlesbank Equity Overage Fund X	2020	11/20/2020	\$6,000,000	_	\$6,000,000		-	-		-	-	-		-
Clearlake Capital Partners V	2017	12/22/2017	\$9,950,000	\$9,163,056	\$2,180,279	92%	\$46,158	\$2,797.682	\$12,564,560	\$15.362.242	\$6,153,028	37.6%	0.31x	1.68x
Clearlake Capital Partners VI	2020	1/2/2020	\$18,700,000	\$7,260,377	\$11,494,148	39%	-	\$155,933	\$7,354,607	\$7,510,540	\$250,163	13.6%	0.02x	1.03x
CRV XVIII	2020	7/2/2020	\$15,000,000	-	\$15,000,000			-	-	-	-		-	-
CVC Capital Partners VIII	2020	5/22/2020	\$22,330,608	-	\$22,330,608		-		-					-
Drive Capital Fund II	2016	9/1/2016	\$15,000,000	\$14,476,970	\$526,240	97%	\$3,210	-	\$20,622,513	\$20,622,513	\$6,142,333	17.2%		1.42x
Drive Capital Fund III	2019	4/5/2019	\$7,500,000	\$2,262,290	\$5,237,710	30%		-	\$2,254,488	\$2,254,488	(\$7,802)	-1.1%		1x
Drive Capital Overdrive Fund I	2019	4/5/2019	\$7,500,000	\$5,167,303	\$2,332,697	69%	-	\$12,492	\$6,865,354	\$6,877,846	\$1,710,543	31.4%	0x	1.33x
ECI 11	2018	7/5/2018	\$9,978,819	\$5,458,182	\$4,520,637	55%	-	-	\$6,081,773	\$6,081,773	\$623,591	10.9%		1.11x
Flexpoint Fund IV-A	2019	7/2/2019	\$10,650,000	\$1,783,947	\$8,866,053	17%	-	-	\$1,496,238	\$1,496,238	(\$287,709)	-34.8%		0.84x
Flexpoint Overage Fund IV-A	2019	7/2/2019	\$3,550,000	-	\$3,550,000			-	(\$4,699)	(\$4,699)	-	-100.0%		-
Genstar Capital Partners IX	2019 2019	2/21/2019 2/21/2019	\$7,500,000 \$2,500,000	\$2,944,241 \$1.502.042	\$4,728,882 \$997.958	39% 60%	-	\$175,000	\$3,377,223 \$1.649.234	\$3,552,223 \$1.649.234	\$607,982 \$147,192	22.4% 11.3%	0.06x	1.21x
Genstar Capital Partners IX Opportunities Program GGV Capital VII	2019	2/21/2019 8/15/2018	\$2,500,000 \$10,160,000	\$1,502,042 \$7,112,000	\$997,958 \$3,048,000	60% 70%	-	-	\$1,649,234 \$7,326,101	\$1,649,234 \$7,326,101	\$147,192 \$214,101	3.2%		1.1x 1.03x
GGV Capital VII GGV Capital VII Plus	2019	8/15/2018	\$2,540,000	\$1,625,600	\$914,400	64%	-	-	\$1,853,353	\$1,853,353	\$227,753	13.8%		1.14x
GGV Capital VIII	2013	10/30/2020	\$9,180,000	-	\$9,180,000		_	-	φ1,000,000 	φ1,000,000 	φ221,100			
GGV Capital VIII Plus	2020	10/30/2020	\$2,295,000	_	\$2,295,000		_	_	_	-	_	_		_
GGV Discovery II	2019	8/15/2018	\$2,100,000	\$1,375,500	\$724,500	66%	-		\$1,477,718	\$1,477,718	\$102,218	8.1%		1.07x
GGV Discovery III	2020	10/30/2020	\$3,825,000	-	\$3,825,000	-			-	-	-			-
Great Hill Equity Partners VII	2019	6/28/2019	\$8,900,000	\$780,349	\$8,119,651	9%		\$2,458,521		\$2,458,521				
Green Equity Investors VIII	2019	10/18/2019	\$15,000,000	\$2,023,598	\$12,976,402	13%			\$1,955,243	\$1,955,243	(\$68,355)	-22.4%		0.97x
GTCR Fund XII	2017	9/29/2017	\$30,000,000	\$19,640,202	\$10,359,798	65%		\$5,743,843	\$19,414,218	\$25,158,061	\$5,517,859	20.6%	0.29x	1.28x
GTCR Fund XIII	2020	10/27/2020	\$30,000,000	-	\$30,000,000	-				-	-			
HarbourVest - Dover Street VIII	2013	5/30/2013	\$67,500,000	\$61,509,954	\$6,075,000	91%	\$84,954	\$76,846,255	\$23,091,149	\$99,937,404	\$38,342,496	19.8%	1.25x	1.62x
HarbourVest - Dover Street IX	2016	12/16/2016	\$60,000,000	\$48,000,000	\$12,000,000	80%		\$23,553,089	\$46,065,824	\$69,618,913	\$21,618,913	22.9%	0.49x	1.45x
HarbourVest - Dover Street X HarbourVest - PRTNS CO INVEST IV L.P.	2019 2017	5/31/2019 6/2/2017	\$40,000,000	\$9,000,000	\$31,000,000 \$5,732,352	23% 82%		\$935,750 \$6.050.893	\$10,320,704 \$30,899,619	\$11,256,454 \$36,950,512	\$2,256,454 \$12.486.124	61.1% 15.3%	 0.25x	1.25x 1.51x
HarbourVest - PRINS CO INVESTIV L.P. HarbourVest - PRTNS CO INVEST V L.P.	2017	6/2/2017 7/31/2018	\$30,000,000 \$35,000,000	\$24,464,388 \$24,500,000	\$5,732,352 \$10,500,000	82% 70%	-	\$6,050,893	\$30,899,619 \$31,375,921	\$36,950,512 \$31,375,921	\$12,486,124 \$6,875,921	15.3% 40.0%	0.25x	1.51x 1.28x
Harbourvest - PRINS CO INVEST V L.P. Hellman & Friedman Capital Partners IX	2019	9/28/2018	\$19,800,000	\$24,500,000 \$9,059,432	\$10,500,000	46%	-	-	\$9,369,152	\$9,369,152	\$309,720	40.0%	-	1.20x
Insight Venture Partners X	2019	10/13/2017	\$25,000,000	\$24,450,000	\$550,000	98%	-	 \$1,654,457	\$38,815,052	\$40,469,509	\$16,019,509	30.8%	0.07x	1.66x
M/C Partners VIII	2019	4/2/2018	\$10,000,000	\$3,080,253	\$6,919,747	31%	_	-	\$2,653,349	\$2,653,349	(\$426,904)	-14.5%	-	0.86x
Oak HC/FT Partners III	2019	7/31/2019	\$15,000,000	\$9,700,837	\$5,299,163	65%	-	-	\$10,491,077	\$10,491,077	\$790,240	15.4%		1.08x
Pantheon Global Secondary Fund IV	2010	8/20/2010	\$15,000,000	\$9,960,000	\$2,040,000	66%	-	\$13,694,043	\$2,040,635	\$15,734,678	\$5,774,678	13.0%	1.37x	1.58x
Pantheon Global Secondary Fund V	2015	2/26/2015	\$50,000,000	\$35,616,509	\$14,383,491	71%	(\$162,514)	\$15,982,534	\$33,229,899	\$49,212,433	\$13,758,438	11.2%	0.45x	1.38x
Pantheon Global Secondary Fund VI	2018	2/24/2020	\$25,000,000	\$11,897,805	\$13,337,113	48%	-	\$37,120	\$13,648,009	\$13,685,129	\$1,787,324	31.6%	0x	1.15x
The Resolute Fund IV	2018	5/2/2018	\$20,000,000	\$16,476,664	\$6,601,113	82%	-	\$5,076,184	\$19,869,406	\$24,945,590	\$8,468,926	54.6%	0.31x	1.51x
Riverside Micro-Cap Fund V	2018	8/21/2018	\$10,000,000	\$3,390,672	\$6,609,328	34%	-	-	\$3,251,673	\$3,251,673	(\$138,999)	-3.7%	-	0.96x
TA XIII	2019	5/2/2019	\$10,000,000	\$5,500,000	\$4,500,000	55%		-	\$5,699,260	\$5,699,260	\$199,260	7.1%		1.04x
Vitruvian Investment Partnership IV	2020	6/3/2020	\$22,333,259	\$278,517	\$22,054,742	1%	-	-	\$165,157	\$165,157	(\$113,360)	-99.3%	-	
Total VCERA Private Equity Program	-	5/21/2010	\$1,261,883,203	\$687, 105, 506	\$577,453,927	54%	\$73, 843	\$278,992,969	\$710, 506, 068	\$989,499,036	\$301,114,056	15.7%	0.41x	1.44x

1. Includes recycled/recallable distributions received to date.

2. Add1 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 1/31/2021 statement of investments produced by Abbott Capital.



### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE DEBT LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment		Outstanding Commitment 1	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Incept Distributions to Paid In Multiple (DPI)	ion Total Value to Paid In Multiple (TVPI)
BlueBay Direct Lending III	2019	2/12/2019	\$25,000,000	\$11,849,228	\$13,150,772	47%	\$3,075,371	\$9,863,562	\$12,938,933	\$1,089,704	7.7%	0.26x	1.09x
Bridge Debt Strategies III	2019	12/20/2019	\$25,000,000	\$24,072,665	\$927,335	96%	\$1,312,521	\$23,529,177	\$24,841,698	\$769,033	3.7%	0.05x	1.03x
CVI Credit Value Fund IV	2017	12/31/2017	\$30,000,000	\$29,100,000	\$900,000	97%	\$2,106,147	\$29,484,576	\$31,590,723	\$2,490,723	4.9%	0.07x	1.09x
Monroe Capital Private Credit Fund III	2018	9/5/2018	\$25,000,000	\$21,253,151	\$3,746,849	85%	\$3,317,508	\$21,258,594	\$24,576,102	\$3,322,951	10.8%	0.16x	1.16x
PIMCO Corporate Opportunities Fund III	2020	1/26/2020	\$50,000,000	\$3,750,000	\$46,250,000	8%	\$37,190	\$4,974,898	\$5,012,088	\$1,262,088	33.8%	0.01x	1.34x
PIMCO Private Income Fund	2019	3/25/2019	\$55,000,000	\$55,000,000	\$0	100%	\$0	\$60,401,935	\$60,401,935	\$5,401,935	11.5%	0x	1.1x
Total VCERA Private Debt Program			\$210,000,000	\$145,025,044	\$64,974,956	69%	\$9,848,736	\$149, 512, 742	\$159,361,479	\$14,336,434	8.4%	0.07x	1.1x

1. Includes recycled/recallable distributions received to date.

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

Performance shown is based on 1/31/2021 cash-adjusted market values.



### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE REAL ESTATE LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Initial		Commitment		Outstanding Commitment 1		Distributions to Date	Valuation	Total Value	Net Benefit		Since Incepti Distributions to Paid In	
	Vintage Year Investment Date	IRR									Multiple (DPI)	Multiple (TVPI)	
Lasalle Income & Growth Fund VIII, LP	2019	2/26/2020	\$100,000,000	\$20,172,821	\$79,827,179	20%	\$0	\$17,141,229	\$17,141,229	-\$3,031,592	-18.5%	0x	0.85x
Total VCERA Private Real Estate Program	-		\$100,000,000	\$20, 172, 821	\$79,827,179	20%	\$0	\$17,141,229	\$17,141,229	-\$3,031,592	-18.5%	0x	0.85x

1. Includes recycled/recallable distributions received to date.

Note: Private Real Estate performance data is reported net of fees.

Performance shown is based on 1/31/2021 cash-adjusted market values.



### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE REAL ASSETS LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment		Outstanding Commitment 1	Call Ratio	Distributions to Date	Valuation	Total Value	- Net Benefit	IRR	Since Inception Distributions T to Paid In Multiple (DPI)	
Brookfield Infrastructure Fund IV, LP Harbourvest Real Assets Fund IV, LP	2019 2019	10/21/2019 7/15/2019	\$50,000,000 \$100,000,000	\$24,829,149 \$0	\$26,908,578 \$100,000,000	50% 0%	\$2,511,321 \$0	\$23,931,805 \$3,855,892	\$26,443,126 \$3,855,892	\$1,613,977 	7.9%	0.1x 	1.07x -
Total VCERA Private Real Estate Program			\$74, 829, 149	\$24,829,149	\$126,908,578	33%	\$2,511,321	\$27,787,697	\$30, 299, 018	\$1,613,977	7.9%	0.1x	1.22x

1. Includes recycled/recallable distributions received to date.

Note: Private Real Assets performance data is reported net of fees.

Performance shown is based on 1/31/2021 cash-adjusted market values.



## TOTAL FUND

		Cas	h Flow Sumr	nary				
				Month Ending J	anuary 31, 2021			
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value	Month Return
Abbott Capital Cash	\$49,962,299	\$79,794,962	-\$45,459,419	\$34,335,543	\$0	\$17,644	\$84,315,486	0.03%
Abbott Secondary Opportunities	\$15,865,241	\$0	\$0	\$0	\$0	\$0	\$15,865,241	0.00%
ABRY Partners IX, LP	\$5,096,839	\$0	\$0	\$0	\$0	\$0	\$5,096,839	0.00%
Adams Street Global Fund Series	\$213,989,642	\$0	-\$465,969	-\$465,969	\$0	\$1	\$213,523,674	0.00%
Advent International GPE IX LP	\$4,419,336	\$0	-\$319,600	-\$319,600	\$0	\$0	\$4,099,737	0.00%
Astorg VII L.P.	\$3,524,548	\$0	\$0	\$0	\$0	-\$66,573	\$3,457,975	-1.89%
Battery Ventures XII	\$17,748,570	\$345,350	\$0	\$345,350	\$0	-\$4	\$18,093,916	0.00%
Battery Ventures XIII	\$4,396,013	\$0	\$0	\$0	\$0	\$0	\$4,396,013	0.00%
BlackRock ACWI ex-U.S. Index	\$568,537,973	\$0	\$0	\$0	-\$49,123	\$943,932	\$569,481,905	0.16%
BlackRock MSCI ACWI Equity Index	\$780,924,031	\$0	\$0	\$0	-\$27,584	-\$3,407,609	\$777,516,422	-0.44%
Blackrock Russell 1000 Index	\$1,686,419,384	\$0	-\$60,000,000	-\$60,000,000	-\$13,873	-\$11,638,988	\$1,614,780,395	-0.69%
Blackrock Russell 2500 Index	\$84,736,799	\$0	\$0	\$0	-\$1,447	\$2,064,482	\$86,801,281	2.43%
BlackRock U.S. Debt Fund	\$179,368,681	\$0	\$0	\$0	-\$9,270	-\$1,271,693	\$178,096,988	-0.71%
Bluebay Direct Lending Fund III	\$9,552,910	\$947,352	-\$636,692	\$310,660	\$0	-\$8	\$9,863,562	0.00%
Bridge Debt Strategies III Limited Partner	\$23,529,177	\$0	\$0	\$0	\$0	\$0	\$23,529,177	0.00%
Bridgewater All Weather Fund	\$382,289,714	\$0	\$0	\$0	-\$112,748	-\$1,101,441	\$381,188,273	-0.29%
Brookfield Infra Fund IV B LP	\$23,931,805	\$0	\$0	\$0	\$0	\$0	\$23,931,805	0.00%
Buenaventure One, LLC	\$70,689,207	\$0	\$0	\$0	\$0	\$0	\$70,689,207	0.00%
Buenaventure Two, LLC	\$714,492	\$0	\$0	\$0	\$0	\$0	\$714,492	0.00%
CapVest Private Equity Partners IV, SCSp	\$867,625	\$0	\$0	\$0	\$0	-\$6,134	\$861,491	-0.71%

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## TOTAL FUND

				Month Ending	January 31, 2021			
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value	Month Return
Clearlake Capital Partners V	\$12,564,561	\$0	\$0	\$0	\$0	\$0	\$12,564,561	0.00%
Clearlake Capital Partners VI	\$4,928,572	\$2,472,724	\$0	\$2,472,724	\$0	\$1	\$7,401,296	0.00%
CVI Credit Value Fund	\$31,123,993	\$0	-\$2,100,000	-\$2,100,000	\$0	\$460,583	\$29,484,576	1.49%
Dover Street X, LP	\$10,320,708	\$0	\$0	\$0	\$0	-\$47,716	\$10,272,992	-0.46%
Drive Capital Fund II	\$20,288,053	\$334,453	\$0	\$334,453	\$0	\$11	\$20,622,517	0.00%
Drive Capital Fund III LP	\$1,562,200	\$692,289	\$0	\$692,289	\$0	-\$1	\$2,254,487	0.00%
Drive Capital Overdrive Fund I	\$5,794,870	\$1,070,482	\$0	\$1,070,482	\$0	\$0	\$6,865,353	0.00%
ECI 11	\$5,040,439	\$1,275,000	\$0	\$1,275,000	\$0	\$2,036,051	\$8,351,490	34.97%
Flexpoint Fund IV	\$1,496,237	\$0	\$0	\$0	\$0	\$0	\$1,496,237	0.00%
Genstar Capital Partners IX	\$3,377,222	\$0	\$0	\$0	\$0	\$0	\$3,377,222	0.00%
Genstar IX Opportunities Fund I	\$1,649,234	\$4,782	\$0	\$4,782	\$0	-\$4,782	\$1,649,234	-0.29%
GGV Capital VII L.P.	\$7,326,100	\$0	\$0	\$0	\$0	\$0	\$7,326,100	0.00%
GGV Capital VII Plus, LP	\$1,827,953	\$25,400	\$0	\$25,400	\$0	\$0	\$1,853,353	0.00%
GGV Discovery II, L.P.	\$1,299,218	\$178,500	\$0	\$178,500	\$0	\$0	\$1,477,718	0.00%
Great Hill Equity Partners VII	\$379,549	\$400,800	\$0	\$400,800	\$0	\$0	\$780,349	0.00%
Green Equity Investors VIII, L.P.	\$1,955,243	\$49,301	\$0	\$49,301	\$0	-\$49,301	\$1,955,243	-2.49%
GTCR Fund XII	\$19,414,214	\$0	\$0	\$0	\$0	\$0	\$19,414,214	0.00%
Harbourvest	\$126,564,805	\$3,500,000	\$0	\$3,500,000	\$0	-\$180,429	\$129,884,376	-0.14%
Harbourvest Real Assets Fund IV L.P.	\$3,855,892	\$0	\$0	\$0	\$0	\$0	\$3,855,892	0.00%
Hellman & Friedman CP IX	\$9,369,156	\$0	\$0	\$0	\$0	\$0	\$9,369,156	0.00%
Hexavest	\$94,582,105	\$0	\$0	\$0	-\$35,101	-\$1,777,951	\$92,804,154	-1.92%
Insight Venture Partners X	\$38,815,057	\$0	-\$445,631	-\$445,631	\$0	\$445,621	\$38,815,047	1.16%
LaSalle Income + Growth VIII Limited Partnership	\$17,141,229	\$0	\$0	\$0	\$0	\$0	\$17,141,229	0.00%



# TOTAL FUND

				Month Ending J	anuary 31, 2021			
	Beginning Market Value	Contributions	Withdrawals I	Net Cash Flow	Fees	Net Investment Change	Ending Market Value	Month Return
Loomis Sayles Multi Strategy	\$91,092,983	\$0	\$0	\$0	-\$28,528	-\$313,519	\$90,779,464	-0.38%
Loomis Strategic Alpha	\$48,408,923	\$0	\$0	\$0	-\$16,136	\$0	\$48,408,923	-0.03%
M/C Partners Fund VIII LP. Limited Partnership	\$2,653,350	\$0	\$0	\$0	\$0	\$0	\$2,653,350	0.00%
Monroe Capital Private Credit Fund III	\$21,258,594	\$0	\$0	\$0	\$0	\$0	\$21,258,594	0.00%
Oak HC/FT Partners III LP	\$10,491,077	\$0	\$0	\$0	\$0	\$0	\$10,491,077	0.00%
Pantheon Global Secondary Funds	\$48,918,540	\$0	\$0	\$0	\$0	\$0	\$48,918,540	0.00%
Parametric	\$83,588,461	\$0	\$0	\$0	-\$8,075	\$814,905	\$84,403,366	0.97%
PIMCO Corp Opps Fund III	\$4,974,898	\$0	\$0	\$0	\$0	\$0	\$4,974,898	0.00%
Pimco Private Income Fund	\$60,401,935	\$0	\$0	\$0	\$0	\$0	\$60,401,935	0.00%
Prudential Real Estate	\$168,998,678	\$0	\$0	\$0	\$0	\$0	\$168,998,678	0.00%
Reams	\$344,088,888	\$0	\$0	\$0	-\$49,322	\$488,679	\$344,577,567	0.13%
Reams 10-Year Treasuries	\$92,433,897	\$0	\$0	\$0	\$0	-\$1,426,336	\$91,007,561	-1.54%
Riverside Micro Cap Fund V, LP	\$3,251,671	\$0	\$0	\$0	\$0	\$0	\$3,251,671	0.00%
Sprucegrove	\$251,477,366	\$0	\$0	\$0	-\$71,618	-\$1,712,544	\$249,764,822	-0.71%
TA XIII A LP	\$5,699,260	\$0	\$0	\$0	\$0	\$0	\$5,699,260	0.00%
The Resolute Fund IV L.P	\$19,874,772	\$0	-\$5,369	-\$5,369	\$0	\$4	\$19,869,406	0.00%
Torchlight Debt Fund VII, L.P.	\$0	\$2,500,000	\$0	\$2,500,000	\$0	\$0	\$2,500,000	0.00%
Tortoise Energy Infrastructure	\$58,244,205	\$0	\$0	\$0	-\$32,039	\$3,270,586	\$61,514,790	5.56%
UBS Real Estate	\$250,043,963	\$0	-\$6,449,625	-\$6,449,625	\$0	\$0	\$243,594,337	0.00%
Vitruvian Investment Partners IV	\$278,123	\$0	\$0	\$0	\$0	-\$1,966	\$276,157	-0.71%
Walter Scott	\$181,262,851	\$0	\$0	\$0	-\$111,204	-\$2,604,641	\$178,658,210	-1.50%
Western	\$309,270,909	\$0	\$0	\$0	-\$50,800	-\$2,872,813	\$306,398,096	-0.95%
Western U.S. Index Plus	\$296,542,621	\$0	\$0	\$0	-\$49,138	-\$3,441,417	\$293,101,204	-1.18%
Total	\$6,900,496,861	\$93,591,395	-\$115,882,306	-\$22,290,911	-\$666,006	-\$21,383,368	\$6,856,822,582	-0.32%



# **DISCLAIMERS & DISCLOSURES**

- Past performance is no guarantee of future results.
- Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.
- A "since inception" return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.
- NEPC's preferred data source is the plan's custodian bank or record-keeper. If data cannot be
  obtained from one of the preferred data sources, data provided by investment managers may be
  used. Information on market indices and security characteristics is received from additional
  providers. While NEPC has exercised reasonable professional care in preparing this report, we
  cannot guarantee the accuracy of all source information contained within. In addition, some index
  returns displayed in this report or used in calculation of a policy index, allocation index or other
  custom benchmark may be preliminary and subject to change.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- The opinions presented herein represent the good faith views of NEPC as of the date of this presentation and are subject to change at any time. Neither fund performance nor universe rankings contained in this report should be considered a recommendation by NEPC.
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### **QUARTERLY PERFORMANCE REPORT**

# **VENTURA COUNTY EMPLOYEES'**

### **RETIREMENT ASSOCIATION**

February 22, 2021



Allan Martin, Partner Dan Hennessy, CFA, CAIA, Senior Consultant Michael Miranda, CFA, Senior Consulting Specialist Corey Robinson, CAIA, Consulting Analyst



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

Business Meeting Agenda - VI.B. INVESTMENT INFORMATION: QUARTERLY INVESTMENT PERFORMANCE REPORT FOR PERIOD ENDING DE...

# MARKET ENVIRONMENT UPDATE & OUTLOOK

NEPC, LLC -

MASTER PAGE NO. 115 of 267

# **ECONOMIC ENVIRONMENT**

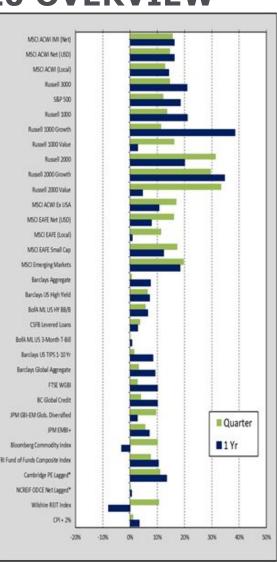
- Q4 Real GDP (advanced estimate) grew at a rate of +4.0%. In the third quarter, real GDP grew at an annual rate of +33.4%.
  - Retail sales ended December at +5.5% on a YoY basis. In the same period last year the YoY growth rate was 3.9%.
  - Corporate profits as a percent of GDP increased to 10.0% in Q2, up from 7.98% in Q1 and remain elevated relative to historical levels.
  - The inventory-to-sales ratio ended November down to 1.3 from 1.4 in June. Levels have remained relatively constant since early 2010 with a spike to 1.7 in April 2020.
  - The U.S. trade deficit widened 1.7% (ended October).
- The unemployment rate was 6.7% in Q4, down from 7.8% in Q3 %; U-6, a broader measure of unemployment, decreased to 11.7% in Q4 from 12.8% in Q3.
  - The labor force participation rate ended Q4 at 61.5%, up from 61.4% in Q3 after declining to 60.2% in April and is at levels below the 10 year pre-pandemic average of 63.2%.
- The Case-Shiller Home Price Index (ended November) increased to 232.4 from 226.8 (in September) 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 1.29% in Q4 from 1.41% in Q3; Capacity Utilization increased to 74.5% in Q4 from 72.3% in Q3.
- Fed Funds rate remains at a targeted range of 0.00%-to-0.25%. The 10-year Treasury Yield (constant maturity) finished Q4 at 0.9%, up from 0.7% in Q3.
- The Fed remains committed to continuing stimulative action as needed to support the US economy. The Fed's balance sheet continues to grow in the wake of the pandemic.
- S&P valuations increased in Q4 to 34.04 from 31.21 in Q3 and is higher than the 10-year average of 26.55x.

- Cyclically adjusted Shiller PE ratio remains above the long-term average of 16.77x



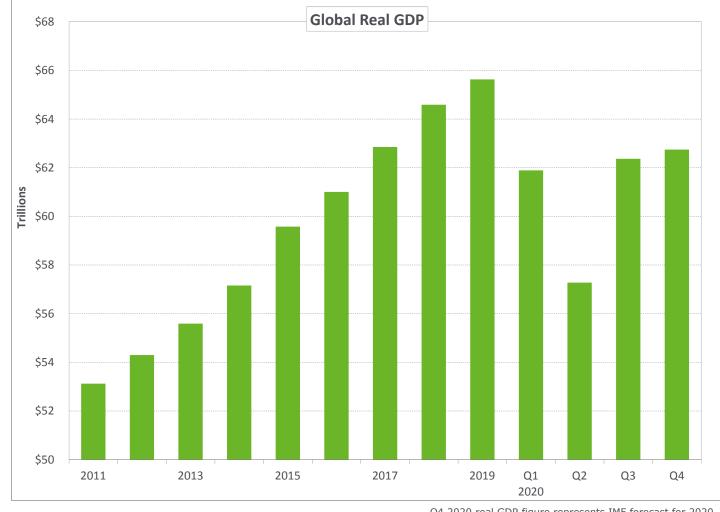
# **MARKET ENVIRONMENT – Q4 2020 OVERVIEW**

		Qtr.	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>
World Equity Benchmarks						
MSCI ACWI IMI (Net)	World with Small Cap	15.70%	16.25%	9.72%	12.15%	9.09%
MSCI ACWI Net (USD)	World W/O Small Cap	14.68%	16.25%	10.06%	12.26%	9.13%
MSCI ACWI (Local)	World (Local Currency)	12.83%	14.21%	9.81%	11.52%	10.02%
Domestic Equity Benchmarks						
Russell 3000	Domestic All Cap	14.68%	20.89%	14.49%	15.43%	13.79%
S&P 500	Large Core	12.15%	18.40%	14.18%	15.22%	13.88%
Russell 1000	Large Core	13.69%	20.96%	14.82%	15.60%	14.01%
Russell 1000 Growth	Large Growth	11.39%	38.49%	22.99%	21.00%	17.21%
Russell 1000 Value	Large Value	16.25%	2.79%	6.07%	9.74%	10.50%
Russell 2000	Small Core	31.37%	19.96%	10.25%	13.26%	11.20%
Russell 2000 Growth	Small Growth	29.61%	34.63%	16.19%	16.36%	13.48%
Russell 2000 Value	Small Value	33.36%	4.63%	3.72%	9.65%	8.66%
International Equity Benchmarks						
MSCI ACWI EX USA	World ex-US	17.01%	10.65%	4.88%	8.93%	4.92%
MSCI EAFE Net (USD)	Int'l Developed	16.05%	7.82%	4.28%	7.45%	5.51%
MSCI EAFE (Local)	Int'l Developed (Local Currency)	11.35%	0.84%	2.98%	5.80%	6.82%
MSCI EAFE Small Cap	Small Cap Int'l	17.27%	12.34%	4.85%	9.40%	7.85%
MSCI Emerging Markets	Emerging Equity	19.70%	18.31%	6.17%	12.81%	3.63%
Domestic Fixed Income Benchmarks						
Barclays Aggregate	Core Bonds	0.67%	7.51%	5.34%	4.44%	3.84%
Barclays US High Yield	High Yield	6.45%	7.11%	6.24%	8.59%	6.80%
BofAML US HY BB/B	High Yield	5.73%	6.45%	6.30%	8.08%	6.65%
CSFB Levered Loans	Bank Loans	3.64%	2.78%	3.99%	5.19%	4.47%
BofAML US 3-Month T-Bill	Cash	0.03%	0.67%	1.60%	1.20%	0.64%
Barclays US TIPS 1-10 Yr	Inflation	1.60%	8.39%	4.93%	4.13%	2.88%
Global Fixed Income Benchmarks						
Barclays Global Aggregate	Global Core Bonds	3.28%	9.20%	4.85%	4.79%	2.83%
FTSE WGBI	World Gov. Bonds	2.77%	10.11%	4.96%	4.78%	2.32%
BC Global Credit	Global Bonds	4.03%	10.03%	5.67%	5.91%	4.35%
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local Currency)	9.62%	2.69%	3.01%	6.72%	1.49%
JPM EMBI+	Em. Mkt. Bonds	5.64%	7.05%	4.50%	6.26%	5.64%
Alternative Benchmarks						
Bloomberg Commodity Index	Commodities	10.19%	-3.12%	-2.53%	1.03%	<b>-6.50%</b>
HFRI Fund of Funds Composite Index	Fund of Hedge Funds	7.59%	10.34%	4.71%	4.46%	3.27%
Cambridge PE Lagged*	Private Equity	11.04%	13.37%	13.07%	12.96%	13.56%
NCREIF ODCE Net Lagged*	Real Estate	0.27%	0.51%	4.25%	5.69%	9.26%
Wilshire REIT Index	REIT	10.63%	<b>-7.89%</b>	3.30%	4.25%	8.27%
CPI + 2%	Inflation/Real Assets	1.10%	3.31%	3.87%	3.98%	3.77%



\* As of 9/30/2020

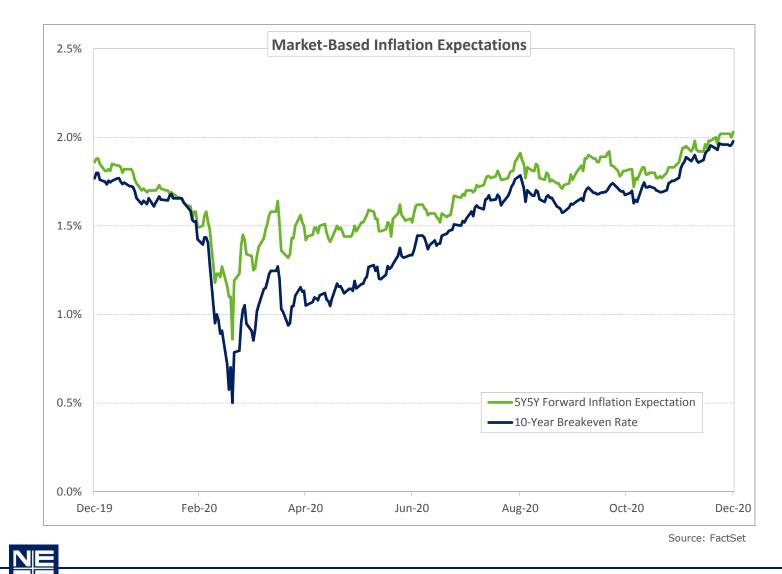
### **THE WORLD ECONOMY SHRANK IN 2020**



Q4 2020 real GDP figure represents IMF forecast for 2020 GDP figures are seasonally adjusted and chained to 2005 dollars Source: IMF, FactSet

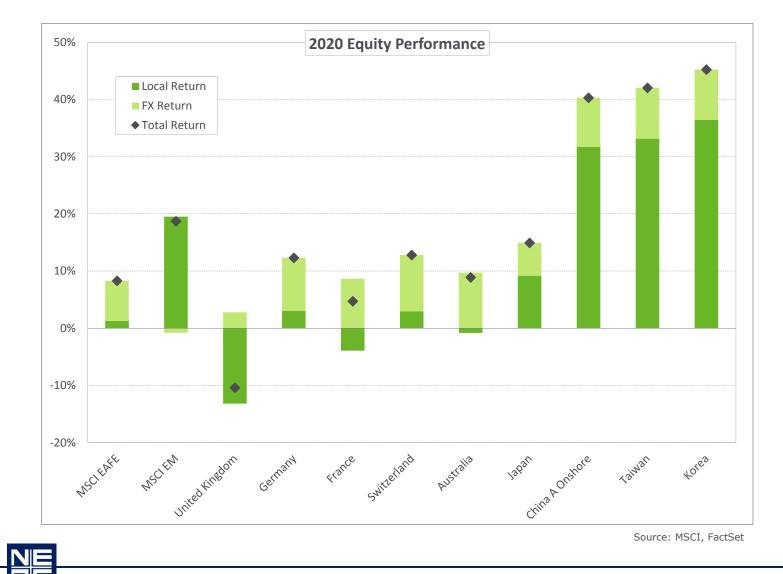


# **INFLATION EXPECTATIONS RECOVERED**

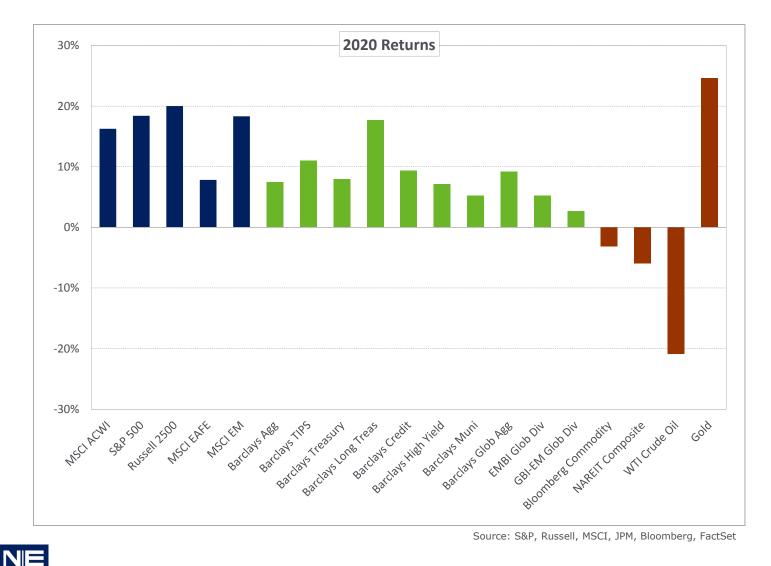


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# **DOLLAR WEAKNESS SUPPORTED NON-US EQUITY**



# **US AND EMERGING EQUITIES OUTPERFORMED**

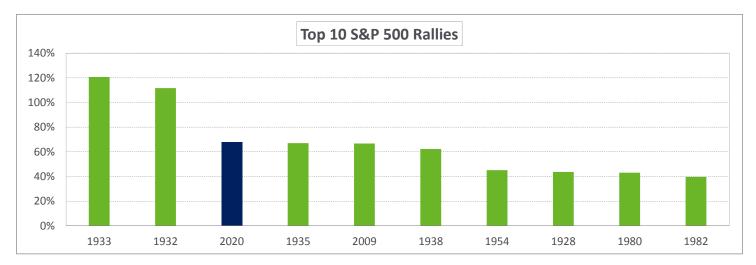


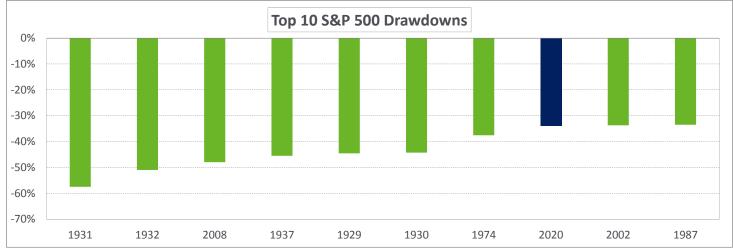
# THE SHORTEST BEAR MARKET IN HISTORY



Financial Crisis represents S&P returns from 9/1/2008 – 8/10/2009; Wall Street Crash represents Dow Jones returns from 8/30/1929 – 8/25/1930; COVID-19 represents S&P returns from 1/23/2020 (representing the start of the Wuhan, China lockdown) – 12/31/2020

# **THE LARGEST EQUITY SWINGS SINCE 1932**



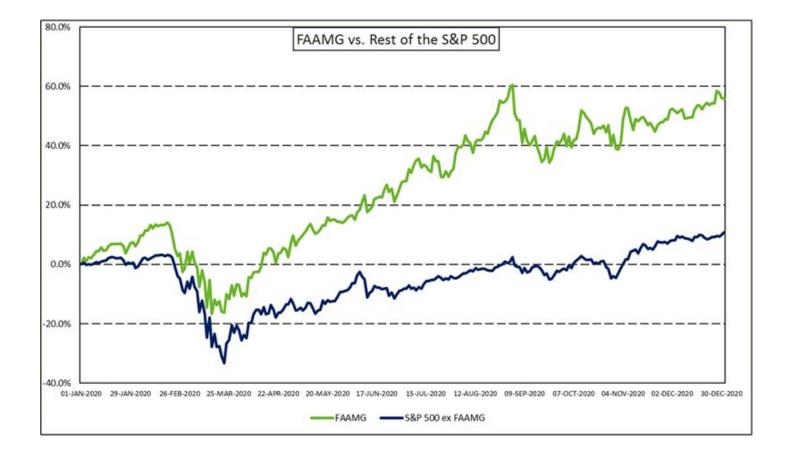


Source: S&P, FactSet

Rallies and drawdowns represent the largest trough-to-peak and peak-to-trough within a calendar year



### **FAAMG DROVE US EQUITY RETURNS HIGHER**





# **QE PUSHED YIELDS INTO NEGATIVE TERRITORY**

Government Bond Yields	6M	1Y	2Υ	3Y	5Y	7Y	10Y	15Y	30Y
Germany	-0.7%	-0.7%	-0.7%	-0.8%	-0.7%	-0.7%	-0.6%	-0.4%	-
Netherlands	-	-0.7%	-0.7%	-0.7%	-0.7%	-0.6%	-0.5%	-0.4%	-0.1%
France	-0.7%	-0.7%	-0.7%	-0.7%	-0.7%	-0.6%	-0.3%	-0.2%	0.4%
Austria	-0.6%	-0.7%	-0.7%	-0.7%	-0.7%	-0.6%	-0.4%	-	0.1%
Switzerland	-	-0.8%	-0.8%	-0.8%	-0.7%	-0.6%	-0.5%	-	-0.3%
Belgium	-	-0.7%	-0.7%	-0.7%	-0.7%	-0.6%	-0.4%	-0.2%	0.3%
Japan	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.2%	0.6%
Finland	-0.7%	-0.7%	-0.7%	-0.7%	-	-0.6%	-	-	
Portugal	-0.9%	-0.8%	-0.7%	-0.5%	-0.4%	-0.2%	0.0%	-	-
Italy	-0.6%	-0.6%	-0.4%	-0.3%	-0.0%	0.2%	0.5%	0.9%	1.4%
United Kingdom	-0.0%	-0.2%	-0.2%	-0.1%	-0.1%	0.0%	0.2%	0.4%	0.7%
Sweden	-0.2%	-	-0.4%	-	-0.2%	-0.2%	0.0%	-	-
Denmark	-	-	-0.6%	-0.6%	-0.6%	-	-0.5%	-	-
Spain	-	-	-0.6%	-0.6%	-0.4%	-0.3%	0.0%	-	0.9%
Australia	-	0.0%	0.1%	0.1%	0.3%	0.6%	1.0%	1.3%	2.0%
Canada	0.1%	0.2%	0.2%	0.3%	0.4%	0.5%	0.7%	-	1.2%
Hong Kong	0.0%	0.1%	0.1%	0.2%	0.3%	0.5%	0.8%	-	-
New Zealand	0.3%	-	0.3%	0.3%	0.4%	0.7%	1.0%	-	-
Norway	0.0%	-	0.3%	-	0.7%	0.7%	0.9%	-	-
Singapore	0.3%	0.4%	0.3%	0.3%	0.5%	0.8%	0.8%	-	1.1%
United States	0.1%	0.1%	0.1%	0.2%	0.4%	0.6%	0.9%	-	1.6%

Source: FactSet

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Business Meeting Agenda - VI.B. INVESTMENT INFORMATION: QUARTERLY INVESTMENT PERFORMANCE REPORT FOR PERIOD ENDING DE...

# TOTAL FUND PERFORMANCE SUMMARY

NEPC, LLC —

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# **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	\$6,900,496,861	11.0%	28	17.4%	16	13.6%	14	9.1%	18	10.4%	14	8.8%	16	8.3%	Apr-94
Policy Index		10.4%	42	16.9%	26	14.4%	12	10.0%	6	10.9%	8	9.2%	9	8.4%	Apr-94
60% MSCI ACWI (Net) / 40% FTSE WGBI		9.9%	55	16.6%	30	14.5%	11	8.4%	28	9.5%	34	6.6%	93	6.8%	Apr-94
60% S&P 500 / 40% BBgBarc Aggregate		7.5%	97	13.6%	89	14.7%	9	11.0%	1	11.1%	6	10.0%	1	8.7%	Apr-94
InvMetrics Public DB > \$1B Net Median		10.1%		15.5%		10.8%		7.4%		9.0%		7.9%		7.7%	Apr-94

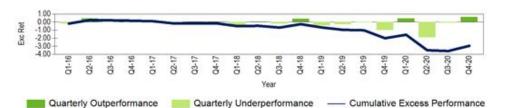
- For the five year period ending December 31, 2020, the Fund returned 10.4% trailing the policy index by 0.5% and ranking in the 14th percentile of its peers and outperforming the actuarial assumed rate of 7.25%. The Fund's volatility, as measured by standard deviation, ranked in the 74th percentile of its peers, and the risk-adjusted return, or Sharpe Ratio, ranks in the 38th percentile. This means that the Fund has earned more return per unit of volatility taken than 62% of its peers.

- For the three-year period, the Fund returned 9.1%, underperforming the policy index and ranking in the 18th percentile of its peers. The Fund's volatility ranks in the 75th percentile of its peers over this period, with the Fund's Sharpe Ratio ranking in the 35th percentile.

- For the one-year period, the Fund returned 13.6%, underperforming the policy index by 0.8% and ranking in the 14th percentile of the Investment Metrics Public Funds > \$1 Billion Universe (Net of fees).

- For the one-year period, the Fund experienced a net investment gain of \$842.4 million which includes a net investment gain of \$693.5 million in the quarter. Assets increased from \$6.15 billion one year ago to \$6.90 billion.

Quarterly and Cumulative Excess Performance



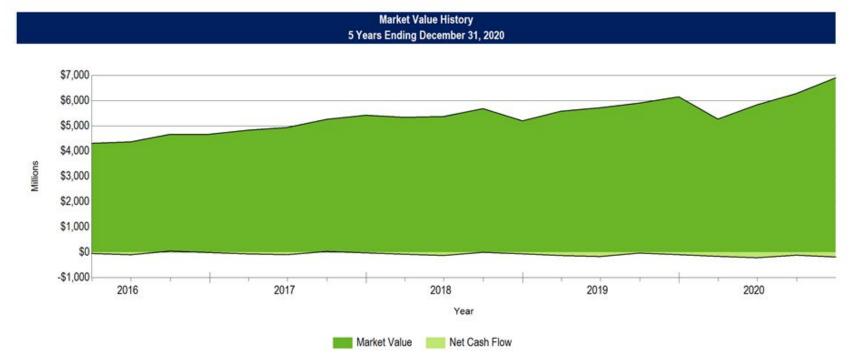
3 Years Ending December 31, 2020											
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank			
Total Fund	9.1%	18	11.7%	75	0.7	35	0.8	23			
Policy Index	10.0%	6	12.3%	85	0.7	24	0.9	12			
InvMetrics Public DB > \$1B Net Median	7.4%		10.7%		0.6		0.7				

			5 Years	Ending Decer	nber 31, 20	20			
of		Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
he	Total Fund	10.4%	14	9.6%	74	1.0	38	1.1	30
	Policy Index	10.9%	8	10.0%	83	1.0	33	1.1	23
	InvMetrics Public DB > \$1B Net Median	9.0%		8.8%		0.9		1.0	

Policy Index as of July 2020: 25% Russell 3000 Index, 16% MSCI ACWI ex U.S., 10% MSCI ACWI, 15% Russell 3000 +3%, 20% BBgBarc US Aggregate, 8% NCREIF ODCE, 6% CPI +2%.



### **TOTAL FUND ASSET GROWTH SUMMARY**



		Summary of Cash Flo	ows		
	Last Three Months	Fiscal Year-To-Date	One Year	Three Years	Five Years
Beginning Market Value	\$6,276,976,535	\$5,830,640,053	\$6,149,016,410	\$5,420,490,945	\$4,290,811,595
Net Cash Flow	-\$69,975,532	\$28,971,713	-\$90,880,953	-\$163,198,358	-\$182,240,201
Net Investment Change	\$693,495,859	\$1,040,885,096	\$842,361,403	\$1,643,204,274	\$2,791,925,467
Ending Market Value	\$6,900,496,861	\$6,900,496,861	\$6,900,496,861	\$6,900,496,861	\$6,900,496,861



# Ventura County Employees' Retirement Association ASSET ALLOCATION VS. POLICY TARGETS

ıt	Policy	IF>\$1 Billion		Asset Alloo	cation vs. T	arget			
		Median Universe		Current	Current	Policy Di	fference*	Policy Range	Withi Rang
			U.S. Equity	\$2,067,698,804	30.0%	25.0%	5.0%	20.0% - 30.0%	Yes
			Non-US Equity	\$1,095,860,295	15.9%	16.0%	-0.1%	12.0% - 20.0%	Yes
96	25.0%	25.8%	Emerging Markets Equity				0.0%		
		20.070	Global Equity	\$780,924,031	11.3%	10.0%	1.3%	7.0% - 13.0%	Yes
			U.S. Fixed Income	\$972,230,383	14.1%	13.0%	1.1%	12.0% - 20.0%	Yes
			Treasury	\$92,433,897	1.3%	2.0%	-0.7%	0.0% - 5.0%	Ye
			Fixed Income - Emerging				0.0%		
	16.0%	11.2%	Fixed Income - Global				0.0%		
	10.076	11.270	GAA/Risk Parity				0.0%		
%			Private Debt	\$127,312,331	1.8%	5.0%	-3.2%	0.0% - 7.0%	Ye
		7.4%	Private Equity	\$725,980,874	10.5%	15.0%	-4.5%	10.0% - 17.0%	Ye
	10.0%		Hedge Funds				0.0%		
		11.2%	Real Estate	\$436,183,870	6.3%	8.0%	-1.7%	0.0% - 9.0%	Yes
%		11.270	Real Assets	\$468,321,616	6.8%	6.0%	0.8%	0.0% - 8.0%	Ye
	13.0%		Cash	\$133,550,760	1.9%	0.0%	1.9%	0.0% - 3.0%	Ye
			Total	\$6,900,496,861	100.0%	100.0%			
96	<u>2.0%</u> 5.0%	16.5%	*Difference between Policy and Current A	llocation					

Cash represents assets in Parametric Overlay.

Policy Index as of July 2020: 25% Russell 3000 Index, 16% MSCI ACWI ex U.S., 10% MSCI ACWI, 15% Russell 3000 +3%, 20% BBgBarc US Aggregate, 8% NCREIF ODCE, 6% CPI +2%.

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



1.8%

10.5%

6.8%

1.9%

4.2% 5.0%

3.1%

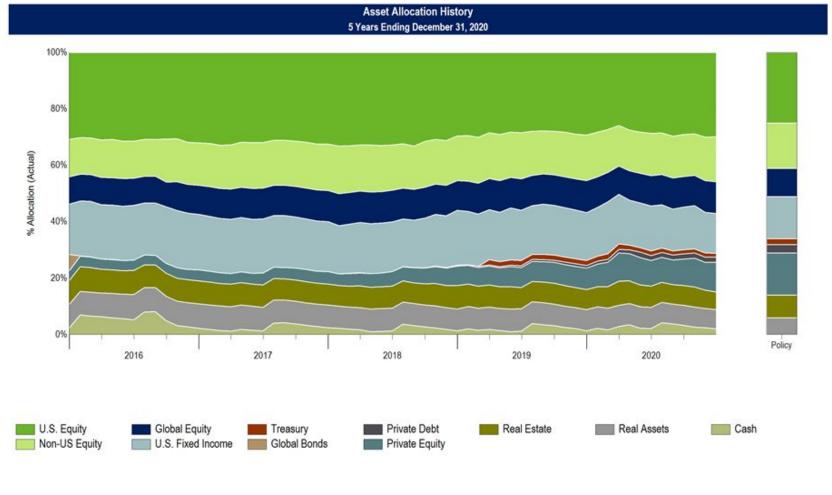
5.0%

1 7%

15.0%

6.0%

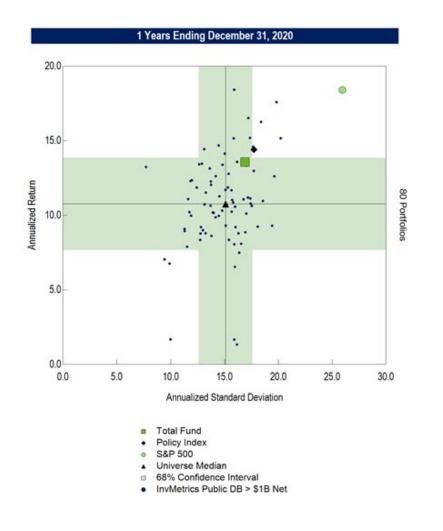
# Ventura County Employees' Retirement Association TOTAL FUND ALLOCATION HISTORY

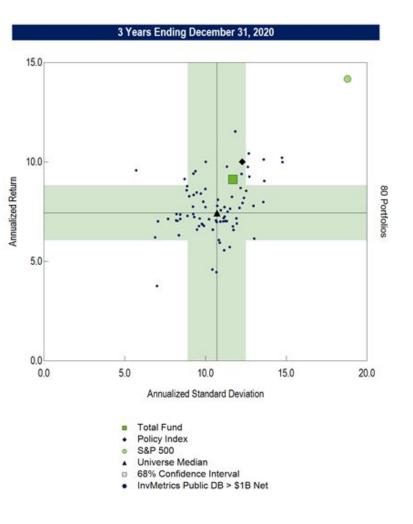


Policy Index shown is most recently approved index

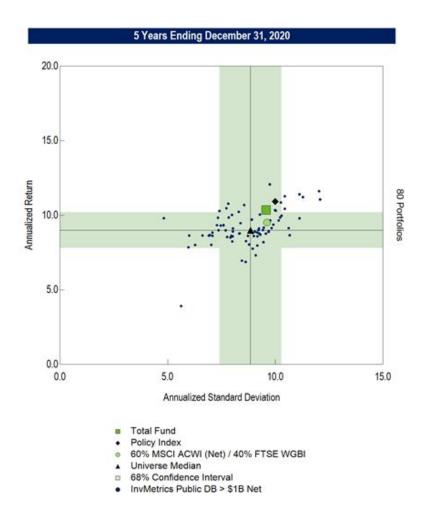
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		17		

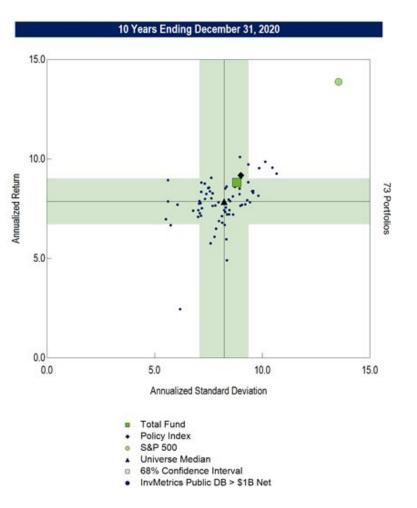
# Ventura County Employees' Retirement Association TOTAL FUND RISK/RETURN





# Ventura County Employees' Retirement Association TOTAL FUND RISK/RETURN





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# **TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE**

	1	Year	
Anizd Return	AnIzd Standard Deviation	Sharpe Ratio	Sortino Ratio
16.0	11.0	1.3	1.9
	12.0	1.2	1.7
14.0	13.0	1.1	1.5
	14.0	1.0	1.3
12.0	15.0	0.0	1.1 🔹 🔺
	16.0	0.8	0.9
10.0	17.0	0.6	0.7
0.0	18.0	0.5	S 92. 1
8.0 -	10.0	0.4	0.5
c.0	19.0	0.3	0.3
6.0	20.0	0.2	0.1
Total Fund	Total Fund	Total Fund	Total Fund
Value 13.6	Value 16.9	Value 0.8	Value 1.1
Rank 14	Rank 79	Rank 35	Rank 23
Policy Index	Policy Index	Policy Index	Policy Index
Value 14.4	Value 17.7	Value 0.8	Value 1.2
Rank 12	Rank 92	Rank 34	Rank 12
Universe	Universe	Universe	Universe
5th %tile 15.2	5th %tile 11.2	5th %tile 1.0	5th %tile 1.3
25th %tile 12.7	25th %tile 13.1	25th %tile 0.8	25th %tile 1.1
Median 10.8	Median 15.1	Median 0.7	Median 0.9
75th %tile 9.2	75th %tile 16.4	75th %tile 0.6	75th %tile 0.7
95th %tile 6.8	95th %tile 18.6	95th %tile 0.4	95th %tile 0.5



# **TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE**

	3	Years	
Anizd Return	Anizd Standard Deviation	Sharpe Ratio	Sortino Ratio
11.0	7.0	1.2	1.5
10.0	8.0	1.1	1.4
	9.0	1.0	1.3
9.0 • •	10.0	0.9	1.1
8.0		0.8	1.0
0.0	11.0	0.7	0.9
7.0	12.0	0.6	0.8
	13.0	0.5	0.7
6.0	14.0	0.4	0.6
5.0	15.0	0.3	0.5
Total Fund	Total Fund	Total Fund	Total Fund
Value 9.1	Value 11.7	Value 0.7	Value 1.0
Rank 18	Rank 75	Rank 35	Rank 26
Policy Index	Policy Index	<ul> <li>Policy Index</li> </ul>	Policy Index
Value 10.0	Value 12.3	Value 0.7	Value 1.1
Rank 6	Rank 85	Rank 24	Rank 11
Universe	Universe	Universe	Universe
5th %tile 10.0	5th %tile 7.6	5th %tile 0.9	5th %tile 1.2
25th %tile 8.6	25th %tile 9.3	25th %tile 0.7	25th %tile 1.0
Median 7.4	Median 10.7	Median 0.6	Median 0.8
75th %tile 7.0	75th %tile 11.7	75th %tile 0.5	75th %tile 0.8
95th %tile 5.7	95th %tile 13.6	95th %tile 0.4	95th %tile 0.6



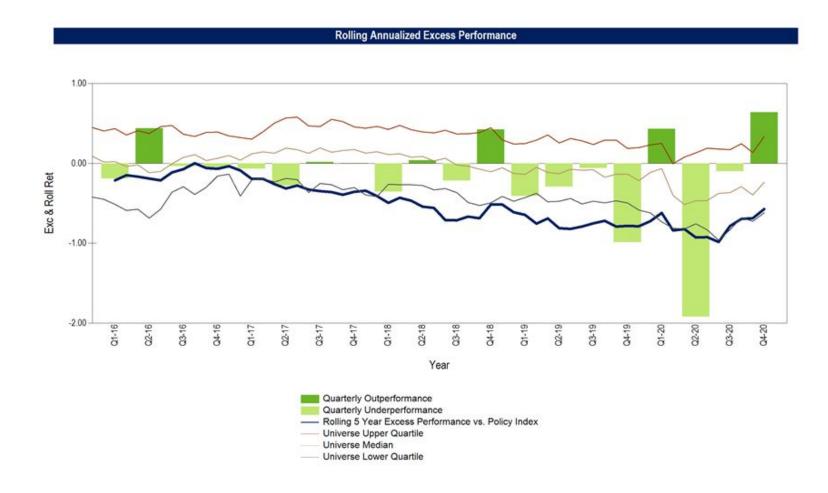
## **TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE**

	5	Years	
Anizd Return	Anizd Standard Deviation	Sharpe Ratio	Sortino Ratio
16.0	6.0	1.5	1.8
15.0 ×	And a second	1.4	1.7
4.0	8.0	1.3	1.6
3.0		1.2	1.5
2.0	10.0	1.1 -	1.3
1.0		1.0	1.2 • ×
	12.0	0.9	1.1
0.0		0.8	1.0
9.0	14.0	0.7	0.9
8.0	×	0.6	0.8
7.0	16.0	0.5	0.6
Total Fund	<ul> <li>Total Fund</li> </ul>	Total Fund	Total Fund
Value 10.4	Value 9.6	Value 1.0	Value 1.2
Rank 14	Rank 74	Rank 38	Rank 30
Policy Index	Policy Index	Policy Index	Policy Index
Value 10.9	Value 10.0	Value 1.0	Value 1.3
Rank 8	Rank 83	Rank 33	Rank 26
S&P 500	× S&P 500	× S&P 500	× S&P 500
Value 15.2	Value 15.3	Value 0.9	Value 1.2
Rank 1	Rank 99	Rank 48	Rank 31
Universe	Universe	Universe	Universe
5th %tile 11.2	5th %tile 6.3	5th %tile 1.2	5th %tile 1.5
25th %tile 9.9	25th %tile 7.8	25th %tile 1.1	25th %tile 1.3
Median 9.0	Median 8.8	Median 0.9	Median 1.1
75th %tile 8.6	75th %tile 9.7	75th %tile 0.8	75th %tile 1.0
95th %tile 7.7	95th %tile 11.1	95th %tile 0.7	95th %tile 0.8

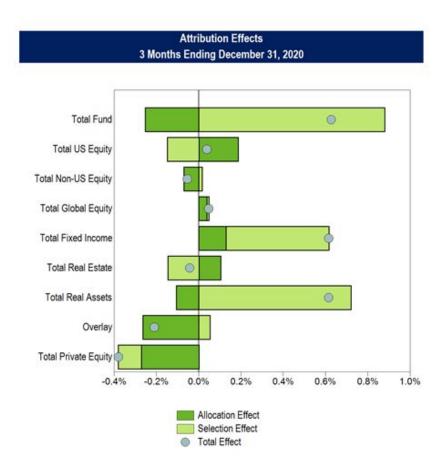
### **TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE**

			1(	) Years				
Anizd F	Return	Anizd Sta Devia		Sharpe	Ratio	Sortino Rat		
11.0 10.5 9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0		4.9 5.4 5.9 6.4 6.9 7.4 7.9 8.4 8.9 9.9 10.4 10.9		1.5 1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5		1.8 1.7 1.6 1.5 1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7	•	
Total Fund	i	Total Fund		Total Fund		Total Fund		
Value	8.8	Value	8.8	Value	0.9	Value	1.3	
Rank	16	Rank	73	Rank	43	Rank	32	
Policy Inde		Policy Inde		Policy Inde		Policy Index	(	
Value	9.2	Value	9.0	Value	1.0	Value	1.3	
Rank	9	Rank	81	Rank	38	Rank	29	
Universe		Universe		Universe		Universe		
5th %tile	9.6	5th %tile	5.9	5th %tile	1.2	5th %tile	1.5	
25th %tile		25th %tile	7.3	25th %tile	1.0	25th %tile	1.4	
Median	7.9	Median	8.2	Median	0.9	Median	1.2	
75th %tile		75th %tile	8.9	75th %tile	0.8	75th %tile	1.0	
95th %tile		95th %tile	9.8	95th %tile	0.7	95th %tile	0.9	

## **ROLLING 5 YEAR EXCESS RETURNS- NET OF FEES**

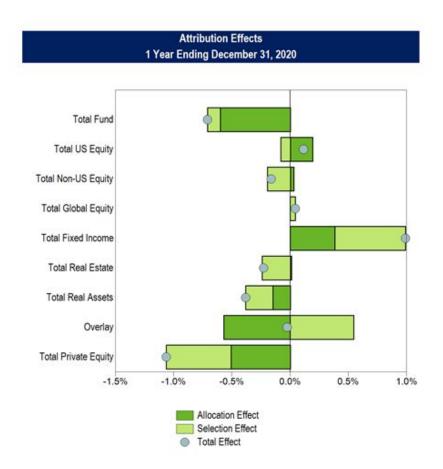






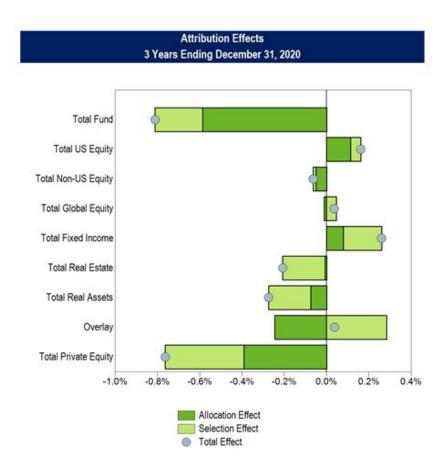
	3 Mon	Attribution S ths Ending De		020		
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total US Equity	14.2%	14.7%	-0.5%	-0.1%	0.2%	0.0%
Total Non-US Equity	17.1%	17.0%	0.0%	0.0%	-0.1%	-0.1%
Total Global Equity	14.8%	14.7%	0.1%	0.0%	0.0%	0.0%
Total Fixed Income	3.1%	0.7%	2.4%	0.5%	0.1%	0.6%
Total Real Estate	-0.9%	1.1%	-2.0%	-0.1%	0.1%	0.0%
Total Real Assets	10.4%	0.6%	9.8%	0.7%	-0.1%	0.6%
Overlay	2.2%	0.0%	2.2%	0.1%	-0.3%	-0.2%
Total Private Equity	14.9%	15.5%	-0.6%	-0.1%	-0.3%	-0.4%
Total	11.0%	10.4%	0.6%	0.9%	-0.2%	0.6%





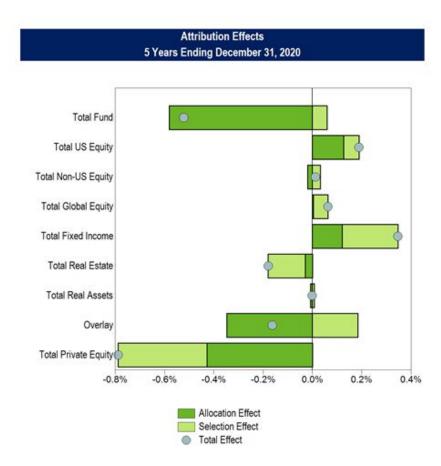
Attribution Summary 1 Year Ending December 31, 2020 Wtd. Actual Wtd. Index Excess Selection Allocation											
	Allocation Effect	Total Effects									
Total US Equity	20.5%	20.9%	-0.4%	-0.1%	0.2%	0.1%					
Total Non-US Equity	9.3%	10.7%	-1.3%	-0.2%	0.0%	-0.2%					
Total Global Equity	16.7%	16.3%	0.4%	0.0%	0.0%	0.0%					
Total Fixed Income	10.9%	7.5%	3.4%	0.6%	0.3%	1.0%					
Total Real Estate	-2.7%	0.3%	-3.0%	-0.2%	0.0%	-0.2%					
Total Real Assets	0.0%	3.4%	-3.4%	-0.3%	-0.1%	-0.4%					
Overlay	10.6%	0.5%	10.1%	0.5%	-0.6%	-0.1%					
Total Private Equity	24.5%	24.5%	0.0%	-0.6%	-0.5%	-1.1%					
Total	13.6%	14.4%	-0.8%	-0.2%	-0.6%	-0.8%					





Attribution Summary 3 Years Ending December 31, 2020											
	Wtd. Actual Wtd. Index Excess Selection Allocation Return Return Return Effect Effect										
Total US Equity	14.6%	14.5%	0.1%	0.0%	0.1%	0.1%					
Total Non-US Equity	4.8%	4.9%	-0.1%	0.0%	0.0%	-0.1%					
Total Global Equity	10.5%	10.1%	0.4%	0.0%	0.0%	0.0%					
Total Fixed Income	6.4%	5.3%	1.0%	0.2%	0.1%	0.2%					
Total Real Estate	1.4%	4.0%	-2.6%	-0.2%	0.0%	-0.2%					
Total Real Assets	2.0%	4.9%	-2.9%	-0.2%	-0.1%	-0.3%					
Overlay	11.8%	1.5%	10.3%	0.2%	-0.3%	0.0%					
Total Private Equity	17.0%	17.9%	-0.9%	-0.4%	-0.4%	-0.8%					
Total	9.1%	10.0%	-0.9%	-0.3%	-0.6%	-0.9%					





Attribution Summary 5 Years Ending December 31, 2020											
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects					
Total US Equity	15.6%	15.4%	0.2%	0.1%	0.1%	0.2%					
Total Non-US Equity	9.2%	8.9%	0.3%	0.0%	0.0%	0.0%					
Total Global Equity	12.8%	12.3%	0.6%	0.1%	0.0%	0.1%					
Total Fixed Income	5.7%	4.4%	1.2%	0.2%	0.1%	0.3%					
Total Real Estate	3.4%	5.3%	-1.9%	-0.1%	0.0%	-0.2%					
Total Real Assets	4.9%	5.4%	-0.5%	0.0%	0.0%	0.0%					
Overlay	7.9%	1.1%	6.7%	0.2%	-0.3%	-0.2%					
Total Private Equity	15.0%	18.8%	-3.8%	-0.4%	-0.4%	-0.8%					
Total	10.4%	10.9%	-0.6%	0.0%	-0.6%	-0.6%					



## **TOTAL FUND RISK STATISTICS**

				1 Year E	nding Dece	ember 31, 2020	l					
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Equity	57.2%	16.5%	27	26.8%	91	-0.2%	32	1.0%	8	0.2	23	1.0
MSCI ACWI		16.3%	31	26.0%	80	0.0%	29	0.0%	1			1.0
Total US Equity	30.0%	20.5%	16	28.0%	83	-0.7%	21	0.8%	6	-0.5		1.0
Russell 3000		20.9%	13	27.5%	75	0.0%	16	0.0%	1			1.0
Total Non-US Equity	15.9%	9.3%	86	26.1%	55	-1.4%	84	1.5%	7	-0.9		1.0
MSCI ACWI ex USA		10.7%	72	25.8%	53	0.0%	69	0.0%	1			1.0
Total Global Equity	11.3%	16.7%	9	26.0%	86	0.4%	20	0.2%	1	2.2	3	1.0
MSCI ACWI		16.3%	11	26.0%	87	0.0%	28	0.0%	1			1.0
Total Fixed Income	17.6%	10.9%	4	4.7%	48	3.0%	9	3.0%	55	1.1	13	1.1
Total Fixed Income Policy Index		7.5%	55	3.4%	28	0.0%	34	0.0%	1			1.0
Total US Fixed Income	14.1%	11.1%	5	6.0%	84	1.7%	7	4.3%	85	0.8	21	1.3
BBgBarc US Aggregate TR		7.5%	47	3.4%	42	0.0%	38	0.0%	1			1.0
Total Real Assets	6.8%	0.0%		21.0%		4.7%		21.1%		-0.2		-1.8
Real Assets Index		3.4%		1.2%		0.0%		0.0%				1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Tracking Error	Rank
Total Real Estate	6.3%	-2.7%	95	2.6%	44	1.8%	42
NCREIF ODCE Net		0.3%	49	2.3%	37	0.0%	1
Total Private Equity	10.2%	24.5%	16	12.0%	36	30.8%	89
Private Equity Benchmark		24.5%	16	27.5%	98	0.0%	1

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 (InvMetrics Public DB Total Eq consists of 87 portfolios), Total Us Equity (InvMetrics Public DB US Eq consists of 161 portfolios), Total Non-US Equity (InvMetrics Public DB ex-US Eq consists of 108 portfolios), Total Global Equity (InvMetrics Public DB Glob Eq consists of 48 portfolios), Total Fixed Income (InvMetrics Public DB Total Fix Inc consists of 87 portfolios), Total US Fixed Income (InvMetrics Public DB Total Fixed Income (InvMetrics Public DB Vertices Public DB), Total Fixed Income (InvMetrics Public DB Vertices Public DB), Total Fixed Income (InvMetrics Public DB Vertices Public DB), Total Fixed Income (InvMetrics Public DB Vertices), Total Real Estate (InvMetrics Public DB Vertices), Total Private Equity (InvMetrics Public DB Vertices), Total Private Equity (InvMetrics Public DB Vertices), Total Real Estate (InvMetrics), Total Vertices), Total Vertices Public DB Vertices, Total Vertices,



## **TOTAL FUND RISK STATISTICS**

				3 Years E	Ending Dec	ember 31, 2020	)					
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Equity	57.2%	11.0%	23	18.8%	70	0.8%	17	0.9%	7	1.0	2	1.0
MSCI ACWI		10.1%	52	18.4%	59	0.0%	28	0.0%	1			1.0
Total US Equity	30.0%	14.6%	7	19.9%	63	0.0%	13	0.5%	3	0.3	7	1.0
Russell 3000		14.5%	12	19.7%	59	0.0%	14	0.0%	1			1.0
Total Non-US Equity	15.9%	4.8%	74	18.1%	30	-0.1%	64	1.2%	6	-0.1		1.0
MSCI ACWI ex USA		4.9%	71	18.2%	32	0.0%	62	0.0%	1			1.0
Total Global Equity	11.3%	10.5%	10	18.4%	78	0.4%	43	0.1%	1	3.3	1	1.0
MSCI ACWI		10.1%	33	18.4%	79	0.0%	69	0.0%	1			1.0
Total Fixed Income	17.6%	6.4%	4	3.6%	42	1.3%	12	1.8%	52	0.6	9	0.9
Total Fixed Income Policy Index		5.3%	44	3.4%	35	0.0%	66	0.0%	1			1.0
Total US Fixed Income	14.1%	6.4%	11	4.2%	83	1.2%	8	2.6%	84	0.4	18	1.0
BBgBarc US Aggregate TR		5.3%	38	3.4%	54	0.0%	59	0.0%	1			1.0
Total Real Assets	6.8%	2.0%		13.8%		0.0%		13.8%		-0.2		0.1
Real Assets Index		4.9%		1.1%		0.0%		0.0%				1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Tracking Error	Rank
Total Real Estate	6.3%	1.4%	97	2.8%	55	1.9%	41
NCREIF ODCE Net		4.0%	66	2.5%	42	0.0%	1
Total Private Equity	10.2%	17.0%	24	8.2%	42	22.0%	80
Private Equity Benchmark		17.9%	20	19.7%	94	0.0%	1

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 (InvMetrics Public DB Total Eq consists of 84 portfolios), Total Us Equity (InvMetrics Public DB US Eq consists of 159 portfolios), Total Non-US Equity (InvMetrics Public DB ex-US Eq consists of 107 portfolios), Total Global Equity (InvMetrics Public DB Glbl Eq consists of 41 portfolios), Total Fixed Income (InvMetrics Public DB Total Fix Inc consists of 86 portfolios), Total US Fixed Income (InvMetrics Public DB Total Fix Inc consists of 86 portfolios), Total US Fixed Income (InvMetrics Public DB US Fix Inc consists of 93 portfolios), Total Real Estate (InvMetrics Public DB Real Estate Pub+Priv consists of 51 portfolios) and Total Private Equity(InvMetrics Public DB Private Eq consists of 40 portfolios).



## **TOTAL FUND RISK STATISTICS**

5 Years Ending December 31, 2020												
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Equity	57.2%	13.3%	11	15.3%	66	0.9%	10	1.0%	11	1.0	1	1.0
MSCI ACWI		12.3%	51	15.1%	57	0.0%	29	0.0%	1			1.0
Total US Equity	30.0%	15.6%	7	16.1%	56	0.1%	8	0.5%	3	0.4	4	1.0
Russell 3000		15.4%	11	16.0%	52	0.0%	9	0.0%	1			1.0
Total Non-US Equity	15.9%	9.2%	60	15.2%	24	0.4%	50	1.2%	4	0.2	42	1.0
MSCI ACWI ex USA		8.9%	72	15.4%	32	0.0%	62	0.0%	1			1.0
Total Global Equity	11.3%	12.8%	3	15.1%	71	0.6%	17	0.4%	1	1.5	1	1.0
MSCI ACWI		12.3%	10	15.1%	71	0.0%	66	0.0%	1			1.0
Total Fixed Income	17.6%	5.7%	31	3.2%	41	1.7%	29	1.7%	46	0.7	5	0.9
Total Fixed Income Policy Index		4.4%	66	3.2%	36	0.0%	77	0.0%	1			1.0
Total US Fixed Income	14.1%	5.7%	15	3.6%	82	1.6%	13	2.2%	83	0.6	17	0.9
BBgBarc US Aggregate TR		4.4%	49	3.2%	58	0.0%	72	0.0%	1			1.0
Total Real Assets	6.8%	4.9%		11.5%		-0.1%		11.5%		0.0		0.9
Real Assets Index		5.4%		1.0%		0.0%		0.0%				1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Tracking Error	Rank
Total Real Estate	6.3%	3.4%	95	2.8%	46	1.5%	22
NCREIF ODCE Net		5.3%	71	2.7%	43	0.0%	1
Total Private Equity	10.2%	15.0%	28	7.2%	42	17.9%	82
Private Equity Benchmark		18.8%	17	16.0%	93	0.0%	1

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 (InvMetrics Public DB Total Eq consists of 77 portfolios), Total Us Equity (InvMetrics Public DB US Eq consists of 145 portfolios), Total Non-US Equity (InvMetrics Public DB ex-US Eq consists of 100 portfolios), Total Global Equity (InvMetrics Public DB Glbl Eq consists of 35 portfolios), Total Fixed Income (InvMetrics Public DB Total Fix Inc consists of 79 portfolios), Total US Fixed Income (InvMetrics Public DB Total Fix Inc consists of 79 portfolios), Total US Fixed Income (InvMetrics Public DB US Fix Inc consists of 91 portfolios), Total Real Estate (InvMetrics Public DB Real Estate Pub+Priv consists of 50 portfolios) and Total Private Equity(InvMetrics Public DB Private Eq consists of 38 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	6,900,496,861	100.0	100.0	11.0	28	17.4	16	13.6	14	9.1	18	10.4	14	8.8	16	8.3	Apr-94
Policy Index				<u>10.4</u>	42	<u>16.9</u>	26	<u>14.4</u>	12	<u>10.0</u>	6	<u>10.9</u>	8	<u>9.2</u>	9	<u>8.4</u>	Apr-94
Over/Under				0.6		0.5		-0.8		-0.9		-0.5		-0.4		-0.1	
60% MSCI ACWI (Net) / 40% FTSE WGBI				9.9	55	16.6	30	14.5	11	8.4	28	9.5	34	6.6	93	6.8	Apr-94
60% S&P 500 / 40% BBgBarc Aggregate				7.5	97	13.6	89	14.7	9	11.0	1	11.1	6	10.0	1	8.7	Apr-94
InvMetrics Public DB > \$1B Net Median				10.1		15.5		10.8		7.4		9.0		7.9		7.7	Apr-94
Total Fund ex Parametric*	6,816,908,400	98.8	-	11.0		17.2		13.1		8.8		10.2	-	8.7		8.2	Apr-94
Total Fund ex Private Equity	6,198,045,164	89.8	-	10.6	34	16.8	27	12.7	25	8.6	23	10.1	21			9.3	Jan-12
Policy Index				<u>10.4</u>	42	<u>16.9</u>	26	<u>14.4</u>	12	<u>10.0</u>	6	<u>10.9</u>	8	<u>9.2</u>	9	<u>10.2</u>	Jan-12
Over/Under				0.2		-0.1		-1.7		-1.4		-0.8				-0.9	
InvMetrics Public DB > \$1B Net Median				10.1		15.5		10.8		7.4		9.0		7.9	_	8.8	Jan-12
Total US Equity	2,067,698,804	30.0	25.0	14.2	94	24.9	48	20.5	16	14.6	7	15.6	7	14.0	4	10.0	Dec-93
Russell 3000				<u>14.7</u>	84	<u>25.2</u>	37	<u>20.9</u>	13	<u>14.5</u>	12	<u>15.4</u>	11	<u>13.8</u>	8	<u>10.2</u>	Dec-93
Over/Under				-0.5		-0.3		-0.4		0.1		0.2		0.2		-0.2	
InvMetrics Public DB US Eq Net Median				15.5		24.9		17.6	10	12.8		14.2		12.8		9.7	Dec-93
Western U.S. Index Plus	296,542,621	4.3		13.6	<u>39</u>	25.0	24	17.9	<u>40</u>	14.2	<u>36</u>	15.8	29	14.6	26 00	7.7	May-07
S&P 500				<u>12.1</u>	55	22.2	49	<u>18.4</u>	39	<u>14.2</u>	36	<u>15.2</u>	32	<u>13.9</u>	32	<u>9.1</u>	May-07
Over/Under				1.5		2.8		-0.5		0.0		0.6		0.7		-1.4	14. 07
eV US Large Cap Equity Net Median Blackrock Russell 1000 Index	1 000 440 204	04.4		12.5	27	22.1	28	14.0	34	11.3 14.9	33	13.0		12.5		8.6	May-07
Russell 1000	1,686,419,384	24.4		13.7	37 37	24.5	28 28	21.0	34 34		33 33		 30		 30	16.0	May-17
Over/Under				<u>13.7</u> 0.0	37	<u>24.5</u> 0.0	28	<u>21.0</u> 0.0	34	<u>14.8</u> 0.1	33	<u>15.6</u>	30	<u>14.0</u>	30	<u>15.9</u> 0.1	May-17
eV US Large Cap Equity Net Median				0.0 12.5		22.1		0.0 14.0		11.3		13.0		12.5		13.0	May-17
Blackrock Russell 2500 Index	84,736,799	1.2		27.4	27	34.9	30	20.0	44	11.4	47			12.5		12.6	May-17 May-17
Russell 2500	04,730,799	1.2		<u>27.4</u>	27	<u>34.9</u>	30 30	<u>20.0</u>	44 44	<u>11.4</u>	47	<u></u> <u>13.6</u>	41	 <u>12.0</u>	 36	<u>12.0</u> <u>12.5</u>	May-17 May-17
Over/Under				0.0	21	<u>34.9</u> 0.0	30	<u>20.0</u> 0.0	44	0.1	47	13.0	41	12.0	30	0.1	ividy-11
eV US Small-Mid Cap Equity Net Median				24.2		31.6		16.5		10.1		12.4		11.1		11.7	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 as of July 2020: 25% Russell 3000 Index, 16% MSCI ACWI ex U.S., 10% MSCI ACWI, 15% Russell 3000 +3%, 20% BBgBarc US Aggregate, 8% NCREIF ODCE, 6% CPI +2%.

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	1,095,860,295	15.9	16.0	17.1	57	24.8	71	9.3	86	4.8	74	9.2	60	5.4	63	6.6	Mar-94
MSCI ACWI ex USA				<u>17.0</u>	60	<u>24.3</u>	77	<u>10.7</u>	72	<u>4.9</u>	71	<u>8.9</u>	72	<u>4.9</u>	86	<u>5.5</u>	Mar-94
Over/Under				0.1		0.5		-1.4		-0.1		0.3		0.5		1.1	
MSCI EAFE				16.0	80	21.6	96	7.8	93	4.3	84	7.4	95	5.5	57	5.1	Mar-94
MSCI ACWI ex USA NR LCL				12.6	99	16.5	99	6.0	99	5.0	64	7.9	92	6.9	15		Mar-94
MSCI EAFE NR LCL				11.4	99	12.7	99	0.8	99	3.0	97	5.8	99	6.8	15	4.8	Mar-94
InvMetrics Public DB ex-US Eq Net Median				17.2		25.6		12.2		5.4		9.5		5.8		6.1	Mar-94
BlackRock ACWI ex-U.S. Index	568,537,973	8.2		17.2	41	25.1	69	11.2	69	5.0	73	9.2	65	5.3	81	3.7	Mar-07
MSCI ACWI ex USA IMI				<u>17.2</u>	41	<u>25.2</u>	69	<u>11.1</u>	69	<u>4.8</u>	73	<u>9.0</u>	70	<u>5.1</u>	83	<u>3.5</u>	Mar-07
Over/Under				0.0		-0.1		0.1		0.2		0.2		0.2		0.2	
MSCI ACWI ex USA NR LCL				12.6	85	16.5	93	6.0	81	5.0	73	7.9	79	6.9	63	4.0	Mar-07
eV ACWI ex-US All Cap Equity Net Median				16.4		27.1		19.1		8.3		10.9		7.5		5.5	Mar-07
Sprucegrove	251,477,366	3.6		24.5	9	31.4	24	4.0	84	1.7	87	8.5	73	4.9	83	7.1	Mar-02
MSCI ACWI ex USA				<u>17.0</u>	45	<u>24.3</u>	73	<u>10.7</u>	69	<u>4.9</u>	73	<u>8.9</u>	70	<u>4.9</u>	83	<u>6.7</u>	Mar-02
Over/Under				7.5		7.1		-6.7		-3.2		-0.4		0.0		0.4	
MSCI EAFE				16.0	55	21.6	82	7.8	76	4.3	74	7.4	80	5.5	79	6.1	Mar-02
MSCI ACWI ex USA NR LCL				12.6	85	16.5	93	6.0	81	5.0	73	7.9	79	6.9	63	5.6	Mar-02
MSCI EAFE NR LCL				11.4	90	12.7	98	0.8	88	3.0	77	5.8	89	6.8	64	4.6	Mar-02
eV ACWI ex-US All Cap Equity Net Median				16.4		27.1		19.1		8.3		10.9		7.5		7.7	Mar-02
Hexavest	94,582,105	1.4		9.6	93	13.5	96	-4.3	98	-0.3	92	3.8	92	3.5	92	3.5	Dec-10
MSCI EAFE				<u>16.0</u>	34	<u>21.6</u>	56	<u>7.8</u>	56	<u>4.3</u>	57	<u>7.4</u>	56	<u>5.5</u>	72	<u>5.5</u>	Dec-10
Over/Under				-6.4		-8.1		-12.1		-4.6		-3.6		-2.0		-2.0	
MSCI EAFE NR LCL				11.4	87	12.7	97	0.8	85	3.0	64	5.8	70	6.8	44	6.8	Dec-10
eV EAFE All Cap Equity Net Median				14.9		22.6		8.4		4.6		7.7		6.4		6.4	Dec-10
Walter Scott	181,262,851	2.6		11.3	90	21.4	84	20.4	45 45	12.6	15	13.7	22	8.3	36	8.3	Dec-10
MSCI ACWI ex USA				<u>17.0</u>	45	<u>24.3</u>	73	<u>10.7</u>	69	<u>4.9</u>	73	<u>8.9</u>	70	<u>4.9</u>	83	<u>4.9</u>	Dec-10
Over/Under				-5.7		-2.9		9.7		7.7		4.8		3.4		3.4	
MSCI ACWI ex USA NR LCL				12.6	85	16.5	93	6.0	81	5.0	73	7.9	79	6.9	63	6.9	Dec-10
MSCIEAFE				16.0	55	21.6	82	7.8	76	4.3	74	7.4	80	5.5	79	5.5	Dec-10
eV ACWI ex-US All Cap Equity Net Median				16.4		27.1		19.1		8.3		10.9		7.5		7.5	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	780,924,031	11.3	10.0	14.8	36	24.2	32	16.7	9	10.5	10	12.8	3	9.2	43	7.2	May-05
MSCI ACWI				14.7	37	<u>24.0</u>	33	<u>16.3</u>	11	<u>10.1</u>	33	12.3	10	<u>9.1</u>	44	<u>7.8</u>	May-05
Over/Under				0.1		0.2		0.4		0.4		0.5		0.1		-0.6	
InvMetrics Public DB Glbl Eq Net Median				14.2		22.5		13.2		9.4		10.9		7.8		7.2	May-05
BlackRock MSCI ACWI Equity Index	780,924,031	11.3		14.8	46	24.2	47	16.7	44	10.5	43	12.7	<mark>36</mark>			11.5	Aug-12
MSCI ACWI				<u>14.7</u>	47	<u>24.0</u>	48	<u>16.3</u>	47	<u>10.1</u>	47	<u>12.3</u>	42	<u>9.1</u>	52	<u>11.0</u>	Aug-12
Over/Under				0.1		0.2		0.4		0.4		0.4				0.5	
eV All Global Equity Net Median				14.3		23.6		15.2		9.2		10.9		9.2		10.8	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	702,451,697	10.2	15.0	14.9	6	24.0	18	24.5	16	17.0	24	15.0	28			15.2	Jan-12
Private Equity Benchmark				<u>15.5</u>	5	<u>27.0</u>	9	<u>24.5</u>	16	<u>17.9</u>	20	<u>18.8</u>	17	<u>17.2</u>	7	<u>18.7</u>	Jan-12
Over/Under				-0.6		-3.0		0.0		-0.9		-3.8				-3.5	
C A Global All PE (Qtr Lag)				9.9	31	20.5	34	14.9	40	13.0	50	12.6	47	12.8	47	12.8	Jan-12
InvMetrics Public DB Private Eq Net Median				8.6		16.2		14.0		13.0		11.8		12.2		12.4	Jan-12
Adams Street Global Fund Series	213,989,642	3.1		11.2		23.8		26.9		16.5		13.9				14.0	Jan-12
Russell 3000 + 3%				<u>15.5</u>		<u>27.0</u>		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>18.7</u>	Jan-12
Over/Under				-4.3	_	-3.2		2.4	_	-1.4		-5.0				-4.7	
Harbourvest	126,564,805	1.8		22.6		25.4		19.6		18.1		16.7				18.8	Aug-13
Russell 3000 + 3%				<u>15.5</u>		<u>27.0</u>		24.5		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>17.0</u>	Aug-13
Over/Under	48.918.540	0.7		7.1 9.7		-1.6		-4.9 6.4		0.2 7.5		-2.2 12.2				1.8 11.0	Jan-12
Pantheon Global Secondary Funds Russell 3000 + 3%	48,918,540	0.7		9.7 <u>15.5</u>		13.8 27.0		<u>0.4</u> 24.5		7.5 <u>17.9</u>		<u>12.2</u> <u>18.9</u>		 <u>17.2</u>		<u>18.7</u>	Jan-12 Jan-12
Over/Under				<u>-5.8</u>		-13.2		- <u>18.1</u>		-10.4		<u>-6.7</u>		<u>11.2</u>		<u>-7.7</u>	Jdll-12
Drive Capital Fund II	20.288.053	0.3		0.1		-1.0		12.3		18.8		-0.7				-5.4	Sep-16
Russell 3000 + 3%				15.5		27.0		24.5		17.9		<u>18.9</u>		17.2		19.4	Sep-16
Over/Under				-15.4		-28.0		-12.2		0.9						-24.8	,
Abbott Secondary Opportunities	15,865,241	0.2		7.6		25.7		40.5		24.5						24.5	Jan-18
Russell 3000 + 3%				<u>15.5</u>		<u>27.0</u>		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>17.9</u>	Jan-18
Over/Under				-7.9		-1.3	_	16.0		6.6						6.6	
Clearlake Capital Partners V	12,564,561	0.2		13.7		31.3		27.8								38.0	Mar-18
Russell 3000 + 3%				<u>15.5</u>		<u>27.0</u>		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>18.3</u>	Mar-18
Over/Under	47 740 570	0.0		-1.8		4.3		3.3								19.7	4 40
Battery Ventures XII Russell 3000 + 3%	17,748,570	0.3		31.2		33.7		46.7		 17.9		 18.9		 17.2		13.8	Apr-18 Apr-18
Over/Under				<u>15.5</u> 15.7		<u>27.0</u> 6.7		<u>24.5</u> 22.2		<u>11.9</u>		10.9		<u>11.2</u>		<u>19.6</u> -5.8	Арт-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.

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# **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
Insight Venture Partners X	38,815,057	0.6		27.5		43.1		46.2								21.3	May-18
Russell 3000 + 3%				<u>15.5</u>		<u>27.0</u>		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>20.0</u>	May-18
Over/Under				12.0		16.1		21.7								1.3	
GTCR Fund XII	19,414,214	0.3		16.4		48.2		55.6								-11.5	Jun-18
Russell 3000 + 3%				<u>15.5</u>		<u>27.0</u>		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>19.3</u>	Jun-18
Over/Under				0.9	_	21.2	_	31.1								-30.8	
Buenaventure One, LLC	70,689,207	1.0		12.8		17.0		17.7								9.2	Jul-18
Russell 3000 + 3%				<u>15.5</u>		<u>27.0</u>		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>19.6</u>	Jul-18
Over/Under				-2.7		-10.0		-6.8								-10.4	
ECI 11	5,040,439	0.1		12.7		35.5		20.8								24.6	Dec-18
Russell 3000 + 3%				<u>15.5</u>		<u>27.0</u>		24.5		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>22.5</u>	Dec-18
Over/Under	40.074.770	0.0		-2.8		8.5		-3.7								2.1	L 40
The Resolute Fund IV L.P	19,874,772	0.3		22.7		35.9		42.2								60.7	Jan-19
Russell 3000 + 3% Over/Under				<u>15.5</u> 7.2		<u>27.0</u> 8.9		<u>24.5</u> 17.7		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>29.6</u> 31.1	Jan-19
GGV Capital VII L.P.	7,326,100	0.1		3.8		6.9		9.7								-8.4	Feb-19
Russell 3000 + 3%	7,520,100	0.1				<u>27.0</u>				 <u>17.9</u>		 <u>18.9</u>		 <u>17.2</u>		-0.4 <u>25.4</u>	Feb-19
Over/Under				<u>15.5</u> -11.7		<u>-20.1</u>		<u>24.5</u> -14.8		11.9		10.9		<u>11.2</u>		<u>-33.8</u>	rep-19
GGV Discovery II, L.P.	1,299,218	0.0		-11.7		-20.1		-14.0								-33.0	Feb-19
Russell 3000 + 3%	1,233,210	0.0		<u>15.5</u>		<u>27.0</u>		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		 17.2		4.2 25.4	Feb-19
Over/Under				-12.4		-20.0		-13.3		11.3		10.3		<u>11.2</u>		-21.2	160-13
Drive Capital Overdrive Fund I	5,794,870	0.1		48.3		48.3		45.4								22.5	May-19
Russell 3000 + 3%	0,101,010	0.1		15.5		27.0		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		22.5	May-19
Over/Under				32.8		21.3		20.9		<u></u>		1010				0.0	indy io
Riverside Micro Cap Fund V, LP	3,251,671	0.0		11.2		10.1		1.7								-17.5	May-19
Russell 3000 + 3%	-,,			<u>15.5</u>		27.0		24.5		17.9		18.9		17.2		22.5	May-19
Over/Under				-4.3		-16.9		-22.8								-40.0	
GGV Capital VII Plus, LP	1,827,953	0.0		10.7		15.8		15.7								9.9	Jun-19
Russell 3000 + 3%	, ,,,,,,,,			<u>15.5</u>		<u>27.0</u>		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		17.2		28.9	Jun-19
Over/Under				-4.8		-11.2		-8.8								-19.0	

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.



# **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
Astorg VII L.P.	3,524,548	0.1		27.9		63.8		62.3								-8.1	Jul-19
Russell 3000 + 3% Over/Under				<u>15.5</u> 12.4		<u>27.0</u> 36.8		<u>24.5</u> 37.8		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>24.8</u> -32.9	Jul-19
M/C Partners Fund VIII LP. Limited Partnership	2,653,350	0.0		-1.9		9.2		-35.1								-34.5	Jul-19
Russell 3000 + 3% Over/Under				<u>15.5</u> -17.4		<u>27.0</u> -17.8		<u>24.5</u> -59.6		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>24.8</u> -59.3	Jul-19
Genstar Capital Partners IX	3,377,222	0.0		15.1		27.3		27.1									Aug-19
Russell 3000 + 3% Over/Under				<u>15.5</u> -0.4		<u>27.0</u> 0.3		<u>24.5</u> 2.6		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>24.9</u>	Aug-19
Genstar IX Opportunities Fund I	1,649,234	0.0		6.0		13.3		12.6								8.5	Aug-19
Russell 3000 + 3% Over/Under				<u>15.5</u> -9.5		<u>27.0</u> -13.7		<u>24.5</u> -11.9		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>24.9</u> -16.4	Aug-19
ABRY Partners IX, LP	5,096,839	0.1		9.5		24.6		-15.0								-21.8	Sep-19
Russell 3000 + 3% Over/Under				<u>15.5</u> -6.0		<u>27.0</u> -2.4		<u>24.5</u> -39.5		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>28.4</u> -50.2	Sep-19
Advent International GPE IX LP	4,419,336	0.1		11.0		33.0		29.0								18.0	Nov-19
Russell 3000 + 3% Over/Under				<u>15.5</u> -4.5		<u>27.0</u> 6.0		<u>24.5</u> 4.5		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>28.2</u> -10.2	Nov-19
Drive Capital Fund III LP	1,562,200	0.0		10.1		10.1		-9.0								-8.4	Dec-19
Russell 3000 + 3% Over/Under				<u>15.5</u> -5.4		<u>27.0</u> -16.9		<u>24.5</u> -33.5		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>25.9</u> -34.3	Dec-19
Oak HC/FT Partners III LP	10,491,077	0.2		18.6		16.3		3.2								2.9	Dec-19
Russell 3000 + 3% Over/Under				<u>15.5</u> 3.1		<u>27.0</u> -10.7		<u>24.5</u> -21.3		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>25.9</u> -23.0	Dec-19
TA XIII A LP	5,699,260	0.1		5.6		21.6		1.9								1.9	Dec-19
Russell 3000 + 3% Over/Under				<u>15.5</u> -9.9		<u>27.0</u> -5.4		<u>24.5</u> -22.6		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>24.5</u> -22.6	Dec-19
Dover Street X, LP	10,320,708	0.1		57.8		57.2										39.9	Feb-20
Russell 3000 + 3% Over/Under				<u>15.5</u> 42.3		<u>27.0</u> 30.2		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>24.3</u> 15.6	Feb-20
Hellman & Friedman CP IX	9,369,156	0.1		5.9		26.9										-2.5	Apr-20
Russell 3000 + 3% Over/Under				<u>15.5</u> -9.6		<u>27.0</u> -0.1		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>56.1</u> -58.6	Apr-20

# **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
Clearlake Capital Partners VI	4,928,572	0.1		11.7		11.7										11.7	Jun-20
<i>Russell 3000</i> + <i>3%</i> Over/Under				<u>15.5</u> - <mark>3.8</mark>		<u>27.0</u> -15.3		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>30.3</u> -18.6	Jun-20
Flexpoint Fund IV	1,496,237	0.0		-12.7		10.7										10.7	Jun-20
<i>Russell 3000</i> + <i>3%</i> Over/Under				<u>15.5</u> -28.2		<u>27.0</u> -16.3		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>30.3</u> -19.6	Jun-20
Battery Ventures XIII	4,396,013	0.1		6.4		2.2										2.2	Jun-20
<i>Russell 3000</i> + 3% Over/Under				<u>15.5</u> - <mark>9</mark> .1		<u>27.0</u> -24.8		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>30.3</u> -28.1	Jun-20
Green Equity Investors VIII, L.P.	1,955,243	0.0														0.0	Nov-20
<i>Russell 3000</i> + 3% Over/Under				<u>15.5</u>		<u>27.0</u>		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>17.7</u> -17.7	Nov-20
CapVest Private Equity Partners IV, SCSp	867,625	0.0														2.3	Dec-20
<i>Russell 3000</i> + 3% Over/Under				<u>15.5</u>		<u>27.0</u>		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		<u>4.7</u> -2.4	Dec-20
Great Hill Equity Partners VII	379,549	0.0															Jan-21
<i>Russell 3000</i> + <i>3%</i> Over/Under				<u>15.5</u>		<u>27.0</u>		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>		-	Jan-21
Vitruvian Investment Partners IV	278,123	0.0															Jan-21
Russell 3000 + 3% Over/Under				<u>15.5</u>		<u>27.0</u>		<u>24.5</u>		<u>17.9</u>		<u>18.9</u>		<u>17.2</u>			Jan-21



# **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	972,230,383	14.1	13.0	2.6	11	4.6	10	11.1	5	6.4	11	5.7	15	4.8	21	6.0	Feb-94
BBgBarc US Aggregate TR				<u>0.7</u>	60	<u>1.3</u>	82	<u>7.5</u>	47	<u>5.3</u>	38	4.4	49	<u>3.8</u>	52	<u>5.4</u>	Feb-94
Over/Under				1.9		3.3		3.6		1.1		1.3		1.0		0.6	
InvMetrics Public DB US Fix Inc Net				0.8		1.7		7.3		5.0		4.3		3.9		5.4	Feb-94
Median																	
BlackRock U.S. Debt Fund	179,368,681	2.6		0.7	71	1.3	75	7.6	35	5.4	38	4.5	<u>49</u>	3.9	<mark>54</mark>	5.2	Nov-95
BBgBarc US Aggregate TR				<u>0.7</u>	71	<u>1.3</u>	75	<u>7.5</u>	36	<u>5.3</u>	39	<u>4.4</u>	50	<u>3.8</u>	56	<u>5.2</u>	Nov-95
Over/Under				0.0		0.0		0.1		0.1		0.1		0.1		0.0	
eV All US Fixed Inc Net Median	000 070 000	4.5		1.4	00	2.8	00	6.0	10	4.8	4.5	4.4	00	4.0	07	5.0	Nov-95
Western	309,270,909	4.5		2.2	39	4.0	39 75	10.9	13 36	6.8	15 39	6.1	26	5.4	27	6.3	Dec-96
BBgBarc US Aggregate TR Over/Under				<u>0.7</u> 1.5	71	<u>1.3</u> 2.7	75	<u>7.5</u> 3.4	30	<u>5.3</u> 1.5	39	<u>4.4</u> 1.7	50	<u>3.8</u> 1.6	56	<u>5.2</u>	Dec-96
eV All US Fixed Inc Net Median				1.5 1.4		2.7		5.4 6.0		1.5 4.8		4.4		1.0 4.0		1.1 5. <i>1</i>	Dec-96
Reams	344,088,888	5.0		3.3	26	2.0 5.6	27	12.0	10	4.0 6.3	19	4.4 5.5	31	4.0	41	5.5	Sep-01
Reams Custom Index	544,000,000	5.0		<u>0.1</u>	20 95	<u>0.1</u>	21 96	<u>0.6</u>	97	<u>1.8</u>	97	<u>1.5</u>	96	<u>4.4</u> <u>1.9</u>	85	<u>3.6</u>	Sep-01 Sep-01
Over/Under				<u>0.1</u> 3.2	30	<u>0.1</u> 5.5	30	<u>0.0</u> 11.4	51	<u>1.0</u> 4.5	51	<u>1.0</u> 4.0	30	2.5	00	<u>5.0</u> 1.9	060-01
BBgBarc US Aggregate TR				0.2	71	1.3	75	7.5	36	5.3	39	4.4	50	3.8	56	4.6	Sep-01
3-Month LIBOR + 3%				0.8	67	1.6	69	3.6	75	4.8	49	4.5	49	3.9	53	4.8	Sep-01
eV All US Fixed Inc Net Median				1.4		2.8		6.0		4.8		4.4		4.0		4.6	Sep-01
Loomis Strategic Alpha	48.408.923	0.7		4.7	17	8.1	16	10.9	13	5.2	43	5.0	38			3.7	Jul-13
BBgBarc US Aggregate TR	-,,			0.7	71	<u>1.3</u>	75	<u>7.5</u>	36	<u>5.3</u>	39	4.4	50	3.8	56	<u>3.9</u>	Jul-13
Over/Under				4.0		6.8		3.4		-0.1		0.6				-0.2	
3-Month LIBOR + 3%				0.8	67	1.6	69	3.6	75	4.8	49	4.5	49	3.9	53	4.1	Jul-13
eV All US Fixed Inc Net Median				1.4		2.8		6.0		4.8		4.4		4.0		3.9	Jul-13
Loomis Sayles Multi Strategy	91,092,983	1.3		4.7	17	7.5	18	12.9	9	7.0	14	7.5	16	6.3	16	6.7	Jul-05
Loomis Custom Index				<u>2.4</u>	36	<u>4.3</u>	36	<u>7.3</u>	39	<u>5.6</u>	34	<u>5.6</u>	29	<u>4.7</u>	38	<u>5.2</u>	Jul-05
Over/Under				2.3		3.2		5.6		1.4		1.9		1.6		1.5	
BBgBarc US Govt/Credit TR				0.8	65	1.6	69	8.9	22	6.0	25	5.0	38	4.2	47	4.6	Jul-05
eV All US Fixed Inc Net Median				1.4		2.8		6.0		4.8		4.4		4.0		4.4	Jul-05
Treasuries	92,433,897	1.3	2.0	-1.8		-1.2		11.4							-	9.6	Apr-19
Reams 10-Year Treasuries	92,433,897	1.3		-1.8		-1.2		11.4								9.6	Apr-19
BBgBarc US Treasury 7-10 Yr TR				<u>-1.3</u>		<u>-1.0</u>		<u>10.0</u>		<u>6.4</u>		<u>4.5</u>		<u>4.6</u>		<u>8.8</u>	Apr-19
Over/Under				-0.5		-0.2		1.4								0.8	

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
Private Debt	150,841,508	2.2	5.0	9.7		12.8		7.1		6.7						6.7	Jan-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>5.0</u>		<u>9.9</u>		<u>6.1</u>		<u>6.7</u>		-				<u>6.7</u>	Jan-18
Over/Under				4.7	_	2.9		1.0		0.0						0.0	
CVI Credit Value Fund	31,123,993	0.5		4.0		16.4		2.1		4.6						4.6	Jan-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>5.0</u>		<u>9.9</u>		<u>6.1</u>		<u>6.7</u>						<u>6.7</u>	Jan-18
Over/Under				-1.0		6.5		-4.0		-2.1						-2.1	
Monroe Capital Private Credit Fund III	21,258,594	0.3		5.1		11.5		11.2								10.7	Dec-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>5.0</u>		<u>9.9</u>		<u>6.1</u>		<u>6.7</u>						<u>8.2</u>	Dec-18
Over/Under				0.1		1.6		5.1								2.5	
Bluebay Direct Lending Fund III	9,552,910	0.1		2.3		7.2		7.1								8.6	Apr-19
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>5.0</u>		<u>9.9</u>		<u>6.1</u>		<u>6.7</u>						<u>7.5</u>	Apr-19
Over/Under				-2.7		-2.7		1.0								1.1	
Pimco Private Income Fund	60,401,935	0.9		11.0		11.0		11.3								9.6	Nov-19
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>5.0</u>		<u>9.9</u>		<u>6.1</u>		<u>6.7</u>						<u>7.4</u>	Nov-19
Over/Under				6.0		1.1		5.2								2.2	
Bridge Debt Strategies III Limited Partner	23,529,177	0.3		20.3		16.3		2.6								2.6	Jan-20
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index + 150bps				<u>5.0</u>		<u>9.9</u>		<u>6.1</u>		<u>6.7</u>		-				<u>6.1</u>	Jan-20
Over/Under	4 074 000	0.4		15.3		6.4		-3.5								-3.5	NA 00
PIMCO Corp Opps Fund III	4,974,898	0.1		15.8		15.8										33.8	May-20
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>5.0</u>		<u>9.9</u>		<u>6.1</u>		<u>6.7</u>						<u>15.8</u>	May-20
Over/Under				10.8		5.9										18.0	

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 Estate	436,183,870	6.3	8.0	-0.9	99	-1.0	99	-2.7	95	1.4	97	3.4	95	7.4	78	7.1	Mar-94
NCREIF ODCE Net Over/Under InvMetrics Public DB Real Estate				<u>1.1</u> -2.0	71	<u>1.4</u> -2.4	71	<u>0.3</u> -3.0	49	<u>4.0</u> -2.6	66	<u>5.3</u> -1.9	71	<u>8.9</u> -1.5	55	<u>7.6</u> -0.5	Mar-94
Pub+Priv Net Median				1.7		1.7		0.2		4.7		6.2		9.0		7.8	Mar-94
Prudential Real Estate	168,998,678	2.4		1.4		1.7		2.1		5.4		6.2		9.8		6.0	Jun-04
NCREIF ODCE Net Over/Under				<u>1.1</u> 0.3		<u>1.4</u> 0.3		<u>0.3</u> 1.8		<u>4.0</u> 1.4		<u>5.3</u> 0.9		<u>8.9</u> 0.9		<u>6.5</u> -0.5	Jun-04
NCREIF ODCE			_	1.3		1.8		1.2		4.9		6.2		9.9		7.5	Jun-04
UBS Real Estate	250,043,963	3.6		-2.0		-2.4		-4.7		-0.5		1.9		6.2		6.0	Mar-03
NCREIF ODCE Net Over/Under				<u>1.1</u> -3.1		<u>1.4</u> -3.8		<u>0.3</u> -5.0		<u>4.0</u> -4.5		<u>5.3</u> -3.4		<u>8.9</u> -2.7		<u>6.7</u> -0.7	Mar-03
NCREIF ODCE			_	1.3		1.8		1.2		4.9		6.2		9.9		7.7	Mar-03
LaSalle Income + Growth VIII Limited Partnership	17,141,229	0.2		-6.9		-6.9										-19.0	Mar-20
NCREIF ODCE Net Over/Under				<u>1.1</u> -8.0		<u>1.4</u> -8.3		<u>0.3</u>		<u>4.0</u>		<u>5.3</u>		<u>8.9</u>		<u>0.3</u> -19.3	Mar-20
NCREIF ODCE				1.3		1.8		1.2		4.9		6.2		9.9		1.2	Mar-20

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	468,321,616	6.8	6.0	10.4		11.7		0.0		2.0		4.9				3.9	Apr-13
Real Assets Index				<u>0.6</u>		<u>2.0</u>		<u>3.4</u>		<u>4.9</u>		<u>5.4</u>		<u>7.7</u>		<u>5.7</u>	Apr-13
Over/Under				9.8		9.7		-3.4		-2.9		-0.5				-1.8	
Bridgewater All Weather Fund	382,289,714	5.5		8.2		12.7		9.6		6.7		8.4				6.2	Aug-13
CPI + 5% (Unadjusted)				<u>1.3</u>		<u>3.5</u>		<u>6.4</u>		<u>6.9</u>		<u>7.0</u>				<u>6.5</u>	Aug-13
Over/Under			_	6.9		9.2		3.2		-0.2		1.4				-0.3	
Tortoise Energy Infrastructure	58,244,205	0.8		26.6		6.8		-29.4		-12.9		-5.9				-4.5	Apr-13
Tortoise MLP Index				<u>29.6</u>		<u>11.7</u>		<u>-27.9</u>		<u>-11.6</u>		<u>-4.6</u>		<u>-1.9</u>		<u>-6.4</u>	Apr-13
Over/Under				-3.0		-4.9		-1.5		-1.3		-1.3				1.9	
Brookfield Infra Fund IV B LP	23,931,805	0.3		9.2		3.1										3.1	Apr-20
CPI + 2% (Unadjusted)				<u>0.6</u>		<u>2.0</u>		<u>3.4</u>		<u>3.9</u>		<u>4.0</u>		<u>3.8</u>		<u>2.4</u>	Apr-20
Over/Under				8.6		1.1										0.7	
Harbourvest Real Assets Fund IV L.P.	3,855,892	0.1															
CPI + 2% (Unadjusted)				<u>0.6</u>		<u>2.0</u>		<u>3.4</u>		<u>3.9</u>		<u>4.0</u>		<u>3.8</u>		<u>3.2</u>	Sep-19
Over/Under																	
Overlay	133,550,760	1.9	0.0														
Parametric	83,588,461	1.2															
Abbott Capital Cash	49,962,299	0.7															

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

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### **VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION** PRIVATE EQUITY LIMITED PARTNERSHIP PERFORMANCE

											-		Since Incept	
Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date <sup>1</sup>	Outstanding Commitment	Call Ratio	Add'l Fees <sup>2</sup>	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	to Paid In Multiple	Total Value to Paid In Multiple
				Bato									(DPI)	(TVPI)
Abbott Secondary Opportunities, LP.	2017	12/21/2017	\$25,000,000	\$23,974,362	\$1,388,355	96%		\$12,750,000	\$15,865,243	\$32,615,243	\$8,640,881	22.8%	0.53x	1.36x
Abbott Secondary Opportunities II, LP.	2020	1/31/2020	\$25,000,000		\$25,000,000	-		\$0	\$605,838	\$605,838		-		-
ABRY Partners IX	2019	12/6/2018	\$10,600,000	\$5,478,498	\$5,121,502	52%			\$5,096,839	\$5,096,839	(\$381,659)	-7.6%	-	0.93x
Adams Street 2010 U.S. Fund	2010	5/21/2010	\$42,500,000	\$37,442,500	\$5,057,500	88% 90%	\$15,213	\$42,488,544	\$35,114,468	\$77,603,012	\$40,145,299	15.4% 12.5%	1.13x	2.07x
Adams Street 2010 Non-U.S. Dev. Mkts Fund Adams Street 2010 Non-U.S. Emg Mkts Fund	2010 2010	5/21/2010 1/3/2011	\$25,500,000 \$8,500,000	\$22,962,749 \$7,633,000	\$2,537,251 \$867,000	90% 90%	\$1,589	\$23,288,863 \$4,130,787	\$16,027,670 \$9,843,935	\$39,316,533 \$13,974,722	\$16,352,195 \$6,341,722	12.5%	1.01x 0.54x	1.71x 1.83x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$8,168,500	\$331,500	96%	\$6.697	\$10.372.022	\$9,643,935 \$4,534,409	\$13,974,722 \$14,906,431	\$6,731,234	12.4%	1.27x	1.82x
Adams Street 2013 Global Fund	2013	6/27/2013	\$75,000,000	\$61,350,000	\$13,650,000	82%	\$10,728	\$20,799,168	\$82,341,378	\$103,140,546		12.3%	0.34x	1.68x
Adams Street 2016 Global Fund	2016	12/22/2016	\$60,000,000	\$39,492,000	\$20,508,000	66%		\$4,801,064	\$46,586,129	\$51,387,193	\$11,895,193	13.5%	0.12x	1.3x
Adams Street Co-Investment Fund IV A	2018	9/24/2018	\$30,000,000	\$16,684,931	\$13,410,000	56%	\$67,808	-	\$19,804,408	\$19,804,408	\$3,051,669	16.2%	-	1.19x
Advent International GPE IX	2019	5/23/2019	\$10,000,000	\$3,674,971	\$6,325,029	37%		-	\$4,419,336	\$4,419,336	\$744,365	26.4%		1.2x
Astorg VII	2019	12/17/2018	\$9,288,744	\$3,094,116	\$6,194,628	33%		-	\$2,880,591	\$2,880,591	(\$213,525)	-14.5%	-	0.93x
Battery Ventures XI	2018	2/1/2018	\$9,050,000	\$7,428,240	\$1,621,760	82%	-	-	\$10,338,549	\$10,338,549	\$2,910,309	22.0%		1.39x
Battery Ventures XII Side Fund	2018	2/1/2018	\$5,050,000	\$4,368,755	\$681,245	87%		-	\$7,410,022	\$7,410,022	\$3,041,267	35.6%	-	1.7x
Battery Ventures XIII	2020 2020	2/11/2020	\$9,240,000	\$2,439,360	\$6,800,640	26% 30%	-	-	\$2,433,803	\$2,433,803	(\$5,557)	-0.7% 29.7%	-	1x
Battery Ventures XIII Side Fund Buenaventure One. LLC	2020	2/11/2020 1/5/2018	\$6,160,000 \$160.429.500	\$1,850,464 \$60,430,590	\$4,309,536 \$99,998,910	30%	-	 \$403,156	\$1,962,209 \$70.689.186	\$1,962,209 \$71.092.341	\$111,745 \$10,661,751	29.7% 14.4%	 0.01x	1.06x 1.18x
CapVest Equity Partners IV	2018	7/11/2018	\$180,429,500 \$13,496,827	\$826,432	\$12,670,395	38% 6%	-	\$403,156	(\$250,227)	(\$250,227)	\$10,001,751	-100.0%	0.01x	-0.3x
Charlesbank Equity Fund X	2013	11/20/2020	\$24,000,000	φ020,402 	\$24,000,000	-	_	_	(\$250,227)	(\$250,227)	-	-100.070		-0.5X
Charlesbank Equity Overage Fund X	2020	11/20/2020	\$6,000,000	-	\$6,000,000	_	_	_	-	_	-	_		-
Clearlake Capital Partners V	2017	12/22/2017	\$9.950.000	\$9.163.056	\$2,180,279	92%	\$46,158	\$2,797,682	\$12,564,560	\$15.362.242	\$6,153,028	39.3%	0.31x	1.68x
Clearlake Capital Partners VI	2020	1/2/2020	\$18,700,000	\$4,787,653	\$13,966,872	26%	-	\$155,933	\$4,896,529	\$5,052,462	\$264,809	18.8%	0.03x	1.06x
CRV XVIII	2020	7/2/2020	\$15,000,000		\$15,000,000			-		-		-		
CVC Capital Partners VIII	2020	5/22/2020	\$22,599,616		\$22,599,616		-	-	-	-	-	-		-
Drive Capital Fund II	2016	9/1/2016	\$15,000,000	\$14,142,517	\$860,693	94%	\$3,210	-	\$20,288,060	\$20,288,060	\$6,142,333	17.9%		1.43x
Drive Capital Fund III	2019	4/5/2019	\$7,500,000	\$1,570,001	\$5,929,999	21%	-	-	\$1,562,199	\$1,562,199	(\$7,802)	-1.5%		1x
Drive Capital Overdrive Fund I	2019	4/5/2019	\$7,500,000	\$4,096,821	\$3,403,179	55%	-	\$12,492	\$5,794,872	\$5,807,364	\$1,710,543	34.2%	0x	1.42x
ECI 11	2018	7/5/2018	\$9,927,209	\$3,715,640	\$6,211,569	37%	-	-	\$3,687,364	\$3,687,364	(\$28,276)	-0.6%		0.99x
Flexpoint Fund IV-A	2019	7/2/2019	\$10,650,000	\$1,783,947	\$8,866,053	17%	-	-	\$1,496,238	\$1,496,238	(\$287,709)	-41.9%		0.84x
Flexpoint Overage Fund IV-A Genstar Capital Partners IX	2019 2019	7/2/2019 2/21/2019	\$3,550,000 \$7,500,000	 \$2,944,241	\$3,550,000 \$4,728,882		-	 \$147,024	(\$4,699) \$3,377,223	(\$4,699) \$3,552,223	 \$607,982	-100.0% 24.8%	 0.05x	 1.21x
Genstar Capital Partners IX Genstar Capital Partners IX Opportunities Program	2019	2/21/2019	\$2,500,000	\$2,944,241 \$1,497,259	\$4,726,662 \$1,002,741	60%	-	3147,024	\$1,649,234	\$1,649,234	\$151,975	12.9%	0.05X	1.1x
GGV Capital VII	2019	8/15/2018	\$10,160,000	\$7,112,000	\$3,048,000	70%	-	-	\$7,326,101	\$7,326,101	\$214.101	3.6%		1.03x
GGV Capital VII Plus	2019	8/15/2018	\$2,540,000	\$1,600,200	\$939.800	63%	_	_	\$1,827,953	\$1,827,953	\$227,753	15.1%	-	1.14x
GGV Capital VIII	2020	10/30/2020	\$9,180,000	-	\$9,180,000	-			-	-	-	-		-
GGV Capital VIII Plus	2020	10/30/2020	\$2,295,000		\$2,295,000			-				-		
GGV Discovery II	2019	8/15/2018	\$2,100,000	\$1,197,000	\$903,000	57%	-	-	\$1,299,218	\$1,299,218	\$102,218	8.9%	-	1.09x
GGV Discovery III	2020	10/30/2020	\$3,825,000	-	\$3,825,000		-	-	-	-	-	-	-	-
Great Hill Equity Partners VII	2019	6/28/2019	\$8,900,000	\$379,549	\$8,520,451	4%	-	-	\$1,708,832	\$1,708,832	-	-		
Green Equity Investors VIII	2019	10/18/2019	\$15,000,000	\$1,974,297	\$13,025,703	13%	-	-	\$1,955,243	\$1,955,243	(\$19,054)	-16.8%		0.99x
GTCR Fund XII	2017	9/29/2017	\$30,000,000	\$19,640,202		65%		\$5,743,843	\$19,414,218	\$25,158,061	\$5,517,859	21.8%	0.29x	1.28x
GTCR Fund XIII	2020 2013	10/27/2020	\$30,000,000	-	\$30,000,000	 91%	-	-		-	 \$38.342.496	 19.9%	 1.25x	
HarbourVest - Dover Street VIII HarbourVest - Dover Street IX	2013 2016	5/30/2013 12/16/2016	\$67,500,000 \$60,000,000	\$61,509,954 \$48,000,000	\$6,075,000 \$12,000,000	91% 80%	\$84,954 	\$76,846,255 \$23,553,089	\$23,091,149 \$46,065,824	\$99,937,404 \$69,618,913	\$38,342,496 \$21,618,913	19.9% 23.6%	1.25x 0.49x	1.62x 1.45x
HarbourVest - Dover Street IX HarbourVest - Dover Street X	2018	5/31/2019	\$40,000,000	\$48,000,000	\$12,000,000	23%	-	\$935,750	\$40,005,624 \$10,320,704	\$11,256,454	\$2,256,454	23.6%	0.49x	1.45x 1.25x
HarbourVest - PRTNS CO INVEST IV L.P.	2019	6/2/2017	\$30,000,000	\$24,464,388	\$5,732,352	82%	-	\$6.050.893	\$30,899,619	\$36.950.512	\$12,486,124	15.7%	0.25x	1.51x
HarbourVest - PRTNS CO INVEST V L.P.	2019	7/31/2018	\$35.000.000	\$21,000,000	\$14.000.000	60%	-	-	\$27,875,921	\$27,875,921	\$6.875.921	45.2%		1.33x
Hellman & Friedman Capital Partners IX	2019	9/28/2018	\$19,800,000	\$9,059,432	\$10,740,568	46%		-	\$9,369,152	\$9,369,152	\$309,720	7.2%		1.03x
Insight Venture Partners X	2017	10/13/2017	\$25,000,000	\$24,450,000	\$550,000	98%		\$1,654,457	\$38,815,052	\$40,469,509	\$16,019,509	32.3%	0.07x	1.66x
M/C Partners VIII	2019	4/2/2018	\$10,000,000	\$3,080,253	\$6,919,747	31%	-	-	\$2,653,349	\$2,653,349	(\$426,904)	-15.8%		0.86x
Oak HC/FT Partners III	2019	7/31/2019	\$15,000,000	\$9,700,837	\$5,299,163	65%	-	-	\$10,491,077		\$790,240	18.4%		1.08x
Pantheon Global Secondary Fund IV	2010	8/20/2010	\$15,000,000	\$9,960,000	\$2,040,000	66%	-	\$13,694,043	\$2,040,635	\$15,734,678	\$5,774,678	13.0%	1.37x	1.58x
Pantheon Global Secondary Fund V	2015	2/26/2015	\$50,000,000	\$35,616,509	\$14,383,491	71%	(\$162,514)	\$15,982,534	\$33,229,899	\$49,212,433	\$13,758,438	11.4%	0.45x	1.38x
Pantheon Global Secondary Fund VI	2018	2/24/2020	\$25,000,000	\$11,897,805	\$13,337,113	48%	-	\$37,120	\$13,648,009	\$13,685,129	\$1,787,324	38.9%	0x	1.15x
The Resolute Fund IV	2018 2018	5/2/2018	\$20,000,000	\$16,476,664	\$6,601,113	82% 34%	-	\$5,070,815	\$19,874,775	\$24,945,590	\$8,468,926	59.2% -3.9%	0.31x	1.51x
Riverside Micro-Cap Fund V TA XIII	2018 2019	8/21/2018 5/2/2019	\$10,000,000 \$10,000.000	\$3,390,672 \$5,500,000	\$6,609,328 \$4,500,000	34% 55%	-	-	\$3,251,673	\$3,251,673 \$5,699,260	(\$138,999) \$199,260	-3.9% -3.9%		0.96x 1.04x
IA XIII Vitruvian Investment Partnership IV	2019	5/2/2019 6/3/2020	\$10,000,000 \$22,598,944	\$5,500,000 \$278,517	\$4,500,000 \$22,320,427	55% 1%	-	-	\$5,699,260 \$167,147	\$5,699,260 \$167,147	\$199,260 (\$111,370)	-3.9%	-	1.04x
vid war investment i articisnip 14	2020	0/3/2020	<i>422,090,944</i>	φ210,017	Ψ <u>22</u> ,020,421	1 70	-	-	ψ107,147	φ107,147	(#111,370)	-100.076		
Total VCERA Private Equity Program	-	5/21/2010	\$1,262,590,840	\$676, 288, 882	\$588,978,188	54%	\$73,843	\$271,715,534	\$702,040,176	\$977,783,685	\$300, 567, 197	16.0%	0.4x	1.45x

1. Includes recycled/recallable distributions received to date.

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

Add'I 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 12/31/2020 statement of investments produced by Abbott Capital.



### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE DEBT LIMITED PARTNERSHIP PERFORMANCE

												Since Incepti	on
Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date <sup>1</sup>	Outstanding Commitment of	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Distributions to Paid In Multiple (DPI)	Total Value t Paid In Multiple (TVPI)
BueBay Direct Lending III	2019	2/12/2019	\$25,000,000	\$10,901,877	\$14,098,123	44%	\$2,438,679	\$9,552,910	\$11,991,590	\$1,089,713	8.1%	0.22×	1.1x
Iridge Debt Strategies III	2019	12/20/2019	\$25,000,000	\$24,072,665	\$927,335	96%	\$1,312,521	\$23,529,177	\$24,841,698	\$769,033	3.7%	0.05x	1.03x
CVI Credit Value Fund IV	2017	12/31/2017	\$30,000,000	\$29,100,000	\$900,000	97%	\$6,147	\$31,123,993	\$31,130,140	\$2,030,140	4.2%	0x	1.07x
Monroe Capital Private Credit Fund III	2018	9/5/2018	\$25,000,000	\$21,253,151	\$3,746,849	85%	\$3,317,508	\$21,258,594	\$24,576,102	\$3,322,951	11.5%	0.16x	1.16x
PIMCO Corporate Opportunities Fund III	2020	1/26/2020	\$50,000,000	\$3,750,000	\$46,250,000	8%	\$37,190	\$4,974,898	\$5,012,088	\$1,262,088	33.8%	0.01x	1.34x
PIMCO Private Income Fund	2019	3/25/2019	\$55,000,000	\$55,000,000	\$0	100%	\$0	\$60,401,935	\$60,401,935	\$5,401,935	12.8%	Ож	1.1x
Total VCERA Private Debt Program	-		\$210,000,000	\$144,077,693	\$65,922,307	69%	\$7,112,045	\$150,841,508	\$157,953,553	\$13,875,860	9.5%	0.05x	1.1x

f. Includes recycled/recallable distributions received to date.

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

Performance shown is based on 12/31/2020 cash-adjusted market values.



### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE REAL ESTATE LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date <sup>1</sup>	Outstanding Commitment 1	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Inception Distributions T to Paid In Multiple (DPI)	
Lasalle Income & Growth Fund VIII, LP	2019	2/26/2020	\$100,000,000	\$20,172,821	\$79,827,179	20%	\$0	\$17,141,229	\$17,141,229	-\$3,031,592	-19.0%	0x	0.85x
Total VCERA Private Real Estate Program			\$100,000,000	\$20,172,821	\$79,827,179	20%	\$0	\$17,141,229	\$17,141,229	-\$3,031,592	-19.0%	0x	0.85x

1. Includes recycled/recallable distributions received to date.

Note: Private Real Estate performance data is reported net of fees.

Performance shown is based on 12/31/2020 cash-adjusted market values.



### VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE REAL ASSETS LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment		Outstanding Commitment	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Incepti Distributions to Paid In Multiple (DPI)	
Brookfield Infrastructure Fund IV, LP Harbourvest Real Assets Fund IV, LP	2019 2019	10/21/2019 7/15/2019	\$50,000,000 \$100,000,000	\$24,829,149 \$0	\$26,908,578 \$100,000,000	50% 0%	\$2,511,321 \$0	\$23,931,805 \$3,855,892	\$26,443,126 \$3,855,892	\$1,613,977 —	7.9%	0.1x 	1.07x 
Total VCERA Private Real Estate Program	-		\$74,829,149	\$24,829,149	\$126,908,578	33%	\$2,511,321	\$27,787,697	\$30, 299, 018	\$1,613,977	7.9%	0.1x	1.22x

1. Includes recycled/recallable distributions received to date.

Note: Private Real Assets performance data is reported net of fees.

Performance shown is based on 12/31/2020 cash-adjusted market values.



Business Meeting Agenda - VI.B. INVESTMENT INFORMATION: QUARTERLY INVESTMENT PERFORMANCE REPORT FOR PERIOD ENDING DE...

# MANAGER DUE DILIGENCE

NEPC, LLC —

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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
BlackRock Russell 1000 Index	-	-	-	-	
Western U.S. Index Plus	-	Yes	No Action	-	Loss of Personnel: Harris Trifon (Co-Head of Mortgage and Consumer Credit)
BlackRock Russell 2500 Index	-	-	-	-	
BlackRock MSCI ACWI ex-U.S. Index	-	-	-	-	
Sprucegrove	Top Quartile	-	-	-	
Hexavest	Bottom Quartile	-	-	Watch (Board Driven)	On Watch for Performance Issues
Walter Scott	Bottom Quartile	-	-	-	
BlackRock MSCI ACWI Index	-	-	-	-	
Adams Street	N/A	-	-	-	
HarbourVest	N/A	-	-	-	
Pantheon	N/A	-	-	-	
Drive	N/A	-	-	-	
Abbott Secondary Opps.	N/A	-	-	-	
Carval Credit Value	N/A	-	-	-	
PIMCO PIF	N/A	Yes	Watch	-	Discrimination Lawsuit
Bridge Debt Strategies	N/A	-	-	-	
BlackRock U.S. Debt Fund	-	-	-	-	
Western	-	-	-	-	
Reams	-	-	-	-	



	Performance (Recent Quarter)	Changes/ Announcements (Recent Quarter)	NEPC DD Committee Rec.	Plan Rec.	Comments
Loomis Sayles Strategic Alpha	Top Quartile	Yes	Watch	-	Loss of Personnel: Jae Park (CIO) & Dan Fuss (PM)
Loomis Sayles Multi-Sector Full Discretion	Top Quartile	Yes	Watch	-	Loss of Personnel: Jae Park (CIO) & Dan Fuss (PM)
Reams 10-Year Treasuries	-	-	-	-	
Monroe	-	-	-	-	
BlueBay	-	-	-	-	
Prudential	N/A	-	-	-	
UBS	N/A	-	Watch	Watch	
Bridgewater	N/A	-	-	-	
Tortoise	N/A	-	Watch	-	Acquisition of Advisory Research Team
Parametric/Clifton	N/A	-	Watch	-	Morgan Stanley Acquisition of Eaton Vance

	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.



The items below summarize any changes or announcements from your Plan managers/funds. A "Yes" indicates there was an announcement and a brief summary is provided separately. NEPC's Due Diligence Committee meets every two weeks to review events as they relate to investment managers and determines if any action should be taken by NEPC and/or by our clients. They rate events: No Action, Watch, Hold, Client Review or Terminate. NEPC considers ourselves to be a fiduciary, as ERISA defines the term in Section 3(21).

Investment Manager	Manager Changes/ Announcements (Recent Quarter)	NEPC Due Diligence Committee Recommendations
Loomis Sayles Multi-Sector Full Discretion/ Loomis Sayles Strategic Alpha	Yes	Watch

#### Manager Changes/Announcements

Below is a summary of manager changes, announcements and due diligence events since the issuance of our last quarterly report.

11/2/2020: Loomis, Sayles has announced that Jae Park, CIO, will be retiring effective March 31, 2021. He will be succeeded by Deputy CIO, David Waldman. Jae joined Loomis in 2002 as CIO of Fixed Income from IBM's pension group. David Waldman joined in 2007 from Putnam (and previously Lazard and GSAM) as director of quantitative research and risk analysis. In 2013, he was promoted to deputy CIO.

12/14/2020: Dan Fuss - Vice Chairman, with nearly 45 years at Loomis will be stepping back from day-to-day portfolio management. The relinquishing of portfolio management duties will be March 1st – the date of his 45th anniversary at Loomis. He is not retiring and will still be vice chair and board member at Loomis. 18 months ago a majority of separate accounts were transitioned away from Dan. In the last decade, new separate account relationships were hiring the team and Dan was not named primary portfolio manager for any accounts. There are 10 separate accounts left with Dan as named PM, and they are checking but don't believe any are NEPC relationships. Specifically, he will also no longer have portfolio management responsibilities on mutual funds, including the Bond Fund and Fixed Income Fund. The full discretion team (Matt Eagan, Elaine Stokes, Brian Kennedy and Todd VanDam) will be the named portfolio managers and this includes offshore funds as well. Dan has not been managing the commingled funds (CITs, NHITs).

A legend key to our recommendations is provided below.

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 be 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 a manager; manager cannot be 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 be in future searches unless a client specifically requests. Current clients must be advised to replace the manager.				

The items below summarize any changes or announcements from your Plan managers/funds. A "Yes" indicates there was an announcement and a brief summary is provided separately. NEPC's Due Diligence Committee meets every two weeks to review events as they relate to investment managers and determines if any action should be taken by NEPC and/or by our clients. They rate events: No Action, Watch, Hold, Client Review or Terminate. NEPC considers ourselves to be a fiduciary, as ERISA defines the term in Section 3(21).

Investment Manager	Manager Changes/ Announcements (Recent Quarter)	NEPC Due Diligence Committee Recommendations
PIMCO Corporate Opportunities III/ PIMCO Private Income Fund	Yes	Watch
Manager Changes/Appouncements		

Below is a summary of manager changes, announcements and due diligence events since the issuance of our last quarterly report.

PIMCO has been named in a complaint by two female employees in operations and client service capacities. The complaint alleges gender and disability discrimination. This follows on similar complaints in 2018 and 2019. The NEPC Unfavorable News Committee met on December 7, 2020 and recommends that the Due Diligence Committee place PIMCO on WATCH. NEPC will monitor the suit for resolution and any findings or other information pertaining to the issue. NEPC will engage with PIMCO on their specific efforts relating to diversity equity and inclusion, as well as metrics relating to the topic.

	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.
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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 be in future searches unless a client specifically requests. Current clients must be advised to replace the manager.

#### A legend key to our recommendations is provided below.



The items below summarize any changes or announcements from your Plan managers/funds. A "Yes" indicates there was an announcement and a brief summary is provided separately. NEPC's Due Diligence Committee meets every two weeks to review events as they relate to investment managers and determines if any action should be taken by NEPC and/or by our clients. They rate events: No Action, Watch, Hold, Client Review or Terminate. NEPC considers ourselves to be a fiduciary, as ERISA defines the term in Section 3(21).

Investment Manager	Manager Changes/ Announcements (Recent Quarter)	NEPC Due Diligence Committee Recommendations
Western U.S. Index Plus	Yes	No Action
Manager Changes/Announcements		

Below is a summary of manager changes, announcements and due diligence events since the issuance of our last quarterly report.

Harris Trifon, Co-Head of Mortgage and Consumer Credit investment team, will be leaving Western Asset on January 12, 2021 to pursue another opportunity. Harris has a background and focus on commercial real estate and CMBS and is co-head of securitized team. On the commercial real estate debt side, there are three dedicated investment professionals supporting the effort below Harris. Greg Handler, Co-Head of Mortgage and Consumer Credit whose focus is on consumer/residential, will assume Interim Head responsibilities. Greg joined Western Asset in 2002 and is a lead portfolio manager on Western Asset's dedicated mortgage portfolios and a member of Western Asset's US Broad Strategy Committee.

	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 be 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 a manager; manager cannot be 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 be in future searches unless a client specifically requests. Current clients must be advised to replace the manager.

#### A legend key to our recommendations is provided below.

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Total Fund	13.6	18.7	-3.6	16.0	8.6	-0.9	6.3	18.1	14.0	0.3	15.1
Policy Index	<u>14.4</u>	<u>20.7</u>	<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>
Over/Under	-0.8	-2.0	0.0	-0.3	0.2	-1.7	-0.5	0.9	1.1	-0.2	1.9
60% MSCI ACWI (Net) / 40% FTSE WGBI	14.5	18.2	-5.8	17.1	5.5	-2.6	2.3	11.4	10.3	-1.8	10.0
60% S&P 500 / 40% BBgBarc Aggregate	14.7	22.2	-2.3	14.2	8.3	1.3	10.6	17.6	11.3	4.7	12.1
Total Fund ex Parametric*	13.1	18.4	-3.7	15.9	8.6	-0.9	6.3	17.8	13.7	0.6	14.5
Total Fund ex Private Equity	12.7	19.6	-4.8	15.9	8.6	-1.4	6.1	16.2	13.3	-	
Policy Index	<u>14.4</u>	<u>20.7</u>	<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>
Over/Under	-1.7	-1.1	-1.2	-0.4	0.2	-2.2	-0.7	-1.0	0.4		
Total US Equity	20.5	31.6	-5.0	21.4	13.0	0.5	12.5	34.0	16.9	0.9	18.5
Russell 3000	<u>20.9</u>	<u>31.0</u>	<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>
Over/Under	-0.4	0.6	0.2	0.3	0.3	0.1	0.1	0.5	0.5	-0.2	1.0
Western U.S. Index Plus	17.9	33.5	-5.3	22.7	13.8	1.1	14.2	32.9	20.7	1.0	24.7
S&P 500	<u>18.4</u>	<u>31.5</u>	<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>
Over/Under	-0.5	2.0	-0.9	0.9	1.8	-0.3	0.5	0.5	4.7	-1.1	9.6
Blackrock Russell 1000 Index	21.0	31.4	-4.7								
Russell 1000	<u>21.0</u>	<u>31.4</u>	<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>
Over/Under	0.0	0.0	0.1								
Blackrock Russell 2500 Index	20.0	27.8	-9.9								
Russell 2500 Over/Under	<u>20.0</u> 0.0	<u>27.8</u> 0.0	<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>



	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Total Non-US Equity	9.3	21.0	-13.0	26.5	6.6	-4.8	-3.6	16.3	17.9	-13.6	13.5
MSCI ACWI ex USA	10.7	21.5	-14.2	27.2	<u>4.5</u>	-5.7	<u>-3.9</u>	15.3	16.8	-13.7	11.2
Over/Under	-1.4	-0.5	1.2	-0.7	2.1	0.9	0.3	1.0	1.1	0.1	2.3
MSCI EAFE	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8
MSCI ACWI ex USA NR LCL	6.0	22.2	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6
MSCI EAFE NR LCL	0.8	21.7	-11.0	15.2	5.3	5.3	5.9	26.9	17.3	-12.2	4.8
BlackRock ACWI ex-U.S. Index	11.2	21.9	-14.6	28.1	4.7	-4.5	-3.8	16.0	17.2	-14.1	12.8
MSCI ACWI ex USA IMI	<u>11.1</u>	<u>21.6</u>	<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>
Over/Under	0.1	0.3	0.2	0.3	0.3	0.1	0.1	0.2	0.2	0.2	0.1
MSCI ACWI ex USA NR LCL	6.0	22.2	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6
Sprucegrove	4.0	17.3	-13.8	27.5	11.9	-9.1	-3.2	17.1	17.2	-10.7	18.8
MSCI ACWI ex USA	<u>10.7</u>	<u>21.5</u>	<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>
Over/Under	-6.7	-4.2	0.4	0.3	7.4	-3.4	0.7	1.8	0.4	3.0	7.6
MSCI EAFE	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8
MSCI ACWI ex USA NR LCL	6.0	22.2	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6
MSCI EAFE NR LCL	0.8	21.7	-11.0	15.2	5.3	5.3	5.9	26.9	17.3	-12.2	4.8
Hexavest	-4.3	16.5	-11.3	17.4	3.8	-1.4	-4.3	20.2	13.7	-9.6	
MSCI EAFE	<u>7.8</u>	<u>22.0</u>	<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>
Over/Under	-12.1	-5.5	2.5	-7.6	2.8	-0.6	0.6	-2.6	-3.6	2.5	
MSCI EAFE NR LCL	0.8	21.7	-11.0	15.2	5.3	5.3	5.9	26.9	17.3	-12.2	4.8
Walter Scott	20.4	27.5	-7.1	26.6	5.1	-0.4	-3.5	11.8	20.4	-9.3	
MSCI ACWI ex USA	<u>10.7</u>	<u>21.5</u>	<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>
Over/Under	9.7	6.0	7.1	-0.6	0.6	5.3	0.4	-3.5	3.6	4.4	
MSCI ACWI ex USA NR LCL	6.0	22.2	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6
MSCI EAFE	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8
Total Global Equity	16.7	27.1	-9.0	24.5	9.0	-3.8	1.9	22.0	14.4	-3.9	11.4
MSCI ACWI	<u>16.3</u>	<u>26.6</u>	<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>
Over/Under	0.4	0.5	0.4	0.5	1.1	-1.4	-2.3	-0.8	-1.7	3.4	-1.3
BlackRock MSCI ACWI Equity Index	16.7	27.1	-9.0	24.5	8.4	-2.0	4.6	23.2			
MSCI ACWI	<u>16.3</u>	<u>26.6</u>	<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>
Over/Under	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4			



	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Total Private Equity	24.5	8.3	18.7	16.9	7.6	14.7	19.0	17.9	10.3		(/0)
Private Equity Benchmark	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.8</u>	<u>16.0</u>	<u>3.5</u>	<u>15.8</u>	<u>37.4</u>	<u>19.8</u>	<u>4.1</u>	21.0
Over/Under	0.0	-26.6	21.1	-7.9	-8.4	11.2	3.2	-19.5	-9.5	<u></u>	21.0
C\A Global All PE (Qtr Lag)	14.9	7.8	16.4	15.9	8.5	7.0	16.3	15.9	13.0	12.6	17.1
Adams Street Global Fund Series	26.9	4.1	19.6	13.4	7.1	10.3	19.6	15.7	10.8		
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	-2.4	24.7	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	37.5	<u>19.9</u>	4.1	20.4
Over/Under	2.4	-30.8	22.0	-11.3	-9.0	6.8	3.7	-21.8	-9.1	<u></u>	20.1
Harbourvest	19.6	12.2	22.7	23.2	6.7	28.5	18.5	-			
Russell 3000 + 3%	24.5	34.9	-2.4	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	37.5	<u>19.9</u>	4.1	20.4
Over/Under	-4.9	-22.7	25.1	-1.5	-9.4	25.0	2.6	01.0	10.0	<u></u>	20.1
Pantheon Global Secondary Funds	6.4	-0.4	17.3	24.1	15.5	6.4	16.7	14.9	0.9		
Russell 3000 + 3%	24.5	<u>34.9</u>	-2.4	24.7	16.1	3.5	<u>15.9</u>	37.5	19.9	4.1	20.4
Over/Under	-18.1	-35.3	19.7	-0.6	-0.6	2.9	0.8	-22.6	-19.0	<u></u>	2011
Drive Capital Fund II	12.3	53.0	-2.5	-33.7							
Russell 3000 + 3%	24.5	<u>34.9</u>	<u>-2.4</u>	24.7	16.1	3.5	<u>15.9</u>	<u>37.5</u>	19.9	<u>4.1</u>	20.4
Over/Under	-12.2	18.1	-0.1	-58.4			<u></u>	<u></u>			
Abbott Secondary Opportunities	40.5	8.9	26.0								
Russell 3000 + 3%	24.5	<u>34.9</u>	-2.4	<u>24.7</u>	16.1	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	19.9	<u>4.1</u>	<u>20.4</u>
Over/Under	16.0	-26.0	28.4		<u></u>		<u></u>	<u></u>	<u></u>		
Clearlake Capital Partners V	27.8	50.2									
Russell 3000 + 3%	24.5	34.9	<u>-2.4</u>	24.7	<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>
Over/Under	3.3	15.3					<u></u>	<u></u>	<u></u>		
Battery Ventures XII	46.7	5.7									
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	-2.4	24.7	<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>
Over/Under	22.2	-29.2									
Insight Venture Partners X	46.2	21.4									
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	-2.4	<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>	20.4
Over/Under	21.7	-13.5									
GTCR Fund XII	55.6	-18.8									
Russell 3000 + 3%	24.5	<u>34.9</u>	<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>
Over/Under	31.1	-53.7									
Buenaventure One, LLC	17.7	6.7									
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	-2.4	24.7	<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>
Over/Under	-6.8	-28.2									
ECI 11	20.8	34.2									
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<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>
Over/Under	-3.7	-0.7	-	·							_

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
The Resolute Fund IV L.P	42.2	81.6	(70)	(70)	(70)	(70)	( 70 )	(70)	(70)	(70)	( 70 ) 
Russell 3000 + 3%	24.5	<u>34.9</u>	- <u>-2.4</u>	 24.7	<u>16.1</u>	<u>3.5</u>	 <u>15.9</u>	 <u>37.5</u>	 <u>19.9</u>	<u></u>	<u>20.4</u>
Over/Under	<u>24.5</u> 17.7	<u>46.7</u>	-2.4	24.1	<u>10.1</u>	0.0	10.3	<u>07.0</u>	13.3	<u>4.1</u>	20.4
GGV Capital VII L.P.	9.7										
Russell 3000 + 3%	24.5	<u>34.9</u>	<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>
Over/Under	-14.8	<u>oo</u>		<u> </u>	<u></u>	0.0	1010	<u>07.10</u>		<u></u>	2011
GGV Discovery II, L.P.	11.2										
Russell 3000 + 3%	24.5	<u>34.9</u>	<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>	4.1	<u>20.4</u>
Over/Under	-13.3										
Drive Capital Overdrive Fund I	45.4										
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<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>
Over/Under	20.9										
Riverside Micro Cap Fund V, LP	1.7										
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<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>
Over/Under	-22.8										
GGV Capital VII Plus, LP	15.7										
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<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>
Over/Under	-8.8										
Astorg VII L.P.	62.3										
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	24.7	<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>
Over/Under	37.8										
M/C Partners Fund VIII LP. Limited Partnership	-35.1										
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<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>
Over/Under	-59.6										
Genstar Capital Partners IX	27.1										
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<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>
Over/Under	2.6										
Genstar IX Opportunities Fund I	12.6										
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<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>
Over/Under	-11.9										
ABRY Partners IX, LP	-15.0										
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<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>
Over/Under	-39.5										
Advent International GPE IX LP	29.0										
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<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>
Over/Under	4.5										

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Drive Capital Fund III LP	-9.0										
Russell 3000 + 3%	24.5	<u>34.9</u>	<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>
Over/Under	-33.5										
Oak HC/FT Partners III LP	3.2										
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<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>
Over/Under	-21.3										
TA XIII A LP	1.9										
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<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>
Over/Under	-22.6										
Dover Street X, LP											
Russell 3000 + 3% Over/Under	<u>24.5</u>	<u>34.9</u>	<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>
Hellman & Friedman CP IX											
Russell 3000 + 3% Over/Under	<u>24.5</u>	<u>34.9</u>	<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>
Clearlake Capital Partners VI	-										
Russell 3000 + 3% Over/Under	<u>24.5</u>	<u>34.9</u>	<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>
Flexpoint Fund IV											
Russell 3000 + 3% Over/Under	<u>24.5</u>	<u>34.9</u>	<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>
Battery Ventures XIII											
Russell 3000 + 3%	 24.5	<u>34.9</u>	-2.4	<u></u> <u>24.7</u>	<u></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>
Over/Under	<u>24.0</u>	<u>04.3</u>	-2.4	<u>27.1</u>	<u>10.1</u>	0.0	10.3	<u>07.0</u>	13.3	<u>4.1</u>	20.4
Green Equity Investors VIII, L.P.											
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	16.1	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>
Over/Under	<u></u>	<u></u>									
CapVest Private Equity Partners IV, SCSp											
Russell 3000 + 3% Over/Under	<u>24.5</u>	<u>34.9</u>	<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>
Great Hill Equity Partners VII											
Russell 3000 + 3%		<u>34.9</u>	- <u>-2.4</u>	<u></u> <u>24.7</u>	 16.1	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>
Over/Under	<u>24.0</u>	01.0	<u></u>	<u> </u>	10.1	0.0	10.0	01.0	10.0	<u></u>	<u>LU.T</u>
Vitruvian Investment Partners IV											
Russell 3000 + 3% Over/Under	<u>24.5</u>	<u>34.9</u>	<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>

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Total US Fixed Income	11.1	8.5	0.0	4.4	4.9	0.3	3.0	-0.1	9.6	7.3	10.6
BBgBarc US Aggregate TR	<u>7.5</u>	<u>8.7</u>	<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>
Over/Under	3.6	-0.2	0.0	0.9	2.3	-0.2	-3.0	1.9	5.4	-0.5	4.1
BlackRock U.S. Debt Fund	7.6	8.7	0.0	3.6	2.7	0.6	6.2	-2.0	4.3	7.9	6.7
BBgBarc US Aggregate TR	<u>7.5</u>	<u>8.7</u>	<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>
Over/Under	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.0	0.1	0.1	0.2
Western	10.9	10.6	-0.6	6.0	4.1	0.9	7.4	-1.2	9.7	7.3	11.3
BBgBarc US Aggregate TR	<u>7.5</u>	<u>8.7</u>	<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>
Over/Under	3.4	1.9	-0.6	2.5	1.5	0.4	1.4	0.8	5.5	-0.5	4.8
Reams	12.0	6.6	0.7	2.5	6.0	0.3	-3.6	2.5	10.0	8.4	10.0
Reams Custom Index	<u>0.6</u>	<u>2.4</u>	<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>
Over/Under	11.4	4.2	-1.7	1.2	5.3	0.0	-3.8	3.0	5.8	0.6	3.5
BBgBarc US Aggregate TR	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5
3-Month LIBOR + 3%	3.6	5.4	5.4	4.4	3.8	3.3	3.2	3.3	3.5	3.3	3.4
Loomis Strategic Alpha	10.9	4.3	0.6	3.3	6.1	-1.0	2.4				
BBgBarc US Aggregate TR	<u>7.5</u>	<u>8.7</u>	<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>
Over/Under	3.4	-4.4	0.6	-0.2	3.5	-1.5	-3.6				
3-Month LIBOR + 3%	3.6	5.4	5.4	4.4	3.8	3.3	3.2	3.3	3.5	3.3	3.4
Loomis Sayles Multi Strategy	12.9	9.4	-0.8	8.4	8.2	-2.3	6.8	1.4	16.7	4.2	13.6
Loomis Custom Index	<u>7.3</u>	<u>10.2</u>	<u>-0.6</u>	<u>4.5</u>	<u>7.0</u>	<u>-1.2</u>	<u>4.6</u>	<u>0.8</u>	<u>7.5</u>	<u>7.1</u>	<u>8.7</u>
Over/Under	5.6	-0.8	-0.2	3.9	1.2	-1.1	2.2	0.6	9.2	-2.9	4.9
BBgBarc US Govt/Credit TR	8.9	9.7	-0.4	4.0	3.0	0.1	6.0	-2.4	4.8	8.7	6.6



# **TOTAL FUND CALENDAR YEAR RETURN SUMMARY**

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Treasuries	11.4		-								
Reams 10-Year Treasuries	11.4										
BBgBarc US Treasury 7-10 Yr TR Over/Under	<u>10.0</u> 1.4	<u>8.5</u>	<u>0.9</u>	<u>2.6</u>	<u>1.1</u>	<u>1.6</u>	<u>9.0</u>	<u>-6.0</u>	<u>4.2</u>	<u>15.6</u>	<u>9.4</u>
Private Debt	7.1	8.4	4.7		-						
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	<u>6.1</u>	<u>13.3</u>	<u>1.1</u>	-		-	-	-	-	-	
Over/Under	1.0	-4.9	3.6								
CVI Credit Value Fund	2.1	7.1	4.6								
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	<u>6.1</u>	<u>13.3</u>	<u>1.1</u>					-			
Over/Under	-4.0	-6.2	3.5								
Monroe Capital Private Credit Fund III	11.2	11.2									
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	<u>6.1</u>	<u>13.3</u>	<u>1.1</u>					-			
Over/Under	5.1	-2.1									
Bluebay Direct Lending Fund III	7.1										
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	<u>6.1</u>	<u>13.3</u>	<u>1.1</u>								
Over/Under	1.0										
Pimco Private Income Fund	11.3										
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	<u>6.1</u>	<u>13.3</u>	<u>1.1</u>	-				-			
Over/Under	5.2										
Bridge Debt Strategies III Limited Partner	2.6										
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	<u>6.1</u>	<u>13.3</u>	<u>1.1</u>					-			
Over/Under	-3.5										
PIMCO Corp Opps Fund III											
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps Over/Under	<u>6.1</u>	<u>13.3</u>	<u>1.1</u>	-							

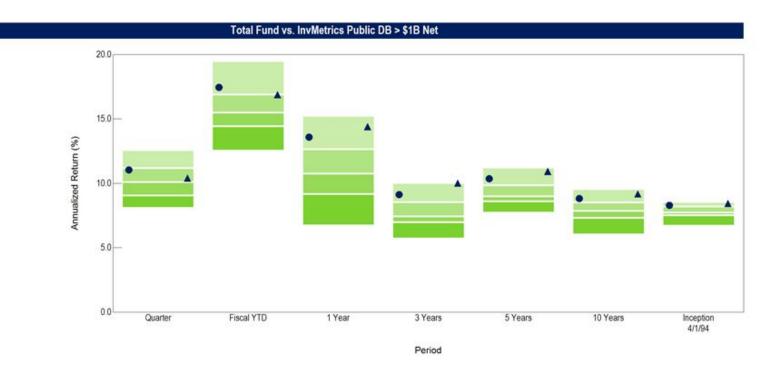
Over/Under



	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Total Real Estate	-2.7	0.3	6.9	5.9	6.8	12.8	11.6	10.6	9.1	14.4	15.4
NCREIF ODCE Net	<u>0.3</u>	<u>4.4</u>	<u>7.4</u>	<u>6.7</u>	<u>7.8</u>	<u>14.0</u>	<u>11.5</u>	<u>12.9</u>	<u>9.8</u>	<u>15.0</u>	<u>15.3</u>
Over/Under	-3.0	-4.1	-0.5	-0.8	-1.0	-1.2	0.1	-2.3	-0.7	-0.6	0.1
Prudential Real Estate	2.1	5.9	8.2	7.0	8.2	14.5	12.5	13.8	8.8	18.0	17.2
NCREIF ODCE Net	<u>0.3</u>	<u>4.4</u>	<u>7.4</u>	<u>6.7</u>	<u>7.8</u>	<u>14.0</u>	<u>11.5</u>	<u>12.9</u>	<u>9.8</u>	<u>15.0</u>	<u>15.3</u>
Over/Under	1.8	1.5	0.8	0.3	0.4	0.5	1.0	0.9	-1.0	3.0	1.9
NCREIF ODCE	1.2	5.3	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4
UBS Real Estate	-4.7	-2.8	6.2	5.4	6.2	11.9	10.6	9.3	9.0	12.1	15.9
NCREIF ODCE Net	<u>0.3</u>	<u>4.4</u>	<u>7.4</u>	<u>6.7</u>	<u>7.8</u>	<u>14.0</u>	<u>11.5</u>	<u>12.9</u>	<u>9.8</u>	<u>15.0</u>	<u>15.3</u>
Over/Under	-5.0	-7.2	-1.2	-1.3	-1.6	-2.1	-0.9	-3.6	-0.8	-2.9	0.6
NCREIF ODCE	1.2	5.3	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4
LaSalle Income + Growth VIII Limited Partnership											
NCREIF ODCE Net Over/Under	<u>0.3</u>	<u>4.4</u>	<u>7.4</u>	<u>6.7</u>	<u>7.8</u>	<u>14.0</u>	<u>11.5</u>	<u>12.9</u>	<u>9.8</u>	<u>15.0</u>	<u>15.3</u>
NCREIF ODCE	1.2	5.3	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4
Total Real Assets	0.0	0.3 14.4	-7.3	7.0	0.0 11.7	-13.8	12.5 10.2	13.9 	10.9		
Real Assets Index	<u>3.4</u>	<u>5.3</u>	<u>-7.5</u> <u>6.0</u>	<u>6.2</u>	<u>6.2</u>	4.8	<u>4.8</u>	28.8	<u></u> <u>5.4</u>	 <u>8.8</u>	
Over/Under	- <u>3.4</u>	<u>9.1</u>	-13.3	<u>0.2</u> 1.0	<u>0.2</u> 5.5	-18.6	<u>4.0</u> 5.4	20.0	<u>5.4</u>	0.0	
Bridgewater All Weather Fund	9.6	16.7	-5.0	11.9	10.0	-6.8	7.6				
CPI + 5% (Unadjusted)	<u>6.4</u>	<u>7.4</u>	<u>-3.0</u>	7.2	<u>7.2</u>	<u>-0.0</u>	<u>5.8</u>				
Over/Under	<u>0.4</u> 3.2	<u>1.4</u> 9.3	-12.0	<u>1.2</u> 4.7	2.8	-12.6	<u>0.0</u> 1.8				
Tortoise Energy Infrastructure	-29.4	8.0	-13.3	-3.5	15.9	-27.1	15.7				
Tortoise MLP Index	-27.9	<u>10.9</u>	-13.7	<u>-5.7</u>	21.0	-34.1	<u>8.0</u>	28.8	<u>5.4</u>	<u>8.8</u>	
Over/Under	-1.5	-2.9	0.4	2.2	-5.1	7.0	7.7	20.0	0.1	0.0	
Brookfield Infra Fund IV B LP											
CPI + 2% (Unadjusted) Over/Under	<u>3.4</u>	<u>4.3</u>	<u>3.9</u>	<u>4.1</u>	<u>4.1</u>	<u>2.7</u>	<u>2.8</u>	<u>3.5</u>	<u>3.8</u>	<u>5.0</u>	<u>3.5</u>
Harbourvest Real Assets Fund IV L.P.											
CPI + 2% (Unadjusted) Over/Under	<u>3.4</u>	<u>4.3</u>	<u>3.9</u>	<u>4.1</u>	<u>4.1</u>	<u>2.7</u>	<u>2.8</u>	<u>3.5</u>	<u>3.8</u>	<u>5.0</u>	<u>3.5</u>
Overlay											
Parametric Abbott Capital Cash											

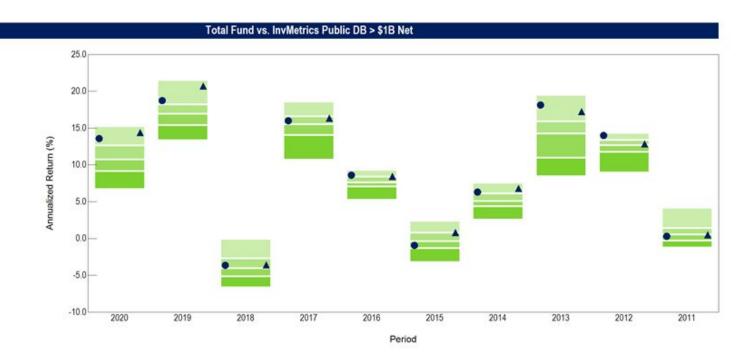


# **TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE**



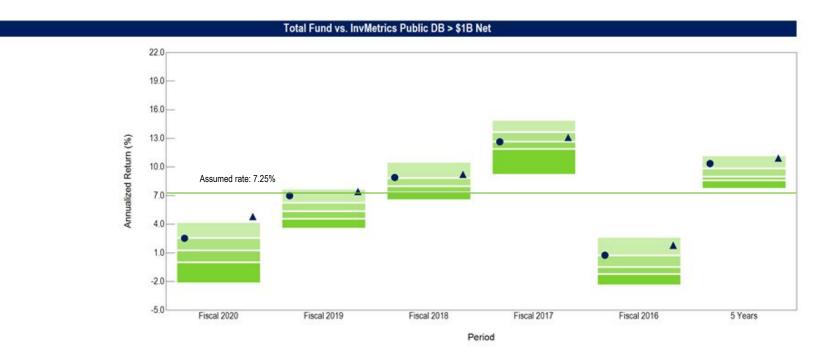
	Return (Rank)													
5th Percentile	12.6		19.5		15.2		10.0		11.2		9.6		8.5	
25th Percentile	11.2		16.9		12.7		8.6		9.9		8.5		8.2	
Median	10.1		15.5		10.8		7.4		9.0		7.9		7.7	
75th Percentile	9.1		14.4		9.2		7.0		8.6		7.3		7.5	
95th Percentile	8.1		12.5		6.8		5.7		7.7		6.0		6.7	
# of Portfolios	80		80		80		80		80		73		33	
Total Fund	11.0	(28)	17.4	(16)	13.6	(14)	9.1	(18)	10.4	(14)	8.8	(16)	8.3	(22)
Policy Index	10.4	(42)	16.9	(26)	14.4	(12)	10.0	(6)	10.9	(8)	9.2	(9)	8.4	(11)

# **TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE**



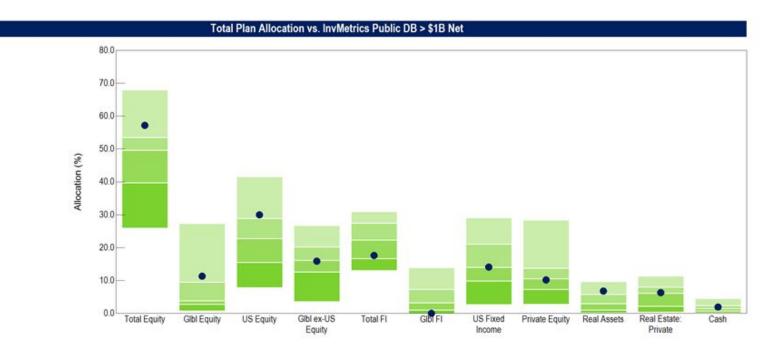
	Return (Ran	nk)																
5th Percentile	15.2	21.5	-0	1	18.6		9.3		2.4		7.6		19.5		14.3		4.2	
25th Percentile	12.7	18.2	-2	7	16.6		8.4		0.8		6.1		16.0		13.4		1.5	
Median	10.8	17.0	-4	0	15.6		7.7		-0.4		5.1		14.3		12.7		0.6	
75th Percentile	9.2	15.4	-5	1	14.1		7.1		-1.3		4.4		11.0		11.8		-0.3	
95th Percentile	6.8	13.4	-6	6	10.7		5.3		-3.2		2.6		8.5		9.0		-1.2	
# of Portfolios	80	69	6	3	61		62		57		55		48		44		42	
Total Fund	13.6 (	(14) 18.7	(17) -3	6 (42)	16.0	(37)	8.6	(15)	-0.9	(65)	6.3	(20)	18.1	(10)	14.0	(15)	0.3	(61)
Policy Index	14.4 (	(12) 20.7	(9) -3	6 (41)	16.3	(29)	8.4	(25)	0.8	(25)	6.8	(12)	17.2	(14)	12.9	(41)	0.5	(55)

## **TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE**



	Return (Rank)											
5th Percentile	4.2		7.7		10.5		14.9		2.7		11.2	
25th Percentile	2.6		6.3		8.8		13.7		0.8		9.9	
Median	1.3		5.4		8.0		12.7		-0.5		9.0	
75th Percentile	0.0		4.6		7.3		11.9		-1.2		8.6	
95th Percentile	-22		3.5		6.5		9.2		-2.4		7.7	
# of Portfolios	71		77		51		65		55		80	
Total Fund	2.5	(29)	7.0	(15)	8.9	(23)	12.6	(53)	0.8	(26)	10.4	(14)
Policy Index	4.8	(2)	7.4	(7)	9.2	(13)	13.1	(37)	1.8	(9)	10.9	(8)

# Ventura County Employees' Retirement Association TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE



	Allocatio	n (Rank)																			
5th Percentile	68.0	27.3	41.6		26.7		31.0		13.9		29.1		28.4		9.6		11.4		4.5		1
25th Percentile	53.6	9.6	28.9		20.2		27.5		7.3		21.1		13.8		5.9		8.0		2.4		-
Median	49.6	3.9	22.8		16.2		22.4		3.3		14.1		10.7		3.0		6.2		1.5		
75th Percentile	39.8	2.9	15.6		12.6		16.7		1.1		9.9		7.4		1.1		2.2		0.8		-
95th Percentile	26.0	0.8	7.9		3.6		13.1		0.0		2.7		2.8		0.2		0.4		0.2		- 2
# of Portfolios	58	27	42		54		58		25		41		51		31		47		58		
Total Fund	57.2	(20) 11.3	(16) 30.0	(24)	15.9	(53)	17.6	(73)	0.0	(96)	14.1	(48)	10.2	(52)	6.8	(14)	6.3	(46)	1.9	(32)	

Business Meeting Agenda - VI.B. INVESTMENT INFORMATION: QUARTERLY INVESTMENT PERFORMANCE REPORT FOR PERIOD ENDING DE...



NEPC, LLC

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## **INVESTMENT GUIDELINES**

#### • Blackrock Russell 1000 Index Fund

 The Blackrock Russell 1000 Index Fund shall be invested and reinvested primarily in a portfolio of Equity Securities with the objective of approximating as closely as practicable the capitalization weighted total rate of return of the Russell 1000 Index (large cap companies).

#### Blackrock Russell 2500 Index Fund

 The Blackrock Russell 2500 Index Fund shall be invested and reinvested primarily in a portfolio of Equity Securities with the objective of approximating as closely as practicable the capitalization weighted total rate of return of the Russell 2500 Index (mid and small cap companies).

#### Western Asset Management Index Plus Separate Account

The objective of the Portfolio is to maximize the long term total return in the Portfolio while providing a core domestic equity exposure to the Standard & Poor's ("S&P") 500 Index and managing Portfolio risk. The Manager shall aim to exceed the total return of the S&P 500 index with all dividends reinvested in the index by 75 basis points on an annualized basis over a full market cycle.

#### Blackrock MSCI ACWI ex-U.S. IMI Index Fund

 The BlackRock MSCI ACWI ex-U.S. IMI Index Fund shall be invested and reinvested in a portfolio of International Equity Securities whose total rates of return will approximate as closely as practicable the capitalization-weighted total rates of return of the equity markets of selected non-U.S. developed and emerging countries.

#### Blackrock MSCI ACWI Equity Index Fund

 The BlackRock MSCI ACWI Equity Index Fund shall be invested and reinvested primarily in a portfolio of U.S. Equity Securities and International Equity Securities with the objective of approximating as closely as practicable the capitalization-weighted total rates of return of the equity markets of the U.S, non-U.S. developed and emerging countries.

#### • Hexavest EAFE Equity Fund

 The Fund seeks to provide investors with capital appreciation and income generation by using a topdown approach and investing primarily in equity and quasi equity securities located in Europe, Australasia and the Far East ("EAFE") and which form part of the MSCI EAFE Index. The Fund seeks to achieve a rate of return that will exceed that of the index net of fees, and achieve a high ranking relative to similar funds over a full market cycle.



# **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 Bloomberg Barclays 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.

#### Reams 10-Year Treasuries

- The portfolio shall be invested in 10-Year U.S. Treasury Debt Securities with the objective of returning the rate of return on a 10-Year U.S. Treasury Debt Security.

#### 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, incomeproducing 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.



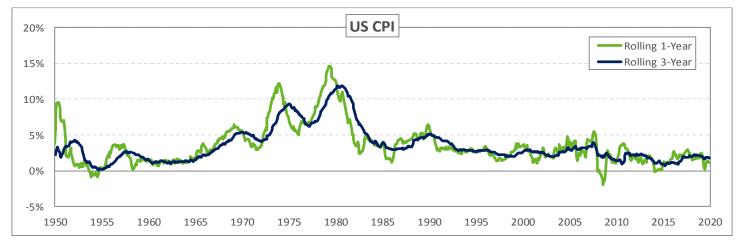
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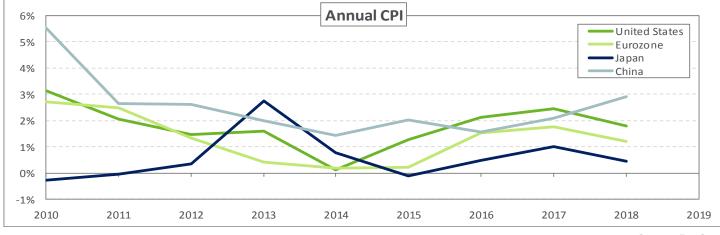


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#### INFLATION



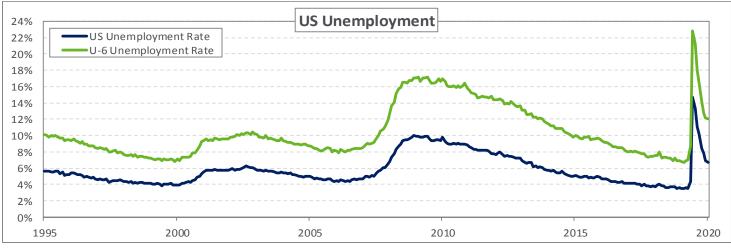
Source: Bureau of Labor Statistics, FactSet



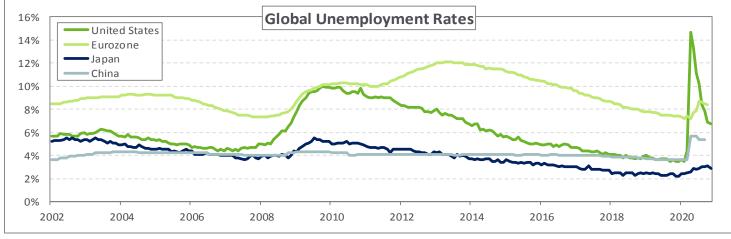
Source: FactSet



#### **UNEMPLOYMENT**



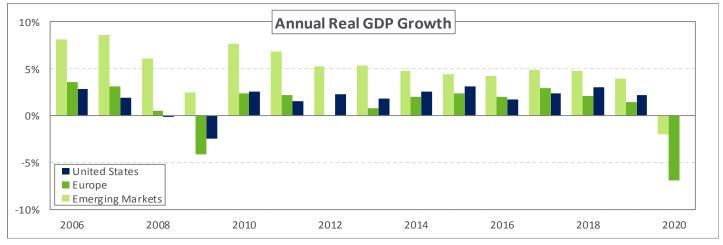
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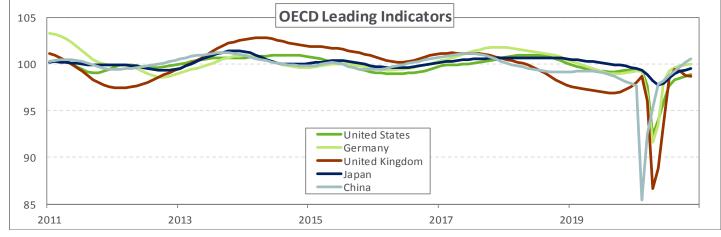
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Source: FactSet

#### **ECONOMIC INDICATORS**



Source: Bureau of Economic Analysis, Oxford Economics, FactSet



Source: OECD, FactSet



## **GROSS DOMESTIC PRODUCT**

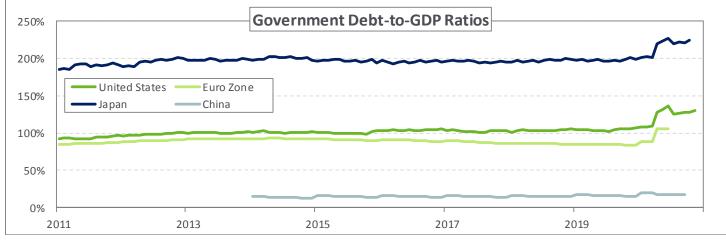


Source: Bureau of Economic Analysis, FactSet

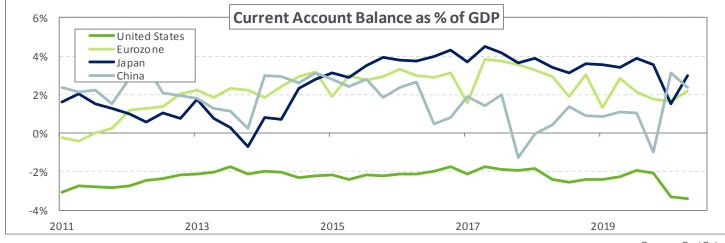


Source: IMF, FactSet

## **GROSS DOMESTIC PRODUCT METRICS**

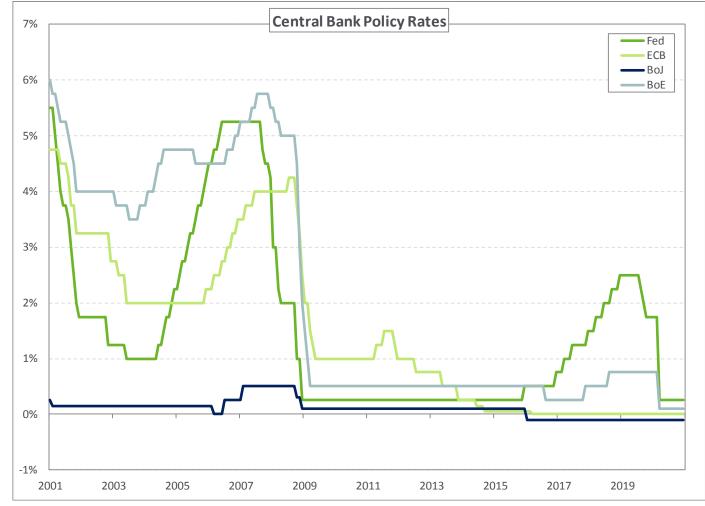


Source: IMF, FactSet



Source: FactSet

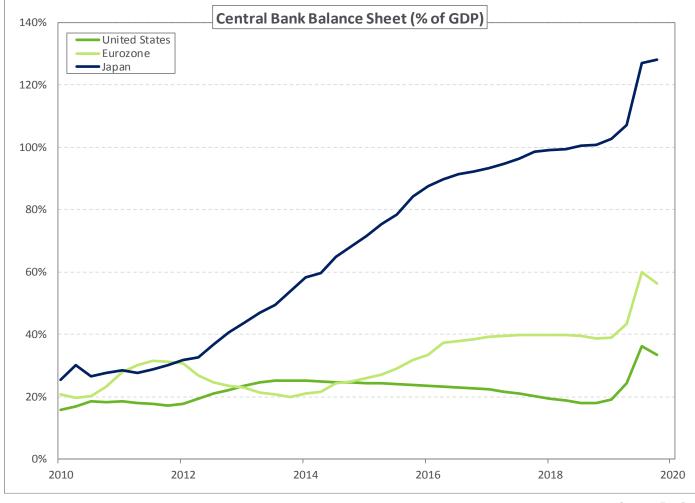
#### **CENTRAL BANK RATES**



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



### **CENTRAL BANK BALANCE SHEETS**



Source: FactSet

## **CURRENCIES**

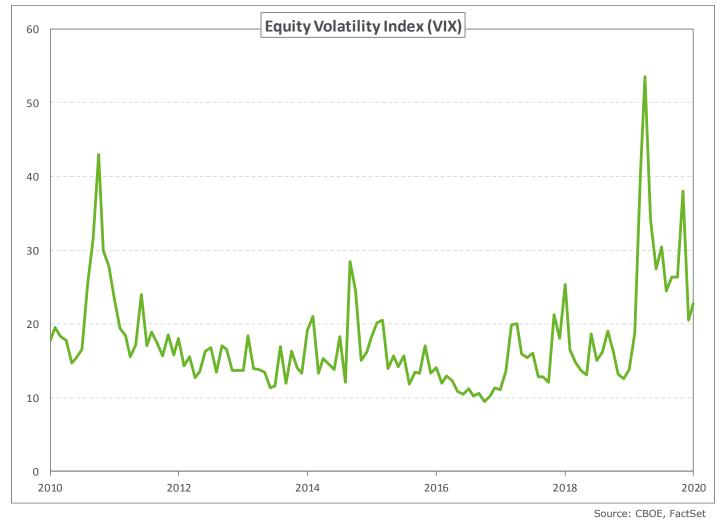
	% Change Relative to USD				
Currencies	Spot	1 Month	YTD	1 Year	
Euro	1.22	2.3%	0.0%	9.0%	
British Pound	1.37	2.4%	0.0%	3.2%	
Japanese Yen	103.25	1.0%	0.0%	5.3%	
Swiss Franc	0.88	2.4%	0.0%	9.5%	
Australian Dollar	0.77	4.7%	0.0%	9.8%	
Chinese Yuan	6.54	0.6%	0.0%	6.5%	
Brazilian Real	5.19	3.7%	0.0%	-22.6%	
Russian Ruble	73.96	3.4%	0.0%	-16.0%	
Indian Rupee	73.07	1.4%	0.0%	-2.3%	
Mexican Peso	19.93	1.2%	0.0%	-5.2%	
South African Rand	14.69	5.4%	0.0%	-4.8%	

Source: FactSet



Source: FactSet

## VOLATILITY



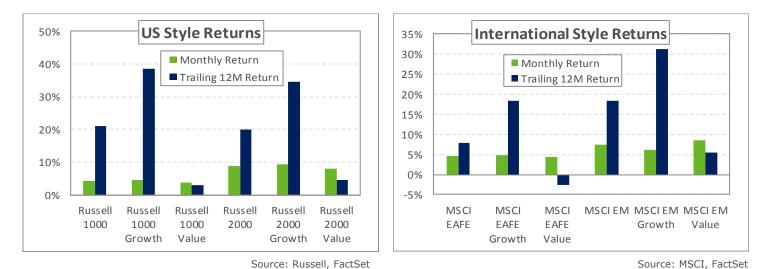
Business Meeting Agenda - VI.B. INVESTMENT INFORMATION: QUARTERLY INVESTMENT PERFORMANCE REPORT FOR PERIOD ENDING DE...

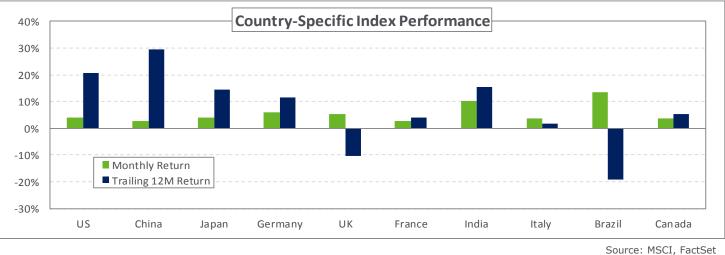




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#### **EQUITY INDEX PERFORMANCE**



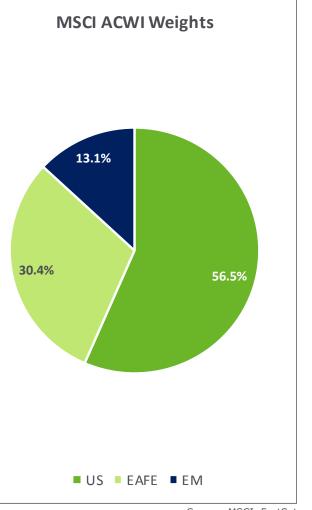


Represents returns in USD

## **INDEX COMPOSITION**

	MTD	QTD	YTD	Index Weight
S&P 500	3.8%	12.1%	18.4%	100.0%
Communication Services	0.3%	1.5%	2.7%	10.8%
Consumer Discretionary	0.3%	0.9%	4.0%	12.7%
Consumer Staples	0.1%	0.4%	0.5%	6.5%
Energy	0.1%	0.6%	-1.8%	2.3%
Financials	0.6%	2.3%	-1.5%	10.4%
Health Care	0.5%	1.1%	2.1%	13.5%
Industrials	0.1%	1.3%	0.6%	8.4%
Information Technology	1.6%	3.2%	12.1%	27.6%
Materials	0.1%	0.4%	0.6%	2.6%
Real Estate	0.0%	0.1%	-0.4%	2.4%
Utilities	0.0%	0.2%	-0.3%	2.8%
			Source: S&	P, FactSet

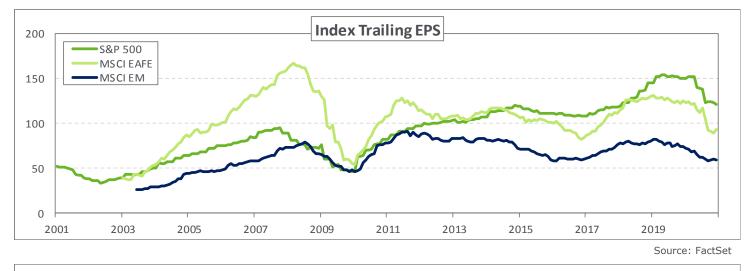
	MTD	QTD	YTD	Index Weight
MSCI ACWI	4.6%	14.7%	16.3%	100.0%
Communication Services	0.3%	1.4%	2.4%	9.3%
Consumer Discretionary	0.6%	1.9%	4.8%	13.0%
Consumer Staples	0.2%	0.6%	0.5%	7.4%
Energy	0.1%	0.7%	-1.9%	3.0%
Financials	0.7%	3.1%	-2.5%	13.5%
Health Care	0.4%	0.9%	2.3%	11.9%
Industrials	0.3%	1.6%	0.8%	9.7%
Information Technology	1.5%	3.1%	9.6%	21.9%
Materials	0.3%	0.9%	1.1%	4.9%
Real Estate	0.0%	0.2%	-0.6%	2.6%
Utilities	0.1%	0.3%	-0.1%	3.0%

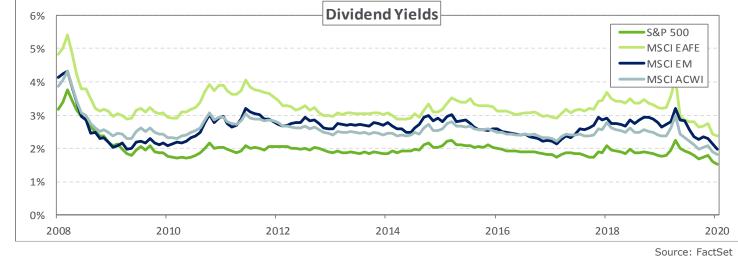


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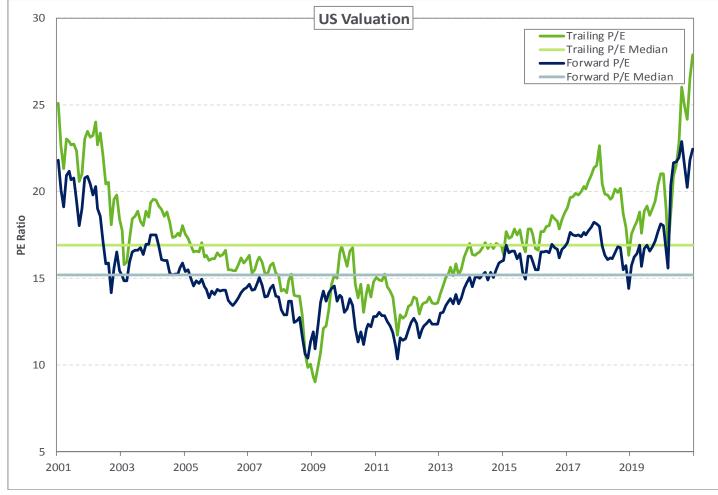








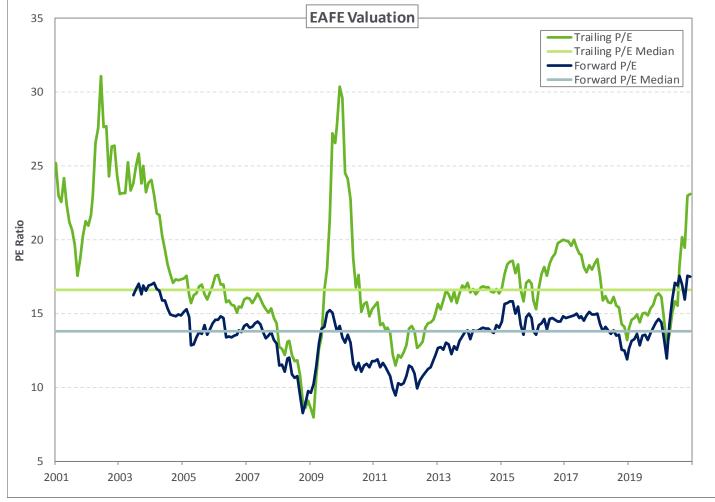
## **US EQUITY VALUATIONS**



Source: S&P, FactSet

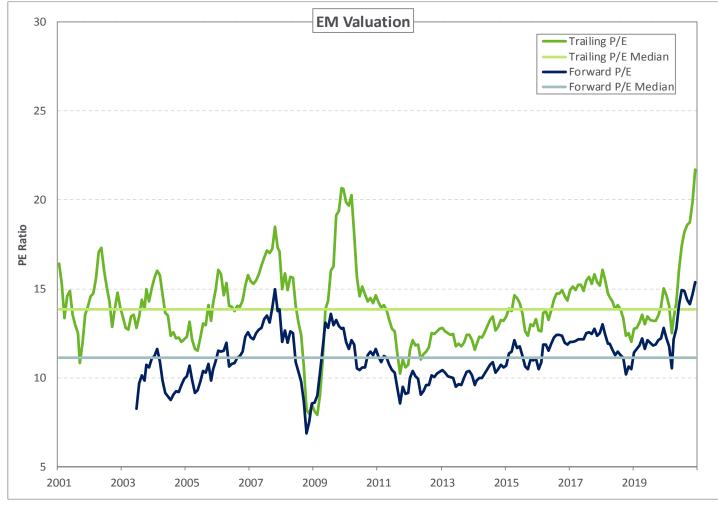


### **EAFE EQUITY VALUATIONS**



Source: MSCI, FactSet

#### **EM EQUITY VALUATIONS**



Source: MSCI, FactSet

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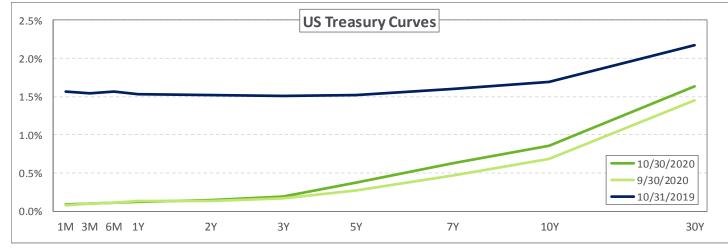
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## FIXED INCOME CHARACTERISTICS

	Averages			Το	otal Returns (%	%)
	Yield to Worst	Spread (bps)	Duration (Years)	1-Month	YTD	1-Year
Barclays Aggregate	1.12%	42	6.2	0.1%	7.4%	7.4%
Barclays Treasury	0.57%	-	7.2	-0.2%	7.9%	7.9%
Barclays Agency	0.48%	10	3.7	0.1%	5.4%	5.4%
Barclays MBS	1.25%	39	2.3	0.2%	3.8%	3.8%
Barclays ABS	0.45%	33	2.1	0.2%	4.5%	4.5%
Barclays CMBS	1.02%	49	5.8	0.4%	8.9%	8.9%
Barclays Corp IG	1.74%	96	8.8	0.4%	9.8%	9.8%
Barclays Muni	1.07%	-	5.2	0.6%	5.2%	5.2%
Barclays HY Muni	3.82%	-	7.3	1.9%	4.9%	4.9%
Barclays TIPS	0.69%	-	3.4	1.1%	10.9%	10.9%
Barclays HY	4.18%	360	3.6	1.9%	7.1%	7.1%
Barclays Global Agg	0.83%	37	7.4	1.3%	9.1%	9.1%
JPM EMBI Glob Div	-	350	8.1	1.9%	5.2%	5.2%
JPM GBI - EM	4.30%	-	5.6	3.5%	2.7%	2.7%

Source: Barclays, JP Morgan, FactSet

#### TREASURIES



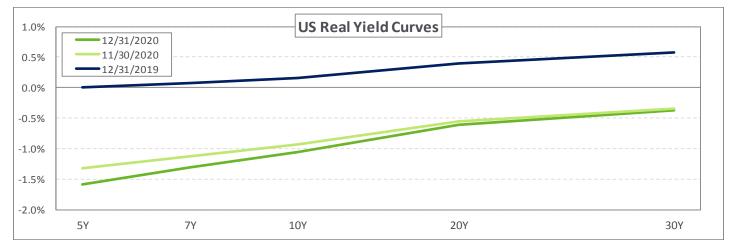
Source: FactSet

		Yield (%)	Total Return (%)		
	Current	1 Month Ago	12 Months Ago	1 Month	12 Months
3M Treasury	0.08%	0.09%	1.55%	0.01%	0.67%
6M Treasury	0.09%	0.10%	1.59%	0.02%	1.05%
2Y Treasury	0.12%	0.14%	1.57%	0.07%	3.03%
5Y Treasury	0.36%	0.36%	1.69%	0.09%	7.20%
10Y Treasury	0.92%	0.84%	1.92%	-0.58%	10.58%
30Y Treasury	1.65%	1.58%	2.39%	-1.51%	18.65%

Source: FactSet



## **REAL YIELDS**



Source: FactSet

		Real Rates	Breakeven Rates		
	Current	1 Month Ago	12 Months Ago	Current	12 Months
5-Year	-1.59%	-1.32%	0.01%	1.95%	0.01%
7-Year	-1.31%	-1.13%	0.07%	1.96%	0.07%
10-Year	-1.06%	-0.93%	0.15%	1.98%	0.15%
30-Year	-0.37%	-0.35%	0.58%	2.02%	0.58%

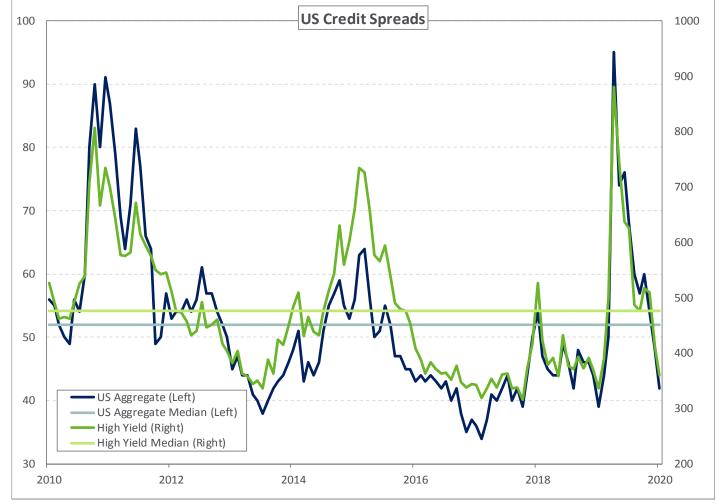
Source: FactSet









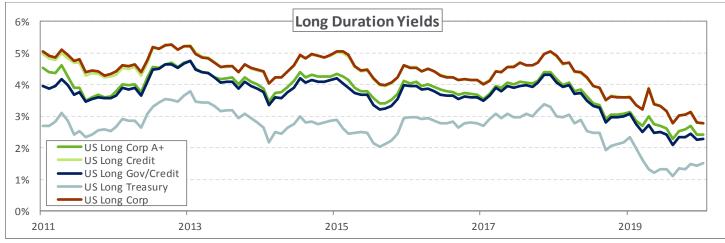


Source: Barclays, FactSet

## LONG DURATION

Index	Current	1 Month Ago	12 Months Ago	Duration
Barclays Long Treasury	1.5%	1.4%	2.3%	19.2
Barclays 20+ STRIPS	1.6%	1.6%	2.4%	27.0
Barclays Long Credit	2.8%	2.8%	3.6%	15.3
Barclays Long Gov/Credit	2.3%	2.3%	3.1%	16.8
Barclays Long Corp A+	2.5%	2.5%	3.3%	16.1

Source: Barclays, FactSet



Source: Barclays, FactSet

Business Meeting Agenda - VI.B. INVESTMENT INFORMATION: QUARTERLY INVESTMENT PERFORMANCE REPORT FOR PERIOD ENDING DE...

# **REAL ASSETS**

NEPC, LLC

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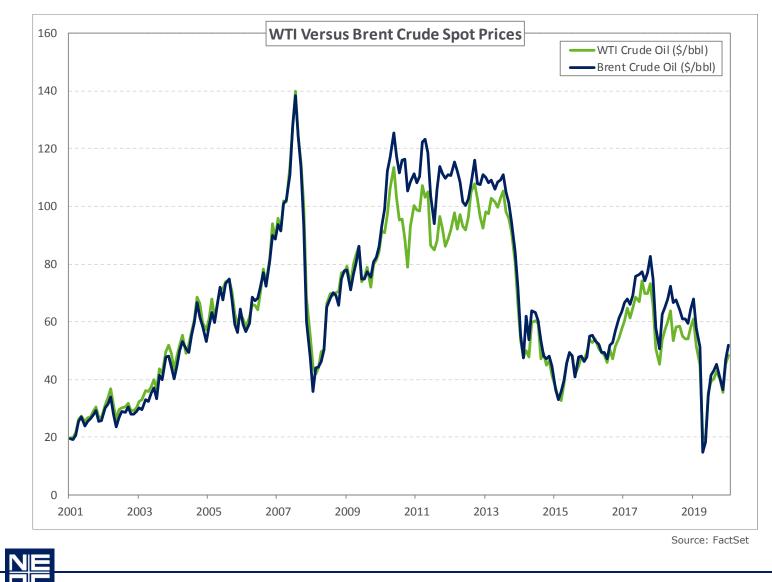
## **REAL ASSETS INDEX PERFORMANCE**

Index	1 Month	3 Month	YTD	1 Year	3 Year	5 Year
Bloomberg Commodity Index	5.0%	10.2%	-3.1%	-3.1%	-2.5%	1.0%
Bloomberg Sub Agriculture Index	10.4%	21.4%	16.3%	16.3%	1.9%	-0.8%
Coffee	4.0%	12.8%	-9.4%	-9.4%	-9.2%	-9.1%
Corn	13.6%	25.2%	12.8%	12.8%	0.7%	-4.1%
Cotton	8.3%	15.7%	9.9%	9.9%	-1.6%	3.5%
Soybean	11.7%	27.4%	31.9%	31.9%	5.1%	4.1%
Soybean Oil	13.6%	28.4%	15.8%	15.8%	3.9%	2.3%
Sugar	6.8%	14.7%	10.5%	10.5%	-5.9%	-5.2%
Wheat	9.5%	9.4%	10.2%	10.2%	7.6%	-3.7%
Bloomberg Sub Energy	-0.7%	2.2%	-42.5%	-42.5%	-17.5%	-9.0%
Brent Crude	8.0%	19.4%	-31.3%	-31.3%	-7.5%	2.5%
Heating Oil	7.6%	25.6%	-38.0%	-38.0%	-13.4%	-0.1%
Natural Gas	-12.9%	-18.8%	-41.7%	-41.7%	-28.5%	-23.8%
Unleaded Gas	11.9%	21.0%	-30.7%	-30.7%	-10.5%	-4.7%
WTI Crude Oil	6.5%	18.2%	-50.4%	-50.4%	-19.1%	-9.9%
Bloomberg Sub Industrial Metals	0.3%	14.2%	16.2%	16.2%	0.1%	9.2%
Aluminum	-3.6%	12.0%	3.9%	3.9%	-6.0%	3.6%
Copper	2.4%	15.8%	23.1%	23.1%	1.4%	9.2%
Nickel	3.5%	14.1%	16.5%	16.5%	8.9%	12.6%
Zinc	-1.7%	13.6%	18.4%	18.4%	-2.7%	13.4%
Bloomberg Sub Precious Metals	8.8%	2.4%	25.4%	25.4%	11.9%	11.2%
Gold	6.4%	-0.4%	20.8%	20.8%	11.5%	11.0%
Silver	16.9%	11.8%	42.1%	42.1%	13.3%	11.9%
Bloomberg Sub Livestock	2.1%	2.4%	-23.3%	-23.3%	-10.8%	-6.6%
Lean Hogs	2.5%	8.7%	-31.3%	-31.3%	-20.9%	-13.2%
Live Cattle	1.9%	-0.4%	-17.8%	-17.8%	-5.2%	-2.9%

Source: Bloomberg, FactSet Bloomberg subindex total return indices reflects the return of the underlying one month commodity futures price movements



#### **OIL MARKETS**



## **DISCLAIMERS & DISCLOSURES**

- Past performance is no guarantee of future results.
- Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.
- A "since inception" return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.
- NEPC's preferred data source is the plan's custodian bank or record-keeper. If data cannot be
  obtained from one of the preferred data sources, data provided by investment managers may be
  used. Information on market indices and security characteristics is received from additional
  providers. While NEPC has exercised reasonable professional care in preparing this report, we
  cannot guarantee the accuracy of all source information contained within. In addition, some index
  returns displayed in this report or used in calculation of a policy index, allocation index or other
  custom benchmark may be preliminary and subject to change.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- The opinions presented herein represent the good faith views of NEPC as of the date of this presentation and are subject to change at any time. Neither fund performance nor universe rankings contained in this report should be considered a recommendation by NEPC.
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#### **NEPC 2021 INVESTMENT OUTLOOK**

### VENTURA COUNTRY EMPLOYEES' RETIREMENT ASSOCIATION

February 22, 2021

**Allan Martin, Partner** 



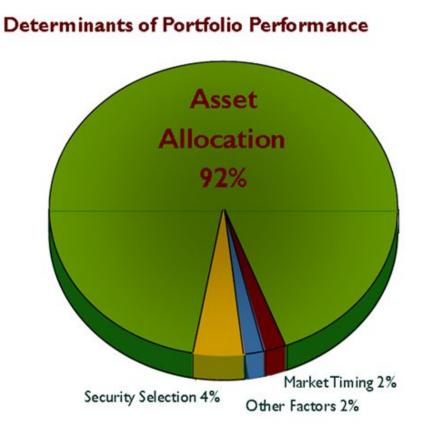
Dan Hennessy, CFA, CAIA, Senior Consultant

Michael Miranda, CFA, Senior Consulting Specialist



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# ASSET ALLOCATION: THE KEY INVESTMENT DECISION



Source: Determinants of Portfolio Performance II: An Update, Brinson, et al, Financial Analysts Journal, Mayl June 1991, pp 40-48.

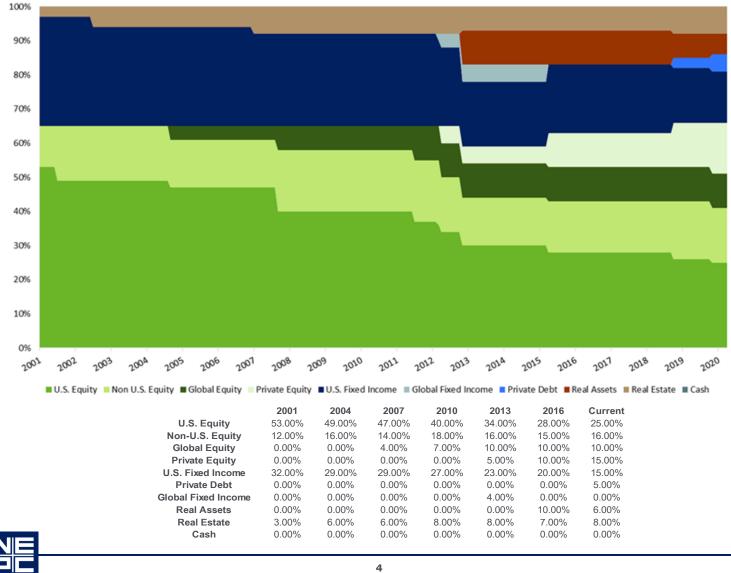


#### **VCERA RANGES AND BENCHMARKS**

	<b>Targets</b>	Ranges	Benchmark
U.S. Equity	25.0%	20.0% - 30.0%	Russell 3000 Index
Non-US Equity	16.0%	12.0% - 20.0%	MSCI ACWI ex U.S. Index Net
Global Equity	10.0%	7.0% - 13.0%	MSCI ACWI Index Net
Private Equity	15.0%	10.0% - 17.0%	Russell 3000 Index + 3%
Fixed Income	20.0%	17.0% - 23.0%	Barclays Capital U.S. Aggregate Bond Index
U.S. Fixed Income	13.0%	12.0% - 20.0%	
Treasuries	2.0%	0.0% - 5.0%	
Private Debt	5.0%	0.0% - 7.0%	
Real Assets			
Real Assets	6.0%	0.0% - 8.0%	CPI + 2%
Real Estate	8.0%	3.0% - 11.0%	NCREIF ODCE Index
Cash	0.0%	0.0% - 3.0%	90 day T-bills



#### **HISTORICAL POLICY ALLOCATION**



Business Meeting Agenda - VI.C. INVESTMENT INFORMATION: NEPC 2021 INVESTMENT OUTLOOK - CAPITAL MARKET ASSUMPTIONS

# CAPITAL MARKET EXPECTATIONS

NEPC, LLC —

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## **ASSUMPTION DEVELOPMENT**

## Assumptions are published for over 70 asset classes

NEPC publishes 10- and 30-year return forecasts

#### Based on data as of 12/31/20

Assumptions are developed with NEPC valuations models and rely on a building block approach

The 10-year return outlook is intended to support strategic asset allocation analysis

**30-year return assumptions** are used for actuarial inputs and long-term planning

#### **Asset Allocation Process**

**Finalize list of new asset classes** 

Calculate asset class volatility and correlation assumptions

Set model terminal values, growth and inflation inputs

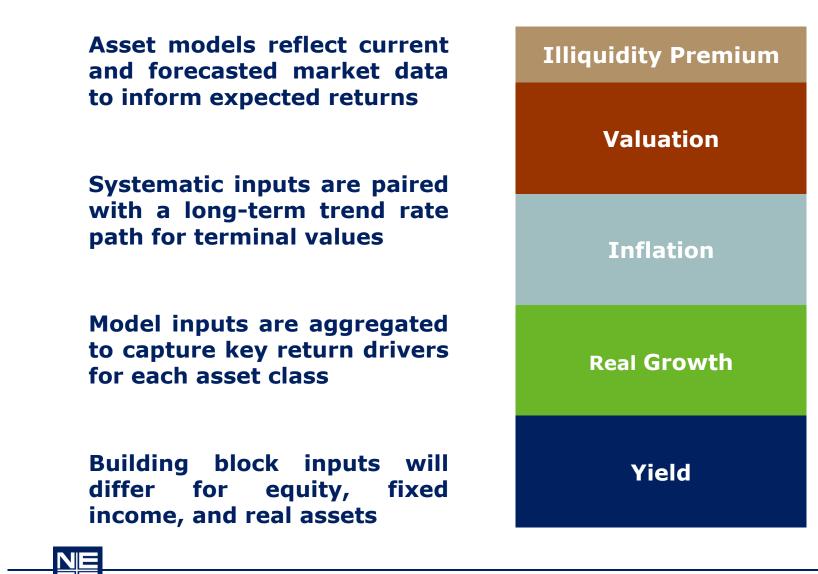
Models updated at quarter-end

**Review model outputs and produce return assumptions** 

Assumptions released on the 15<sup>th</sup> calendar day after quarter-end

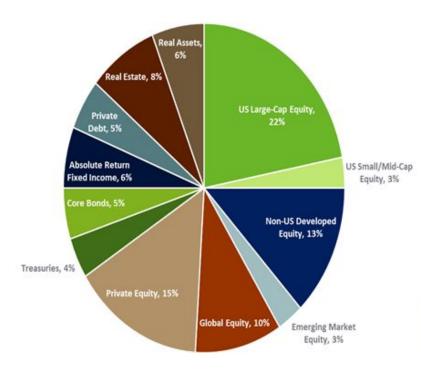


### **BUILDING BLOCKS METHODOLOGY**



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### **VCERA TARGET MIX – USING NEPC'S 2021 ASSUMPTIONS**



	10 Year		30 Year	
	2020	2021	2020	2021
Expected Return	6.5%	6.2%	7.7%	7.2%
Expected Volatility	14.1%	14.6%	14.1%	14.6%
Sharpe Ratio	0.33	0.37	0.38	0.36
Sortino Ratio	0.55	0.50	0.68	0.60

Probabilities using 2021 Assumption	ns
Probability of 1-Year Return Under 0.00%	33.4%
Probability of 10 Year Return Under 0.00%	8.8%
Probability of 10 Year Return Under 7.25%	58.8%
Probability of 30-Year Return Under 7.25%	50.7%

### **TARGET MIX USING 2021 ASSUMPTIONS**

	Policy Target	Median PF
Cash	0%	2%
Total Cash	0%	2%
US Large-Cap Equity	22%	0%
US Small/Mid-Cap Equity	3%	0%
Non-US Developed Equity	10%	0%
Non-US Developed Small-Cap Equity	3%	0%
Emerging Market Equity	3%	0%
Global Equity	10%	48%
Private Equity	15%	13%
Total Equity	66%	61%
US Treasury Bond	4%	0%
US Aggregate Bond	5%	20%
US High Yield Corporate Bond	0%	3%
Absolute Return Fixed Income	6%	0%
Private Debt	5%	0%
Total Fixed Income	20%	23%
Real Estate	8%	7%
Real Assets	6%	0%
Total Real Assets	14%	<b>7%</b>
Absolute Return	0%	3%
Global Asset Allocation Strategy	0%	3%
Total Multi Asset	0%	<b>7%</b>
Expected Return 10 yrs	6.2%	5.5%
Expected Return 30 yrs	7.2%	6.5%
Standard Dev	14.6%	13.1%
Sharpe Ratio (10 years)	0.37	0.36
Sharpe Ratio (30 years)	0.36	0.35
	0.30	0.35
Probability of 1-Year Return Under 0.0%	33.4%	33.7%
Probability of 10-Year Return Under 0.0%	8.8%	9.2%
Probability of 10-Year Return Under 7.25%	58.8%	66.3%
Probability of 30-Year Return Under 7.25%	50.7%	62.0%



Note: Allocations rounded to nearest whole percent.

### **GEOMETRIC RETURN ASSUMPTIONS**

10 Year Geome	tric Exp	ected F	Return
Asset Class	2021	2020	2021-2020
Public Equity	6.18%	6.21%	-0.03%
Large Cap Equities	5.40%	4.98%	0.42%
Small/Mid Cap Equities	5.70%	5.55%	0.15%
Int'l Equities (Unhedged)	5.90%	6.02%	-0.12%
Emerging Int'l Equities	7.50%	9.00%	-1.50%
Private Equity	9.31%	9.37%	-0.06%
Core Fixed Income	1.43%	2.51%	-1.08%
Treasuries	0.90%	1.91%	-1.01%
IG Corp Credit	2.20%	3.36%	-1.16%
MBS	1.20%	2.48%	-1.28%
Credit Fixed Income	4.70%	5.51%	-0.81%
High-Yield Bonds	2.90%	4.15%	-1.25%
Bank Loans	3.90%	4.78%	-0.88%
EMD External	3.00%	4.14%	-1.14%
EMD Local Currency	5.00%	5.38%	-0.38%
Private Credit	6.15%	6.72%	-0.57%
Real Estate	4.86%	5.70%	-0.84%
Infrastructure	5.40%	5.91%	-0.51%
Cash	0.80%	1.81%	-1.01%

30 Year Geomet	ric Exp	ected	Return
Asset Class	2021	2020	2021-2020
Public Equity	7.00%	7.52%	-0.52%
Large Cap Equities	6.30%	6.71%	-0.41%
Small/Mid Cap Equities	6.60%	7.15%	-0.55%
Int'l Equities (Unhedged)	6.50%	6.96%	-0.46%
Emerging Int'l Equities	8.40%	9.20%	-0.80%
Private Equity	10.07%	10.71%	-0.64%
Core Fixed Income	2.65%	3.42%	-0.77%
Treasuries	2.00%	2.72%	-0.72%
IG Corp Credit	3.70%	4.39%	-0.69%
MBS	2.30%	3.42%	-1.12%
Credit Fixed Income	6.01%	6.41%	-0.40%
High-Yield Bonds	5.00%	5.61%	-0.61%
Bank Loans	4.80%	5.22%	-0.42%
EMD External	4.50%	4.97%	-0.47%
EMD Local Currency	5.10%	5.29%	-0.19%
Private Credit	7.50%	7.81%	-0.31%
Real Estate	6.16%	6.51%	-0.35%
Infrastructure	6.60%	6.70%	-0.10%
Cash	1.90%	2.38%	-0.48%

Credit Fixed Income modeled as 20% High Yield, 20% Bank Loans, 10% Emerging Market Debt (External), 10% Emerging Market Debt (Local), 40% Private Debt
 Real Estate modeled as 70% Core, 30% Non-Core



Asset classes may be calculated as a blend of underlying asset classes

## **VOLATILITY ASSUMPTIONS**

Volatility						
Asset Class	2021	2020	2021-2020			
Public Equity**	17.97%	17.79%	0.18%			
Large Cap Equities	16.57%	16.50%	0.07%			
Small/Mid Cap Equities	20.70%	20.00%	0.70%			
Int'l Equities	19.65%	20.50%	-0.85%			
Emerging Int'l Equities	28.66%	28.00%	0.66%			
Private Equity**	24.82%	24.58%	0.24%			
Core Fixed Income**	5.69%	6.01%	-0.32%			
Treasuries	5.28%	5.50%	-0.22%			
IG Corp Credit	7.29%	7.50%	-0.21%			
MBS	6.50%	7.00%	-0.50%			
Credit Fixed Income**	10.66%	10.64%	0.02%			
High-Yield Bonds	11.51%	12.50%	-0.99%			
Bank Loans	9.20%	9.00%	0.20%			
EMD External	13.00%	13.00%	0.00%			
EMD Local Currency	13.04%	13.00%	0.04%			
Private Credit**	11.86%	11.54%	0.32%			
Real Estate**	16.01%	14.14%	1.87%			
Infrastructure	12.50%	12.00%	0.50%			
Cash	0.62%	1.00%	-0.38%			

Credit Fixed Income modeled as 20% High Yield, 20% Bank Loans, 10% Emerging Market Debt (External), 10% Emerging Market Debt (Local), 40% Private Debt
 Real Estate modeled as 70% Core, 30% Non-Core



Asset classes may be calculated as a blend of underlying asset classes

### SHARPE RATIO ASSUMPTIONS

Sharpe Ratio – 10 Year				Sharpe Ratio 30-Year			
Asset Class	2021	2020	2021-2020	Asset Class	2021	2020	2021-2020
Public Equity**	0.30	0.25	0.05	Public Equity**	0.28	0.29	-0.01
Large Cap Equities	0.28	0.19	0.09	Large Cap Equities	0.27	0.26	0.00
Small/Mid Cap Equities	0.24	0.19	0.05	Small/Mid Cap Equities	0.23	0.24	-0.01
Int'l Equities	0.26	0.21	0.05	Int'l Equities	0.23	0.22	0.01
Emerging Int'l Equities	0.23	0.26	-0.02	Emerging Int'l Equities	0.23	0.24	-0.02
Private Equity**	0.34	0.31	0.04	Private Equity**	0.33	0.34	-0.01
Core Fixed Income**	0.11	0.12	-0.01	Core Fixed Income**	0.13	0.17	-0.04
Treasuries	0.02	0.02	0.00	Treasuries	0.02	0.06	-0.04
IG Corp Credit	0.19	0.21	-0.01	IG Corp Credit	0.25	0.27	-0.02
MBS	0.06	0.10	-0.03	MBS	0.06	0.15	-0.09
Credit Fixed Income**	0.37	0.35	0.02	Credit Fixed Income**	0.39	0.38	0.01
High-Yield Bonds	0.18	0.19	0.00	High-Yield Bonds	0.27	0.26	0.01
Bank Loans	0.34	0.33	0.01	Bank Loans	0.32	0.32	0.00
EMD External	0.17	0.18	-0.01	EMD External	0.20	0.20	0.00
EMD Local Currency	0.32	0.27	0.05	EMD Local Currency	0.25	0.22	0.02
Private Credit**	0.45	0.43	0.03	Private Credit**	0.47	0.47	0.00
Real Estate**	0.25	0.28	-0.02	Real Estate**	0.27	0.29	-0.03
Infrastructure	0.37	0.34	0.03	Infrastructure	0.38	0.36	0.02
Cash	0.00	0.00	0.00	Cash	0.00	0.00	0.00



# KEY MARKET THEMES

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### **NEPC KEY MARKET THEMES**

Key Market Themes are factors that influence global markets and remain relevant for an extended period

Themes may be disrupted and incite market volatility

The conclusion of a theme may alter market dynamics and NEPC's long-term market outlook

Our intent is for clients to be aware of these themes and understand their implications for the capital markets

**NEPC currently has four Key Market Themes:** 





### ASSESSING THE KEY MARKET THEMES AS OF 12/31/20

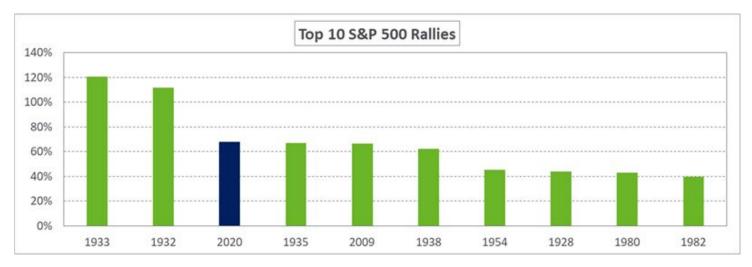
	Dormant	Faded	Neutral	Prevalent	Dominant
<b>Virus</b> <b>Trajectory</b> No Change in Status	<ul> <li>Market sentiment logistics, and supp</li> </ul>	improved with successf ly of the vaccine ns as worsening COVID-:	nant force driving global e ul vaccine candidates, the 19 trends and a potential	ough concerns remain a	
	Dormant	Faded	Neutral	Prevalent	Dominant
Permanent Interventions No Change in Status	• In the US, a fifth co	oronavirus relief package	he dominant force drivin e worth about \$900 billio gram by €500B and exten	n was passed. In Europe	
	Dormant	Faded	Neutral	Prevalent	Dominant
<b>Globalization</b> <b>Backlash</b> <i>No Change in Status</i>	The world will like		e in coming years as the l lified wealth divide given political outcomes		
	Dormant	Faded	Neutral	Prevalent	Dominant
China Transitions No Change in Status	owning a select nu software application	mber of corporate secu	rump signed two executi rities from China and bar y review in 2021 regardin	ned transactions with so	ome Chinese

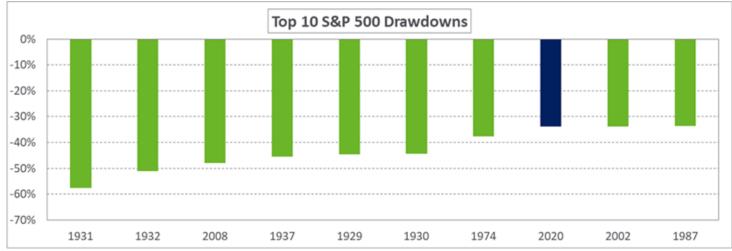


### **A WILD RIDE FOR INVESTORS**

	Phase One Trade Deal		Vaccine Op and Stin Continue to Market Ser	ıulus Support	Consolidated Appropriations Act is Passed
500	Strong Corporate Earnings	-	Dollar Falls – XY Worst Month Since 2010		Slow Economic Recovery Continues
000	First C Coronavirus Spi Headlines –	oronavirus ontinues to read Globally Declared a Pandemic	Gold Hits R High Near \$2		
	Social Distancing Restrictions Imposed	CRASA ଜନାନ୍ତର	JS Unemployment Rate Hits 14.8% <b>Arguings First</b> Arians Artand	Level	Year-to- Date Change
500	Largest Weekly S&P	Negati The Fed I	S&P 500	3756	+18.4%
000	Loss Since 2008	Purchases a and Lei	III-YOAT IIS YIOID	0.92%	-100 bps
		The Fed Une	30-Year US Yield	1.65%	-74 bps
	VIX Hits 80	Cuts Rates 15			
	VIX Hits 80 US Yields Hi	Cuts Rates 15 Range of 0.00	DVA	89.9	-6.7%
000		t Range of 0.00	DVA	89.9 22.0	-6.7% +9 points

### **2020 WAS A MOMENTOUS YEAR**





Source: S&P, FactSet





## MACRO ASSUMPTIONS

NEPC, LLC —

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### **INFLATION OVERVIEW**

## Inflation is an essential building block for developing asset class return assumptions

#### Inflation assumptions are model-driven and informed by multiple inputs for both the US and global assets

Includes forecasts from international organizations (e.g. IMF), local consumer and producer price indices, global interest rate curves, and break-even inflation expectations

#### **NEPC's US inflation expectation continues to reflect** minimal expected inflation pressures over the long-term

We anticipate near-term volatility in our inflation assumptions as market-based inflation expectations discount the full range of economic scenarios associated with the pandemic and response

Region	10-Year Inflation Assumption	30-Year Inflation Assumption
United States	2.0%	2.2%



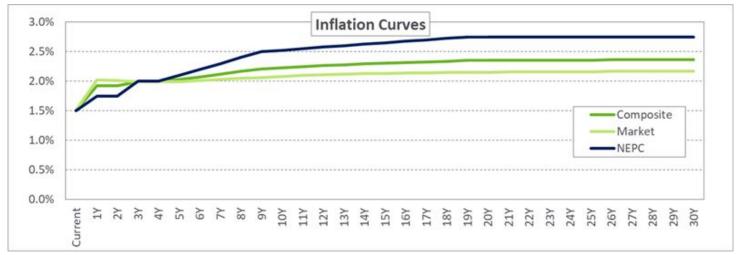
### **CURRENT ENVIRONMENT – SUMMARY**

## Subdued market pricing for inflation reflects the competing forces of inflationary and deflationary pressures

This base case is a consolidation of many potential paths: some inflationary, some deflationary

Those divergent paths highlight reasons to take inflation risk into stronger consideration in portfolio construction

#### NEPC's inflation path reflects higher inflation relative to market pricing, but does not call for "high" inflation in the near- or even medium-term



Source: FactSet, NEPC; as of 12/31/2020



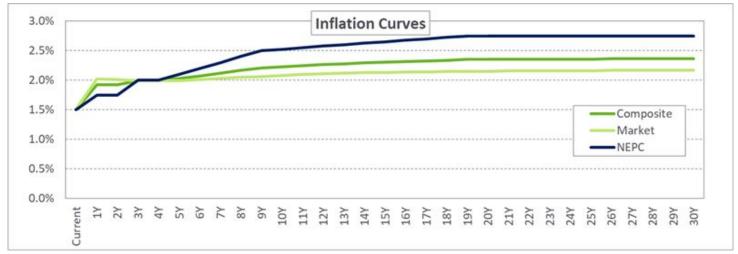
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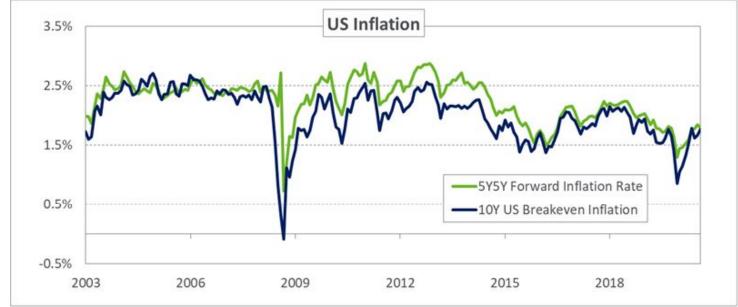
Source: FactSet, NEPC; as of 12/31/2020



### THE IMPORTANCE OF INFLATION SURPRISES

While the absolute level of inflation matters from an economic perspective, market expectations relative to realized inflation tend to drive changes in asset prices

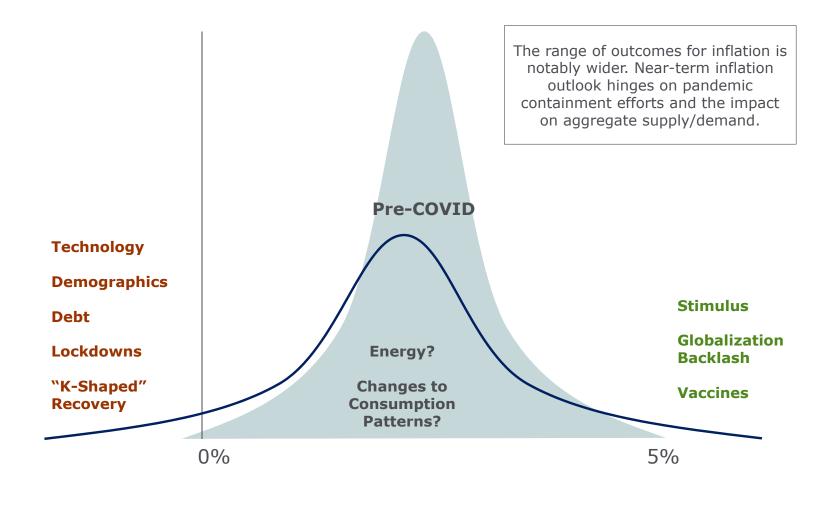
## Market expectations have anchored to a low inflation environment over the long-term



This dynamic makes an inflation surprise a key risk for asset pricing

Source: FactSet; as of 11/30/2020

### **A WIDE RANGE OF POTENTIAL OUTCOMES**



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### **US CASH EXPECTATIONS**

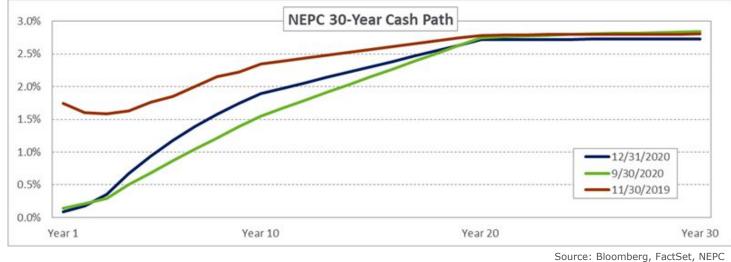
#### Cash is a foundational input for all asset class returns

The assumption is a direct building block input and is a relative value factor (cash + risk premia) in long-term return projections

#### **Cash assumptions reflect inflation and real interest rates**

#### **US nominal rates are near historic lows for NEPC forecasts**

Market expectations of suppressed real rates and minimal inflation create a slow trending path for cash to reach NEPC's long-term target



5, ,

### **GLOBAL INTEREST RATE EXPECTATIONS**

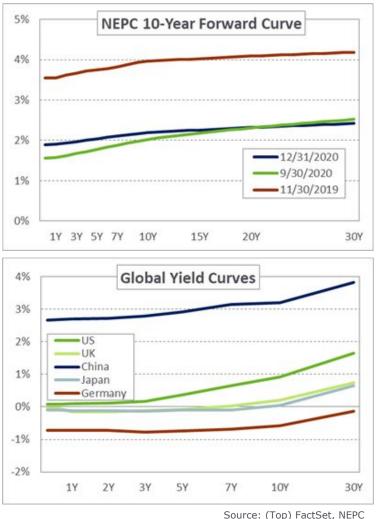
## Negative real yields reflect central bank intervention

Low real rates depress returns for all assets in the long-term

The Fed's easy policy and low inflation suppress long term yield forecasts

The outlook for Japan and Europe bonds are poor due to negative nominal yields

Emerging market interest rates are higher relative to the developed world



Source: (Bottom) FactSet, NEPC



# EQUITY ASSUMPTIONS

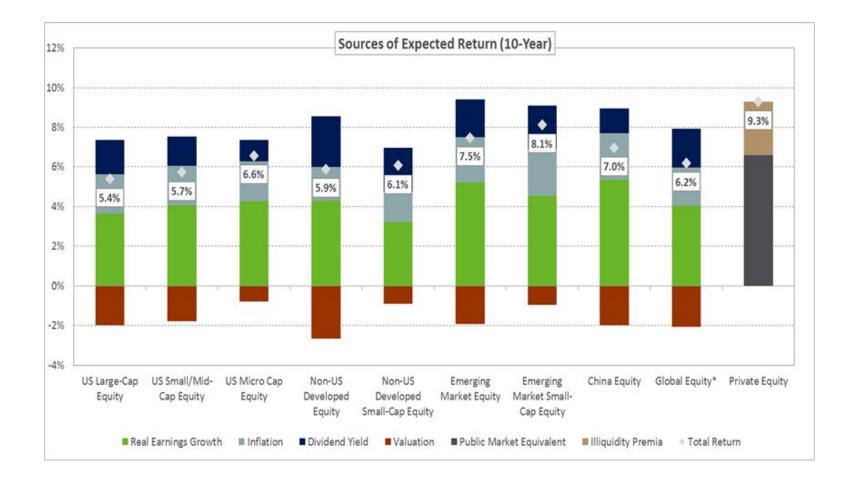
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## **EQUITY: ASSUMPTIONS**

Equit	Equity Building Blocks		12/31/20 10-Year	Change from
Tiliquidity	The return expected for	Asset Class	Return	09/30/20
Illiquidity Premium	investments with illiquidity risk	US Large-Cap Equity	5.4%	-0.4%
		US Small/Mid-Cap Equity	5.7%	-0.7%
Valuation	Represents P/E multiple contraction or expansion	US Microcap Equity	6.6%	-0.6%
	relative to long-term trend	Non-US Developed Equity	5.9%	-0.3%
Inflation	Market-specific inflation based on country revenue and region-specific inflation	Non-US Developed Small-Cap Equity	6.1%	-0.3%
Innation		Emerging Market Equity	7.5%	-0.5%
Deel	Market-specific real growth based on a weighted-	Emerging Market Small-Cap Equity	8.1%	-0.4%
Real Earnings Growth	average derived from country revenue	China Equity	7.0%	-
Growth	contribution and GDP growth	Hedge Fund - Equity	4.0%	-0.3%
Dividend	Income distributed to shareholders adjusted to	Global Equity*	6.2%	-0.4%
Yield	reflect market trends	Private Equity*	9.3%	-0.7%
			*Calculated as a blend	Source: NEPC of other asset classes
		27		

### **EQUITY: BUILDING BLOCKS**





Source: NEPC \*Calculated as a blend of other classes

## FIXED INCOME ASSUMPTIONS

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### FIXED INCOME ASSUMPTIONS OVERVIEW

Credit return assumptions are lower from the prior quarter with credit spreads continuing to tighten

#### While return assumptions are low for safe-haven assets, we continue to endorse a dedicated Treasury allocation

We recommend a strategic blend of 50% US Treasuries and 50% TIPS for total return focused investors

#### Safe-haven instruments may differ by investor

The fixed income profile and duration should reflect risk objectives, liability/commitment structure, and desire for capital efficiency

#### Return-seeking credit investments look to earn income and exploit shifts in credit spreads and market cycles

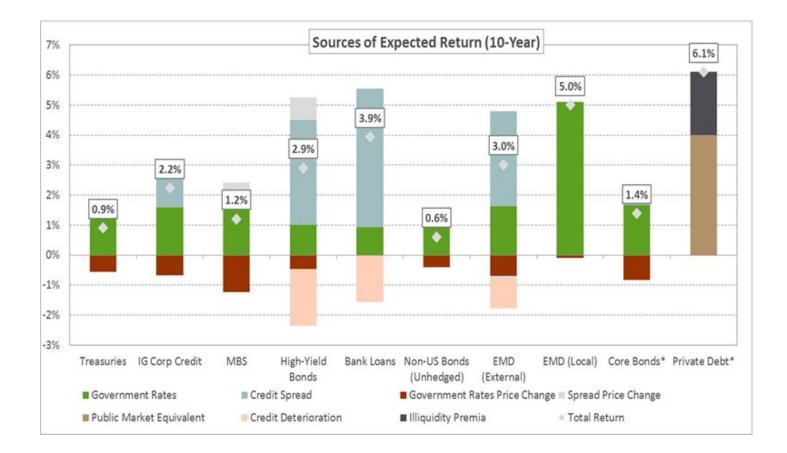
We believe a strategic blend of 50% high yield, 25% levered loans, and 25% blended EMD offers an improved beta profile for return-seeking credit relative to US high yield



## **FIXED INCOME: ASSUMPTIONS**

Fixed Inc	ome Building Blocks		12/31/20	Change
Illiquidity	The return expected for investments with	Asset Class	10-Year Return	From 09/30/20
Premium	illiquidity risk	US TIPS	1.0%	+0.2%
Government	Valuation change due to	US Treasury Bond	0.9%	+0.3%
Rates Price Change	shifts in the current yield curve to forecasted rates	US Corporate Bond	2.2%	-0.2%
Change	curve to forecasted fates	US Mortgage-Backed Securities	1.2%	+0.4%
Credit	The average loss for credit assets due to defaults and recovery rates	US High Yield Corporate Bond	2.9%	-0.7%
Deterioration		US Leveraged Loan	3.9%	+0.1%
	Valuation change due to	Emerging Market External Debt	3.0%	-1.0%
Spread Price Change	shifts in credit spreads over the duration of the	Emerging Market Local Currency Debt	5.0%	-0.4%
	investment	Non-US Government Bond	0.6%	-
Credit	Yield premium provided by	US Municipal Bond (1-10 Year)	1.1%	+0.1%
Spread	securities with credit risk	US High Yield Municipal Bond	2.8%	-0.5%
		Hedge Fund - Credit	3.9%	-0.2%
Government	The yield attributed to sovereign bonds that do	US Aggregate Bond*	1.4%	+0.2%
Rates	not have credit risk	Private Debt*	6.1%	-0.2%
		*C;	alculated as a blend o	Source: NEPC f other asset classes
PC	3	1		

### FIXED INCOME: BUILDING BLOCKS



Source: NEPC \*Calculated as a blend of other classes

## REAL ASSET ASSUMPTIONS

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## **REAL ASSET ASSUMPTIONS OVERVIEW**

#### The strategic outlook for real assets reflects a high level of uncertainty due to subdued inflation expectations

Real assets offer a meaningful portfolio diversification benefit, but are exposed to a wide range of potential inflation scenarios

## Real assets exhibit different betas to inflation and each asset class is exposed to various economic factors

Diversification and correlation benefits are helpful to a portfolio but must be carefully considered relative to the expected risk premium

#### Inflation-sensitivity and portfolio objectives influence an investor's strategic allocation to real assets

We encourage investors to remove commodity futures from strategic allocation targets due to persistent negative roll yield

## Strategic targets to Gold should be carefully weighed relative to the long-term macroeconomic environment

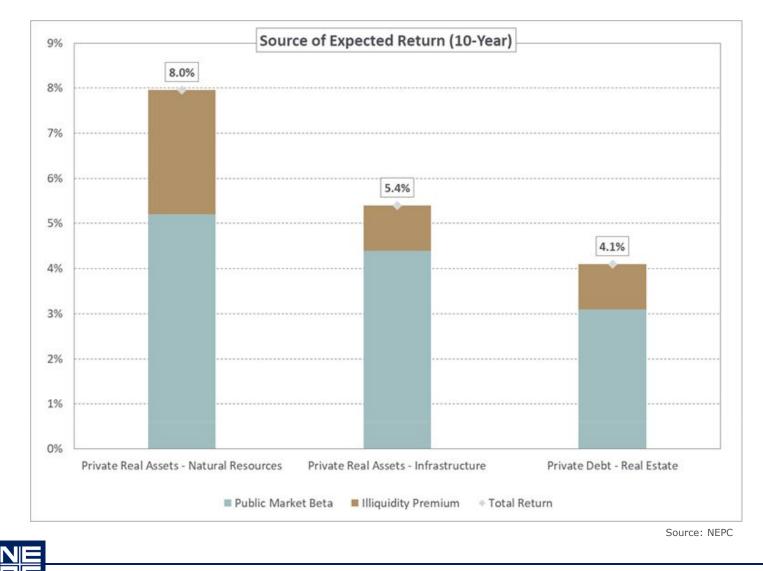
Gold exposure can be a challenge to investor risk-tolerance given its volatility profile and lack of a consistent risk premium



## **REAL ASSET: ASSUMPTIONS**

Real As	ssets Building Blocks	Asset Class	12/31/20 10-Year Return	Change From 09/30/20
Illiquidity Premium	The return expected for investments with illiquidity risk	Commodity Futures	0.9%	+0.3%
		Midstream Energy	7.4%	-0.6%
Valuation	The change in price of the asset moving to a terminal value or real average level	US REIT	5.5%	-0.2%
		Global Infrastructure Equity	5.9%	-0.3%
Inflation	Based on the inflation paths as defined by TIPS breakeven and NEPC assumptions	Global Natural Resources Equity	6.7%	-0.4%
		Gold	2.9%	N/A
Growth	Market-specific real growth based on a weighted-average derived from country revenue contribution and GDP growth	Core Real Estate	4.4%	+0.2%
		Non-Core Real Estate	5.5%	+0.4%
		Private Debt - Real Estate	4.1%	+0.2%
Real Income	The inflation-adjusted income produced by the underlying tangible or physical asset	Private Real Assets - Natural Resources	8.0%	-0.2%
		Private Real Assets - Infrastructure	5.4%	-0.1%
		*C	alculated as a blend c	Source: NEF

### **PRIVATE REAL ASSET BUILDING BLOCKS**



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# VIRUS TRAJECTORY

NEPC, LLC —

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#### **DEFINING THE THEME** KEY MARKET THEME: VIRUS TRAJECTORY

# The Virus Trajectory theme reflects the uncertain path of how the pandemic and global economic activity interact

The scope and duration of virus containment efforts severely disrupted the global economy

#### **Successful distribution of COVID-19 vaccines shortens** the timeline of the theme

A significant increase in the pace of vaccinations will be needed to aid a rapid recovery for the global economy

## The lasting influence of the pandemic is uncertain as the extent of the economic scars have yet to be fully realized

Despite relative improvement in economic data, recent data points highlight lingering disruptions in businesses and the labor market

## Plausible economic paths range from a rapid economic recovery, to a K-shaped recovery, to a depression

The Virus Trajectory theme began in 2020 and could conclude in 2021, but broad socio-economic effects will be felt for years



### **POTENTIAL OUTCOMES AND IMPLICATIONS** KEY MARKET THEME: VIRUS TRAJECTORY

	Description	Market Implications
Base Case	Virus containment efforts aimed at slowing the spread of COVID-19 will shape the trajectory of a recovery. Increased monetary and fiscal stimulus offset some of the economic disruption, but economic growth and labor markets are likely to take longer to normalize than historical recessions suggest.	Market volatility remains at elevated levels. Low interest rates are here to stay but there is increased volatility around the path of inflation. Large deflationary pressures remain and are paired with a stimulative fiscal response. Opportunities may be available for investors willing to take on greater strategic equity exposure. Impact of Virus Trajectory looks to recede within 12 months.
Economic Depression	Period of extreme economic disruption characterized by unemployment levels greater than 10% and falling consumer spending levels. Waves of changing containment rules damage consumer confidence, limiting economic activity even during less restrictive times. Massive government fiscal relief measures look to plug holes in GDP but the lack of economic dynamism reduces productivity.	Combined fiscal and monetary policies are MMT- like with outsized volatility in global currency regimes. Relative benefits to the yuan and dollar. Extreme deflationary pressures offer value in nominal local government debt (e.g. US Treasuries). An unprecedented economic disruption across industries and countries. Patience is required as equity markets reprice and the credit default cycle is elevated. Maintaining liquidity is a first order priority, but look to allocate surplus liquidity to distressed investments.
Rapid Vaccine Roll-Out	Combination of dynamic containment and expansive distribution of vaccines lead to a rapid path of economic recovery in 2021. Fiscal policy relief and stimulus fill the economic gap to restore economic normalization.	Strongly positive for all cyclical assets and a potential catalyst for value-oriented equities. Provides path for moderately higher inflation as fiscal policy expansion drives economic growth. Begins a period of post-pandemic economic exuberance with consumer spending growth across all corners of the economy.

Business Meeting Agenda - VI.C. INVESTMENT INFORMATION: NEPC 2021 INVESTMENT OUTLOOK - CAPITAL MARKET ASSUMPTIONS

# PERMANENT INTERVENTIONS

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## DEFINING THE THEME

**KEY MARKET THEME:** *PERMANENT INTERVENTIONS* 

## Global markets are defined by central bank market interventions and permanent fiscal support

The pandemic has supercharged the Permanent Interventions theme with outsized support and fiscal relief

### Market sentiment is now a key central bank policy pillar of equal standing to inflation and employment mandates

Low interest rates and a fragile economic environment force central banks to grow balance sheets and liquify the global financial system

Without meaningful inflation pressures, the path of monetary policy does not normalize and an environment of low interest rates persists

### We believe permanent fiscal intervention is the baseline

Weak economic growth trends in the developed world underpin political tensions and motivate a significant fiscal debt expansion

#### Permanent Interventions boosts investor sentiment and enhances our long-term return outlook for risk assets

We believe central banks across the globe will continue to expand balance sheet assets to sustain an environment of excess liquidity



### **DEFINING THE THEME CONTINUED** KEY MARKET THEME: *PERMANENT INTERVENTIONS*

## The removal of central bank measures and fiscal stimulus would reveal the global economy's structural weakness

The dynamics of muted inflation pressures and low economic growth drive a combined monetary and political response

## As debt-to-GDP levels rise, the necessity of central bank intervention is reinforced to maintain low interest rates

Nominal economic growth rates must exceed sovereign bond yields to forestall a sovereign debt crisis, as seen in the Eurozone in 2010

## We see the Permanent Interventions theme muting the normal fluctuations of the business cycle

This potentially leaves no safety net in an economic downturn should central bank and fiscal interventions be limited or exhausted

## The new regime reflects permanent easy monetary policy, surplus liquidity, and fiscal debt growth

Investors have yet to fully discount the combined favorable equity market conditions and heightened long-term macro tail-risks



#### **POTENTIAL OUTCOMES** KEY MARKET THEME: *PERMANENT INTERVENTIONS*

Description	Long-Term Market Implications
NEPC base case expectation of a permanent regime of easy monetary policy, surplus market liquidity, and fiscal debt growth paired with muted inflation levels	Favorable to equities relative to safe-haven fixed income, with risk assets benefiting from above average corporate profit margins and low interest rates. The normal fluctuations of a business cycle are subdued but macro tail-risks continue to build
Interconnected with NEPC's Globalization Backlash theme, political conflict disrupts the full intervention of fiscal stimulus	Economic growth rates are lower as fiscal stimulus lacks permanence. Developed economies are at a greater risk of a downturn and central bank intervention has limits to improve economic growth. Favorable to long duration fixed income and tactically favorable to risks assets following frequent bouts of market volatility
Economic trend growth rates and inflation levels normalize along with market and business cycles	Expected period of low investment returns for all assets classes as real interest rates normalize. Requires a repricing of risk premia to incorporate a neutral fiscal policy and the withdrawal of central bank intervention
A material increase in inflation would be a severe tail-risk outcome for investors as the market discounts almost no probability of above average inflation levels	Significant repricing of market expectations and risk premia likely generate permanent losses of capital among some segments of equity and fixed income markets. Potential cause and/or effect is a devaluation of developed market currencies and a breakdown of the US dollar's reserve currency status
This outcome is largely driven by a demographic crisis, with Europe being the most severely exposed. China is at risk, but racing to increase per-capita GDP levels before the population ages. The US demographic profile is relatively positive compared to other nations	Favorable to long duration fixed income with severe deflationary pressures and low growth rates. Fiscal and monetary intervention is not a cure, but mitigates the full economic damage. Central banks control bond prices across the yield curve, severely distorting the cost of capital and corporate capital structures. The impacted regions experience a "lost decade" of investment returns
	<ul> <li>NEPC base case expectation of a permanent regime of easy monetary policy, surplus market liquidity, and fiscal debt growth paired with muted inflation levels</li> <li>Interconnected with NEPC's Globalization Backlash theme, political conflict disrupts the full intervention of fiscal stimulus</li> <li>Economic trend growth rates and inflation levels normalize along with market and business cycles</li> <li>A material increase in inflation would be a severe tail-risk outcome for investors as the market discounts almost no probability of above average inflation levels</li> <li>This outcome is largely driven by a demographic crisis, with Europe being the most severely exposed. China is at risk, but racing to increase per-capita GDP levels before the population ages. The US demographic profile is relatively</li> </ul>

Business Meeting Agenda - VI.C. INVESTMENT INFORMATION: NEPC 2021 INVESTMENT OUTLOOK - CAPITAL MARKET ASSUMPTIONS

# GLOBALIZATION BACKLASH

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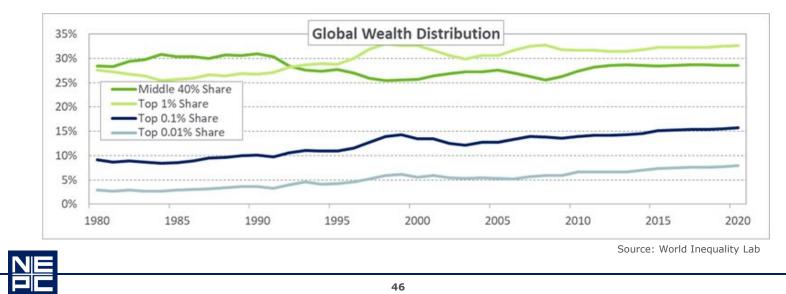
### **DEFINING THE THEME** KEY MARKET THEME: GLOBALIZATION BACKLASH

## Stagnant wage growth and growing wealth inequality are fueling political discontent across the world

Populist movements across the world are shifting away from the political and economic orthodoxy of the last 50 years

### The growth of populist movements destabilizes the established political order and materializes as Backlash

Anti-establishment political bias heightens tail-risks in global markets as voting patterns become more volatile with a wider range of outcomes associated with foreign policy, trade policy, and tax rates



#### **POTENTIAL OUTCOMES AND IMPLICATIONS** KEY MARKET THEME: GLOBALIZATION BACKLASH

	Description	Long-Term Market Implications
Pushback on Established World Order	NEPC base case expectation of rising nationalism and growing populist trends, which strains multilateral relationships and increases geopolitical risks	Does not favor a specific investment action or asset class but includes more volatility for governments as coalitions shift with narrow paths of consensus. Likely leads to greater volatility for capital markets, particularly in currencies across the developed world
A More Balanced Global Wealth Distribution	Economic adjustments lead to long- term improvements in real income for lower income workers in the developed world and emerging market economies	Positive for equities and credit with some aspect of normalization in inflation and real interest rates. With economic productivity gains, role of monetary policy could decrease in importance
Expanding Protectionism	A severe reversal in globalization with a regression in trade and global economic integration	Greater protectionism negatively harms investor sentiment, business investment, geopolitical relations, and global supply chains. Developed nations, such as the US, with domestically available resources and consumers may have a relative structural advantage. This scenario generates lower global growth and higher volatility
Democracy Crumbles	Breakdowns in the social fabric of society and government. Populist movements become the "revolution" as economic structures and policies are refashioned	Holders of capital suffer under this path as investment markets across equity and fixed income experience severe negative outcomes with gold and alternative currencies being one of the few exposures to offer a positive benefit for a portfolio



# CHINA TRANSITIONS

NEPC, LLC —

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#### **DEFINING THE THEME** KEY MARKET THEME: CHINA TRANSITIONS

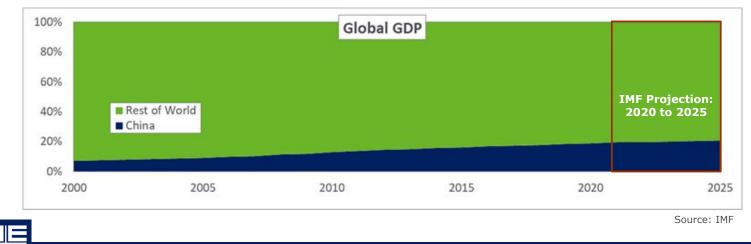
## China is undergoing a multi-faceted advancement as the economy transitions to a consumption-oriented model

China's socioeconomic profile is changing with rising income levels, increased urbanization, but also a challenging demographic profile

#### All the while China's influence on the global stage shifts to reflect its status as an ascending geopolitical power

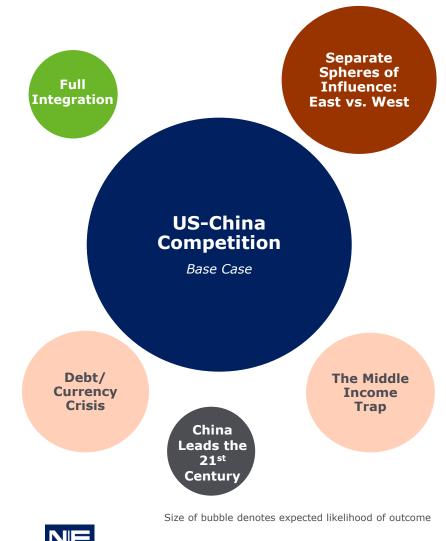
#### Disruption of these transitions will be transmitted widely due to China's ever-expanding role in the world economy

China is the global growth engine and is expected to provide 25% of world GDP growth, which is equal to creating a new Canada annually



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### **POTENTIAL OUTCOMES AND IMPLICATIONS** KEY MARKET THEME: CHINA TRANSITIONS



**US-China Competition:** Competition not confrontation characterizes the economic and geopolitical relationship for the US and China. China successfully transitions to a consumer-oriented economy with per-capita GDP in line with the developed world. Capital markets continue to liberalize but cycles of volatility reflects the ebb and flow of the competitive US-China relationship

**US-China and Separate Spheres of Influence:** Two separate economic, geopolitical, and financial systems exist with an ongoing confrontational relationship. This dynamic may impact foreign access to Chinese capital markets, with the potential to directly impact regional blocs aligned with China

**The Middle Income Trap:** Per-capita income growth stalls as innovation and productivity levels do not improve from current levels. China fails to achieve developed market status, implying an internal shift away from market-friendly reforms or an external force such as US policy pressure curtailing China's growth

**Debt and Currency Crisis:** Uncontrolled expansion of credit growth to drive short-term economic gain fuels capital misallocation and represents a systematic risk to the financial system and China's currency controls

**The 21st Century is Dominated by China:** China becomes the dominant global power for this century. China assumes economic leadership and the yuan ascends to become a global reserve currency

**Full Integration:** Political and economic liberalization within China and complete integration in the established world order and the current geopolitical hierarchy

### **PRIVATE MARKETS COMPOSITES**

## Assumed public market beta composites for private market return assumptions are detailed below:

#### **Private Equity:**

Private Equity – Buyout: 25% US Large Cap, 75% US Small/Mid Cap
Private Equity – Secondary: 25% US Large Cap, 75% US Small/Mid Cap
Private Equity – Growth: 50% US Small/Mid Cap, 50% US Microcap
Private Equity – Venture: 25% US Small/Mid Cap, 75% US Microcap
Private Equity – Non-US: 70% International Small Cap, 30% Emerging Small Cap *PE Composite: 34% Buyout, 34% Growth, 15 % Non-US, 8.5% Secondary, 8.5% Venture*

#### **Private Debt:**

Private Debt – Direct Lending: 100% Bank Loans Private Debt – Distressed: 20% US Small/Mid Cap, 60% US High Yield, 20% Bank Loans Private Debt – Credit Opportunities: 34% US SMID Cap, 33% US High Yield, 33% Bank Loans *Private Debt Composite: 50% Direct Lending, 25% Credit Opportunities, 25% Distressed* 

#### **Private Real Assets:**

Private Real Assets – Energy: 30% Comm., 35% Midstream, 35% Public Resource Equity Private Real Assets - Infra/Land: 30% Commodities, 70% Public Infrastructure Private Real Estate Debt: 50% CMBS, 50% Core Real Estate



### **INFORMATION DISCLAIMER**

Past performance is no guarantee of future results.

The goal of this report is to provide a basis for substantiating asset allocation recommendations. 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.

Information on market indices was provided by 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.

All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.

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February 22, 2021

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

#### SUBJECT: REVISIT OF APPOINTMENTS TO PERSONNEL REVIEW COMMITTEE

Dear Board Members:

At the January 25<sup>th</sup> Business Meeting, three (3) trustees were appointed to serve on the annual ad hoc Personnel Review Committee (PRC). This committee is tasked with coordinating the annual review of the three (3) VCERA executives who report directly to the Board, which were the Retirement Administrator, the General Counsel and the Chief Investment Officer.

The trustees appointed to the PRC were those who volunteered at the meeting to serve; these were Trustees Grass, Hernandez-Garcia, and Tang-Paradis. These three trustees are all new to the VCERA Board, and have not served previously on the PRC or any other committee. This was correctly brought to my attention by Trustee Tang-Paradis, and I believe it prudent for at least one member of the PRC to be a longer term trustee for historical perspective and continuity.

For this reason, I would ask that a more tenured member volunteer to serve on the Personnel Review Committee and that one of the 3 previously-appointed volunteers offer to step down to allow for this.

Sincerely,

Motor Sudal

Mike Sedell Chair, Board of Retirement



February 22, 2021

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

SUBJECT:

Dear Board Members,

As members of the Ad Hoc VCERA v. County Litigation Committee, we unanimously recommend that the Board adopt the enclosed Resolution.

The "Whereas" paragraphs explain the fiduciary rationale for the Board's adoption of the Resolution at this time.

Adoption of the Resolution should also resolve objections raised by Defendants County of Ventura and the Ventura County Superior Court in VCERA v. County, et al. regarding aspects of VCERA's First Amended Complaint that the Resolution addresses.

Sincerely,

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Art Goulet Chair, Ad Hoc Litigation Committee

#### RESOLUTION OF THE BOARD OF RETIREMENT OF VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION REGARDING NON-PENSIONABILITY OF IN-KIND ONLY FLEX CREDIT

WHEREAS, the Ventura County Employees' Retirement Association ("VCERA") and the VCERA Board of Retirement (the "Board") are governed by the County Employees Retirement Law of 1937 (Government Code sections 31450, *et seq.*) ("CERL") and the Public Employees' Pension Reform Act of 2013 (Government Code sections 7522, *et seq.*) ("PEPRA").

WHEREAS, the Board is required by Government Code sections 31460, 31461, and 31542 to determine "compensation" and "compensation earnable" for VCERA members who entered membership in VCERA before January 1, 2013, or who entered membership in another California public retirement system before January 1, 2013 and established reciprocity with VCERA thereafter ("Legacy Members").

WHEREAS, on July 30, 2020, the California Supreme Court filed a decision entitled Alameda County Deputy Sheriffs' Association v. Alameda County Employees' Retirement Association (2020) 9 Cal.5th 1032 (the "Alameda Decision").

WHEREAS, the *Alameda* Decision holds that the "task of a county retirement board," such as the VCERA Board, "is not to design the county's pension plan but to implement the design enacted by the Legislature" through CERL and PEPRA.

WHEREAS, the *Alameda* Decision further holds that retirement boards, such as the VCERA Board, have no discretion to include benefits in Legacy Members' compensation earnable or in PEPRA Members' pensionable compensation that CERL, PEPRA, or other applicable statutes do not permit to be included (the "*Alameda* Exclusions").

WHEREAS, the *Alameda* Decision further holds that "there is no indication . . . that a local board," such as the VCERA Board, "has the discretion to include the monetary value of inkind benefits," in the determination of retirement allowances.

WHEREAS, in the case of *In Re Retirement Cases* (2003) 110 Cal.App.4th 426, to which VCERA and the County of Ventura were parties, the superior court issued a ruling on July 20, 2000, stating that "insurance-related benefits," including "employer payments into flexible benefit plans" are benefits of insurance coverage, not cash, and "[a]s such, it is an in-kind advantage." The ruling further stated that cash payments to employees from a flexible benefit plan in lieu of health benefits is cash remuneration and constitutes "compensation." The court of appeal affirmed all aspects of the superior court's ruling and concluded that public retirement systems therefore "need not" include in-kind advantages in the calculation of retirement benefits. The court of appeal did not address the question of whether retirement boards had the discretion to include flexible benefit payments in compensation earnable. The *Alameda* Decision, however, concluded that public retirement systems do not have the "discretion" to include benefits that members may not receive in cash in the determination of their retirement allowances. *Alameda*, supra, 9 Cal5th at p. 1070 (Nothing in CERL's definitions of "compensation" and "compensation earnable" "hints either that they are intended merely to establish a minimum, rather than to serve as a comprehensive definition, or that they may be implemented at the discretion of local

retirement boards.... There is no indication, for example, that a local board has the discretion to include the monetary value of in-kind benefits" in compensation earnable.) Moreover, the Supreme Court stated "The task of a county retirement board is ... not to design the county's pension plan but to implement the design enacted by the Legislature through CERL." *Alameda, supra,* 9 Cal5th at p. 1066. Retirement boards "do not have the authority to 'evade the law' that otherwise applies to their system .... [I]t is the Legislature that has the final authority to establish the provisions governing the award of pension benefits under CERL. Further, it is the judiciary, not individual retirement boards, that has the 'final responsibility' for the interpretation of the Legislature's terms." *Id.* at p. 1067.

WHEREAS, by the *Alameda* Implementation Resolution adopted and approved by the Board on October 12, 2020, the Board followed the *Alameda* Court's directive and stated that "all portions of Flex Credit that may not be provided to members in cash under a participating employer's rules applicable during the pertinent time period" ("In-Kind Only Flex Credit") fall within the definitions of *Alameda* Exclusions, and that the Board thus has no discretion to include In-Kind Only Flex Credit in VCERA members' retirement benefit calculations, even though it has historically included all Flex Credit in the calculation of its Legacy Members' "compensation earnable".

WHEREAS, by the *Alameda* Implementation Resolution adopted and approved by the Board on October 12, 2020, the Board resolved to seek "declaratory relief or other appropriate judicial resolution" as to the *Alameda* Exclusions.

WHEREAS, VCERA has filed an action entitled *Ventura County Employees' Retirement Association v. County of Ventura, et al.* (Case No. VENCI00546574) ("*VCERA v. County of Ventura, et al.*"), which seeks declaratory relief as to all aspects of the *Alameda* Implementation Resolution that VCERA determined its members and/or participating employers contested.

WHEREAS, at the Board's direction, VCERA previously deferred implementation of the *Alameda* Exclusions applicable to In-Kind Only Flex Credit, under paragraphs 3, 6 and 9 of the *Alameda* Implementation Resolution, until the resolution of *VCERA v. County of Ventura, et al.;* however, such delay will require VCERA to recoup certain already-paid retirement benefits from its retired Legacy Members if the Court concurs with the Board that VCERA does not have the legal authority to pay retirement allowances calculated with the inclusion of In-Kind Only Flex Credit for those who retired on or after the *Alameda* Decision date of July 30, 2020.

WHEREAS, the Ad Hoc Litigation Committee considered further the fact that delaying implementation of paragraphs 3, 6 and 9 in the *Alameda* Implementation Resolution until either the referenced *Sanders* litigation is fully resolved or *VCERA v. County of Ventura, et al.* is finally decided, which could take several years, and the fact that the Board has a legal duty to administer VCERA consistent with existing law and factual circumstances. Furthermore, postponing recoupment of already-paid retirement benefits calculated to include In-Kind Only Flex Credit until the resolution of *VCERA v. County of Ventura, et al.* would be to the increasing detriment of retired Legacy Members, because VCERA's corrective distributions of overpaid contributions to such retirees will increasingly be insufficient to cover all amounts that must be recouped from them.

WHEREAS, the Board hereby determines that the interests of justice and applicable law require it to implement the exclusion of In-Kind Only Flex Credit from "compensation earnable" of its members who retired on or after the *Alameda* Decision forthwith, as resolved below.

WHEREAS, this Resolution Regarding Non-Pensionability of In-Kind Only Flex Credit is intended to comply with the requirements of the Internal Revenue Code of 1986, and the regulations issued thereunder, as applicable.

NOW, THEREFORE BE IT RESOLVED, that the VCERA Board declares the following:

1. The foregoing Recitals are incorporated herein by reference.

2. VCERA must comply with the *Alameda* Decision by excluding In-Kind Only Flex Credit, among other *Alameda* Exclusions, from the "compensation earnable" of any Legacy Member who retires on or after July 30, 2020.

3. VCERA shall make corrective distributions or other refund method as allowed under the Internal Revenue Code (which will include interest) to any Legacy Member who retires on or after July 30, 2020, of all contributions that such member made to VCERA on any benefit constituting an *Alameda* Exclusion. Such refund shall be made upon the Legacy Member's retirement from VCERA. VCERA will make such refund, together with interest, to active and deferred members at the earliest of (1) final resolution of the Declaratory Relief action adjudging VCERA's *Alameda* implementation actions to be permitted by law, or (2) all parties to the action, and all other unions representing employees who are VCERA members, agreeing to be bound by the terms of this Resolution. Interest on such refunds will be at the pre-judgment rate of 7% per annum.

4. To calculate retirement allowance adjustments, prospective member contributions, and corrective distributions of contributions based on In-Kind Only Flex Credit, VCERA shall assume that each Legacy Member maximized his or her benefit that may be, or could have been, received directly in unrestricted cash, during the applicable time period. (See generally *Hittle v. Santa Barbara County Employees' Ret. Sys.* (1985) 39 Cal.3d 374.) In addition, should participating employers at a later date return all Opt-Out Fees to members for all applicable periods, then VCERA will take retirement contributions on those payments and the full amount of Flex Credit will then be deemed to be pensionable for all members, as none of it will constitute In-Kind Only Flex Credit, and corresponding prospective and retroactive adjustments will be made.

Mike Sedell, Chair of the Board