In accordance with current state and local emergency proclamations and orders, this Board Meeting will be held virtually via Zoom Client.

The public may only attend the meeting by (1) clicking here https://us02web.zoom.us/j/87246390678 and following the prompts to enter your name and email, or (2) calling (669) 219-2599 or (669) 900-9128 and entering Meeting ID 87246390678#.

Persons who require disability-related accommodations should contact SJCERA at (209) 468-9950 or KendraF@sjcera.org at least forty-eight (48) hours prior to the scheduled meeting time.

1.0 ROLL CALL

2.0 PLEDGE OF ALLEGIANCE

3.0 APPROVAL OF MINUTES
   3.01 Approval of the minutes for the Board Meeting of April 9, 2021
   3.02 Board to approve minutes

4.0 PUBLIC COMMENT
   4.01 Follow the steps below to address the Board of Retirement. Speakers are limited to three minutes, and are expected to be civil and courteous.

   If joining via Zoom, Public Comment can be made in the following ways:

   PC or Mac: select “Participants” in the toolbar at the bottom of your screen, then select the option to raise or lower your hand.

   Mobile Device: select the “More” option in the toolbar at the bottom of your screen, then select the option to raise or lower your hand.

   Tablet: select the icon labeled “Participants,” typically located at the top right of your screen, then select the hand icon next to your device in the Participants column.

   If dialing in from a phone for audio only, dial *9 to “raise your hand.”

   Except as otherwise permitted by the Ralph M. Brown Act (California Government Code Sections 54950 et seq.), no deliberation, discussion or action may be taken by the Board on items not listed on the agenda. Members of the Board may, but are not required to: (1) briefly respond to statements made or questions posed by persons addressing the Board; (2) ask a brief question for clarification; or (3) refer the matter to staff for further information.
5.0 CONSENT ITEMS
   5.01 Service Retirement (65)

6.0 PENSIONABLE COMPENSATION FOR FUTURE MEMBERS - TIER 2B PROPOSAL
   6.01 CEO to provide educational presentation
   6.02 Resolution 2021-05-01 “Pensionable Compensation for Future SJCERA Members”
   6.03 Board to adopt Resolution 2021-05-01

7.0 RETURN TO IN-PERSON BOARD MEETINGS
   7.01 Board to discuss and provide direction

8.0 CONSULTANT REPORTS PRESENTED BY DAVID SANCEWICH OF MEKETA INVESTMENT GROUP
   8.01 Monthly Investment Performance Updates
      01 Receive and File Manager Performance Flash Report - March 2021
      02 Receive and File Economic and Market Update - March 2021
   8.02 Private Equity Review
   8.03 Board to accept and file reports

9.0 STAFF REPORTS
   9.01 Legislative Summary Report
   9.02 Trustee and Executive Staff Travel
      01 Conferences and Events Schedule for 2021
      02 Summary of Pending Trustee and Executive Staff Travel
      03 Summary of Completed Trustee and Executive Staff Travel
   9.03 CEO Report
   9.04 Board to accept and file reports

10.0 CORRESPONDENCE
   10.01 Letters Received
   10.02 Letters Sent
   10.03 Market Commentary/Newsletters/Articles
      01 MEKETA Understanding China: an economic and investment perspective March 2021
      02 BUSINESS INSURANCE Travelers unit must indemnify county retirement association April 2021
      03 NCPERS The Monitor April 2021
      04 NEWS ALERT SJC Begins Core Fixed-Income Mgr. Search April 2021
      05 Pensions & Investments 2021 Investors inching closer to joining the fray April 2021
      06 Pensions & Investments Two Virginia pension funds warm up to blockchain technology investments April 2021
11.0 COMMENTS
11.01 Comments from the Board of Retirement

12.0 CLOSED SESSION

12.01 PURCHASE OR SALE OF PENSION FUND INVESTMENTS
CALIFORNIA GOVERNMENT CODE SECTION 54956.81

12.02 PERSONNEL MATTERS
CALIFORNIA GOVERNMENT CODE SECTION 54957
EMPLOYEE DISABILITY RETIREMENT APPLICATION(S) (2)

12.03 CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION
CALIFORNIA GOVERNMENT CODE SECTION 54956.9(d)(4)
Initiation of Litigation - 1 Case

13.0 REPORT OF CLOSED SESSIONS

13.01 On May 8, 2020, the Board unanimously authorized the CEO to sign the necessary documents and further approve Resolution 2020-10-01 titled “Stellex Capital Partners II” and committed to invest $50 million in the fund.

14.0 CALENDAR

14.01 Audit Committee Meeting May 20, 2021, at 10:00 AM

14.02 Board Meeting June 4, 2021, at 9:00 AM

15.0 ADJOURNMENT
M I N U T E S

BOARD MEETING
SAN JOAQUIN COUNTY EMPLOYEES RETIREMENT ASSOCIATION
BOARD OF RETIREMENT
FRIDAY, APRIL 9, 2021
AT 9:00 AM
Location: Via Zoom

1.0 ROLL CALL
1.01 MEMBERS PRESENT: Phonxay Keokham, Emily Nicholas, Jennifer Goodman, Katherine Miller, Chanda Bassett, Adrian Van Houten, Margo Praus, and Michael Restuccia presiding
MEMBERS ABSENT: Michael Duffy and Ray McCray
STAFF PRESENT: Chief Executive Officer Johanna Shick, Assistant Chief Executive Officer Kathy Herman, Retirement Investment Officer, Paris B., Financial Officer Carmen Murillo, Department Information Systems Analyst II Lolo Garza, Information Systems Analyst II Jordan Regevig, and Administrative Secretary Kendra Fenner
OTHERS PRESENT: Deputy County Counsel Jason Morrish, David Sancewich of Meketa Investment Group, and Sean Byrne of Rimon Law

2.0 PLEDGE OF ALLEGIANCE
2.01 Led by Michael Restuccia

3.0 APPROVAL OF MINUTES
3.01 Approval of the minutes for the Board Meeting of March 12, 2021
3.02 Approval of the minutes for the Audit Committee Meeting of March 11, 2021
3.03 The Board voted unanimously (7-0) to approve the Minutes of the Board Meeting of March 12, 2021 and the Audit Committee Meeting of March 11, 2021. (Motion: Van Houten; Second: Keokham)

4.0 PUBLIC COMMENT
4.01 There was no public comment.

5.0 CONSENT ITEMS
5.01 Service Retirement (22)
5.02 General (1)
  01 Return to active membership - Emad Abbas
5.03 The Board voted unanimously (7-0) to approve the Consent Items. (Motion: Bassett; Second: Goodman)

6.0 STRATEGIC ASSET ALLOCATION POLICY
6.01 Proposed revisions to Strategic Asset Allocation Policy - Mark-up
6.02 Proposed revisions to Strategic Asset Allocation Policy - Clean
The Board made a minor wording change and voted unanimously (7-0) to adopt proposed policy revisions as recommended by staff and consultant. (Motion: Keokham; Second: Van Houten)

CONSULTANT REPORTS PRESENTED BY DAVID SANCEWICH OF MEKETA INVESTMENT GROUP

Monthly Investment Performance Updates
- Receive and File Manager Performance Flash Report - February 2021
- Receive and File Economic and Market Update - March 2021

Real Estate Review
- Presentation by Christy Fields and David Glickman of Meketa
- Board to discuss and provide direction as necessary

Board accepted and filed reports.

SACRS BOARD OF DIRECTORS ELECTIONS

SACRS Board of Director Elections - 2021 - 2022 - Final Ballot
- CEO Shick verbally corrected the incumbancy status of candidates listed in the memo and the Board voted unanimously (7-0) to approve candidates for SACRS 2021 - 2022 Board of Directors. (Motion: Keokham; Second: Van Houten)

STAFF REPORTS

Pending Retiree Accounts Receivable - First Quarter 2021
Disability Quarterly Report - Statistics
Legislative Summary Report
Trustee and Executive Staff Travel
- Conferences and Events Schedule for 2021
  a SACRS Spring Conference
  b CALAPRS Advanced Principles of Pension Governance for Trustees
- Summary of Pending Trustee and Executive Staff Travel - None
- Summary of Completed Trustee and Executive Staff Travel and Travel Reports

Board accepted and filed reports

CEO Report
In addition to the CEO report, CEO Shick stated SJCERA prevailed in their lawsuit against Travelers and plans to submit our legal bills to Travelers. Since the CEO report was written, the Actuarial files have been submitted and there are three Board of election seats up in May. CEO Shick went on to explain this is a challenging time at SJCERA. In addition to the normal busy retirement season, staff is implementing Alameda, the system enhancements are being refined, and four staff members have retired since October, equating to 25 percent of SJCERA’s staff. Two of those positions have been filled and SJCERA is actively recruiting for the other two. While this was expected, CEO Shick wanted the Board to be aware of the potential impact on goals and budget. SJCERA staff is staying focused on our mission and prioritizing legally mandated items.
9.07 Report from Committee(s)

01 Investment Contract Requirements Ad Hoc Committee - March 24, 2021

10.0 CORRESPONDENCE

10.01 Letters Received

10.02 Letters Sent

10.03 Market Commentary/Newsletters/Articles

01 NCPERS The Monitor March 2021

02 NEPC Total Return and Asset Allocation Analysis Fourth Quarter 2020

03 Business Insider Second Investment Consultant Puts PIMCO on Watch March 2021

11.0 COMMENTS

11.01 Comments from the Board of Retirement

01 In regard to CEO Shick’s update about staff, Chair Restuccia thanked CEO Shick and the staff for their hard work and he couldn’t be prouder.

02 Trustee Bassett congratulated staff on resolving the top four accounts on the pending receivables report. Overall looks like a lot of work. Great job.

03 Trustee Keokham inquired about possibly returning to in person board meetings. The topic will be placed on an upcoming agenda for discussion.

12.0 CLOSED SESSION

12.01 PURCHASE OR SALE OF PENSION FUND INVESTMENTS
CALIFORNIA GOVERNMENT CODE SECTION 54956.81

12.02 PERSONNEL MATTERS
CALIFORNIA GOVERNMENT CODE SECTION 54957
EMPLOYEE DISABILITY RETIREMENT APPLICATION(S) (0)

12.03 CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION
CALIFORNIA GOVERNMENT CODE SECTION 54956.9(d)(4)
Initiation of Litigation - 1 Case

12.04 Counsel noted there was nothing to report out from closed session.

13.0 REPORT OF CLOSED SESSIONS

13.01 At the meeting of December 11, 2020, the Board elected to redeem its $103.3 million allocation in Prima Mortgage Investment Trust. SJCERA reinvested $50 million with Dodge & Cox, $50 million with Bloomberg Barclays Aggregate Index, and retained $3.3 million in cash.

14.0 CALENDAR

14.01 Board Meeting April 9, 2021, at 9:00 AM

01 Counsel noted the agenda inadvertently identified the next Board meeting date as April 9, 2021; it should have listed May 7, 2021.

02 Board Meeting May 7, 2021, at 9:00 AM

15.0 ADJOURNMENT
There being no further business the meeting was adjourned at 11:26 a.m.

Respectfully Submitted:

______________________
Michael Restuccia, Chair

Attest:

_______________________
Raymond McCray, Secretary
<table>
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<tr>
<th>No.</th>
<th>Name</th>
<th>Position</th>
<th>Member Type</th>
<th>Years of Service</th>
<th>Retirement Date</th>
<th>Comments</th>
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<td>DANELLE M ALEJO-HERNANDEZ</td>
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<td>3/27/2021</td>
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<td>3/27/2021</td>
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<td>KEVIN J BAYSINGER</td>
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<td>General</td>
<td>35y 02m 18d</td>
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<td>JEROME BECKER</td>
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<td>07</td>
<td>MARTIN E BROCKMAN</td>
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<td>JONATHAN P BURRIS</td>
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<td>LULA M BUTLER</td>
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<td>23y 00m 00d</td>
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<td>ALICE L CASTILLO</td>
<td>Legal Process Clerk III</td>
<td>Court-Oper-Criminal-Stkn</td>
<td>General</td>
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<td>TERESA CERVANTES</td>
<td>Juvenile Detention Unit Suprv</td>
<td>Juvenile Detention</td>
<td>Safety</td>
<td>20y 05m 23d</td>
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<td>12</td>
<td>CYNTHIA A COPULOS</td>
<td>Communications Dispatcher III</td>
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<td>31y 09m 05d</td>
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<td>ERIN C DALE</td>
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<td>NANCY FERNANDEZ-LIGHT</td>
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<td>DONNA C FLORES-HINOJOS</td>
<td>Human Resources Technician II</td>
<td>Court - Human Resource</td>
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<td>JANICE A FONG</td>
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<td>General</td>
<td>18y 07m 12d</td>
<td>3/8/2021</td>
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<td>Member Type</td>
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<td>19</td>
<td>BEATRIZ S GARCIA</td>
<td>Retirement Services Technician</td>
<td>Retirement Office</td>
<td>General</td>
<td>21y 11m 08d</td>
<td>3/27/2021</td>
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<td>RITA L GOMEZ</td>
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<td>3/27/2021</td>
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<td>ELIZABETH A GRIFFITHS</td>
<td>Management Analyst II</td>
<td>Behavioral Health Admin</td>
<td>General</td>
<td>23y 02m 17d</td>
<td>3/27/2021</td>
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<td>22</td>
<td>STEVEN D HENRY</td>
<td>FD 80 HrEmplRate 1 SM NFICA</td>
<td>Waterloo - Morada Rural Fire</td>
<td>Safety</td>
<td>05y 00m 10d</td>
<td>3/27/2021</td>
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<td>JAMIE M HOOD</td>
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<td>Probation-Adult</td>
<td>Safety</td>
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<td>3/26/2021</td>
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<td>FRANCES A HUTCHINS</td>
<td>Sr DeputyDir-BHS</td>
<td>Behavioral Health Admin</td>
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<td>28y 09m 02d</td>
<td>3/27/2021</td>
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<td>ROSEMARY L JHAO-CATHCART</td>
<td>Employment Training Spec I</td>
<td>Mental Health</td>
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<td>19y 07m 05d</td>
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<td>KATHY A KATO</td>
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<td>DENNIS R KEITH</td>
<td>Special District Class Code</td>
<td>SJ Co Mosquito Abatement</td>
<td>General</td>
<td>33y 11m 20d</td>
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<td>MICHAEL P KITH</td>
<td>Environmental Hlth- Prgm Coord</td>
<td>Environmental Health</td>
<td>General</td>
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<td>MARIA LEWIS</td>
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<td>DEBORAH A LIMAS</td>
<td>Staff Nurse IV - Inpatient</td>
<td>Mental Health</td>
<td>General</td>
<td>16y 10m 28d</td>
<td>3/27/2021</td>
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<td>MARK E LOESER</td>
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<td>00y 09m 11d</td>
<td>3/26/2021</td>
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<td>32</td>
<td>ROBIN L MAISNER</td>
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<td>HSA</td>
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<td>3/27/2021</td>
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<td>FELIPA G MALIWAT</td>
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<td>Retirement Office</td>
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<td>Hosp Laboratory</td>
<td>General</td>
<td>21y 05m 04d</td>
<td>3/27/2021</td>
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<td>LAURA C MARQUEZ</td>
<td>Hospital Unit Clerk</td>
<td>Hosp Social Services</td>
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<td>JOHNNIE P MORRIS</td>
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37  MICHAEL W MORROW
    Social Worker V
    HSA - Services Staff
    Member Type: General
    Years of Service: 32y 01m 21d
    Retirement Date: 3/27/2021

38  REBECCA MULLER
    Probation Officer II
    Probation
    Member Type: Safety
    Years of Service: 16y 10m 17d
    Retirement Date: 3/27/2021

39  MILTON D OHAIRE
    Deferred Member
    N/A
    Member Type: General
    Years of Service: 16y 10m 17d
    Retirement Date: 3/27/2021
    Comments: Outgoing reciprocity and concurrent retirement with StanCERA

40  ROBERT C PAINE
    DA Investigator II
    District Attorney
    Member Type: Safety
    Years of Service: 06y 06m 21d
    Retirement Date: 3/27/2021
    Comments: Tier 2

41  CAREY T PEHL
    Sergeant
    Sheriff - Boating Safety
    Member Type: Safety
    Years of Service: 20y 02m 05d
    Retirement Date: 3/27/2021
    Comments: Outgoing reciprocity and concurrent retirement with CalPERS.

42  MICHELE T PENNINGTON
    Public Guardian/Conservator
    Conservator Services
    Member Type: General
    Years of Service: 13y 04m 17d
    Retirement Date: 3/28/2021

43  VERA T QUIWA
    Deferred Member
    N/A
    Member Type: General
    Years of Service: 15y 07m 05d
    Retirement Date: 3/24/2021

44  MARIVIC F RAMOS
    Nursing Assistant
    Hospital
    Member Type: General
    Years of Service: 28y 08m 05d
    Retirement Date: 3/27/2021

45  PHILIP A RAYA
    Crafts Worker III
    Hosp Plant Maintenance
    Member Type: General
    Years of Service: 25y 05m 28d
    Retirement Date: 3/27/2021
46 MICHIELLE J RELF
Member Type: General
Years of Service: 23y 07m 14d
Retirement Date: 3/27/2021
Office Assistant Specialist
Purchasing

47 RUSSELL C RELF
Member Type: General
Years of Service: 14y 11m 11d
Retirement Date: 3/27/2021
Comments: Outgoing reciprocity and concurrent retirement with CalPERS.
Office Building Engineer
Facilities Management

48 SHIRLEY M ROBINSON
Member Type: General
Years of Service: 29y 10m 25d
Retirement Date: 3/27/2021
Sheriff Records Manager
Sheriff's Department

49 DANNY ROMERO
Member Type: Safety
Years of Service: 21y 00m 13d
Retirement Date: 3/28/2021
Juvenile Detention Officer
Juvenile Detention

50 ANNE D ROSE
Member Type: General
Years of Service: 10y 00m 06d
Retirement Date: 3/29/2021
Clinical Lab Scientist II
Hosp Laboratory Clinic

51 ADAM C SALAS
Member Type: Safety
Years of Service: 23y 06m 15d
Retirement Date: 3/26/2021
Probation Officer III
Probation

52 SANDRA G SALCEDO
Member Type: General
Years of Service: 17y 02m 27d
Retirement Date: 3/29/2021
Senior Office Assistant
HSA

53 ELLEN S SCHWARZENBERG
Member Type: General
Years of Service: 36y 09m 21d
Retirement Date: 3/27/2021
Deputy Public Defender IV
Public Defender

54 GARY M SHAW
Member Type: Safety
Years of Service: 26y 01m 15d
Retirement Date: 3/15/2021
Correctional Officer
Sheriff's Department
55  REINA Q SILVA  
Member Type: General  
Years of Service: 18y 08m 10d  
Retirement Date: 3/27/2021

56  TAMRA L SMITH  
Member Type: General  
Years of Service: 12y 05m 01d  
Retirement Date: 3/31/2021  
Comments: Outgoing reciprocity and concurrent retirement with CalPERS.

57  BARBARA P STOAKES  
Member Type: General  
Years of Service: 24y 00m 29d  
Retirement Date: 3/27/2021

58  LYLE D STUGELMEYER  
Member Type: General  
Years of Service: 15y 06m 01d  
Retirement Date: 3/27/2021

59  SOPHAL SUON  
Member Type: General  
Years of Service: 24y 03m 03d  
Retirement Date: 3/15/2021

60  MONICA A TAYLOR  
Member Type: General  
Years of Service: 36y 00m 26d  
Retirement Date: 3/27/2021

61  ROBERT R TEAGUE  
Member Type: Safety  
Years of Service: 20y 01m 21d  
Retirement Date: 3/26/2021

62  ROBERT R TEAGUE  
Member Type: General  
Years of Service: 00y 02m 16d  
Retirement Date: 3/26/2021

63  MARIUM E WALKER  
Member Type: General  
Years of Service: 29y 06m 09d  
Retirement Date: 3/13/2021
64 NATALIE J WILLIAMS

   Member Type: General
   Years of Service: 42y 09m 28d
   Retirement Date: 3/27/2021

65 GREGORY J WILLIAMSON

   Member Type: Safety
   Years of Service: 23y 08m 19d
   Retirement Date: 3/28/2021
Pensionable Compensation:
Tier 2b Education, Part 2

Board of Retirement Meeting
May 7, 2021
Agenda

- Recap of Tier 2b Proposal
- BOR Request for Additional Information
  - Employer Feedback
  - Normal Cost Calculations
  - Member Impact Information and Examples
Recap: Tier 2b Proposal

• Same Tier 2 benefit formula & retirement eligibility

• What changes?
  – Retirement benefit will be based on base pay
  – Tier 2b members still receive special pays, but don’t pay retirement contributions on them

• Applies only to future members (1/1/2022)
  – No impact on existing SJCERA members
# Recap: Tier 2b Pros & Cons

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreases complexity, related administrative expense and risk of error</td>
<td>Possible litigation risk</td>
</tr>
<tr>
<td>Streamlines administration for SJCERA &amp; Employers</td>
<td></td>
</tr>
<tr>
<td>Prevents pension spiking &amp; other potential gamesmanship</td>
<td></td>
</tr>
<tr>
<td>Increases take-home pay for Tier 2b employees</td>
<td></td>
</tr>
<tr>
<td>Sets solid foundation for future</td>
<td></td>
</tr>
<tr>
<td>Decreases Normal Cost</td>
<td></td>
</tr>
<tr>
<td>Lowers overall plan risk; lowers investment risk needed to fund benefit</td>
<td></td>
</tr>
<tr>
<td>Increases transparency</td>
<td></td>
</tr>
<tr>
<td>Aligns with PEPRA Legislative Intent</td>
<td></td>
</tr>
</tbody>
</table>
Board Authority & Requests

• Tier 2b is an earnings code eligibility issue
  – BOR has exclusive authority over earnings codes’ eligibility (but must be consistent with statute)
  – Proposed Tier 2b is consistent with statute

• Feb. 12: Board requested additional information
  – Employer feedback
  – Additional calculations
  – Member scenarios
Employers Supportive

• All Employers contacted; most responded
  – **County**: “The County is fine with implementing Tier 2b concept on a prospective basis”
  – **Superior Court**: “Good idea. Prudent. It’s the right thing to do. Grandfathering existing employees limits the impact and challenges.”
  – **Lathrop-Manteca Fire District**: “I don’t have an issue with it. I like that you’re not taking anything from current employees, and new hires know the rules from the start. If you don’t fix the pension system, rates will never go down enough for employers to give raises.”
Employers Supportive (cont’d)

– Waterloo-Morada Fire District: “The Board would likely appreciate the cost containment effort. Labor would likely be okay with it since no existing employees would be affected. MOUs would be updated to reflect changes for new hires.”

– Mosquito Abatement and Vector Control District: “We have no concerns. We understand the need to get on top of the liabilities, and future employees are thinking about a pay check, not retirement. People understand when new rules are in place at the time they are hired.”
Employers Supportive (cont’d)

• All Employers contacted; most responded
  – Tracy Public Cemetery: “We have no concerns. Employees are focused on their hourly rate and having a steady job so they can pay their bills. Retirement isn’t a big focus.”
  – Mountain House Community Service District: “By implementing this prospectively only, there should be no problems. I’m not worried about tier envy—that hasn’t been our experience in the past.”

• The 2 remaining employers did not respond.
  – Represent approximately 6 General members
## Estimated Normal Cost Decrease ($)

<table>
<thead>
<tr>
<th>Year</th>
<th>General ER NC $ Savings</th>
<th>UAL Rate Incr</th>
<th>General ER NC $ Savings</th>
<th>UAL Rate Incr</th>
<th>General Total SJCERA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>$ (684,000)</td>
<td>0.0%</td>
<td>$ (242,000)</td>
<td>0.0%</td>
<td>$ (926,000)</td>
</tr>
<tr>
<td>2022</td>
<td>(741,000)</td>
<td>0.1%</td>
<td>(280,000)</td>
<td>0.3%</td>
<td>(1,021,000)</td>
</tr>
<tr>
<td>2023</td>
<td>(829,000)</td>
<td>0.2%</td>
<td>(334,000)</td>
<td>0.5%</td>
<td>(1,163,000)</td>
</tr>
<tr>
<td>2024</td>
<td>(901,000)</td>
<td>0.3%</td>
<td>(391,000)</td>
<td>0.8%</td>
<td>(1,292,000)</td>
</tr>
<tr>
<td>2025</td>
<td>(980,000)</td>
<td>0.4%</td>
<td>(440,000)</td>
<td>1.1%</td>
<td>(1,420,000)</td>
</tr>
<tr>
<td>2026</td>
<td>(1,071,000)</td>
<td>0.5%</td>
<td>(471,000)</td>
<td>1.4%</td>
<td>(1,542,000)</td>
</tr>
<tr>
<td>2027</td>
<td>(1,144,000)</td>
<td>0.6%</td>
<td>(522,000)</td>
<td>1.7%</td>
<td>(1,666,000)</td>
</tr>
<tr>
<td>2028</td>
<td>(1,236,000)</td>
<td>0.7%</td>
<td>(567,000)</td>
<td>2.0%</td>
<td>(1,803,000)</td>
</tr>
<tr>
<td>2029</td>
<td>(1,343,000)</td>
<td>0.8%</td>
<td>(639,000)</td>
<td>2.3%</td>
<td>(1,982,000)</td>
</tr>
<tr>
<td>2030</td>
<td>(1,438,000)</td>
<td>0.8%</td>
<td>(686,000)</td>
<td>2.6%</td>
<td>(2,124,000)</td>
</tr>
<tr>
<td>2031</td>
<td>(1,541,000)</td>
<td>0.9%</td>
<td>(727,000)</td>
<td>2.9%</td>
<td>(2,268,000)</td>
</tr>
<tr>
<td>2032</td>
<td>(1,620,000)</td>
<td>0.9%</td>
<td>(746,000)</td>
<td>3.0%</td>
<td>(2,366,000)</td>
</tr>
<tr>
<td>2033</td>
<td>(1,706,000)</td>
<td>0.9%</td>
<td>(773,000)</td>
<td>3.2%</td>
<td>(2,479,000)</td>
</tr>
<tr>
<td>2034</td>
<td>(1,659,000)</td>
<td>0.5%</td>
<td>(693,000)</td>
<td>1.7%</td>
<td>(2,352,000)</td>
</tr>
<tr>
<td>2035</td>
<td>(1,736,000)</td>
<td>0.3%</td>
<td>(717,000)</td>
<td>1.5%</td>
<td>(2,453,000)</td>
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<tr>
<td>2036</td>
<td>(1,844,000)</td>
<td>0.3%</td>
<td>(745,000)</td>
<td>1.0%</td>
<td>(2,589,000)</td>
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<tr>
<td>2037</td>
<td>(1,984,000)</td>
<td>0.2%</td>
<td>(814,000)</td>
<td>0.9%</td>
<td>(2,798,000)</td>
</tr>
<tr>
<td>2038</td>
<td>(2,209,000)</td>
<td>0.2%</td>
<td>(919,000)</td>
<td>0.9%</td>
<td>(3,128,000)</td>
</tr>
<tr>
<td>2039</td>
<td>(2,438,000)</td>
<td>0.2%</td>
<td>(1,037,000)</td>
<td>0.9%</td>
<td>(3,475,000)</td>
</tr>
<tr>
<td>2040</td>
<td>(2,621,000)</td>
<td>0.0%</td>
<td>(1,109,000)</td>
<td>0.0%</td>
<td>(3,730,000)</td>
</tr>
</tbody>
</table>

**TOTAL** $29.7M  $12.9M  $42.6M
## Member Impact

36% of Tier 2 Members Receive Supplemental Pays

<table>
<thead>
<tr>
<th>Description</th>
<th>General</th>
<th>Safety</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Tier 2 Active Members</td>
<td>2,978</td>
<td>336</td>
<td>3,314</td>
</tr>
<tr>
<td>Tier 2 Members Receiving Supplements</td>
<td>961</td>
<td>236</td>
<td>1,197</td>
</tr>
<tr>
<td>Tier 2 % Receiving Supplements</td>
<td>32%</td>
<td>70%</td>
<td>36%</td>
</tr>
</tbody>
</table>
Member Impact

Supplemental Pays ~ 5.6% of Total Tier 2 Payroll

<table>
<thead>
<tr>
<th>Description</th>
<th>General</th>
<th>Safety</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Tier 2 Payroll</td>
<td>$210 M</td>
<td>$26 M</td>
<td>$236 M</td>
</tr>
<tr>
<td>Annual Tier 2 Supplemental Pay</td>
<td>$10.8 M</td>
<td>$2.4 M</td>
<td>$13.1 M</td>
</tr>
<tr>
<td>Supplemental Pay Percentage (%) of Tier 2 Payroll</td>
<td>5.1%</td>
<td>9.4%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>
## Member Impact

### Supplemental Pays Vary Widely: $1 - $4,000/pay period

<table>
<thead>
<tr>
<th>Description</th>
<th>General</th>
<th>Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>$443</td>
<td>$388</td>
</tr>
<tr>
<td>Median</td>
<td>$216</td>
<td>$343</td>
</tr>
<tr>
<td>Mode</td>
<td>$66</td>
<td>$447</td>
</tr>
<tr>
<td>Range</td>
<td>$1.12 - $4,153.85</td>
<td>$9.20 - $1,261.73</td>
</tr>
</tbody>
</table>
## Tier 2 Member Examples

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Monthly Base Pay&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Supplemental Pay (Monthly)&lt;sup&gt;3&lt;/sup&gt;</th>
<th>FAC</th>
<th>Benefit &lt;sup&gt;4&lt;/sup&gt;</th>
<th>Base Pay Only Benefit &lt;sup&gt;4&lt;/sup&gt;</th>
<th>Monthly Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse III (G)</td>
<td>$8,252</td>
<td>$1,166</td>
<td>$9,418</td>
<td>$2,402</td>
<td>$2,104</td>
<td>$298</td>
</tr>
<tr>
<td>Corr. Officer (S)</td>
<td>$5,370</td>
<td>$470</td>
<td>$5,840</td>
<td>$1,927</td>
<td>$1,772</td>
<td>$155</td>
</tr>
</tbody>
</table>

(1) Based on pay period ending January 3, 2021  
(2) Monthly Base Pay based on assumption that member retired on January 3, 2021 and their last year was their highest FAC  
(3) Based on the actual supplemental pay received during the 3-year FAC period  
(4) Benefit Calculation Assumptions suggested by Actuary: G – Age 59 w/15 years; S – Age 52 w/15 years
# Tier 2 Member Averages

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Monthly Base Pay¹</th>
<th>Supplemental Pay (Mo’ly) ²</th>
<th>FAC</th>
<th>Benefit ³</th>
<th>Base Only Benefit ³</th>
<th>Monthly Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. General</td>
<td>$ 5,416</td>
<td>$ 959</td>
<td>$ 6,375</td>
<td>$ 1,626</td>
<td>$ 1,381</td>
<td>$ 245</td>
</tr>
<tr>
<td>Avg. Safety</td>
<td>$ 6,212</td>
<td>$ 841</td>
<td>$ 7,053</td>
<td>$ 2,327</td>
<td>$ 2,050</td>
<td>$ 278</td>
</tr>
</tbody>
</table>

(1) Monthly Base Pay based on average pay for membership group (General or Safety) reported on page 42 of Actuarial Valuation
(2) Based on pay period ending January 3, 2021
(3) Benefit Calculation Assumptions suggested by Actuary: G – Age 59 w/15 years; S – Age 52 w/15 years
Recommendation

• Approve Resolution 2021-05-01: Pensionable Compensation for Future SJCERA Members
  – Base Pay Only will be included in Pensionable Compensation
  – Affects those who become SJCERA Members for first time on/after January 1, 2022 and who are not “legacy members”
RESOLUTION TITLE: PENSIONABLE COMPENSATION FOR FUTURE SJCERA MEMBERS

RESOLUTION NO. 2021-05-01

WHEREAS, Government Code Sections 31460 and 31461 define and specify Compensation that is included in, and excluded from, Compensation Earnable and establishes the Board of Retirement as responsible for determining Compensation Earnable for members of the San Joaquin County Employees' Retirement Association; and

WHEREAS, Government Code Sections 31460 and 7522.34 define and specify the Compensation that is included in, and excluded from, Pensionable Compensation and establishes the Board of Retirement (Board) as responsible for determining Pensionable Compensation for employees subject to the Public Employees' Pension Reform Act (PEPRA) of 2013; and

WHEREAS, Compensation Earnable and Pensionable Compensation are used to determine the retirement contributions payable to SJCERA and the benefits payable by SJCERA to members and beneficiaries; and

WHEREAS, in July 1995, the Board established guidelines for determining Compensation Earnable as adopted in Resolution 95-07-01; and

WHEREAS, in December 2012, the Board established guidelines for determining Pensionable Compensation for new members in Tier 2 as adopted in Resolution 2012-12-04; and

WHEREAS, as reflected in the “Revised by” dates on this Resolution, the Board from time to time has amended its determination of Compensation Earnable and Pensionable Compensation due to changes in the compensation schedules of employers participating in SJCERA and/or changes in applicable law; and

WHEREAS, the definition of Pensionable Compensation permits the Board to include a member’s “base pay” only, in his or her retirement allowance calculation, which, if implemented in lieu of determining members’ “normal monthly rate of pay,” would substantially decrease the complexity, related administrative expense, and risk of error arising from pensionability determinations, which is consistent with legal principles set forth in Marin Assn. of Public Employees v. Marin County Employees' Retirement Assn. (2016) 2 Cal.App.5th 674 and Alameda County Deputy Sheriff’s Assn., et al. v. Alameda County Employees' Retirement Assn., et al. (2020) 9 Cal.5th 1032; and
WHEREAS, the Board determines that it is prudent and in the overall best interest of its members and beneficiaries to streamline, and thus simplify, the manner in which SJCERA determines the pensionability of pay and may communicate those determinations accurately to its members and participating employers; and

WHEREAS, by this Resolution, the Board does not intend to change the pensionability rules applicable to any current or former active, deferred or retired Tier 1 or Tier 2 members, nor to change the pensionability rules applicable to future SJCERA members who establish reciprocity such that they are not considered “new members” as defined in Gov. Code sec. 7522.04, subd. (f) (“legacy members”);

NOW, THEREFORE, BE IT RESOLVED that, pursuant to Legislature’s stated intent in PEPRA (Gov. Code sec. 7522.34) that boards of retirement may limit Pensionable Compensation to the “base pay of the member paid in cash to similarly situated members of the same group or class of employment for services rendered on a full-time basis during normal working hours, pursuant to publicly available pay schedules” (“Base Pay Only”) and may exclude from Pensionable Compensation various specified pay items as well as “Any other form of compensation a public retirement board determines should not be pensionable,” the SJCERA Board of Retirement hereby determines that Base Pay Only will be included in Pensionable Compensation for all individuals who become SJCERA members for the first time on and after January 1, 2022, and who do not establish reciprocity between SJCERA and another public retirement system in California as to which the individual’s retirement system membership commenced prior to January 1, 2013 (i.e., legacy members).

BE IT FURTHER RESOLVED that the determinations made herein shall remain in effect until such time as this Board, the Legislature or the Courts take action that requires a different determination.

PASSED AND ADOPTED by the Board of Retirement of the San Joaquin County Employees' Retirement Association on the 7th day of May 2021.

AYES:

NOES:  

ABSENT:  

ABSTAIN:  

__________________________
MAYOR RESTUCCIA, Chair

Attest:

__________________________  
RAYMOND McCRAV, Secretary
History:
Revised by Resolution No. 95-07-01
Revised by Resolution No. 96-06-03
Revised by Resolution No. 97-06-03
Revised by Resolution No. 98-03-01
Revised by Resolution No. 98-04-01
Revised by Resolution No. 98-10-01
Revised by Resolution No. 2000-07-01
Revised by Resolution No. 2000-10-01
Revised by Resolution No. 2001-03-03
Revised by Resolution No. 2002-02-01
Revised by Resolution No. 2002-11-01
Revised by Resolution No. 2004-07-01
Revised by Resolution No. 2007-07-13
Revised by Resolution No. 2010-06-03
Revised by Resolution No. 2012-12-04
Revised by Resolution No. 2015-09-01
Revised by Resolution No. 2017-02-02
Revised by Resolution No. 2017-08-01
Revised by Resolution No. 2018-01-02
Revised by Resolution No. 2019-01-01
Revised by Resolution No. 2020-10-04
Revised by Resolution No. 2021-01-01
May 7, 2021

SUBJECT: In-Person Board Meeting Discussion

SUBMITTED FOR: ___ CONSENT       ___ ACTION       X INFORMATION

RECOMMENDATION

No recommendation; for Board discussion purposes only.

PURPOSE

For the Board to discuss and provide direction on resuming in person Board meetings.

DISCUSSION

At its April 9, 2021 meeting, the Board requested staff place the topic of resuming in-person Board meetings as a discussion item on an upcoming Board of Retirement meeting agenda.

Upon concluding its discussion, staff seeks the Board’s direction on how to proceed with upcoming meetings. Options include, but are not limited to, the following.

1. **Maintain the status quo**: Remain fully virtual until such time as the Executive Order expires and/or when restrictions are lifted (possibly June 15).
   
   **Pros**: - Trustees, staff and the public are accustomed to the virtual meeting format.
   - Virtual meetings have increased public participation at SJCERA meetings.
   - Eliminates trustee travel time and SJCERA’s related mileage costs.
   - Provides the greatest possible protection against possible COVID transmission.
   
   **Cons**: - Some trustees have expressed that meeting remotely makes discussion and “reading the room” more difficult.

2. **Personal Choice Hybrid Approach**: Allow individual trustees and the public to attend meetings virtually or in person according to their preference (until such time as the Executive Order expires or meeting virtually becomes impractical). Identify any requirements regarding in-person attendance (COVID screening, percentage of room capacity allowed, etc.).

   **Pros**: - Provides the greatest flexibility to accommodate individual’s needs
   - Allows members of the public who may not have computer access greater access to meetings
   - Maintains lower trustee travel time and SJCERA’s related mileage costs compared to fully in-person meetings
- Virtual meetings would still be accessible and have increased public participation at SJCERA meetings

**Cons:**
- Increased technological complexity for SJCERA’s IT department. (IT needs time to obtain necessary equipment and conduct testing prior to implementation. July would be the earliest feasible Board meeting for implementation.)
- Trustee travel time and related SJCERA mileage costs will increase some compared to fully remote option.
- Possible increased COVID exposure

3. **In-Person Hybrid Approach:** Resume in-person meetings (socially distanced and masked) for trustees and staff; allow the public and/or consultants and guest speakers to choose to participate in person or virtually. Identify any requirements regarding in-person attendance (COVID screening, percentage of room capacity allowed, etc.).

**Pros:**
- Face-to-face discussions with trustees and staff
- Reduced risk of home-technology issues for Trustees
- Allows members of the public who may not have computer access greater access to meetings
- Virtual meetings would still be accessible and have increased public participation at SJCERA meetings

**Cons:**
- Increased technological complexity for SJCERA’s IT department. (IT needs time to obtain necessary equipment and conduct testing prior to implementation. July would be the earliest feasible Board meeting for implementation.)
- Trustee travel time and related SJCERA mileage costs will increase to pre-pandemic levels.
- Possible increased COVID exposure

4. **Resume In-Person-only meetings (socially distanced and masked) for all.** This returns to the pre-pandemic model and discontinues remote viewing options. Members of the public interested in participating would attend in person.

**Pros:**
- Face-to-face discussions with trustees and staff
- Reduced risk of home-technology issues for Trustees
- Allows members of the public who may not have computer access greater access to meetings

**Cons:**
- Possible increased COVID exposure
- Trustee travel time and related SJCERA mileage costs will increase pre-pandemic levels
- Decreased public participation
The following information may be helpful background information to consider in the discussion.

- The Board of Supervisors allows the public to attend at 25 percent of capacity.
- Governor Newsom has stated that California may be “fully open” by June 15.
- There is a bill before the legislature, AB 703, seeking to change the Brown Act requirements and allow Board meetings to be held via teleconferencing. Should this bill become law, it would become effective in 2022.
- A survey of ’37 Act systems indicates that other systems are also considering whether to return to in person meetings, but most are currently still meeting remotely.

<table>
<thead>
<tr>
<th>Retirement System</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alameda</td>
<td>Still virtual, not sure when it will change</td>
</tr>
<tr>
<td>Orange</td>
<td>Not meeting in person currently, but will be polling Trustees</td>
</tr>
<tr>
<td>Sacramento</td>
<td>Still virtual with a few Trustees coming in due to home-tech issues; no public access</td>
</tr>
<tr>
<td>San Mateo</td>
<td>Still virtual. Considering June 15 when state is set to “fully open”</td>
</tr>
<tr>
<td>Santa Barbara</td>
<td>Still virtual. Putting the issue up for discussion and planning to return to in person in August, including the public. Will still try and allow Trustees the option to attend remotely, as long as executive order allows. May limit consultant travel and have them participate via Zoom.</td>
</tr>
<tr>
<td>Sonoma</td>
<td>Board meetings are virtual; however, a few trustees attend in person (following COVID screening) in the Board room with staff and trustees socially distant and wearing masks.</td>
</tr>
<tr>
<td>Stanislaus</td>
<td>Not meeting in person, but seriously contemplating.</td>
</tr>
<tr>
<td>Tulare</td>
<td>Meeting in person. Have expanded their Board table to allow social distancing. Counsel and a few trustees attend remotely. Trustees who attend bring their iPads to access agenda materials but do not log into Zoom, to avoid audio (echo) issues. Public is allowed to attend with social distancing and face mask requirements.</td>
</tr>
<tr>
<td>Ventura</td>
<td>Trustees may choose to participate in person or not. Last meeting four trustees attended in person. No date has been identified for being back in person. Able to easily social distance because not all Trustees are attending in person.</td>
</tr>
</tbody>
</table>

JOHANNA SHICK
Chief Executive Officer
### San Joaquin County Employees Retirement Association (SJCERA)
#### Preliminary Monthly Flash Report (Net)³

March 2021

<table>
<thead>
<tr>
<th>Commitment ($000)</th>
<th>Sub-Segment</th>
<th>Market Value</th>
<th>Physical % of Total</th>
<th>Policy Target %</th>
<th>1-Mo</th>
<th>3-Mos</th>
<th>YTD</th>
<th>1-Yr</th>
<th>3-Yrs</th>
<th>5-Yrs</th>
<th>SI Return</th>
<th>SI Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTOAL PLAN</strong>⁴</td>
<td>Policy Benchmark ⁴</td>
<td>$3,563,126,243</td>
<td>100.0%</td>
<td>100.0%</td>
<td>1.11</td>
<td>1.5</td>
<td>2.7</td>
<td>1.27</td>
<td>2.31</td>
<td>8.5</td>
<td>7.5</td>
<td>8.7</td>
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<td>(75/25) Portfolio ⁵</td>
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</table>

**Broad Growth**

| $2,685,712,538 | 75.4% | 75.0% | 17.0 | 2.5 | 2.5 | 27.4 | 8.0 | 9.4 | 8.5 | Jan-95 |

**Aggressive Growth Lag**³

| $247,749,750 | 7.0% | 10.0% | 7.0 | 7.0 | 4.6 | 4.6 | 9.0 | 8.6 | 8.8 | 8.8 | 5.5 | Feb-05 |

**BlackRock Global Energy & Power Lag**³

| $350,000 | Global Infrastructure | 0.4% | 0.2 | 0.2 | 2.6 | -- | -- | -- | -- | 11.2 | Jul-19 |
| Difference: | | | 0.2 | 0.2 | 2.6 | -- | -- | -- | -- | 11.2 | |

**Ocean Avenue II Lag**³

| $340,000 | PE Buyout FOF | 0.9% | 19.7 | 19.7 | 11.7 | 11.7 | 16.7 | 16.6 | 8.8 | 8.9 | 10.4 | May-13 |
| Difference: | | | 19.7 | 19.7 | 11.7 | 11.7 | 16.7 | 16.6 | 8.8 | 8.9 | 10.4 | |

**Ocean Avenue III Lag**³

| $500,000 | PE Buyout FOF | 1.3% | 3.8 | 3.8 | 1.6 | 16 | 28.2 | 8.8 | 8.8 | 19.3 | Apr-16 |
| Difference: | | | 3.8 | 3.8 | 1.6 | 16 | 28.2 | 8.8 | 8.8 | 19.3 | Apr-16 |

**Ocean Avenue IV Lag**³

| $500,000 | PE Buyout FOF | 0.6% | 8.4 | 8.4 | 27.4 | -- | -- | -- | -- | 25.0 | Dec-19 |
| Difference: | | | 8.4 | 8.4 | 27.4 | -- | -- | -- | -- | 25.0 | |

**Morgan Creek III Lag**³

| $310,000 | Multi-Strat FOF | 0.2% | 1.8 | 1.8 | 18.9 | 19.9 | -4.6 | -2.4 | -3.1 | Feb-15 |
| Difference: | | | 1.8 | 1.8 | 18.9 | 19.9 | -4.6 | -2.4 | -3.1 | Feb-15 |

**Morgan Creek V Lag**³

| $312,000 | Multi-Strat FOF | 0.2% | 10.9 | 10.9 | 4.3 | 4.3 | 11.0 | 8.8 | 8.8 | 12.5 | Jun-13 |
| Difference: | | | 10.9 | 10.9 | 4.3 | 4.3 | 11.0 | 8.8 | 8.8 | 12.5 | Jun-13 |

**Morgan Creek VI Lag**³

| $320,000 | Multi-Strat FOF | 0.6% | 7.5 | 7.5 | 8.8 | 8.8 | 15.4 | 8.8 | 8.8 | 6.1 | Feb-15 |
| Difference: | | | 7.5 | 7.5 | 8.8 | 8.8 | 15.4 | 8.8 | 8.8 | 6.1 | Feb-15 |

**Opportunistic Private Real Estate**

| $330,000 | Opportunistic Pvt. RE | 0.0% | 0.0 | 0.0 | -24.4 | -24.4 | -6.1 | -5.3 | -3.1 | Jul-08 |
| Difference: | NCREIF ODCF + % Lag Blend | | -0.4 | -0.5 | -25.9 | -25.9 | -9.4 | -12.0 | -11.4 | |

**Greenfield V⁶**

| $250,000 | Opportunistic Pvt. RE | 0.0% | 3.7 | 3.7 | -42.3 | -42.3 | -32.1 | -19.2 | -7.2 | Apr-12 |
| Difference: | NCREIF ODCF + % Lag Blend | | 3.7 | 3.7 | -42.3 | -42.3 | -32.1 | -19.2 | -7.2 | Apr-12 |

**Greenfield VI³**

| $191,000 | Opportunistic Pvt. RE | 0.4% | 1.1 | 1.1 | 4.3 | 4.3 | 10.3 | 11.9 | 11.2 | Oct-14 |
| Difference: | NCREIF ODCF + % Lag Blend | | 1.1 | 1.1 | 4.3 | 4.3 | 10.3 | 11.9 | 11.2 | Oct-14 |

**Grandview²**

| $330,000 | Opportunistic Pvt. RE | 0.6% | 13.8 | 13.8 | 36.3 | 36.3 | -- | -- | 5.6 | Apr-18 |
| Difference: | NCREIF ODCF + % Lag Blend | | 13.8 | 13.8 | 36.3 | 36.3 | -- | -- | 5.6 | Apr-18 |

**Miller Global Fund V⁷**

| $350,000 | Opportunistic Pvt. RE | 0.0% | -35.9 | -35.9 | -59.6 | -59.6 | -18.7 | -9.8 | -16.3 | Oct-05 |
| Difference: | NCREIF ODCF + % Lag Blend | | -35.9 | -35.9 | -59.6 | -59.6 | -18.7 | -9.8 | -16.3 | Oct-05 |

**Miller Global Fund VI²**

| $350,000 | Opportunistic Pvt. RE | 0.0% | 521 | 521 | -71.9 | -71.9 | -30.0 | -16.3 | -7.2 | May-08 |
| Difference: | NCREIF ODCF + % Lag Blend | | 521 | 521 | -71.9 | -71.9 | -30.0 | -16.3 | -7.2 | May-08 |

**Miller Global Fund VII**

| $250,000 | Opportunistic Pvt. RE | 0.0% | 68.8 | 68.8 | -6.2 | -6.2 | -16.6 | -2.3 | 23.2 | Dec-12 |
| Difference: | NCREIF ODCF + % Lag Blend | | 68.8 | 68.8 | -6.2 | -6.2 | -16.6 | -2.3 | 23.2 | Dec-12 |

**Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.

³ Total class returns are as of 03/31/20, and lagged 1 quarter.

⁴ Manager returns are as of 03/31/20, and lagged 1 quarter. Since inception date reflects one quarter lag.

⁵ 4/1/20 to present benchmark is 0.32% MSCI ACWI (MI), 17.5% BB Aggregate Bond Index, 17.5% BB High Yield, 0.0% S&P Leveraged Loans, 6% NCREIF ODCF +1% lag; 10% 1YR +4%, 10% MSCI ACWI +2%, 15% CRO Custom Benchmark. Prior to 4/1/20 benchmark is legacy policy benchmark.

⁶ 4/1/20 to present 75% MSCI ACWI, 25% BB Global Aggregate. Prior to 4/1/20 60% MSCI ACWI, 40% BB Global Aggregate.
### San Joaquin County Employees Retirement Association (SJCERA)

#### March 2021

**Preliminary Monthly Flash Report (Net)**

<table>
<thead>
<tr>
<th>Commitment ($000)</th>
<th>Sub-Segment</th>
<th>Market Value</th>
<th>Physical % of Total</th>
<th>Policy Target %</th>
<th>1-Mo</th>
<th>3-Mos</th>
<th>YTD</th>
<th>1-Yr</th>
<th>3-Yrs</th>
<th>5-Yrs</th>
<th>SI Return</th>
<th>SI Date</th>
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<td>NCREIF ODCE + % Lag Blend</td>
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<td>0.5</td>
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<td>15</td>
<td>5.3</td>
<td>6.7</td>
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</table>

**Value-Added Private Real Estate**

| AG Core Plus Vli^2 | $520,000 | Value-Added Pvt RE | $20,050,687 | 0.6% | 2.0 | 2.0 | 4.8 | 4.8 | 7.7 | 7.2 | 4.1 | Sep-15 |
| | | NCREIF ODCE + % Lag Blend | | | 0.4 | 0.5 | 15 | 15 | 5.3 | 6.7 | 11.3 | | |
| | | Difference | | | 1.6 | 1.5 | 33.3 | 33.3 | 24.5 | 0.5 | -72.0 | | |
| Almanac Realty Vli^3 | $530,000 | Value-Added Pvt RE | $3,824,321 | 0.1% | 0.6 | 0.6 | -28.8 | -28.8 | -8.6 | -1.0 | 243.4 | Feb-13 |
| | | NCREIF ODCE + % Lag Blend | | | 0.4 | 0.5 | 15 | 15 | 5.3 | 6.7 | 12.9 | | |
| | | Difference | | | 0.2 | 0.1 | -30.3 | -30.3 | -16.9 | -17.7 | -14.4 | | |
| Colony Realty III | $520,000 | Value-Added Pvt RE | $222,675 | 0.0% | 6.7 | 6.7 | -1.2 | -1.2 | -8.2 | -4.3 | 17.9 | Dec-09 |
| | | NCREIF ODCE + % Lag Blend | | | 0.4 | 0.5 | 15 | 15 | 5.3 | 6.7 | 11.3 | | |
| | | Difference | | | 6.3 | 6.2 | -2.7 | -2.7 | -13.5 | -11.0 | -6.6 | | |
| Colony Realty IV | $520,000 | Value-Added Pvt RE | $222,269 | 0.0% | -6.2 | -6.2 | 3.2 | 3.2 | -0.7 | -0.7 | 3.7 | 13.0 | Mar-13 |
| | | NCREIF ODCE + % Lag Blend | | | 0.4 | 0.5 | 15 | 15 | 5.3 | 6.7 | 12.8 | | |
| | | Difference | | | 0.4 | 0.5 | 15 | 15 | 5.3 | 6.7 | 12.8 | | |
| Stockbridge RE III | $545,000 | Value-Added Pvt RE | $27,630,069 | 0.8% | 3.4 | 3.4 | 3.7 | 3.7 | -1.6 | -1.6 | 13.0 | Jul-18 |
| | | NCREIF ODCE + % Lag Blend | | | 0.4 | 0.5 | 15 | 15 | 5.3 | 6.7 | 12.8 | | |

**Traditional Growth**

| MSCI ACWI IMI Net | $1,350,677,074 | 37.9% | 32.0% | 3.0 | 5.6 | 5.6 | 52.4 | 9.4 | 12.0 | 9.5 | Jan-95 |
| | | | | | | | | | | | |
| Difference | | | | | | | | | | | |

| Global Equity | $1,307,920,039 | 36.7% | | | | | | | | | |

| Northern Trust MSCI World IMI | $1,666,974,309 | 32.8% | | | | | | | | | |
| | | All Cap Global | | | | | | | | | |
| | | MSCI World IMI Net | | | | | | | | | |
| | | Difference | | | | | | | | | |
| SJCERA Transition | $3,371,000 | 0.0% | | | | | | | | | |
| | | All Cap Global | | | | | | | | | |

**Emerging Markets**

| GIG Active Emerging Markets | $65,259,399 | 1.8% | | | | | | | | | |
| | | Emerging Markets | | | | | | | | | |
| | | MSCI Emerging Markets Index Net | | | | | | | | | |
| | | Difference | | | | | | | | | |
| PIMCO RAE Fundamental Emerging Markets | $75,682,960 | 2.1% | | | | | | | | | |
| | | Emerging Markets | | | | | | | | | |
| | | MSCI Emerging Markets Index | | | | | | | | | |
| | | Difference | | | | | | | | | |

**REITS**

| Invesco All Equity REIT | $42,247,035 | 1.2% | | | | | | | | | |
| | | Core US REIT | | | | | | | | | |
| | | FTSE NAREIT Equity Index | | | | | | | | | |
| | | Difference | | | | | | | | | |

Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.

^2 MSCI ACWI IMI Net as of 4/1/2020; MSCI ACWI Gross prior.

^3 MSCI ACWI IMI Net as of 4/1/2020; MSCI ACWI Gross prior.

Manager returns are as of 9/30/20, and lagged 1 quarter. Since inception date reflects one quarter lag.

NM = Returns not meaningful
## Preliminary Monthly Flash Report (Net)

**San Joaquin County Employees Retirement Association (SJCERA)**

**March 2021**

### Stabilized Growth

<table>
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<th>Commitment</th>
<th>Sub-Segment</th>
<th>Market Value</th>
<th>Physical % of Total</th>
<th>Policy Target %</th>
<th>1-Mo</th>
<th>3-Mos</th>
<th>YTD</th>
<th>1-Yr</th>
<th>3-Yrs</th>
<th>5-Yrs</th>
<th>SI Return</th>
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<td>3.8</td>
<td>Jan-05</td>
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### Risk Parity

| | T-Bill +4% | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Difference | 0.0 | -3.5 | -3.5 | 16.5 | 1.7 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |

### Bridgewater All Weather

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### PanAgora Diversified Risk Multi-Asset

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### Liquid Credit

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### Neuberger Berman

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<tr>
<th>33% ICE BofA HY Constrained, 33% S&amp;P/LSTA LL, 33% JPM EMBI Glob Div.</th>
<th>Global Credit</th>
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### Stone Harbor Absolute Return

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### Private Credit Lag

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### BlackRock Direct Lending Lag

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### Mesa West RE Income III Lag

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### Mesa West RE Income IV Lag

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</table>

### Oaktree Lag

<table>
<thead>
<tr>
<th>550,000</th>
<th>Leveraged Direct</th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Difference</td>
<td>20.5</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
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</table>

### HPS EU Asset Value II Lag

<table>
<thead>
<tr>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Difference</td>
<td>7.6</td>
<td>7.9</td>
<td>17.6</td>
<td>17.6</td>
<td>8.0</td>
<td>8.4</td>
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<td>8.6</td>
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### Raven Opportunity II Lag

<table>
<thead>
<tr>
<th>545,000</th>
<th>Direct Lending</th>
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<tbody>
<tr>
<td>Difference</td>
<td>1.2</td>
<td>12.0</td>
<td>-2.0</td>
<td>-2.0</td>
<td>-0.5</td>
<td>-3.9</td>
<td>4.8</td>
<td>4.8</td>
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</tr>
</tbody>
</table>

### Raven Opportunity III Lag

<table>
<thead>
<tr>
<th>550,000</th>
<th>Direct Lending</th>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Difference</td>
<td>3.4</td>
<td>3.4</td>
<td>2.1</td>
<td>2.1</td>
<td>7.8</td>
<td>8.0</td>
<td>8.4</td>
<td>8.4</td>
<td>8.4</td>
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<td></td>
</tr>
</tbody>
</table>

---

1. Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.
2. Total class return is as of 12/31/20, and lagged 1 quarter.
3. Manager returns as of 12/31/20, and lagged 1 quarter. Since inception date reflects one quarter lag.
4. 9% Annual until 7/1/2018 then CPI +6% Annual thereafter.
5. 50% BB/High Yield 50% S&P Leveraged Loan until 12/31/20 then CPI +6% Annual thereafter. Benchmark lagged one quarter.
6. MSCI ACWI = 2% until 12/31/20 then CPI +6% Annual thereafter. Benchmark lagged one quarter.
San Joaquin County Employees Retirement Association (SJCERA)

Preliminary Monthly Flash Report (Net)  
March 2021

<table>
<thead>
<tr>
<th>Commitment ($000)</th>
<th>Sub-Segment</th>
<th>Market Value</th>
<th>Physical % of Total</th>
<th>Policy Target %</th>
<th>1-Mo</th>
<th>3-Mos</th>
<th>YTD</th>
<th>1-Yr</th>
<th>3-Yrs</th>
<th>5-Yrs</th>
<th>SI Return</th>
<th>SI Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Credit Lag (continued)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Medley Opportunity II Lag⁵ | Direct Lending | $11,54,548 | 0.3% | -9.9 | -9.9 | -19.9 | -19.9 | -15.5 | -8.5 | -2.4 | Jul-12 |
| CPI +6% Annual Blend |
| Difference: | 0.6 | 2.4 | 7.4 | 7.4 | 8.0 | 8.4 | 8.6 |
| White Oak Summit Peer Fund Lag⁵ | Direct Lending | $46,190,005 | 1.3% | 1.7 | 17 | 4.7 | 4.7 | 6.4 | -- | 7.1 | Mar-16 |
| CPI +6% Annual Blend |
| Difference: | 1.1 | -0.7 | -2.7 | -2.7 | -1.6 | -- | -- | 12 |
| White Oak Yield Spectrum Master V Lag⁵ | Direct Lending | $49,045,875 | 1.4% | 2.0 | 2.0 | -- | -- | -- | -- | -- | Mar-20 |
| CPI +6% Annual Blend |
| Difference: | 0.6 | 2.4 | -- | -- | -- | -- | -- | 6.2 |
| Principal US³ | Core Pvt. RE | $33,760,920 | 0.9% | 0.0 | 0.0 | 0.2 | 0.2 | 4.9 | 7.1 | 7.1 | Jan-16 |
| NCREIF ODCE + 1% Lag Blend |
| Difference: | 0.0 | 0.5 | 15 | 15 | 5.3 | 6.7 | 10.6 |
| Prologis Logistics³ | Core Pvt. RE | $74,142,304 | 2.1% | 4.5 | 4.5 | 8.1 | 8.1 | 13.8 | 15.2 | 6.3 | Dec-07 |
| NCREIF ODCE + 1% Lag Blend |
| Difference: | 0.4 | 0.5 | 15 | 15 | 5.3 | 6.7 | 8.9 |
| RREEF America III³ | Core Pvt. RE | $50,531,354 | 1.4% | 0.0 | 0.0 | 2.3 | 2.3 | 5.5 | -- | 6.7 | Jan-16 |
| NCREIF ODCE + 1% Lag Blend |
| Difference: | 0.0 | 0.5 | 15 | 15 | 5.3 | -- | 9.8 |

| Diversifying Strategies |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $772,869,809 | 21.7% | 25.0% | -0.7 | -1.7 | -1.7 | -4.0 | 3.3 | 2.2 | 6.4 | Oct-90 |

| Principal Protection |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BB Aggregate Bond Index | $323,811,174 | 9.1% | 10.0% | -0.7 | -1.6 | -1.8 | -3.4 | 0.7 | 4.7 | 3.6 | 3.1 | 6.4 | Oct-90 |
| Difference: | 0.5 | 18 | 18 | 18 | 2.0 | 2.0 | 0.5 | 0.4 |

| DODGE & COX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Core Fixed Income | $16,973,431 | 4.6% | -0.7 | -2.6 | -2.6 | -2.6 | 7.6 | 5.7 | 4.8 | 31 | Oct-90 |
| BB Aggregate Bond Index |
| Difference: | 0.5 | 0.8 | 0.8 | 0.8 | 10 | 10 | 12 | 17 |

| DOUBLELINE CAPITAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MBS | $111,409,776 | 3.1% | -0.4 | 0.3 | 0.3 | 7.8 | 4.2 | 3.9 | 5.1 | Feb-12 |
| BB Aggregate Bond Index |
| Difference: | 0.8 | 3.7 | 3.7 | 71 | 7.1 | 90 | 0.8 | 2.2 |

| SJ PRINCIPAL PROTECTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Int Core Bond ETF | $48,427,985 | 1.4% | -1.3 | --- | --- | --- | --- | --- | --- | --- | --- | Jan-21 |
| BB Aggregate Bond Index |
| Difference: | -1.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

| PRIMA Lag⁶ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Comm. Mortgage | $ - | 0.0% | 0.0 | 0.0 | -4.6 | 1.4 | 2.6 | 3.9 | Jul-08 |
| BB Aggregate Bond Index Legged |
| Difference: | -0.1 | 0.7 | 0.7 | 0.7 | 5.7 | 5.7 | 5.7 | 18 | 4.3 |

¹Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.
²Total class returns are as of 12/31/20, and lagged 1 quarter.
³Manager returns are as of 12/31/20, and lagged 1 quarter. Since inception date reflects one quarter lag.
⁴5% Annual until 7/1/2018 then CPI +6% Annual thereafter.
⁵PRIMA redeemed 98% of its assets on 1/19/21. The remaining value was redeemed in March.
⁶PRIMA redeemed 98% of its assets on 1/19/21. The remaining value was redeemed in March.
# San Joaquin County Employees Retirement Association (SJCERA)

### Preliminary Monthly Flash Report (Net)

**March 2021**

**Commitment ($000)**

<table>
<thead>
<tr>
<th>Sub-Segment</th>
<th>Market Value</th>
<th>Physical % of Total</th>
<th>Policy Target %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Crisis Risk Offset</strong></td>
<td>$449,058,635</td>
<td>12.6%</td>
<td>15.0%</td>
</tr>
<tr>
<td><strong>CBO Custom Benchmark</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference:</td>
<td>$142,481,103</td>
<td>4.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Long Duration</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BB US Long Duration Treasuries</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Difference:</td>
<td>$142,481,103</td>
<td>4.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Dodge &amp; Cox Long Duration</strong></td>
<td></td>
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</tr>
<tr>
<td>Long Duration</td>
<td></td>
<td></td>
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<tr>
<td>Difference:</td>
<td>$142,481,103</td>
<td>4.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Systematic Trend Following</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTO50 Index</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Difference:</td>
<td>$182,525,621</td>
<td>5.1%</td>
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<tr>
<td><strong>Mt. Lucas Managed Futures - Cash</strong></td>
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<tr>
<td>Systematic Trend Following</td>
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</tr>
<tr>
<td>Difference:</td>
<td>$91,851,307</td>
<td>2.6%</td>
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<tr>
<td><strong>Graham Tactical Trend</strong></td>
<td></td>
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<tr>
<td>SG Trend Index</td>
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<td></td>
</tr>
<tr>
<td>Difference:</td>
<td>$90,677,888</td>
<td>2.5%</td>
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</tr>
<tr>
<td><strong>Alternative Risk Premia</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5% Annual</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Difference:</td>
<td>$124,949,911</td>
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<tr>
<td><strong>AGT Style Premia</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5% Annual</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Difference:</td>
<td>$29,642,987</td>
<td>0.8%</td>
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<tr>
<td><strong>PE Diversified Global Macro</strong></td>
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<tr>
<td>Alternative Risk Premia</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Difference:</td>
<td>$36,794,036</td>
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<tr>
<td><strong>Lombard Odier</strong></td>
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<td></td>
</tr>
<tr>
<td>Alternative Risk Premia</td>
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<tr>
<td>Difference:</td>
<td>$57,677,888</td>
<td>1.6%</td>
<td></td>
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<tr>
<td><strong>Cash</strong></td>
<td></td>
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</tr>
<tr>
<td>US T-Bills</td>
<td></td>
<td></td>
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<tr>
<td>Difference:</td>
<td>$59,051,255</td>
<td>1.7%</td>
<td>0.0%</td>
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<tr>
<td><strong>Northern Trust STIF</strong></td>
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<tr>
<td>Collective Govt. Short Term</td>
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</tr>
<tr>
<td>Difference:</td>
<td>$66,672,930</td>
<td>1.9%</td>
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<tr>
<td><strong>Parametric Overlay</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Cash Overlay</td>
<td></td>
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</tr>
</tbody>
</table>

### Returns

Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.

### Benchmark

Benchmark is (1/3) BB Long Duration Treasuries, (1/3) BTO50 Index, (1/3) 5% Annual.

### Cash

Includes lagged cash.

### SI Return

Includes lagged cash.

### SI Date

Includes lagged cash.

---

1 Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.

2 Benchmark is (1/3) BB Long Duration Treasuries, (1/3) BTO50 Index, (1/3) 5% Annual.

3 Includes lagged cash.

4 MSCI ACWI, 42% BB Universal

5 Given daily cash movement returns may vary from those shown above.
Economic and Market Update

Data as of March 31, 2021
• After peaking in early January at ~858,000, the number of global daily cases steadily declined to ~303,000 at the end of February, before increasing again in March, driven by new variants.

• Looking ahead, the rollout of multiple vaccines continues to gather momentum, with roughly 800 million total doses administered as of mid-April.2

• In the US, the Biden administration set a goal of the vaccine being available to the general population by April 19.

---

1 Source: Our World in Data. Data is as of March 31, 2021.
Vaccine distribution has ramped up in many countries, including the Pfizer-BioNTech, Moderna, and Johnson & Johnson vaccines in the US. Outside the US, vaccines have also been developed by China, Russia, India, and the UK.

Some countries have done better with the vaccine rollout, with Israel being at the forefront. The United Kingdom’s and the United States’ vaccination rates have exceeded many other countries. Early immunization efforts focused on the most vulnerable populations with eligibility expanding recently.

---

1 Source: Our World in Data. Data is as of March 31, 2021. Vaccination totals include first and second doses.
Economic and Market Update

Market Returns

<table>
<thead>
<tr>
<th>Indices</th>
<th>March</th>
<th>YTD</th>
<th>1 Year</th>
<th>3 Year</th>
<th>5 Year</th>
<th>10 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P 500</td>
<td>4.4%</td>
<td>6.2%</td>
<td>56.4%</td>
<td>16.8%</td>
<td>16.3%</td>
<td>13.9%</td>
</tr>
<tr>
<td>MSCI EAFE</td>
<td>2.3%</td>
<td>3.5%</td>
<td>44.6%</td>
<td>6.0%</td>
<td>8.9%</td>
<td>5.5%</td>
</tr>
<tr>
<td>MSCI Emerging Markets</td>
<td>-1.5%</td>
<td>2.3%</td>
<td>58.4%</td>
<td>6.5%</td>
<td>12.1%</td>
<td>3.7%</td>
</tr>
<tr>
<td>MSCI China</td>
<td>-6.3%</td>
<td>-0.4%</td>
<td>43.6%</td>
<td>8.2%</td>
<td>16.1%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Bloomberg Barclays Aggregate</td>
<td>-1.3%</td>
<td>-3.4%</td>
<td>0.7%</td>
<td>4.7%</td>
<td>3.1%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Bloomberg Barclays TIPS</td>
<td>-0.2%</td>
<td>-1.5%</td>
<td>7.5%</td>
<td>5.7%</td>
<td>3.9%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Bloomberg Barclays High Yield</td>
<td>0.2%</td>
<td>0.9%</td>
<td>23.7%</td>
<td>6.8%</td>
<td>8.1%</td>
<td>6.5%</td>
</tr>
<tr>
<td>10-year US Treasury</td>
<td>-3.1%</td>
<td>-7.0%</td>
<td>-8.1%</td>
<td>4.7%</td>
<td>1.7%</td>
<td>3.7%</td>
</tr>
<tr>
<td>30-year US Treasury</td>
<td>-6.1%</td>
<td>-15.8%</td>
<td>-20.6%</td>
<td>5.6%</td>
<td>2.7%</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

- Over the last year, global risk assets produced significant returns, largely driven by record fiscal and monetary policy stimulus and positive developments with the COVID-19 vaccine. One-year returns are also being heavily influenced by the roll-off the significant declines in March 2020.
- In March, rising inflation and US economic growth expectations continued to drive longer-dated Treasury yields higher, leading to negative returns across most maturities.
- Equity markets across developed economies showed a notable level of resilience to the tighter financial conditions. Emerging markets were impacted by rising COVID-19 cases and re-shuttering of some economies, as well as rising inflation risks prompting some central banks to consider tightening measures.

1 Source: Investment Metrics and Bloomberg. Data is as of March 31, 2021.
With positive developments regarding COVID-19 vaccines, valuations based on backward-looking earnings rose to levels not seen since 2001.

By contrast, valuations based on forward-looking earnings recently declined due to continued improvements in earnings expectations. Despite the decline in forward P/E ratios, they remain well above long-term averages.

1 Source: Bloomberg. Data is as of March 31, 2021.
Cyclical sectors like energy and financials have led the way in 2021, as investors rotate out of the stay-at-home focused companies in the technology sector.

The recent rotation into value stocks has largely been driven by expectations for the economy to reopen, potentially higher taxes, and rising interest rates. Growth stocks typically produce more of their cash flows further into the future and increased interest rates lead to a larger discount, reducing present value.

Energy has been a particular standout this year, supported by record low active rig counts, Saudi Arabia’s reductions in output, and expectations of rising demand later in 2021.

Higher interest rates have benefited lending institutions within the financial sector.

---

1 Source: Bloomberg. Data is as of March 31, 2021
Growth stocks led the way for most of 2020, but have recently lagged

During much of 2020, market gains were driven by a few technology companies that benefited from the stay-at-home environment related to the virus.

The outsized relative returns of these companies last year caused them to comprise an increasingly large portion of the S&P 500, making their performance going forward impactful to overall market results.

Recently, their proportion of the index declined as value stocks outpaced growth stocks by over 10% in 2021.

---

1 FAANG+M = Facebook, Amazon, Apple, Netflix, Google (Alphabet), and Microsoft. The percentage represents the aggregate market capitalization of the 6 companies compared to the total market capitalization of the S&P 500 as of March 31, 2021.

2 Each data point represents the price change relative to the 12/31/2019 starting value.
Equity market volatility, as measured by the VIX, declined over the month to levels last experienced just prior to the spike of market volatility in March 2020.

Counter to the experience in equity markets, volatility levels within fixed income, as represented by the MOVE index, increased in March due to building expectations for higher growth and inflation. Uncertainty regarding the future path of interest rates could keep fixed income volatility elevated.

1 Source: Chicago Board of Exchange. Data is as of March 31, 2021.
2 Source: Bloomberg. Data is as of March 31, 2021.
### Key Elements of the Latest Round of US Fiscal Stimulus

<table>
<thead>
<tr>
<th></th>
<th>Joint Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Signed by President Biden on March 11, 2021</td>
</tr>
<tr>
<td>Direct Payments</td>
<td>Up to $1,400 per eligible recipient</td>
</tr>
<tr>
<td>Enhanced Unemployment</td>
<td>$300 per week through September</td>
</tr>
<tr>
<td>State &amp; Local Aid</td>
<td>$360 billion</td>
</tr>
<tr>
<td>Vaccines, testing and tracing</td>
<td>$123 billion</td>
</tr>
<tr>
<td>School aid/Education Grants</td>
<td>$176 billion</td>
</tr>
<tr>
<td>Health Insurance Support</td>
<td>$105 billion</td>
</tr>
<tr>
<td>Transportation</td>
<td>$56 billion</td>
</tr>
<tr>
<td>Food / Agriculture aid</td>
<td>$16 billion</td>
</tr>
<tr>
<td>Rental Assistance</td>
<td>$1 billion</td>
</tr>
<tr>
<td>Small Business Assistance</td>
<td>$59 billion</td>
</tr>
<tr>
<td>Total</td>
<td>$1.9 trillion</td>
</tr>
</tbody>
</table>

- Fiscal stimulus totaling ~$900 billion, representing the second largest package in history at the time, was finalized in late December 2021.
- President Biden signed an additional $1.9 trillion stimulus package in March that includes another round of direct payments to individuals, $300 extra per week in unemployment benefits, and aid to state and local governments.
- Concerns have increased significantly that the historic infusion into the economy could lead to excessive inflation and put pressure on borrowing costs.
Key Elements of the ~$2.65 Trillion American Jobs Plan (2021 – 2031)

<table>
<thead>
<tr>
<th>Key Pillars</th>
<th>Plan Highlights</th>
</tr>
</thead>
</table>
| Transportation | • $174B to electric vehicles-replacing diesel school buses and transport vehicles  
|             | • $115B to fix roads and bridges  
|             | • $165B to the transit system  
|             | • $80B to Amtrak  
|             | • $25B to airports  
|             | • $17B to ports and ferries |
| Quality of life at home: Invest in broadband, the electrical grid, and clean drinking water | • $111B on clean water  
|             | • $100B on broadband networks  
|             | • $100B on electrical transmission upgrades |
| Improve housing stock, schools, and other facilities | • $213B on affordable homes and commercial buildings  
|             | • $100B on modernizing schools |
| Caregivers for elderly and people with disabilities | • Improve access to quality, affordable home or community-based care for the elderly  
|             | • Expand the Medicaid program to make more services available  
|             | • It would also boost pay for care workers. |
| Research, development, and manufacturing | • $100B for domestic manufacturing and supply chains  
|             | • $50B to semiconductor manufacturing and research  
|             | • $100B for worker training and increasing of worker protection |

1 Dollar amounts are estimates. Source: [https://www.crfb.org/blogs/whats-president-bidens-american-jobs-plan](https://www.crfb.org/blogs/whats-president-bidens-american-jobs-plan)
The US dollar has benefited from higher US growth estimates and rising interest rates. Growth and interest rate differentials have put pressure on emerging market asset prices.

A stronger US dollar may deepen the US trade deficit and offer a competitive advantage to exporters in Asia and Europe.

Going forward, the dollar’s safe-haven quality and the higher interest rates in the US could continue to provide support.

Source: Bloomberg. Represents the DXY Index. Data is as of March 31, 2021.
Global oil prices rallied from April 2020 lows and have recovered to pre-crisis levels.

In 2020 the collapse in global oil demand led to the shuttering of active drilling in North America and international markets and production capacity has been slow to come back online.

In a surprise decision, OPEC+ recently announced they would not be increasing production despite signs that the global economy could absorb the additional supply.

Low production capacity and tight supply may help balance oil markets and drawdown reserves offering support for oil prices as global demand recovers.

Once reserves are used, and if production remains tight, oil prices could continue to rise, contributing to inflationary pressures, and weighing on the global economic recovery.

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1 Source: Bloomberg. Represents WTI first available futures contract. Data is as of March 31, 2021.
The US Treasury yield curve declined materially during 2020, driven by safe-haven demand, Federal Reserve policies (policy rate cuts and the quantitative easing program), and weak US economic fundamentals.

Thus far in 2021, the curve has steepened on inflation fears related to gradual signs of economic improvement, vaccine developments, and expectations for increased Treasury issuance to support fiscal policy measures.

Higher yields relative to other countries, and the Fed potentially extending the duration of QE purchases to mitigate tightening financial conditions, could counterbalance steepening trends, but the risk remains that the yield curve could continue to steepen if growth and inflationary pressures build.

1 Source: Bloomberg. Data is as of March 31, 2021.
The FOMC continues to indicate they do not anticipate increasing policy rates for the next few years, as delivered through the FOMC’s meeting statements and the supporting Summary of Economic Projections report (aka the “Dot Plot”).

Policy expectations as measured by current asset prices, including fed funds futures, are suggesting more aggressive policy actions, with 1-2 policy rate increases by the end of 2023.
Inflation breakeven rates declined sharply in early 2020, due to a combination of lower growth and inflation expectations, as well as liquidity dynamics in TIPS during the height of market volatility. Breakeven rates increased as deflationary concerns moderated.

Inflation expectations have risen abruptly in recent months to slightly above long-term averages, with the vaccine roll-out and expected additional fiscal stimulus as key drivers.

Looking forward, the track of economic growth and the inflationary effects of the unprecedented US fiscal response will be key issues. Additionally, changes to Fed policy focused on an average inflation target may play a role in the inflation market dynamics going forward.

Source: Bloomberg. Data is as of March 31, 2021.
Credit spreads (the spread above a comparable maturity Treasury) for investment grade and high yield corporate debt widened sharply at the start of the pandemic as investors sought safety.

- Policy support, the search for yield in the low rate environment, and recent increases in Treasury rates have led to a decline in credit spreads to below long-term averages, particularly for high yield.

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1 Source: Bloomberg. High Yield represents US Corporate High Yield average OAS. Investment grade represents liquid investment grade corporate average OAS. Data is as of March 31, 2021.
The global economy faced major recessionary pressures last year, but significant optimism remains for improvements in 2021 as economies are gradually reopening. The IMF is forecasting US 2021 growth at 6.4% and 2022 growth at 3.5%. The IMF has projected 4.4% euro area growth for 2021 and 3.8% in 2022.

Historic declines in US and European growth during the second quarter were followed by record increases in the third quarter of 2020, due to pent-up demand from the lockdown measures earlier in the year.

Fourth quarter 2020 US GDP growth was 4.1% (QoQ annualized). Full year US GDP growth declined 2.4%, better than the IMF’s forecasted decline of 3.4%.

In the euro area, increased virus cases and a return to restrictions weighed on fourth quarter growth (-2.8% QoQ annualized). For the year, the euro area economy declined 4.9%, worse than the US, but also ahead of forecasts of a 7.2% decline.

1 Source: Bloomberg, and IMF; Euro Area figures annualized by Meketa. Projections via April 2021 IMF World Economic Outlook and represent annual numbers.
Purchasing Managers Indices (PMI), based on surveys of private sector companies, initially collapsed across the world to record lows, as closed economies depressed output, new orders, production, and employment.

Readings below 50 represent contractions across underlying components and are a leading indicator of economic activity, including the future paths of GDP, employment, and industrial production.

After a period of underperformance, US services and manufacturing are accelerating. In Europe, manufacturing continues to improve, led by Germany, with services lagging given on-going restrictions. After a notable return to full economic activity in the second half of 2020, the Chinese economy has stabilized in positive territory.

1 Source: Bloomberg. US Markit Services and Manufacturing PMI. Data is as of March 2021.
2 Source: Bloomberg. Eurozone Markit Services and Manufacturing PMI. Data is as of March 2021.
3 Source: Bloomberg. Caixin Services and Manufacturing PMI. Data is as of March 2021.
In March, the unemployment rate (U3) continued its steep decline from the April 2020 peak of 14.7%, falling to 6.0%.

The broader measure of unemployment (U6) that includes discouraged and underemployed workers is much higher at 10.7%, showing further evidence of the slack in the labor market.

Despite recent improvements, unemployment levels remain above pre-virus readings and are likely higher than reported, as the total labor force participation rate remains below pre-COVID levels.

A counterforce to the recent inflation concerns remains the slack in the labor market and corresponding weak wage pressures.

1 Source: Bloomberg. Data is as of March 31, 2021. Bars represent recessions as observed by the National Bureau of Economic Research.
Since the start of the crisis, ~78 million people filed for initial unemployment. This level is approaching four times the 22 million jobs added since the GFC, highlighting the unprecedented impact of the virus.

Despite the stabilization in initial jobless claims to below one million per week, levels remain near the worst reading during the Global Financial Crisis.

Continuing jobless claims (i.e., those currently receiving benefits) have also declined from record levels but remain elevated at 3.7 million.

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1 Source: Bloomberg. First reading of seasonally adjusted initial jobless claims. Data is as of March 26, 2021.

2 Source: Bloomberg. US Continuing Jobless Claims SA. Data is as of March 26, 2021.
• Fiscal programs including stimulus checks, enhanced unemployment benefits, and loans to small businesses through the Paycheck Protection Program (PPP) have largely supported income levels through the shutdown.

• While estimates of personal income have been extremely volatile since 2020, wage growth has remained relatively stable.

• Despite the income support, the savings rate increased due to the decline in consumer spending, driven by the initial lock-down of the economy, and by uncertainties about the future of the job market and stimulus programs.

• More recently, the savings rate declined from its peak as spending increased with the economy slowly reopening. Going forward, questions remain about how consumers will use the recently approved stimulus programs with concerns over the potential inflationary impacts.

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1 Source: Bloomberg. Latest data is as of February 2021.

2 Source: Bloomberg. Represents Atlanta FED wage growth tracker. Latest data is as of March 2021.
The attitudes of businesses and consumers are useful indicators of future economic activity.

Consumer spending comprises close to 70% of US GDP, making the attitudes of consumers an important driver of economic growth. Additionally, small businesses generate around half of US GDP, making sentiment in that segment important.

Sentiment indicators showed improvements as the economy re-opened, particularly for small businesses. Increasing cases, including from new variants, and the initial slow vaccine rollout have recently weighed on short-term sentiment. This trend could change based on improvements in vaccine distribution and the recent fiscal stimulus.

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1 Source: Bloomberg. University of Michigan Consumer Sentiment Index. Data is as of March 31, 2021.

2 Source: Bloomberg. NFIB Small Business Optimism Index. Data is as of March 31, 2021.
US Consumers are beginning to venture out again

- There have been improvements in high frequency data, but overall levels remain well below historical averages, and have slowed in some instances given the recent spike in cases.
- Generally, people have become more active as restrictions eased and stores reopened. Retail sales recovered from a record decline with five consecutive months of growth, and notably beat estimates for March as consumers spent recently received stimulus checks.
- Restaurants saw initial improvements before declining with the fall spike in cases and rising again after the holidays. In-store dining has been cited as a key contributor to increases in infections.

1 Source: Bloomberg. Data is as of March 31, 2021 and represents the US Retail Sales SA MoM%.
2 Source: Bloomberg. Data is as of March 26, 2021 and represents the deviation from normal mobility behaviors induced by COVID-19 (formerly the “Social Distancing Index”). The index represents a weighted average of various lengths of time that a mobile device, like a cell phone, leaves its “home” or place of residence, and/or how long a device stays at home. A decline in this index represents a mobile device at home for a longer period than average.
3 Source: Bloomberg. This data shows year-over-year seated diners at restaurants on the OpenTable network across all channels: online reservations, phone reservations, and walk-ins. Only states or cities with 50+ restaurants in the sample are included. All such restaurants on the OpenTable network in either period are included. Data is as of March 31, 2021. Index start date 2/19/20.
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San Joaquin County Employees’ Retirement Association ("SJCERA")

2021 Private Equity Review
SJCEA PROGRAM OVERVIEW

→ Since inception, $282 million has been committed across 8 partnerships
  • Initial commitment began investing in 2013
  • Funds are combination of Fund-of-Funds, Co-investment, Infrastructure and Special Situations Funds.

→ One new partnerships approved in 2020
  • Totaling $50 million of commitments

→ Private equity targeted to be 5% to 6% (or $180 million to $210 million) of the total portfolio as part of the Private Appreciation allocation
  • Current actual allocation at approximately 4.5%
  • Market value of $158.3 million as of September 30, 2020

→ The Program has approved commitments across four firms
  • Ocean Avenue has the largest commitments with a total of $140 million across three funds and is approximately 67% of the market value.
**SJCERA COMMITMENT LIST**

### Since Inception Partnership Commitments

<table>
<thead>
<tr>
<th>Partnership</th>
<th>Vintage Year</th>
<th>Commitment</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morgan Creek V</td>
<td>2013</td>
<td>$12 million</td>
<td>Primary Market Fund of Funds: diversified</td>
</tr>
<tr>
<td>Ocean Avenue II</td>
<td>2013</td>
<td>$40 million</td>
<td>Primary Market Fund of Funds: diversified</td>
</tr>
<tr>
<td>Morgan Creek VI</td>
<td>2015</td>
<td>$20 million</td>
<td>Primary Market Fund of Funds: diversified</td>
</tr>
<tr>
<td>Morgan Creek Co-Investment III</td>
<td>2015</td>
<td>$10 million</td>
<td>Co-investment</td>
</tr>
<tr>
<td>Ocean Avenue III</td>
<td>2016</td>
<td>$50 million</td>
<td>Co-investment</td>
</tr>
<tr>
<td>Ocean Avenue IV</td>
<td>2019</td>
<td>$50 million</td>
<td>Co-investment</td>
</tr>
<tr>
<td>BlackRock Global Energy and Power Infrastructure III</td>
<td>2019</td>
<td>$50 million</td>
<td>Infrastructure</td>
</tr>
<tr>
<td>Stellex Capital Partners II</td>
<td>2020</td>
<td>$50 million</td>
<td>Special Situations</td>
</tr>
<tr>
<td><strong>Total Program</strong></td>
<td>---</td>
<td><strong>$282 million</strong></td>
<td>---</td>
</tr>
</tbody>
</table>
### SJCERA PERFORMANCE

#### SJCERA Private Equity Portfolio Detail

Performance As Of September 30, 2020, Since Inception, Net Of Fees

<table>
<thead>
<tr>
<th>Vintage Year</th>
<th>Capital Committed ($ MM)</th>
<th>Total Contribution ($ MM)</th>
<th>Unfunded Commitments ($ MM)</th>
<th>Total Distribution ($ MM)</th>
<th>9/30/20 Market Value ($ MM)</th>
<th>NET IRR (%)</th>
<th>NET TVM (X)</th>
<th>DPI (X)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morgan Creek V</td>
<td>2013</td>
<td>12.0</td>
<td>11.1</td>
<td>0.5</td>
<td>7.2</td>
<td>10.9</td>
<td>11.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Ocean Avenue II</td>
<td>2013</td>
<td>40.0</td>
<td>35.9</td>
<td>8.5</td>
<td>21.4</td>
<td>40.2</td>
<td>14.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Morgan Creek VI</td>
<td>2015</td>
<td>20.0</td>
<td>15.6</td>
<td>2.4</td>
<td>23.1</td>
<td>23.1</td>
<td>11.0</td>
<td>1.6</td>
</tr>
<tr>
<td>Morgan Creek Co-Investment III</td>
<td>2015</td>
<td>10.0</td>
<td>9.9</td>
<td>0.1</td>
<td>7.3</td>
<td>7.3</td>
<td>-1.2</td>
<td>0.9</td>
</tr>
<tr>
<td>Ocean Avenue III</td>
<td>2016</td>
<td>50.0</td>
<td>42.0</td>
<td>6.5</td>
<td>55.2</td>
<td>55.2</td>
<td>20.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Ocean Avenue IV</td>
<td>2019</td>
<td>50.0</td>
<td>9.5</td>
<td>40.5</td>
<td>10.9</td>
<td>10.9</td>
<td>21.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Blackrock Gepif III</td>
<td>2020</td>
<td>50.0</td>
<td>16.1</td>
<td>39.2</td>
<td>10.6</td>
<td>10.6</td>
<td>11.4</td>
<td>1.1</td>
</tr>
<tr>
<td>Stellex Capital Partners II</td>
<td>2020</td>
<td>50.0</td>
<td>0.0</td>
<td>50.0</td>
<td>0.0</td>
<td>0.0</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Total Portfolio As Of 9/30/20</strong></td>
<td><strong>282.0</strong></td>
<td><strong>140.2</strong></td>
<td><strong>147.7</strong></td>
<td><strong>158.3</strong></td>
<td><strong>158.3</strong></td>
<td><strong>13.2%</strong></td>
<td><strong>1.5X</strong></td>
<td><strong>0.3X</strong></td>
</tr>
</tbody>
</table>
San Joaquin County Employees’ Retirement Association
Summary and Recommendation

Allocation by Strategy

**FMV**
- Co-Investment: 61%
- Infrastructure: 7%
- Special Situations: 0%
- Fund-of-Funds: 32%

**Exposure**
- Co-Investment: 49%
- Fund-of-Funds: 19%
- Infrastructure: 16%
- Special Situations: 16%
San Joaquin County Employees’ Retirement Association

Summary and Recommendation

ALLOCATION BY VINTAGE YEAR

**FMV**
- 2016: 35%
- 2015: 19%
- 2013: 32%
- 2019: 14%

**Exposure**
- 2019: 33%
- 2020: 16%
- 2013: 20%
- 2015: 11%
- 2016: 20%
San Joaquin County Employees’ Retirement Association
Summary and Recommendation

ALLOCATION BY GEOGRAPHY

**FMV**
- North America: 91%
- Rest of the World: 9%

**Exposure**
- North America: 88%
- Rest of the World: 12%
FUTURE GROWTH

→ Additional activity required to achieve the target allocation over longer term
  - Also providing vintage year diversification

→ Growth of a private equity program is a function of several factors:
  - Commitment pace
  - Rate of investment by underlying managers
  - Investment growth
  - Investment liquidations/distributions

→ Percentage allocation to private equity impacted by Total Portfolio growth
  - Slower Total Portfolio growth = larger private equity allocation
  - Faster Total Portfolio growth = smaller private equity allocation
SJCERA COMMITMENT PACING

<table>
<thead>
<tr>
<th>Projections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment Target:</td>
</tr>
<tr>
<td>(commitment range)</td>
</tr>
<tr>
<td>Commitment Sizing:</td>
</tr>
<tr>
<td>Number of Partnerships:</td>
</tr>
</tbody>
</table>

→ Recommend targeting $50 million in commitments annually
  - May scale up or down depending upon opportunity set
  - Target approximately $25 million per opportunity

→ Commit to two to three partnerships during the year
  - Provides diversification across vintage year and firm

→ Continue to update pacing targets on an annual basis
  - Update actual private equity cash flows and market values
  - Incorporates volatility of the public markets and Total Portfolio growth
RECOMMENDATIONS

Continue on the 2020 commitment pacing plan and search criteria for the SJCERA private equity program. Specifically, the SJCERA should commit $50 million per year across two to three private equity partnerships.
Fundraising for private equity funds in the third quarter of 2020 increased slightly from the previous quarter, with $127.0 billion raised, but remained below historical fundraising totals for the same time period over the last four years. In recent years, fundraising has typically increased during the third quarter, but no such increase was seen in 2020. Fundraising appears to have been hampered by the COVID-19 pandemic, with the fewest number of funds closed in a quarter over the last five years. Overall, fundraising showed signs of further capital consolidation with larger, more established managers, who are gradually increasing their market share.
Buyout funds continued to be the most popular private equity strategy with 61% of all private equity capital raised dedicated to Buyout funds in the third quarter of 2020. Alternatively, Growth Equity strategies, as a proportion of total capital raised, decreased compared with the last quarter, falling from 16% in Q2 2020 to 6% in Q3 2020. Venture Capital also experienced a modest decline of 21% from last quarter, to 18%. Fund of Funds and Other Private Equity, which includes co-investment and hybrid vehicles, stayed relatively consistent at 8% and 3%, respectively. Secondaries decreased from 18% of capital raised to 4% since last quarter. Europe surpassed North America, with 45% of private equity capital raised in the third quarter, at 45%. Asia-focused funds decreased from 14% to 9% of aggregate capital raised. Overall, private equity investors favored commitments to Europe and Rest of World over North America and Asia compared to the previous quarter, as the COVID-19 pandemic continued to disproportionally affect North America in fundraising totals during the quarter.

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1. Prequin
2. Prequin
Private Equity purchase price multiples through the third quarter of 2020 remained slightly lower than in 2019 but remained near all-time highs. Notably, equity contribution (relative to total purchase price) increased, and total purchase prices now comprise slightly more equity than debt for the first time since 2009. Elevated prices were supported by a continued record level of dry powder, which has surpassed the level of the previous year. Dry powder levels will remain high as long as more capital is being raised than is being deployed, and investors may expect to continue to see high purchase prices as a result. Capital concentration and a more cautious investment approach due to market uncertainty may contribute to increasing levels of dry powder as well, with larger funds taking longer to deploy all capital. TMT (70%), Services & Leasing (14%), and Healthcare (7%) were the three largest sectors targeted for LBOs, collectively making up nearly 91% of all deals during the first three quarters of 2020.\(^3\)
Recently published aggregate private equity trailing 3-, 5-, and 10-year period returns decreased slightly from the preliminary second quarter data with all of private equity generating an 8.7% IRR over the past year. One-year performance of Buyout, Venture Capital, and Fund of Funds has remained consistent between preliminary and published Q2 benchmark data. In general, performance has been strong in each vintage year since the Global Financial Crisis. Buyout and Venture funds have generally both performed well over the various horizons on an absolute basis, with Venture funds significantly outperforming Buyout funds over the past year. The spread between first and third quartile performance in private equity has grown consistently since the Global Financial Crisis: 2007 vintage funds reported a 10% spread while 2018 vintage funds reported a 22% spread.

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San Joaquin County Employees’ Retirement Association

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### Legislation Impacting SJCERA:

<table>
<thead>
<tr>
<th>BILL NO.</th>
<th>AUTHOR</th>
<th>DESCRIPTION</th>
<th>LAST ACTION DATE</th>
<th>LOC</th>
<th>SPONSOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 361</td>
<td>Rivas</td>
<td>This bill would authorize local agencies to use teleconferencing to hold meetings, without complying to Brown Act requirements for purpose of declaring or ratifying a local emergency, during a declared state or local emergency and other specified circumstances. The abbreviated procedures still require providing notice, posting the agenda, and allowing the public to access the meeting and address the legislative body. The intent is to improve public access to local agency meetings during COVID-19 and future emergencies.</td>
<td>04/07/21</td>
<td>Assembly L. Gov Comm.</td>
<td></td>
</tr>
<tr>
<td>AB 703</td>
<td>Rubio</td>
<td>Executive Order N-29-20 suspended the Brown Act requirements for teleconferencing during the COVID-19 pandemic, provided that notice requirements are met and the ability of the public to observe and provide comments. This bill would remove the requirements of the Act particular to teleconferencing and allow for teleconferencing subject to existing provisions regarding the posting of notice of an agenda and the ability of the public to observe the meeting and provide public comment. This bill would declare Legislature's intent, consistent with the Executive Order, to improve and enhance public access to meetings into the future, and considering the digital age, by allowing broader access through teleconferencing options.</td>
<td>02/25/21</td>
<td>Assembly L. Gov Comm</td>
<td></td>
</tr>
<tr>
<td>AB 845</td>
<td>Rodriguez</td>
<td>This bill, until 1/1/2023, would create a presumption, applicable to the retirement systems that PEPRA regulates, that would be applied to disability retirements on the basis of a COVID-19-related illness. The presumption would apply to specified firefighter, public safety officer, and health care job classifications, or their functional equivalents, and to members in other job classes who test positive during a COVID-19 outbreak at their place of employment.</td>
<td>04/19/21</td>
<td>Assembly Appr. Comm.</td>
<td></td>
</tr>
<tr>
<td>SB 274</td>
<td>Wieckowski</td>
<td>This bill would require a local agency to email a copy of, or website link to, the agenda or a copy of the agenda packet if the person requests that the items be delivered by email. If it is technologically infeasible, the bill would require materials to be sent by mail.</td>
<td>04/22/21</td>
<td>Assembly Read 1st time</td>
<td></td>
</tr>
<tr>
<td>BILL NO.</td>
<td>AUTHOR</td>
<td>DESCRIPTION</td>
<td>LAST ACTION DATE</td>
<td>LOC</td>
<td>SPONSOR</td>
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<td>------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>SB 634</td>
<td>L, PE &amp; R Comm.</td>
<td>This bill would authorize county health officer’s duly authorized representative to also advise retirement boards with advice on medical matters; correct an obsolete CERL cross-reference to a provision in the Education Code; repeal a CERL member's authority to complete a service credit by paying a lump sum; authorize the Board to contract with a private practice physician for medical advice necessary to carry out disability retirement related provisions of CERL. This bill would also make changes to PERS and STRS that would not impact SJCERA.</td>
<td>4/08/21</td>
<td>Assembly</td>
<td>Read 1st time</td>
</tr>
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</table>

**Other Bills of Interest:**

<table>
<thead>
<tr>
<th>BILL NO.</th>
<th>AUTHOR</th>
<th>DESCRIPTION</th>
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<th>LOC</th>
<th>SPONSOR</th>
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</thead>
<tbody>
<tr>
<td>AB 386</td>
<td>Cooper</td>
<td>This bill would exempt from disclosure under CPRA regarding an internally managed private loan made directly by the PERS fund.</td>
<td>04/19/21</td>
<td>Assembly</td>
<td>Jud. Comm.</td>
</tr>
<tr>
<td>AB 473</td>
<td>Chau</td>
<td>Technical, non-substantive changes to CPRA.</td>
<td>04/21/21</td>
<td>Assembly</td>
<td>Appr. Comm.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Referred to suspense file</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AB 761</td>
<td>Chen</td>
<td>This bill would allow the OCERS Board to appoint CEO, ACEO, CIO and provide that personnel appointed pursuant to these provisions would not be county employees, and instead be employees of the retirement system.</td>
<td>04/26/21</td>
<td>Senate</td>
<td>OCERS</td>
</tr>
<tr>
<td>AB 885</td>
<td>Quirk</td>
<td>This bill would require State bodies that conduct meetings by teleconferencing to make the open session both audibly and visually observable, and to post the agenda at the designated primary physical meeting location where members of the public may physically attend the meeting and participate.</td>
<td>03/25/21</td>
<td>Assembly</td>
<td>Re-referred to G.O. Comm.</td>
</tr>
<tr>
<td>AB 890</td>
<td>Cervantes</td>
<td>This bill would require the Boards of CalPERS and CalSTRS to report annually to the Legislature on the status of achieving objectives and initiatives regarding the participation of emerging or diverse managers responsible for asset management within the pension fund's portfolio. The bill requires the Boards to define &quot;emerging manager&quot; and &quot;diverse manager&quot; for the purposes of these reports.</td>
<td>03/15/21</td>
<td>Assembly</td>
<td>P.E. &amp; R. Comm.</td>
</tr>
<tr>
<td>AB 1133</td>
<td>Chen</td>
<td>This bill would state the intent of the Legislature to enact legislation that would create a hybrid retirement benefit, consisting of a DB plan and DC plan.</td>
<td>2/19/21</td>
<td>Assembly</td>
<td>From printer</td>
</tr>
<tr>
<td>AB 1354</td>
<td>Grayson</td>
<td>Technical, non-substantive changes to PEPRA.</td>
<td>02/22/21</td>
<td>Assembly</td>
<td>First Reading</td>
</tr>
<tr>
<td>BILL NO.</td>
<td>AUTHOR</td>
<td>DESCRIPTION</td>
<td>LAST ACTION DATE</td>
<td>LOC</td>
<td>SPONSOR</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
<td>-------------</td>
<td>------------------</td>
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</tr>
<tr>
<td>AJR 9</td>
<td>Cooper</td>
<td>This measure would request the Congress of the U.S. to enact, and the President to sign, legislation that would repeal the Government Pension Offset and the Windfall Elimination Provision from the Social Security Act.</td>
<td>04/19/21</td>
<td>Assembly Ordered to 3rd reading</td>
<td></td>
</tr>
<tr>
<td>SB 278</td>
<td>Leyva</td>
<td>This bill would establish new procedures under PERL for cases in which PERS determines that benefits of a member or annuitant are based on disallowed compensation that conflicts with PEPRA or other laws under PERL. For retirees, the bill would require adjustment of benefits and for actives it would require crediting of contributions paid on disallowed earnings against future required contributions.</td>
<td>04/20/21</td>
<td>Senate Placed on Appr. suspense file</td>
<td></td>
</tr>
<tr>
<td>SB 294</td>
<td>Leyva</td>
<td>This bill would remove the 12-year limitation for service credit earned on an employer-approved compensated leave for PERS and STRS.</td>
<td>03/23/21</td>
<td>Senate Ordered to 3rd reading</td>
<td></td>
</tr>
</tbody>
</table>

**Federal Legislation:**

<table>
<thead>
<tr>
<th>BILL NO.</th>
<th>AUTHOR</th>
<th>DESCRIPTION</th>
<th>LAST ACTION DATE</th>
<th>LOC</th>
<th>SPONSOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR 1319</td>
<td>Yarmuth</td>
<td>Called the &quot;American Rescue Plan Act&quot;, HR 1319 was signed into law. Included in the $1.9 trillion aid package is pandemic-related aid to state and local governments. The final legislation makes clear that funds have to be used for COVID costs and economic recovery and cannot be deposited into a public pension plan, or used for lowering taxes, or paying down legacy obligations.</td>
<td>03/11/21</td>
<td>Public Law No: 117-2</td>
<td></td>
</tr>
</tbody>
</table>

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**2021 TENTATIVE State Legislative Calendar (Last Revised 12-21-2020)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 19</td>
<td>Last day for new bills to be introduced</td>
</tr>
<tr>
<td>Mar 25</td>
<td>Spring Recess begins upon adjournment</td>
</tr>
<tr>
<td>Jun 4</td>
<td>Last day for bills to be passed out of the house of origin</td>
</tr>
<tr>
<td>Jun 15</td>
<td>Budget Bill must be passed by midnight</td>
</tr>
<tr>
<td>Jul 16 - Aug 15</td>
<td>Summer Recess upon adjournment provided budget bill passed</td>
</tr>
<tr>
<td>Sep 3</td>
<td>Last day to amend bills on the floor</td>
</tr>
<tr>
<td>Sep 10</td>
<td>Last day for each house to pass bills; Final Study Recess begins upon adjournment</td>
</tr>
<tr>
<td>Oct 10</td>
<td>Last day for Governor to sign or veto bills.</td>
</tr>
</tbody>
</table>
## 2021 CONFERENCES AND EVENTS SCHEDULE

<table>
<thead>
<tr>
<th>EVENT DATES 2021</th>
<th>EVENT TITLE</th>
<th>EVENT SPONSOR</th>
<th>LOCATION</th>
<th>REG. FEE</th>
<th>WEBLINK FOR MORE INFO</th>
<th>EST. BOARD EDUCATION HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr 20</td>
<td>Legislative Conference</td>
<td>NCPERS</td>
<td>Webinar</td>
<td>N/A</td>
<td>ncpers.org</td>
<td>N/A</td>
</tr>
<tr>
<td>May 4</td>
<td>Preparing for the Pandemic's Impact on Your Pension Plan - Year 2</td>
<td>NCPERS</td>
<td>Webinar</td>
<td>N/A</td>
<td>ncpers.org</td>
<td>N/A</td>
</tr>
<tr>
<td>May 4</td>
<td>2021 Annual Pension Bridge Virtual Conference</td>
<td>Pension Bridge</td>
<td>Virtual Conference</td>
<td>N/A</td>
<td>pensionbridge.com</td>
<td>10 hrs*</td>
</tr>
<tr>
<td>May 10</td>
<td>Trustees Round Table</td>
<td>CALAPRS</td>
<td>Webinar</td>
<td>$50</td>
<td>calaprs.org</td>
<td>5 hrs*</td>
</tr>
<tr>
<td>May 11</td>
<td>SACRS Spring Conference</td>
<td>SACRS</td>
<td>Virtual Conference</td>
<td>$120</td>
<td>sacrs.org</td>
<td>11 hrs*</td>
</tr>
<tr>
<td>Jun 7, 9 &amp; 11</td>
<td>Advanced Principles Trustees</td>
<td>CALAPRS</td>
<td>Virtual Conference</td>
<td>$650</td>
<td>calaprs.org</td>
<td>6 hrs*</td>
</tr>
<tr>
<td>Jun 8</td>
<td>Trustee Educational Seminar</td>
<td>NCPERS</td>
<td>Virtual Conference</td>
<td>$300</td>
<td>ncpers.org</td>
<td>8 hrs*</td>
</tr>
<tr>
<td>Jun 25</td>
<td>Administrators' Round Table</td>
<td>CALAPRS</td>
<td>Webinar</td>
<td>$125</td>
<td>calaprs.org</td>
<td>5 hrs*</td>
</tr>
<tr>
<td>Jul 27</td>
<td>Private Equity Exclusive 2021</td>
<td>Pension Bridge</td>
<td>Virtual Conference</td>
<td>N/A</td>
<td>pensionbridge.com</td>
<td>10 hrs*</td>
</tr>
<tr>
<td>Sep 9</td>
<td>Investments Round Table</td>
<td>CALAPRS</td>
<td>Webinar</td>
<td>$50</td>
<td>calaprs.org</td>
<td>6 hrs*</td>
</tr>
<tr>
<td>Nov 9</td>
<td>SACRS Fall Conference</td>
<td>SACRS</td>
<td>Hollywood, CA</td>
<td>$120</td>
<td>sacrs.org</td>
<td>11 hrs*</td>
</tr>
</tbody>
</table>

* Estimates based on prior agendas
<table>
<thead>
<tr>
<th>Event Dates</th>
<th>Sponsor / Event Description</th>
<th>Location</th>
<th>Traveler(s)</th>
<th>Estimated Cost</th>
<th>BOR Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 11 - 14</td>
<td>SACRS Spring Conference</td>
<td>Virtual Conference</td>
<td>Keokham, Morrish, McCray, Restuccia, Shick</td>
<td>$120</td>
<td>N/A</td>
</tr>
<tr>
<td>Jun 22 - 23</td>
<td>Moody's Commercial Real Estate Analysis</td>
<td>Virtual Conference</td>
<td>Ba</td>
<td>$1,946</td>
<td>N/A</td>
</tr>
<tr>
<td>Nov 9 - 12</td>
<td>SACRS Fall Conference</td>
<td>Hollywood, CA</td>
<td>Keokham</td>
<td>$120</td>
<td>N/A</td>
</tr>
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</table>
# Summary of Completed Trustee and Executive Staff Travel

<table>
<thead>
<tr>
<th>Event Dates 2020</th>
<th>Sponsor / Event Description</th>
<th>Location</th>
<th>Traveler(s)</th>
<th>Estimated Cost</th>
<th>Actual Cost</th>
<th>Event Report Filed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 27</td>
<td>Meketa Fourth Quarter 2020 Market Review</td>
<td>Webinar</td>
<td>Nicholas, Praus</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Feb 2 - 3</td>
<td>NCPERS FALL Conference</td>
<td>Webinar</td>
<td>Shick, Herman, Ba</td>
<td>$900</td>
<td>$900</td>
<td>N/A</td>
</tr>
<tr>
<td>Feb 11</td>
<td>CALAPRS Administrators' Roundtable</td>
<td>Webinar</td>
<td>Shick</td>
<td>$50</td>
<td>$50</td>
<td>N/A</td>
</tr>
<tr>
<td>Feb 19</td>
<td>CALAPRS Attorneys' Roundtable</td>
<td>Webinar</td>
<td>Morrish</td>
<td>$50</td>
<td>$50</td>
<td>N/A</td>
</tr>
<tr>
<td>Feb 23 - 25</td>
<td>2021 Pension Bridge ESG Summit Virtual Conference</td>
<td>Virtual Conference</td>
<td>Keokham</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Mar 8 - 9</td>
<td>CALAPRS General Assembly</td>
<td>Webinar</td>
<td>Shick, Bassett, Nicholas</td>
<td>$850</td>
<td>$850</td>
<td>N/A</td>
</tr>
</tbody>
</table>
April 30, 2021

TO: Board of Retirement

FROM: Johanna Shick  
Chief Executive Officer

SUBJECT: Chief Executive Officer Report

Strengthen Fund Stability  
Fixed Income Managers Search Under Way  

SJERA posted an RFP for Fixed Income managers on April 16, 2021, on Meketa’s website. The due date for the proposal is May 5, 2021, at 5:00 PM. SJERA is now in a “quiet period” until the Board enters into a contract for the investment manager(s) selected for the mandate or the Board decides not to proceed.

Securities Litigation Update.  
As part of our custodial bank contract, Northern Trusts monitors securities litigation and files for SJERA to join applicable class action law suits. During the first quarter 2021, Northern Trust filed on SJERA’s behalf to join the following class actions: Valeant Pharmaceuticals, Spectrum Brands Legacy (two lawsuits), Davita, Obalon Therapeutics, Brightview Holdings, Finisar Corporation (three lawsuits), and Bankrate Inc.

Leverage Technology to Improve Accuracy and Efficiency  
Implement Year 1 of Five-Year Technology Plan  
Implement Pension System Enhancements Remaining on Statement of Work for legacy PAS.  

Last month we reported we now had the capability of directly depositing refund payments (instead of issuing a check). This month, SJERA issued its first directly deposited refund of member contributions. Success!

Improve Website Architecture and Functionality  
Communications Officer, Freda King, is working with Adnan Khan to document the identified requirements for improving the website. Freda’s next steps include researching vendors and obtaining bids for website modifications. Separately, SJERA’s IT staff is assessing the relative merits of becoming part of the County’s web hosting service, and the implications for this project. If SJERA were to move to the County’s web hosting, we would get our own domain in order to retain our website addressing.

Issue RFP for a Provider to Write an RFP for a new PAS Vendor  
RFP Coordinator, Greg Frank, received three proposals in response to the RFP seeking a provider to write an RFP for a new Pension Administration System vendor. The evaluation team (myself, Kathy Herman, Adnan Khan, and Greg Frank) plans to bring their recommendation to the Board in July, along with the mid-year budget adjustment. Longer term, the goal is for the successful provider to issue the RFP for a new PAS vendor by the end of 2021.

Manage Risk  
Conduct Cyber-Security Audit  
RFP Coordinator, Greg Frank received three proposals from Cyber-Security Auditing firms. The evaluation team, consisting of myself, Kathy Herman, Adnan Khan, and Matt Eakin of OCERS, plans to bring their recommendation to the Audit Committee in May.
Conduct Actuarial Audit
The evaluation team, consisting of myself, Kathy Herman, Greg Frank, and Jason Morrish, scored the four proposals. We will be reaching out to each vendor to notify them of the outcome of the search shortly. The selected vendor will present their audit of Cheiron’s Actuarial Valuation at the September 10, 2021 Board meeting.

Implement Alameda Decision
One hundred percent of all affected retirees’ benefits were adjusted on or before the May 3, 2021 payroll. Many have also started the repayment process. According to the repayment schedule 99 percent will be completed by December 1, 2021. Only one or two members requested more than six months to complete the repayment of overpaid benefits and interest. Three members requested copies of the supporting documentation used to calculate the adjusted benefit. Administrative Secretary Kendra Fenner is working with me to prepare detailed letters explaining the documentation and worksheets provided.

Cheiron has determined that it will be able to calculate the majority of overpaid contributions for the approximately 1,200 active and deferred members affected by the Alameda decision. ACEO Kathy Herman will coordinate with Cheiron, employer payroll departments, and deferred compensation program representatives to plan this portion of the project.

Assess Disaster Recovery Procedures and Identify Opportunities for Improvement
Information Systems Specialist II Jordan Regevig and Information Systems Manager Adnan Khan worked with Northern Trust to formalize our disaster recovery procedures for running retiree payroll. In the event a disaster prevented SJCERA from running retiree payroll, SJCERA can authorize Northern Trust to use the previous month’s retiree payroll file to issue the current month’s payments. While this scenario is unlikely given the advance scheduling of processes, it’s important to have a plan in place. A test of the process will be conducted within 60 days and annually thereafter.

Deliver Excellent Service and Support to Stakeholders
Provide Stakeholder Communication and Education
Two hundred twenty-one (221) members have registered for the May 6, “Understanding your Retirement Benefit” seminar. In about an hour, they will learn the basics of their retirement benefit. Using technology, SJCERA is able to serve more members, more efficiently. Questions are answered both during the presentation and via online chat. Melinda DeOliveira and Ron Banez conduct these events, and Communications Officer Freda King will observe in preparation for conducting future events. Freda coordinated the distribution of an email blast to active members and participating employers announcing the May 6 event, as well as the ability to register online for this and future events.

Revise and Update Prioritized Member Communications and Web Content
Communications Officer Freda King worked with Information Systems Specialist II, Jordan Regevig to update the SJCERA website including:

- Revamping the Seminar page to allow members to register for any seminar scheduled during the year.
- Updating the Board of Retirement page to provide a more comprehensive description of composition, responsibilities, and adding evergreen information about the election process.
- Adding an Alameda Decision: Implementation Status document, to keep members informed on SJCERA’s progress implementing the court’s decision.
- Providing Annual Updates/Maintaining Existing Information such as posting the 2021 Retiree Open Enrollment Meeting information and maintaining links throughout the website.

Develop Quality Online SJCERA Benefit Videos
Communications Officer, Freda King has arranged for IT to record the May 6, Understanding your Retirement seminar. She will use the recording to create a script, which will help her learn the material,
and also serve as a starting place for developing scripts used for short, online, videos on individual topics.

Provide Excellent Customer Service.
Throughout our busiest season, our Benefits Team continues to strive for excellence and build rapport with our members. Here are just a few of the comments we have received.

- “Marissa [Smith] went above and beyond in helping my Dad and I understand his retirement options and benefits. She was super friendly and explained everything really well for us.”
- “Ms. [Andrea] Bonilla is very prompt in answering my questions.”
- “Mary Chris is always responsive and professional.”

Keep up the great work Benefits Team!

Maintain a High-Performing Workforce

Promote Positive Work Environment
What better way to recognize your co-worker than with a Shout-Out!?
Employees are encouraged to write words of thank you, praise or acknowledgement on our SJCERA’s Shout-Out board. Each employee on the receiving and giving end of the Shout-Out, receives a Jeans Day coupon. Way to Go! Keep up the Great Work!

What better way to create a happy “buzz” around the office, than a surprise Earth Day treasure hunt? When staff arrived on April 22, hidden throughout the office were flower seed packets with Jeans Day coupons of varying lengths (one day to one week of jeans days). Imagine the excitement that started when the first one was found! Thanks to Kendra Fenner for her help in bringing both these employee recognition ideas (Earth Day and Shout Outs) into reality with her artistic work and assembly of the materials. Congratulations to Greg Frank who found the one seed packet that had a one-week jeans day coupon!

Recruitments
As mentioned last month, four experienced staff members left to enjoy happy retirements within the last six months. Filling the remaining two vacancies and training (and cross training) new and existing staff is a high priority.

Investment Accountant Recruitment
Finance Officer Carmen Murillo, ACEO Kathy Herman and Chief Deputy Treasurer Mandy Matt, from the County Treasurer’s office, conducted interviews on Monday April 26, 2021, for the vacant Retirement Investment Accountant position. Several strong candidates emerged. Once references are checked we are confident we will be able to fill the position with a well-qualified person by the end of May.

Retirement Technician Recruitment – Member Services Unit
The recruitment for the vacant Retirement Technician position is closed and the written test is scheduled for May 6, 2021. SJCERA will schedule interviews upon receiving the certified list from Human Resources. The goal is to have another well-qualified person in place by the end of May or early June.

Modify SJCERA Job Descriptions for Career Paths to Meet Organizational Needs
ACEO Kathy Herman has scheduled a series of meetings with representatives from the County’s Human Resources Division to develop and review drafts of revised job descriptions. She is aiming for Civil Service Commission approval by the end of the 2021.
Offer Enterprise Training on Topics Intended to Strengthen SJERA’s Succession Planning
At the quarterly Leadership meeting, the Management team brainstormed potential training topics for our staff. A variety of topics emerged including investments, project management, communication skills, and how to better work as a team. We are on pace to have our first training, Project Management, led by a facilitator from University of the Pacific, completed by the end of June. The trainings are meant to encourage an organization-wide way of conducting business, provide insights to all aspects of SJERA’s business, and hopefully assist our employees in their career growth or open doors to new opportunities.

Managing Emerging Organizational Needs
Identify and Begin Implementing a 2022 Strategic Planning Process
I contacted five strategic planning facilitation providers, four of whom specialize in providing strategic planning assistance to public pensions and the fifth worked with the Board of Supervisors and executive staff in developing the strategic plan for San Joaquin County. I met with each of the four vendors that responded and requested they provide me a proposal. I will solicit input from the Administrative Committee in June on the selection of the successful Strategic Planning facilitator. The goal is to begin the strategic planning process in June or July. Vendors have indicated it will likely take three to six months to complete the Strategic Planning process.

Certificate of Transparency Award
SJERA received the Certificate of Transparency award from NCPERS for participating in their 2020 Public Retirement Systems Study. The study seeks to encourage the public’s understanding of public retirement systems.

Conclusion
SJERA’s small but mighty team continues to make progress on all fronts. Persistence, focus, prioritization, and the disciplined following of our guiding documents (including our Action Plan and our Alameda Implementation Plan) are paying dividends. Many of this year’s action plan projects are laying the foundation for SJERA’s future success. To quote Mahatma Gandhi, “The future depends on what you do today.” Clearly, we are doing a lot today to ensure the success of our organization’s future. Once we get our new staff on board and fully trained, our future will look even brighter!
Understanding China: an economic and investment perspective, part I

No discussion of the health and future of the global economy is complete without including an analysis of China’s economic development and integration into the global financial system. Admittedly, China is an immense subject to undertake. However, we have prepared a three-part series that is designed to provide readers with a summary overview of China’s economy and financial markets. The first part provides a recent history of China’s political economy, connecting the dynamics of party leadership and state-led economic growth. In the second part, we will turn our focus to the characteristics of, and recent developments in, China’s financial markets, including China’s version of stake-holder capitalism, where state influence is balanced against market forces. The last section in the series will focus on the changing investment opportunities in China.

Our hope is to provide a comprehensive and balanced description of China’s capitalism with special features to facilitate a multi-dimensional perspective on investing in China. We believe that financial market participants must understand the nature of the Chinese economic and financial system as the country’s influence continues to grow, so we seek to provide that perspective in this paper.

China’s political economy: 2000 through 2020

Each nation state has its own unique mixture of governmental regulation, capital market structures, and economic conditions. In the 1950s and 1960s, China’s inward looking economic efforts focused on political consolidation and food security. In the 1970s and 1980s, China slowly opened to the global economy, in a deliberate change to its economic development strategy that incorporated elements of free markets and foreign trade. China eventually joined the World Trade Organization in December of 2001. In the decades prior to joining the WTO, state-owned enterprises dominated much of China’s economic investment and growth. Foreign direct investment accelerated after accession to the WTO, resulting in a hybrid economic growth model where western and domestic private sector companies operated within the state-led economic system. This paper explores the evolution of China’s political economy and the role of the state in its economic performance over the past twenty years.

1 Throughout this paper, we will utilize economic statistics reported by Chinese authorities. It is widely accepted that these statistics are not always reflective of reality. Decentralized data gathering, inconsistent calculation methods, and manipulation are potential contributors to the low quality of reported data. China’s economic data also experiences substantial revisions, and suspiciously low volatility. Current Chinese Premier Li Keqiang himself admitted that he prefers to utilize alternative indicators of growth, giving rise to the “Li Keqiang Index.” While Chinese statistics offer directional inference, we should emphasize that they should not be treated as quantitatively precise.

2 Source for graphs: World Bank national accounts data, in constant 2010 US dollars (i.e., real/inflation-adjusted GDP). Data is not purchasing power parity-adjusted, which can have a significant influence on results – a debate on the merits of PPP adjustments is outside of the scope of this paper.
China’s rise and reach: the economic story arc

After several decades of rapid growth, China is now the world’s second largest economy, representing nearly one-fifth of global GDP. During most of this boom period, China’s focus has been on utilizing aggressive, debt-driven investment, and a comparative advantage in labor costs, to boost domestic employment. However, after a debt-fueled boom coming out of the Global Financial Crisis, China’s economic model began to shift considerably. A critical pivot came in 2013, when the ruling Communist Party of China (CPC) announced efforts to focus on domestic consumption while backing away from aggressive, debt-driven fixed asset investment. An increasing point of emphasis for the CPC today is “Made in China 2025” and other strategic plans aimed at moving China up the value chain into more technologically sophisticated end products. Alongside these phase shifts in internal economic strategy, China has turned outward. This includes an increased emphasis on globalization through efforts like the Belt and Road Initiative (“BRI”), and the gradual relaxation of constraints on foreign investment. The knock-on effects of this evolution for China and the global economy are significant.

China’s development in historical context

A full understanding of China’s rise to economic prominence requires awareness of the country’s modern history. While the roots of Chinese society trace back thousands of years, the structure of China’s 21st century economy first began to take shape in the 1970s. The first half of the 20th century in China was dominated by turbulence and a search for identity. The century kicked off in 1900 with an escalation of the Boxer Rebellion, an uprising against occupying countries such as Great Britain, Japan, Russia, and the United States. Angst within China regarding imperialism increased with the invasion and occupation of China by Japan before and during World War II. The escalation of an ongoing civil war in China after the conclusion of World War II led to the founding of the People’s Republic of China (“PRC”) in 1949, and cemented single-party rule by the Communist Party of China (“CPC” or “CCP”), which continues today. The establishment of the PRC brought an end to what is often described as China’s “century of humiliation.” However, economic modernization was
yet to occur in earnest. Chairman Mao Zedong, credited as the founding father of the PRC, presided over fits and starts of economic development. While he helped forge the PRC’s modern identity, his totalitarian style of leadership, reflected in two key initiatives, the Great Leap Forward and the Cultural Revolution⁴, prioritized political capital and the consolidation of power. At the time of Chairman Mao’s death in 1976, the PRC’s population exceeded 930 million, but annual GDP per capita was a paltry $263. Of the 160 countries for which per capita GDP data is available that year, only one, Myanmar, was lower. Global median per capita GDP in 1976 was $2,767; per capita GDP in the US in 1976 was $26,223, or nearly 100 times higher than China⁵.

Following Deng Xiaoping’s ascendance to a de facto leadership role in 1978 after a brief succession struggle, aggressive reforms (e.g., the “Four Modernizations” of agriculture, industry, science & technology, and defense) accelerated China’s economic growth off a very low base. A key tenet of Deng’s growth strategy was capitalizing on China’s large, growing population as a low-wage workforce to be mobilized. China historians often discuss the “social contract” that was put in place at the time⁶. In exchange for the implicit concession of individual freedoms under single party rule through tools like the Hukou migration system that would improve the distribution of labor in-country⁷, the CPC would initiate growth-oriented reforms. This gave rise to what the CPC characterized as “Socialism with Chinese Characteristics,” an effort to bring a large portion of the population out of poverty through social order, industrialization and eventually globalization⁸. In the early stage of the reform period, this effort was focused on China’s agrarian economy, leading to increased agricultural productivity. Subsequently, focus was shifted toward the industrial economy, as the CPC emphasized the production of cheap exports at a lower labor cost than international competitors (i.e., “labor cost arbitrage”).

![Figure 2: Annual GDP Growth, 1978-2007 (%, 2010 US dollars)](image)

⁴ The Great Leap Forward was a campaign initiated by Chairman Mao to transform China into an industrialized communist society from 1958-1962. The resulting policies exacerbated one of the largest famines in world history. The Cultural Revolution followed, from 1966-1976, and was an effort by Mao to eliminate capitalist and traditionalist thought from Chinese society.

⁵ World Bank national accounts data, in constant 2010 US dollars.


⁷ Hukou is a system of household registration, which is used as a domestic passport that the CPC can use to regulate population distribution and, importantly, rural-to-urban migration.

⁸ Note that the Communist Party of China, as the name implies, still identifies as a communist party.

⁹ World Bank.
While China’s growth path has been remarkable, it shares commonalities with past examples of rapid boom-periods in other economies that should not be ignored. It bears resemblance to the growth in the Soviet Union during the early and middle stages of the Cold War (1945 - 1970), at a time when many economists and politicians began to worry that the USSR would eventually overtake the US economy in size and power, threatening the global order\textsuperscript{10}. However, unlike the former Soviet Union’s failed attempt at global supremacy through the centralized means of production of classical communism, China successfully paired a production- and export-led growth model with numerous other factors throughout this reform period:

\begin{itemize}
  \item Rapid population growth (so rapid that the “one-child policy” was introduced in 1980)
  \item An increasing labor force participation rate
  \item Increased education to enhance the technical skill level of workers
  \item Reform and privatization of state-owned enterprises to improve efficiency
  \item Debt growth and extensive domestic fixed asset investment
  \item Increasing foreign direct investment (“FDI”) into China
  \item Technology/intellectual property transfer to Chinese companies
  \item Currency devaluation
  \item Suppression of debt costs for companies through “financial repression”
  \item Willingness to accept environmental degradation as a social cost of growth
  \item Improved relations with the US, initiated by President Nixon’s visit to China in 1972
\end{itemize}

Among these key drivers, one of the most important catalysts for growth in China, which arguably persists today, has been the implicit transfer of wealth from households to corporations through financial repression, artificially low wages and high private savings rates due to the lack of a viable social safety net. In the 1980s and 1990s in particular, Beijing’s deliberate industrial development plan ensured corporate profitability and competitiveness through low wage policies and curtailment of discretionary consumer demand. China is also able to exercise significant power through state control of the banking system, where bank boards and leadership positions are staffed with active party members. As a result, capital has been available at a very attractive cost to Chinese businesses. It might come as a surprise to investors that, even as Chinese real GDP growth far exceeded that of the US, the real rate of interest was actually much lower, suggesting that a greater share of national income may have accrued to corporations (borrowers) rather than individuals (savers).
By 1990, China’s GDP per capita had risen to $729; this was still extremely low relative to more developed economies, but represented nearly a doubling in real terms from 1976. The 1990s witnessed further acceleration of economic growth in China. The decade began with the opening of flagship stock markets in Shanghai and Shenzhen, which continue to represent the widely discussed China A shares market today. While the Asian Financial Crisis saw a period of volatility in the late 1990s, China’s economic footprint continued to grow.

It would be difficult to evaluate the Chinese economy, both past and present, without acknowledging the importance of state-owned enterprises (“SOEs”), which are companies that are owned and operated by the CPC. China’s SOE reforms accelerated in the 1990s with a strategy labeled “grasp the big, release the small” (essentially consolidating SOEs in strategically important industries, while privatizing less strategically important industries). Given that SOEs represented 50% of industrial output in China at the turn of the century, improved efficiency clearly represented a growth opportunity.\(^\text{12}\)

China’s accession to the World Trade Organization in 2001, after a 15-year period of negotiation, marked a key development in international relations, and assured the country’s ability to further integrate into the global supply chain. This gradual opening-up marked the culmination of a nearly 30-year process of China re-establishing relations with large global economies like the US.\(^\text{13}\) With open access to global trade and capital markets, rapid GDP growth continued.

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\(^{13}\) Richard Nixon’s 1972 visit to China is often cited as one of the key catalysts for this process.
Changes over this 30-year period certainly catalyzed rapid growth, but its sustainability can be questioned. Economists who have studied the period argue that China was able to monetize the base effects of a very low starting level of productivity and efficiency as it emerged from the Maoist era of the mid-20th century. Data quality is often cited as a reason to discount historical growth statistics, but existing evidence suggests that the “low hanging fruit” of China climbing the curve of industrialization and integration into the world economy was gradually harvested. Many of the widely cited catalysts for growth that were previously highlighted exhibit diminishing marginal returns, indicating the likelihood of a gradual moderation of their impact on potential growth.

The Global Financial Crisis was the most significant challenge to China’s growth streak. The collapse of consumer demand in the US and the EU implicitly threatened Beijing’s export-led growth model, which might have unleashed domestic unrest as factories closed and laid-off workers. In the face of global demand collapse, CPC officials responded aggressively by initiating a debt-financed fixed asset investment binge to soften the GFC’s blow. Further, Beijing began a longer-term process of refocusing their economic growth model by unleashing formerly suppressed domestic (consumer) demand.

While it is not often highlighted in discussions of the Crisis, China directed commercial banks to dramatically increase lending, which totaled over $1 trillion in the first half of 2009 alone\textsuperscript{15}. Not only were new loans given, but existing loans were rolled and extended on generous terms. Wages were raised in the countryside and in second tier cities. Migration to first tier cities was encouraged with a dramatic increase in hukou licenses\textsuperscript{16}, increasing domestic mobility and demand for infrastructure, cars, homes and consumer goods. This marked an important shift in China’s growth strategy from a balance sheet perspective. The country’s willingness to finance investment growth through the banking sector and consumer debt resulted in a rapid increase

\textsuperscript{14} CEIC.


\textsuperscript{16} Kam Wing Chai, “The Chinese Hukou System at 50”, Eurasian Geography and Economics, 2009. http://courses.washington.edu/chinageo/Chan-Hukou50-EGE2009.pdf. The Hukou license is a type of residence permit which allows access to social services, education, and medical care dependent on income and stable place of residence. Migrant workers to cities in China have had less access to social services based on their temporary housing status. Since 2000 various reform efforts have increased access to urban hukou licenses.
in leverage. China’s government and consumer debt burden had been on the rise prior to the GFC, but it accelerated meaningfully, through a wider array of channels, during and after.

![Figure 5: Rapid Debt Growth](image)

While the official national sovereign debt remained low as a percentage of GDP, the explosion of private rates of indebtedness quickly reached levels associated with advanced economies. With loose regulatory constraints, meaningful political corruption, artificially low interest rates, and yield-starved investors, the post-GFC China financial climate gave rise to speculation. The CPC directed commercial banks to reduce lending in the early 2010s. However, the shadow banking sector, with its wealth management products ("WMPs") guaranteeing high rates of return, allowed commercial banks to take assets off of their balance sheets and feed the risk appetite. Implicitly, borrowers unable to gain access to traditional credit were able to access financing via the shadow banking sector, exacerbating the growing debt burden in China, and potentially reducing debt quality. Research has found that commercial banks are more willing to offer guaranteed rates of return when they are closer to insolvency, likely increasing systematic risk during a liquidation event. Chinese regulators have since clamped down on WMP growth. According to official data, the WMP industry peaked in 2018, with total market value approaching $5 trillion. The market has since contracted to $3.9 trillion as of the end of 2019.

It is often posited that credit is the lifeblood of economic growth. A surge in debt in China during and after the GFC produced the CPC’s desired outcome. Growth re-accelerated, although the pace of growth remained moderate relative to the prior two decades. However, the quality of incremental growth in China remained relatively low. The efficiency of debt-financed growth, which had already been in decline, weakened further. The Incremental Capital to Output Ratio ("ICOR") in China has risen over the past decade, demonstrating that a dollar of investment does not go nearly as far as it once did.
**From 2013 to the present: a shift in strategy**

While a fixed-asset boom post-GFC was beneficial in the short term, China’s growth model was showing signs of strain even in the late 2000s. Like other 20th century growth “miracles” before it, such as those of the Soviet Union, Brazil, and Japan, the pace of growth proved to be unsustainable. The one-child policy, implemented in 1980, took several decades to manifest in slower population growth, but this trend has emerged strongly in the 21st century. Scholars began to highlight (and continue to discuss) the Chinese “Lewis turning point” at which surplus labor is fully absorbed into the manufacturing sector, leading to rising wages and thus lower export competitiveness\(^{21}\).

Empirical research seems to confirm what was hypothesized at the time: the fixed asset investment that had fueled China’s post-Crisis boom had a limited and unsustainable impact on productivity. Further, China’s GDP growth continued to be dominated by investment spending, perpetuating the dominance of corporations, both private and state owned, within the economy.

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\(^{20}\) World Bank. ICOR is calculated as the investment share of GDP divided by the growth rate of GDP.

Outside observers began highlighting evidence of a weakening growth model, citing the appearance of "bridges to nowhere" and "ghost cities" as evidence of unproductive infrastructure made possible by an excessive credit binge. Investors entertained the possibility of a "hard landing" in which a forced deleveraging of built-up excesses in the Chinese financial system could lead to its collapse, or a "soft landing" in which these excesses were managed down over time. It was this backdrop that underpinned Xi Jinping's ascension to the presidency of China, when he succeeded Hu Jintao in 2013.

With recognition both domestically and internationally that the existing debt-driven growth model was showing signs of strain, Chinese policymakers under President Xi began to signal a shift in strategy. It is important to emphasize that because of the centralized model of leadership utilized in the CPC government, any announcement of significant changes by CPC leadership is worthy of close attention. One of the most important directional shifts in policy in China was made at their 2013 plenary session, a central planning meeting held every five years. The Xi administration signaled a transition from debt-driven investment spending toward domestic consumption, technological advancement, and increased market openness. This represented a tacit admission of the need for an economic "rebalancing."

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**FIGURE 8**
General Structure of the Communist Party of China

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23 South China Morning Post.
The implications of this transition were not paid substantial attention by international investors until they began to manifest in global financial markets in subsequent years. China moved to moderate the growth of financial leverage, raising policy rates and encouraging the state banking sector to reduce loan activity. The 2014 to 2015 collapse in a decade-long commodity boom is often associated with the end of China’s fixed asset investment boom after a period of unsustainably high demand. China followed the Third Plenum by announcing the “Made in China 2025” initiative in 2015. This made explicit China’s aspirations to move up the value chain to seek independence from foreign suppliers and accelerate domestic technological development.

One belt, one road initiative

An additional initiative first floated by President Xi in 2013 was the One Belt, One Road policy. Now referred to as the Belt and Road Initiative (“BRI”), the originally stated scope was to establish strategic agreements with trade partners, though the true aim has always been somewhat ambiguous. The BRI can be described as a continuous stream of infrastructure investments in countries outside of China, financed using loans primarily made by Chinese state-owned banks. While it is extremely difficult to properly measure the full scale of the BRI, and the estimates of its total scope are inconsistent, it has been posited that financing of the BRI by China could eventually total between $1 trillion and $8 trillion over a period of 5 to 10 years. While the scale of BRI financing may appear impressive, when compared to the country’s annual GDP of approximately $20 trillion, the multi-year program may not have had a meaningful economic impact on the Chinese economy as a whole. However, for certain legacy State Owned Enterprises in the energy and construction sectors, the BRI program may have been strategically beneficial, boosting employment and enmeshing developing country governments with China’s financing and diplomatic interests.

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Loan Size (authorized)</th>
<th>Lending Per Year (est. 2015-2019)</th>
<th>Anticipated Annual Lending (2020-2025)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multilateral Development Banks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Development Bank</td>
<td>$100</td>
<td>$1.7</td>
<td>$10-15</td>
</tr>
<tr>
<td>New Development Bank</td>
<td>$100</td>
<td>$1-1.5</td>
<td>$5-7</td>
</tr>
<tr>
<td>Silk Road Fund</td>
<td>$40</td>
<td>$2-3</td>
<td>$2-3</td>
</tr>
<tr>
<td>Commercial Banks — (China)</td>
<td></td>
<td>Est. $90bn annual lending by the big four banks</td>
<td></td>
</tr>
<tr>
<td>China Policy Banks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export-Import Bank of China (EXIM)</td>
<td>$24 (2015)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE 1
Belt & Road Initiative
Finance Mechanisms
(USD Bn)

Source: Oxford Economics, compiled from government and company annual reports and press releases.


Delving briefly into the mechanics of the BRI, Chinese commercial banks, state banks and international development banks make low-interest loans to recipient countries. These loans require the signing of Memoranda of Understanding ("MOUs"). 149 of these agreements between China and other countries exist today. The loans are utilized to finance a variety of development projects in other nations. China has targeted energy and transport, based on Oxford Economics investment data for the BRI. The projects are broad in scope, but seem to focus on increasing China’s sphere of influence.

**Examples of BRI investments:**

- Cambodia – Sihanoukville Special Economic Zone (factories, ports) and express train funded by China Communications Construction Company. Access to Cambodian ports for Chinese merchants, and potentially government use.
- Pakistan – China – Pakistan Economic Corridor (highways, railroads, pipelines, power plants, port development)
- Kenya – railway development (Nairobi to Mombasa)
- Greece – China purchased majority stake in Port of Piraeus in 2016
- Portugal – Huawei agrees to build out 5G network with local company Altice Portugal

**Why does the BRI matter?**
An important consequence of the BRI, outside of the implicit increase in China’s international influence, has been weaker balance sheet positions in the countries that choose to sign MOUs. For example, recently, Sri Lanka could no longer make the payments on a financed port project and surrendered ownership.

While BRI investments often create opportunities in local markets and represent a path towards development, they potentially represent a Faustian bargain. The headline agreements draw much fanfare and potentially signal upward mobility for recipient countries, where the prospect of infrastructure improvements and job opportunities are appealing. However, in many instances, China insists that the projects utilize China’s domestic companies and labor supply. While BRI investment recipient countries are asked to foot the bill, they might not ultimately be receiving enough benefit through employment opportunities and domestic development to offset greater indebtedness.20

![Figure II: Belt & Road Initiative Troubled Projects by Region (2013-2020 USD M — AEI China Global Investment Tracker)](image)

<table>
<thead>
<tr>
<th>Region</th>
<th>Sum (SM L-Axis)</th>
<th>Ave Project Cost (L-Axis)</th>
<th>Count (R-Axis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle East</td>
<td>2,460</td>
<td>492</td>
<td>5</td>
</tr>
<tr>
<td>East Asia</td>
<td>16,560</td>
<td>920</td>
<td>18</td>
</tr>
<tr>
<td>Europe &amp; Israel</td>
<td>11,869</td>
<td>847</td>
<td>14</td>
</tr>
<tr>
<td>South America</td>
<td>9,330</td>
<td>1,555</td>
<td>6</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>14,390</td>
<td>685</td>
<td>22</td>
</tr>
<tr>
<td>West Asia</td>
<td>27,770</td>
<td>1,698</td>
<td>16</td>
</tr>
</tbody>
</table>

With debt that is largely unreported to global financial market participants reaching potential record levels, considerably more balance sheet risk might exist in some emerging markets than is otherwise assumed. It is apparent from this map that a number of countries in Asia, Africa, and South America have considerable obligations to China.
Where China stands today

It is important to distinguish the Chinese system’s nature and level of development from that of the US and regional peers. China’s political system is unique, its population is massive, and from a productivity per capita standpoint, it is well behind countries like the US, Korea, and Japan, which have climbed the curve to the distinction of middle- or high-income. The path that these countries took to economic “emergence” are paid close attention by CPC policy makers.

<table>
<thead>
<tr>
<th>Political System</th>
<th>China</th>
<th>US</th>
<th>Korea</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Bodies</td>
<td>Communism</td>
<td>Democracy</td>
<td>Democracy</td>
<td>Democracy</td>
</tr>
<tr>
<td>Currency Type</td>
<td>Managed Peg</td>
<td>Floating</td>
<td>Floating</td>
<td>Floating</td>
</tr>
<tr>
<td>Population</td>
<td>1,398 million</td>
<td>328 million</td>
<td>52 million</td>
<td>126 million</td>
</tr>
<tr>
<td>10-Year Average GDP Growth</td>
<td>7.7%</td>
<td>2.3%</td>
<td>3.3%</td>
<td>1.3%</td>
</tr>
<tr>
<td>GDP Per Capita</td>
<td>$8,254</td>
<td>$55,670</td>
<td>$28,606</td>
<td>$49,188</td>
</tr>
<tr>
<td>Consumption % of GDP</td>
<td>38.5%</td>
<td>60.2%</td>
<td>48.6%</td>
<td>55.6%</td>
</tr>
<tr>
<td>Current Account Balance</td>
<td>$141 billion</td>
<td>-$498 billion</td>
<td>$60 billion</td>
<td>$185 billion</td>
</tr>
</tbody>
</table>

Source: World Bank as of 12/31/19.

Trends associated with the 2013 Plenum’s focus on domestic consumption and market reforms, the BRI, and a corruption crackdown have had several key impacts on the Chinese economy over the past seven years. The most evident is that the path of reported growth statistics continues to indicate a “soft landing,” as the pace of debt creation and infrastructure spending slows. As China-focused economists have highlighted, it is more difficult in practice to “rebalance” an economy than it is to do so in theory. All else equal, for consumption to increase as a percentage of GDP, another source of growth must give way. Efforts to rebalance the economy while managing a more cautious pace of leverage growth (as debt to GDP pushes above 300%), have undoubtedly resulted in a slower pace of GDP growth itself.

FIGURE 12
World Map of External Debt to China

29 See “China’s Overseas Lending” citation. As of 2017, direct loans only.
The gradual retrenchment of the traditional growth model in China has led to a bifurcation in the Chinese economy. The materials, industrials, energy, and financials sectors, which once enjoyed strong, consistent activity and growth, have grown at a more moderate pace. Investors and economists often refer to the widening spread between the “Old Economy” in China, reliant upon credit growth and infrastructure spending, and the “New Economy” that continues to grow as a result of the CPC’s initiatives. Critically for old economy companies, which once enjoyed implicit debt guarantees from the CPC, slower growth has also been accompanied by a slightly increased willingness to allow defaults on debt obligations, especially since 2015. Relatively unproductive companies, saddled with large debt burdens, have been forced to declare insolvency in some cases. The losses implied by default are often absorbed by China’s larger state-owned banks at the direction of the CPC.

The broader SOE sector in China remains robust. SOEs account for 39% of corporate assets, 27% of corporate revenues, and 18% of employment. Chinese financial SOEs represent 84% of financial system assets in China. “SOE reform” occupies a nearly continuous place at the top of the CPC’s priorities, which is not a surprise considering that SOEs represent approximately 25% of China’s GDP, and 4.5% of global GDP. However, follow-through on reforms has been mixed. SOEs continue to underperform private enterprises on a return-on-assets basis, and have experienced diminishing asset efficiency, as measured by asset turnover (revenue/average total assets).
China’s economic development depended heavily on hydrocarbon fuels, and in 2007, China became the single largest emitter of CO2 emissions. In 2008 China elevated the State Environmental Protection Agency to the State Council and reorganized it as a Ministry with expanded powers and authority. While the CCP has prioritized cleaning up air quality, progress has been slow. China’s small hazardous airborne particles (PM2.5) are, on average, three times higher than the WHO’s recommended maximum upper limit of 10 PM2.5 micrograms per metre. Industrial cities frequently experience PM2.5 levels twenty times higher than the WHO’s recommend limit.33

The CPC continues to focus on domestic consumers as a potential engine of growth. Over the past seven years, consumption as a percentage of GDP has increased, albeit off a very low base. Growth in Chinese consumption spending can be observed in business trends in China. China boasts the largest market for smartphones, the largest e-commerce market, and the largest consumer base in the world. Chinese citizens are increasingly online, increasing domestic usage of search engines, social media platforms, online gaming, and other online venues. Smartphone penetration in China has increased to 60%, which is far higher than regional developing economies like India (37%) and Indonesia (31%) but is lower than the United States (79%)34. Rapid development of technology infrastructure has catalyzed growth in information technology, communication services, and industrial technology companies as well.

Rising wages in China have meant less labor competitiveness than at the turn of the 21st century. It has been reported that the manufacturing wage level per person in China now exceeds most Latin American countries, and many emerging economies in Asia35. However, to say China’s role in the global industrial complex is compromised would be misleading. In 2018, China represented 28% of the global manufacturing sector’s value add36. The country remains a key player in globalized supply chains for hard and soft commodities, industrial and consumer goods, and technology development. China is an important trading partner with many countries in Asia, Africa, Europe, and the Americas.

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33 Source: China Ministry of Ecology and Environment. The Ministry website provides daily air quality reports by city with relevant safety recommendations see http://english.mee.gov.cn/. See also ‘China targets to allow air pollution to rise slightly in 2021,’ Reuters February 2021.


35 Euromonitor.

Although wages are rising, China is also aging quickly, and the lack of a social safety net for many retirees has kept savings rates high. China’s NDRC estimates that 25% of China’s population will be over the age of 60 by the year 2030, and most of the elderly cannot afford to move to nursing homes. The one-child policy means that fewer children and grandchildren can offer additional support. China offers universal health insurance through three national health insurance schemes, one each for urban employed and retired, registered urban residents, and rural residents. However, the quality of primary health care remains poor and uneven.\(^{37}\)

Importantly, GDP growth remains relatively robust in China, and investment spending has not ceased. China continues to build infrastructure at a pace that would be unimaginable in most countries. As one small, illustrative example of the scale of China’s economy, the country has built over 100 civil airports since 2005, and nearly 1 million miles of road infrastructure since 2009\(^{38}\). The scale of development has been extraordinary.

**Looking ahead**

China is the world’s most populous country, enjoys an improving standard of living, continues to expand its reach outside its own borders, and is climbing the development curve. China has grown at nearly 10% per annum in real GDP terms over the past 40 years, the longest sustained period of country-specific growth in recorded history. Absent an extraordinary positive shock to growth, the evidence suggests that this feat will not be repeated over the next 40 years. Thus, it is important to assess the evolution of key drivers of GDP growth going forward.

China has grown at nearly 10% per annum in real GDP terms over the past 40 years, the longest sustained period of country-specific growth in recorded history. Absent an extraordinary positive shock to growth, the evidence suggests that this feat will not be repeated over the next 40 years.

China’s financial system has been weakened by aggressive credit creation over the course of China’s rise. While government debt levels remain moderate when compared to other large economies, nonfinancial corporate debt in China continues to rise. The Institute of International Finance’s research suggests that system-
wide debt is well over 300% of China’s annual GDP, with nonfinancial corporate debt representing over 150% alone. Historically, country-specific growth booms have generally preceded growth slowdowns or financial crises. China’s large debt burden creates an implicit constraint on China’s ability to finance future growth with aggressive credit creation. Clearly, the CPC will have to carefully manage debt both inside and outside of the financial system.

Officials within China are clearly sensitive to the country’s fiscal position. The CPC’s reaction to recent slowdowns has been tempered relative to their past inclination to aggressively deploy infrastructure-focused fiscal stimulus. China cut benchmark rates in the wake of COVID-19, and has engaged in fiscal stimulus, but has not initiated the same level of investment as in previous downturns. The government went as far as eliminating its traditional use of an annual GDP target for 2020, instead choosing to focus on job creation. This suggests that the CPC has shifted away from the traditional model in favor of a more measured approach, given a stretched debt burden relative to most major global economies.

China’s population is the largest in the world. Continued population growth is considered a key input to growth expectations in long-term GDP growth models, so close attention should be paid to its trajectory. The evidence points toward deceleration in population growth and, more importantly, working age population growth. Largely as a result of the one-child policy, which was finally ended in 2015, China’s demographic trajectory has weakened. Immigration has failed to bridge the decline in domestic population growth; China’s immigrant population as a percentage of the total population was the second lowest of any country for which the UN’s Population Division maintains data, as of 2019. As a result, China’s long-term population growth trend appears to be following a similar trajectory to large developed economies like the US and Japan. As is now the case in the US, Japan, and many European countries, the ratio of retirees relative to the productive workforce continues to increase, per UN Population Division data.

39 Unlike other countries, China’s local government debt is combined with private credit so that public levels of indebtedness is understated at the level of sovereign debt. The hybrid of municipal, provincial and state-owned enterprise debt is combined with private debt and named social financing.


These gradual changes in China’s growth trajectory will have important implications for future economic growth. With the availability of capital in decline due to less aggressive credit growth, and the availability of labor in decline due to less favorable population dynamics, consumption and productivity will be the center of attention. China has increasingly chosen to focus on the domestic consumer, which authorities now view as a key engine of growth. The government continues to announce targeted measures, such as improved access to brick and mortar retail and e-commerce for citizens, relaxation of restrictions on the purchase of automobiles, and even cleaning up streets to develop urban gathering places. Unfortunately, in order to increase consumption’s share of GDP, investment will have to decrease as a share of GDP, all else equal. Inevitably, China’s continued efforts to re-balance should result in a downward trajectory of GDP growth going forward.

The CPC has turned aggressively to the channels of potential growth that remain available: consumption and technological advancement. However, neither guarantees economic success.

China has also turned to technological progress as a source of productivity gains. Made in China 2025 remains a key initiative. The goal of the program is to indigenize key technologies, gain favorable positions in global supply chains, win market share within China from international firms, and capture more global market share. The plan originally called for China to become a dominant player in 10 sectors: IT, manufacturing, aerospace, maritime engineering, railways, electric vehicles, electrical equipment, materials, biomedicine, and agricultural equipment. The precise targets of Made in China are likely to evolve further, but the project’s scope has already impacted the economy. China has rapidly increased research and development spending, with R&D totaling $468 billion in 2018, second only to the US at $582 billion, according to the Organization for Economic Cooperation and Development. According to the 2019 Global Innovation Index, which factors in 80 indicators including political environment, education, infrastructure and business sophistication, China moved up three spots since the previous year to 14th.

A focus on technology has given rise to corporate success as well. Currently, two of the five largest private “unicorn” companies globally, Bytedance (internet technology, Toutiao content platform) and Didi Chuxing (Didi car-for-hire service) are based in China. Ant Group’s $14 billion 2018 fundraising, which valued the company at $150 billion, was the largest fundraising ever by a private company. Additionally, publicly traded Chinese conglomerates, such as Alibaba (e-commerce), Baidu (internet

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43 This is a very simple description of a nuanced economic concept laid out extensively by China scholar Michael Pettis.


45 CB Insights as of March 2021.
search), and Tencent (gaming and social media), draw comparisons to US technology giants Amazon, Alphabet, and Facebook. While not necessarily household names in most countries, these homegrown companies in China are increasing their reach.

In addition, China has introduced the China Standards 2035 project, which endorses and builds upon Made in China 2025. In effect, the goal of the former – to transform China into a leading technology innovator and producer – is simply a supplement to Made in China 2025. For example, China is pushing the development of automation and artificial intelligence. An initiative to develop technology is one thing, while the actual development of technology is another. China has gone to great lengths to improve the ease of conducting business, resulting in an improved Doing Business ranking of 31st out of 180 ranked countries for 2019, an improvement from its ranking of 78th two years prior. However, China ranks just 103rd in the Heritage economic freedom score, owing to low property rights, government integrity, financial freedom, and fiscal health.

The last important forward-looking development in China is the trajectory of notable reform efforts. While China is focusing on reform in a variety of arenas, continuing reform of SOEs, improvement of the Hukou system, and strengthening of land ownership rights are worth close attention. SOEs continue to structurally under-earn relative to private competitors. An effort to increase their competitiveness could prove to be beneficial to the SOEs and their investors. China’s governing body for SOEs, the State-owned Assets Supervision and Administration of the State Council (SASAC) continues to pursue a reform agenda originally laid out by Xi Jinping at the Third Plenum. Key initiatives include deleveraging SOEs and consolidating them to improve their ability to compete internationally.

However, reform in the context of heavy government involvement has proven to be challenging. In many instances, the government has merged large companies, thereby reducing competition rather than fostering it. Hukou reform is cited as an effort to improve the distribution of labor while strengthening the rights of migrant workers and improving education opportunities for migrant families, but progress has been slow. Likewise, an improvement in land ownership rights for citizens could stimulate additional demand and increased investment. However, as with SOE reform, land reform is an extremely complex endeavor. Land sales are a major source of fiscal revenue for local authorities; strengthening land rights for Chinese citizens would reduce the ability of local officials to expropriate property and resell it. In short, reforming decades-old systems will not be achieved overnight.

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Conclusions

Ultimately, China’s challenge in the 21st century is clear: how can growth be perpetuated? China could continue to experience a reversion to a lower long-term average, as has almost always happened in the past, especially after periods of prolonged credit expansion. The risk is that this glide path slope becomes steeper than expected, exposing excesses in system-wide leverage and potentially leading to a financial crisis. Chinese President Xi Jinping himself has admitted a keen focus on ways in which China can avoid succumbing to the “middle income trap,” which refers to the stagnation of growth as wages push production costs higher. In order to escape the Middle Income Trap, Beijing will have to engineer maximum wealth creation while growth rates are high: as GDP growth normalizes to a lower rate, escaping the Middle Income trap may become more challenging. Chinese policymakers are acutely aware of the risk that evolving demographics result in China “growing old before it grows rich,” as China’s working age population growth rate has recently turned negative.

The CPC has turned aggressively to the channels of potential growth that remain available: consumption and technological advancement. However, neither guarantees economic success. Consumption growth must replace investment growth, and it has not bridged the gap yet. Investment spending is not a guarantee of technological innovation. A five-year study in 2018 revealed that 91% of Chinese design patents, 61% of utility patents, and 37% of invention patents were discarded after five years (fewer than 15% of US patents were disposed of during the same period). While creative strategies to absorb excess capacity like the Belt & Road Initiative have provided financing for the goods and services of China’s construction and energy companies, the level of indebtedness of some under-developed countries may well have reached maximum levels. The more debt China chooses to utilize, both at home and abroad, the more likely that structural imbalances created during the boom-period from the late 1970s to the 2010s are likely to act as headwinds for China in the coming decades.
Additional sources


Kha. The Belt and Road in Cambodia: Successes and Challenges.


Appendix 1: China Currency Dynamics

After closely managing a peg to the US dollar (which allowed China to suppress the value of the renminbi (Rmb), making exports more competitive) a managed float was introduced in the 2000s (and it was re-introduced in the 2008 Crisis temporarily). China subsequently introduced an offshore version of the renminbi (“CNH,” deliverable in Hong Kong) as a first step towards currency internationalization in 201052.

The CNY is regulated by China’s State Administration of Foreign Exchange, while the CNH is regulated by the Hong Kong Monetary Authority. International investors can freely transact in CNH through Hong Kong, but China restricts transactions in CNY to approved market participants, in financial market transactions and direct investments. As a result, CNH tends to more closely resemble the likely fair market value of the renminbi as long as the PBoC allows reasonable fluctuations of CNY. Since 2015, the yuan has been pegged to a basket of major currencies. The People’s Bank of China announces a reference rate for the yuan versus the US dollar and other currencies on a daily basis.

The value of the renminbi relative to other global benchmark currencies is watched closely by global market participants as China becomes increasingly integrated into the global economy. Fluctuations in the value of CNY/CNH have been a source of considerable market volatility in the past. In 2015, for example, after a considerable drawdown in foreign reserves resulting from capital flight and relative economic weakness, China unexpectedly devalued its currency over several days, setting the USD/CNY reference rate higher than 7.0 for the first time in more than 10 years.

Global market volatility spiked, with participants viewing the move as an admission of economic weakness in China and therefore slowing global growth. Importantly, any investor outside of China with Chinese security holdings realized an immediate, one-off devaluation53. As is the case with any international investment, and is especially the case for economic systems undergoing meaningful change, currency dynamics merit close attention as they inherently represent a potential mismatch between assets and obligations. Additional pressure on the renminbi, leading to devaluation, remains a risk for international investors.


53 Provided that they were not invested in Chinese companies that were net currency importers.
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A federal appeals court overturned a lower court ruling Thursday and held a Travelers Cos. Inc. unit must indemnify a California county employees’ retirement association under its fiduciary liability insurance coverage in connection with a lawsuit filed against the organization.

Retirees and beneficiaries filed suit against Stockton, California-based San Joaquin County Employees’ Retirement Association in 2017 regarding the maintenance of a contingency reserve fund they claimed was overfunded and should have been used to pay them supplemental benefits, according to the complaint in San Joaquin County Employees’ Retirement Assn. v. Travelers Casualty and Surety Co. of America.

Travelers denied coverage on the basis that the litigation fell under a “prior and pending proceeding” exclusion in its policy. The association filed suit against the insurer, charging it with breach of contract and bad faith.

The lower court ruled in Travelers’ favor, but was overturned by a unanimous three-judge appeals court panel of the 9th U.S. Circuit Court of Appeals in San Francisco.

The district court had ruled in favor of the insurer after determining the lawsuit “has a slight connection with the allegations” in a 1998 lawsuit involving the association and its members, the appellate court ruling said.

“We disagree,” the panel said. The current litigation involves supplemental benefits “which did not exist in 1998,” it said in holding the exclusion did not apply and remanding the case for further proceedings.

Attorneys in the case did not respond to a request for comment.
Pension Organizations Get Behind Bill to Address Climate Financial Risk

On March 31, President Joe Biden announced his second major policy initiative, the American Jobs Program, which is a $2.25 trillion package of basic infrastructure, green infrastructure, housing, broadband, and job retraining.

Members of the coalition from the public pension community include California Public Employees’ Retirement System, California State Teachers’ Retirement System, and New York State Common Retirement Fund. Other members include Ceres, Edison International, National Association for Latino Community Asset Builders, National Whistleblowers Center, PG&E Corporation, Public Citizen, Sempra Energy, Sierra Club, UN Principles for Responsible Investment, and Union of Concerned Scientists.

Social, political and economic pressure to improve climate change has led to a global push to divest fossil fuels, and numerous public pension funds have been in forefront. At latest count, fossil fuel divestment commitments have been made by than 1,300 institutions worldwide—12 percent of which are pension funds—with assets of nearly $14.6 trillion, according to the advocacy group Fossil Free. Efforts to improve the understanding and

CONTINUED ON PAGE 5
On March 31, President Joe Biden announced his second major policy initiative, the American Jobs Program, which is a $2.25 trillion package of basic infrastructure, green infrastructure, housing, broadband, and job retraining. President Biden chose Pittsburgh for his announcement, a city that embodies blue-collar, manufacturing jobs, and has been central to the U.S. economy over the years.

The proposal contains:

- Highways, transit ports, airports, water, and sewer systems — $650 billion
- Home and Community Based Health — $400 billion
- Affordable Housing — $300 billion
- U.S. Manufacturing — $300 billion
- Research and Development — $180 billion
- Clean Drinking Water — $100 billion
- Electric Grid Investments — $100 billion
- High-Speed Broadband — $100 billion
- Workforce Development and Job Retraining — $100 billion
- Repealing tax preferences for fossil fuels; and
- Increasing investment in IRS tax enforcement of corporations and high-income individuals.

It is unclear at this early point in the process whether Congress will seek to facilitate increased investment in infrastructure by public pension plans as part of this legislation. Some proponents of greater participation by public plans in infrastructure argue that it would be a benefit to plans to have full or partial ownership of the actual infrastructure asset and the revenue stream produced by that asset.

House Speaker Nancy Pelosi (D-CA) announced that the target date for House passage is July 4. The hope is that the package will attract bipartisan support as it moves through Congress. However, the reliance on tax increases to fund the proposal is likely to make Republican support difficult, if not impossible, to secure. The tax increases include:

- Raising the corporate tax rate to 28 percent;
- Creating a 15 percent minimum tax on the book income of the largest corporations;
- Creating a 15 percent minimum tax on the book income of the largest corporations;
- Repealing tax preferences for fossil fuels; and
- Increasing investment in IRS tax enforcement of corporations and high-income individuals.

They identify a barrier in federal tax law that they say creates an unlevel playing field among public plans today, specifically the question of whether a public pension plan designated to acquire the public infrastructure asset would meet the criteria of “an instrumentality of one or more states or political subdivisions” as outlined in Rev. Rul. 57-128. In particular, the question is whether the plan’s governing structure satisfies prong four of the ruling’s six-part test: “whether control and supervision of the organization is vested in public authority or authorities.” In addition, a second question is whether, for purposes of the private business test under IRC Section 141, the acquisition by a public plan would trigger the arbitrage rule under IRC Section 148(b), which would result in the underlying bonds losing their tax-exempt status.

In the 115th Congress, H.R. 6276, the Strengthening Pensions through Investment in Infrastructure Act, was introduced by then-Rep. Mike Bishop (R-MI). The bill would have made two changes to the tax code. First, it would have amended IRC Section 141(b) to state that use by a public pension fund of public infrastructure

CONTINUED ON PAGE 6
Andrew Biggs is riding his favorite hobby-horse again, accusing pension plans of chronic mismanagement. He lays blame for funding shortfalls at the feet of employers and, of course, his nemesis, the labor unions that protect workers’ rights. Reality, as usual is more complicated.

Biggs’ real concern should be with certain unintended consequences of the Pension Protection Act of 2006. The law unfortunately forced plans to raise benefits when their overfunding levels reached 120% — but it offered no way to reverse course when funding levels dropped. This had disastrous consequences for many plans during the global financial crisis of 2008-9.

Government action and inaction have played a hand in intensifying the woes facing multiemployer pension plans — and have been a far bigger factor than any mismanagement on the part of management or Biggs’ favorite bogeyman, organized labor.

Instead, with the Wall Street Journal’s opinion page as his platform, Biggs delivers his latest shameless anti-pension screed by attacking the aid package included in the recently already-enacted stimulus bill to assist private-sector multiemployer pension plans. More than a million retired workers would have faced severe cuts in their pensions, if not outright collapse, without funding provided under the $1.9 trillion American Rescue Act of 2021. The law authorizes $86 billion in special financial assistance that the Pension Benefit Guaranty Corporation can use to extend the solvency of financially troubled multiemployer pension plans that meet strict eligibility requirements.

Biggs tips his hand early in the article: He doesn’t like multiemployer plans because they are “jointly run by labor unions and employers, often within the same or related industries.” Under this “unusual funding mechanism,” organizations with similarities function as mutual insurers. Of course, there is nothing unusual or pernicious about organizations with mutual ties banding together in this way. But industries coming together to solve their own challenges and share risks is, apparently, a step too far for Biggs, who notes that sometimes whole industries decline. This is indisputable because of the phenomenon known as human progress — buggy whip makers
NORTHEAST: New Jersey

Governor Phil Murphy called for a $6.4 billion payment into the state’s pension system in the fiscal year that begins in July. If his budget proposal is approved by the legislature, it would mark the first time in 25 years that the state would make its full, actuarially determined contribution.

The proposed budget, totaling $44.8 billion overall, would accelerate by one year Murphy’s pledge to ramp up pension payments to achieve a full contribution. Previous plans had anticipated a 90 percent contribution in fiscal year 2022. Dedicated revenues from the state lottery will cover some of the cost.

The Murphy Administration’s decision to make a full contribution a year early will reduce obligations in coming years, and would save taxpayers $861 million over the next 30 years.

“The combined pension contributions by the Murphy Administration in four years will roughly total an unprecedented $18 billion, which is $9.4 billion more than the prior Governor contributed over two terms,” the Governor’s office said in a news release.

“The problems and shortfalls in our pension system have absolutely nothing to do with our hardworking public employees who have dutifully paid their full share into the pension funds every two weeks. They’ve been scapegoated for far too long,” Murphy said in his budget message. Instead, he pointed to past administrations of both parties that skipped the payment of pension obligations, with damaging consequences. “We won’t go back to those failed, old ways,” he said.

“Making the payment is keeping our word to hundreds of thousands of retirees who depend on their pensions,” Murphy said. “We did it without attacking the middle class and slashing services,” he continued, adding, “When we keep making this payment, we’ll go from a pension system that many said was destined for bankruptcy, to one that is solvent, healthy, and sustainable.”

CONTINUED ON PAGE 7
disclosure of climate-related financial risks have become a priority among financial standard-setting bodies worldwide because markets can't risks and opportunities correctly without reliable financial information.

“The legislation is a reasonable, results oriented approach to the real threat of climate change” said Hank Kim, executive director and counsel of NCPERS. “NCPERS members are long-term investors whose investment horizon is 30 or more years. As such, we see the dangers & risks of climate change clearly. The United State, in partnership with all nations, need to begin addressing this crisis with urgency.

“Investors need federal regulators to provide clear guidance to understand the climate risks to the financial system and potential economic opportunities,” Marcie Frost, CEO of CalPERS. “Our ability to invest wisely and pay retirement benefits over decades depends on it. That's why Senator Feinstein and Representative Casten's bill is so important. It gives authorities a powerful tool that will help protect investors like CalPERS from climate risks that threaten our portfolio companies and the long-term sustainability of our fund.”

“For several years, major investors, like New York State's pension fund, have been taking steps to protect our portfolios from climate risk, one of the greatest threats to our long-term value,” said New York State Comptroller Thomas P. DiNapoli. “We need to ensure our nation is prepared to meet the risks climate change poses throughout our financial system, and we thank Senator Feinstein and Representative Casten for their leadership on this important issue.”

The bill’s key provisions would establish an advisory committee on climate financial risk within the U.S. Financial Stability Oversight Council (FSOC), drawing together experts in the science, economics and financial risks related to climate. It would require federal bank and credit union regulators to update their supervisory guidance on climate risk, and would direct FSOC to determine whether to designate any risky nonbanks as requiring additional oversight by the Federal Reserve due to climate change considerations. It would also require the Federal Insurance Office of the U.S. Department of Treasury to report on modernizing and improving climate risk insurance regulation, and would call for improved global coordination.
property shall not be treated as private business use. Second, the legislation would have amended IRC Section 148(b) to state that the term investment-type property shall not include public infrastructure property. Proponents say that without these clarifications the bonds used to finance public infrastructure property would be treated as arbitrage bonds and would lose their tax-exempt status.

This previous legislation has been included in a new proposal, which has not yet been introduced but could surface during consideration of the American Jobs Program. The new proposal is called the Public Infrastructure Finance and Innovation Act (PIFIA). It would contain a federal loan program for states and localities.

PIFIA would authorize federal dollars to be borrowed by a state or locality with over one million in population in the form of a 30-year loan. Then, the borrower would transfer the monies to the pension plan(s) that it sponsors. The plan must use 10-20 percent of the loan proceeds, depending on population density, for public infrastructure investments. Providing the pension plan with new money would likely result in a reduction in the plan’s unfunded liability and, in turn, a reduction in the borrower’s actuarially determined contribution, i.e., budget savings. The borrower (plan sponsor) then must use 50 percent of any budget savings for public infrastructure projects starting the fourth year and for every year thereafter. The first three years of budget savings would be used for expenses related to Covid-19.

In addition, House Budget Committee Chairman John Yarmuth (D-KY) has discussed creating a National Infrastructure Development Bank, which would be financed through the sale of $75 billion worth of Rebuild America Bonds on the credit of the United States. An additional $300 billion in bonds could be issued at the request of the bank. According to the draft legislation, the bonds would mature in 40 years and may not be resold until 10 years after issuance. The bonds would bear an interest rate of 200 basis points above the 30-year Treasury bond and may be purchased only by pension plans – both ERISA and governmental plans. Chairman Yarmuth has not yet made clear whether he will pursue his proposal in the upcoming debate.

Please be assured that NCPERS will closely follow the development of the American Jobs Program for inclusion of any provisions related to public pension plans.

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**EXECUTIVE DIRECTORS CORNER CONTINUED FROM PAGE 3**

are gone for good. (The same cannot be said, alas, for professional opinionators like Biggs, but that’s a different article altogether.)

There is a problem, however, when government ties pension trustees’ hands, as it did in the case of multiemployer plans. ERISA’s “anti-cutback rule” compromises the ability of trustees of troubled plans to manage benefits proactively. Only single employer plans can take contribution holidays when plans were overfunded during periods of strong market performance. Multiemployer trustees were incentivized to increase benefits, which could not be reversed during underperforming markets.

The aid package isn’t the bailout Biggs insists on calling it. It will prevent pension cuts for older retirees, but not for today’s workers. Multiemployer plans have been working hard to fix their shortfalls, but they can’t do everything alone. As Teresa Ghilarducci noted in a critique of Biggs’ article on Forbes.com, “Congress has never allowed any federal insurance program to go bankrupt. Taxpayer funds have been used to prevent the insolvency of crop insurance, flood insurance, banks, savings and loans, auto companies, and airlines.”

Ironically, Biggs has never seemed to have much problem with corporate welfare. Government tax incentives that support and subsidize private corporations have never gotten him worked up. He reserves his wrath for any hint that ordinary, hard-working Americans might be advantaged by government action. And the fear that favorable government policy might extend to public pension plans gets him in a complete lather. He couldn’t possibly let that happen.
MIDWEST: Kansas

The Kansas Senate is poised to consider a bill authorizing the state finance agency to issue $500 million of pension obligation bonds to refinance part of the Kansas Public Employees Retirement System unfunded liability.

The Senate cut the proposed authorized funding contained in House Bill 2405 by half, from the $1 billion that the House approved March 4 on a vote of 117-6. The Senate Ways and Means Committee adopted the lower amount on March 25 before referring the bill to the Senate floor for a vote.

HR 2405 would permit the state to issue the 30-year bonds for interest rates not to exceed 3.75 percent, taking advantage the relatively low rate environment. As of March 31, 30-year U.S. Treasury bonds were trading at 2.41 percent. The yield curve has been steepening in 2021; 30-year bonds started the year at 1.66 percent.

Proponents said the bill would enhance KPERS’ reliability and give the state an economic boost. They also noted that pension obligation bonds issued for KPERS in 2004 and 2015 are performing well.

The state has an unfunded liability of $6 billion in the state government worker and teacher portion of KPERS. Lawmakers have targeted a funded obligation ratio of 80 percent, versus 71.9 percent at present, and the bond issuance would help close the gap.

The earlier version of the bill, as passed by the House, would have authorized $1 billion in bond issuances if the interest rate was 3.5 percent or less, but the borrowing cap would have fallen to $500 million if rates were in the 3.5 percent to 3.75 percent band. The Senate decided to set the total at $500 million as long as rates don’t exceed 3.75 percent.

Alan Conroy, executive director of KPERS, said the pension’s board of trustees applauded legislative actions to improve sustainability of the system, according to a report in Kansas Reflector. “The additional assets in the trust fund immediately improve the funded ratio of the state/school group,” Conroy said. “With the additional assets from the bond proceeds, the amount of state/school employer contributions required to extinguish the unfunded liability is less.”

SOUTH: Florida

Proposed legislation to close the Florida Retirement System (FRS) defined benefit pension plan to new enrollees effective July 1, 2022, has passed its first hurdle in the state Senate. The Senate Appropriations Committee approved the legislation March 31 on a party-line vote of 12-8. A House counterpart had not been introduced at press time.

Senate Bill 84, sponsored by Sen. Ray Rodrigues, a Republican, would also require all employees to enroll in a 401(k)-type defined contribution plan. It would not affect the options available to current employees; the changes apply only to those who initially enroll on or after July 1, 2022.

“If you close the plan, that is a major shock to the system,” Matt Puckett, executive director of the Florida Police Benevolent Association, told the Tampa Bay Times.

Florida is a “trifecta state,” with the Governor’s office and both chambers of the legislature under a single party’s control—in Florida’s case, a strong GOP majority. The Republicans control the Senate by 24-16 and the House by 78-42.

According to a legislative analysis, the FRS has a $36 billion gap between its assets and its long-term obligations. Funded by the typical combination—employer contributions, employee contributions and investment returns—the FRS had assets with an actuarial value about $164 billion as of July 1, versus actuarial liabilities of $200 billion. Liabilities, of course, are owed over the long term, not immediately.

Currently, FRS offers a mandatory defined benefit plan and an optional defined contribution plan. Under SB 84, the defined contribution plan, or “investment plan,” would be the only option for new state employees and workers in 177 cities, 151 hospitals, school districts and special districts.

Democrats and labor unions staunchly oppose the plan. They point out that lawmakers are chipping away at any funding issues. Last year, they increased employer contributions by $404.5 million a year. This is getting the job done, public pension supporters argue.
"Why do we need any legislation?" Rep. Joe Geller, a Democratic member of the Florida House, told The Center Square, a news service that covers state government. "FRS is a model nationally. I have to give credit where credit is due. The people who run it, seem to me, do a very good job. Leave it alone."

WEST:
New Mexico

The New Mexico Legislature has sent a bill to Governor Michelle Lujan Grisham that would increase employer contributions for the teachers pension fund to 16 percent over two years, from 14 percent at present, the Associated Press reported. An early draft of the bill would have increased contributions 1% each year for four years but it was scaled back.

If signed into law, the increased contribution would fall short of recommendation issued March 24 by a top credit rating agency. Moody's Investors Service said that New Mexico's teachers pension fund isn't collecting enough money to keep up with financial obligations for future benefits.

Moody's raised concern that a drop in interest rates could hurt the funds' investment earnings from mainly low-risk fixed-income securities, the AP said. A higher percentage of payroll would need to be earmarked for the fund to keep unfunded future benefits from rising.

"The gap between our tread water indicator and contributions amounted to roughly 5% of payroll," the Moody's report stated. Moody's did not issue a new credit rating.

A financial shortfall could be made up through increases in teacher contributions or reductions in future benefits. But constitutional protections may prevent those measures, and education advocates argue teachers already get weaker pension benefits than state employees, the AP reported.

The New Mexico Educational Retirement Board serves around 100,000 current and inactive educators and around 50,000 retirees.

On March 2, Lujan Grisham signed bipartisan legislation providing a $55 million cash infusion for the Public Employee Retirement Association to help it trim its $6.6 billion unfunded liability. It also required increased contributions from current employees and employers, and it changed, over time, the formulas for calculating the cost-of-living adjustments (COLAs) retirees receive.

The bill’s supporters included the New Mexico Municipal League, New Mexico Counties, AFSCME Council 18; New Mexico Professional Firefighters Association; Fraternal Order of Police; National Association of Police Officers; the Albuquerque Fire Department Retirees’ Association; the Albuquerque Police Officers Association; and Communications Workers of America.  

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2021 Legislative Conference Webcast

April 20th

Broadcasting from the National Press Club in Washington, DC

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### Calendar of Events 2021

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### 2020-2021 Officers

- **Daniel Fortuna**: President
- **Kathy Harrell**: First Vice President
- **Dale Chase**: Second Vice President
- **Carol Stukes-Baylor**: Secretary
- **Will Pryor**: Treasurer
- **Mel Aaronson**: Immediate Past President

### Executive Board Members

- **State Employees Classification**
  - Stacy Birdwell
  - John Neal
- **County Employees Classification**
  - Teresa Valenzuela
- **Local Employees Classification**
  - Sherry Mose
  - Thomas Ross
  - Ralph Sicuro
- **Police Classification**
  - Kenneth Hauser
  - James Sklenar
- **Fire Classification**
  - Dan Givens
  - Emmit Kane
  - James Lemonda
- **Educational Classification**
  - David Kazansky
  - Richard Ingram
- **Protective Classification**
  - Peter Carozza, Jr.
  - Ronald Saathoff
- **Canadian Classification**
  - Frank Ramagnano

The Monitor is published by the National Conference on Public Employee Retirement Systems. Website: [www.NCPERS.org](http://www.NCPERS.org) • E-mail: amanda@ncpers.org
San Joaquin County Begins Core Fixed-Income Mgr. Search

The $3.5 billion San Joaquin County (Calif.) Employees Retirement Association has issued an RFP for a domestic core fixed-income manager to handle a $150 million to $200 million mandate.

The search is being conducted as part of the plan’s principal protection portfolio structure review, CEO Johanna Shick said, in an e-mail.

The plan is reviewing the asset class relative to the Bloomberg Barclays US Aggregate Index and the proposals will be used to determine if any changes are needed in its current fixed-income portfolio, she added.

Current core fixed-income managers Dodge & Cox and DoubleLine Capital handle $165 million and $112 million, respectively, according to a February flash report.

The RFP is available on general investment consultant Meketa Investment Group’s website and the deadline for proposals is May 5.

Interested firms should have their firm and product information updated through Dec. 31 on the eVestment database and must have $3 billion in firm assets under management and $500 million in product assets under management, according to the RFP.

Questions regarding the RFP should be directed to Meketa at RFPresponse@meketa.com.
Investors inching closer to joining the fray

Market infrastructure improvements drive cryptocurrency growth

Institutional investors are warming to the idea of investing in digital assets.
If digital assets were a dance floor, institutional investors have been mainly sipping punch on the gym bleachers for the last decade.

But now, more institutional investors are putting on their dancing shoes and getting off the bleachers, or at least thinking about tying their laces, sources said.

"We continue to see more demand, we continue to see diversification of demand across institutional client segments, which is also a healthy indicator of where the industry is going," said Tom Jessop, New York-based president of Fidelity Digital Assets, which was launched in late 2018 by Fidelity Investments as the first major firm in institutional asset servicing to offer cryptocurrency custody and trade execution operations.

Mr. Jessop said his company noticed an uptick in interest around the start of the COVID-19 lockdowns in March 2020. The previous fall, Fidelity Digital Assets was granted a charter from the New York State Department of Financial Services to operate as a limited liability trust company.

Is cryptocurrency an investment option for your pension fund or endowment?

- Yes
- No
- Not yet, but considering and could add in the next 1 to 3 years
- Not yet, but considering and could add in the next 3 to 5 years

View Results
Crowdsignal.com
A spokeswoman declined to provide Fidelity's assets under custody but said its client base quadrupled to more than 100 in December 2020 from the year prior. Fidelity's institutional clients include hedge funds, family offices, registered investment advisers, pension funds, endowments, foundations and corporate treasury departments, the spokeswoman added.

"It went from something that people may have tiptoed (around) or been fearful of, to something that people felt that there was no more career risk associated with being involved in digital assets," said Michael Sonnenshein, New York-based CEO at Grayscale Investments LLC, which touts itself as the world's largest digital asset manager with $50.6 billion in assets under management as of April 14 and 14 cryptocurrency investment products for institutional and accredited investors, six of which trade publicly and are available to all investors.

In 2020, Grayscale brought in more than four times the assets it had cumulatively raised in the prior six years, according to Mr. Sonnenshein. The additional inflows and huge price gains in bitcoin have led to a surge in Grayscale's AUM. In February 2020, Grayscale had $2.6 billion in AUM.

Interest from institutional investors, paced still by hedge funds and family offices, is on the rise among all institutional segments, Mr. Sonnenshein added.
Overcoming hurdles
Historically, institutions have kept their distance from digital assets for a variety of reasons, including a lack of custody capabilities, and liquidity and volatility concerns.

"Institutional investors have an understanding that this is a more speculative investment," said Christopher Levell, partner at consultant NEPC LLC in Boston. "It's relatively easy to make the case that bitcoin could be $1 million or it could be zero. It's got a ton of convexity."

TOBAM, a Paris-based asset manager with $10.2 billion in AUM, launched a bitcoin fund in 2017. Yves Choueifaty, TOBAM's president and chief investment officer, said bitcoin, the biggest digital currency, can be a precarious investment on its own, but the risk of an asset should determine the size of the investment, not the investment case itself. He compared bitcoin to chlorine: As a "combat gas, it's very dangerous, but if you put a drop of chlorine in water, it's drinkable." If an investor puts 1% of bitcoin in a 60%/40% portfolio, its volatility won't be felt, he said.

Akbar Thobhani, CEO and co-founder of San Francisco-based cryptocurrency prime broker-dealer SFOX Inc., which offers clients cryptocurrency trading and custody
options, said the learning curve for institutional investors has been steep. "When you're investing in the traditional markets, the infrastructure is there, the rules and regulations are in place, and when you come to crypto, it's like a whole new world," he said.

Whereas in years past institutions were merely asking questions trying to figure out what digital assets were, more are now interested in learning the best ways to incorporate these assets in their portfolios, sources said. "If you're a fiduciary, you cannot ignore the reality that the highest-performing asset of the last decade has been bitcoin," said Matthew Le Merle, San Francisco-based managing partner of Blockchain Coinvestors, a blockchain fund of funds. "You could argue that it's not sustainable or intrinsically not appropriate, but at the end of the day your goal is to try and in a disciplined way both protect and manage the assets you have under management and make them grow."

As the digital-asset market continues to mature, the hurdles preventing institutions from getting involved have dissipated, Mr. Jessop said, including prior liquidity concerns. "I think it's a self-fulfilling prophecy, more investors coming into the space attracts more liquidity, which increases the size of the liquidity pool, which attracts more traditional investors, and that's all been very healthy," he said.

Earlier this month, the cryptocurrency market capitalization topped $2 trillion for the first time, according to market tracker CoinGecko.

The perception of digital assets improved in 2020, with 58% of U.S. investors expressing a neutral or positive perception, up from 43% in 2019, according to a Fidelity Digital Assets survey released in June.

And sources expect that perception to continue to warm after recent developments in the space.

The price of bitcoin has surged over $63,000, up from about $8,000 last April, and digital currency exchange Coinbase Global Inc. had a successful initial public offering on April 14, with a market valuation of $86 billion. Also, Tesla Inc. announced in a February Securities and Exchange Commission filing that it had bought $1.5 billion worth of bitcoin.
Also in February, **Bank of New York Mellon** Corp. announced the formation of a digital assets unit and is developing a multiasset digital custody and administration platform for traditional and digital assets.

And **Goldman Sachs Group** Inc. is relaunching its cryptocurrency trading desk, Matthew McDermott, global head of digital assets for Goldman Sachs' global markets division, said on a company podcast in March.

"There's a virtuous cycle here where these problems are solving themselves because of the market demand," Mr. Jessop said.

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**New SEC chairman**

Gary Gensler, whom the Senate confirmed in a 53-45 vote on April 14, is the first SEC chairman with an extensive knowledge of digital assets. The former chairman of the Commodity Futures Trading Commission, and more recently a professor at the MIT Sloan School of Management, has taught classes and testified before Congress on digital currencies and blockchain technology.
Cryptocurrency stakeholders say Mr. Gensler's background is a positive for the industry.

"For someone to do a good job in this space they have to understand the past, and they have to understand the future and they have to be able to move regulation in the right direction, and Gensler is clearly very qualified on both of those dimensions," said Blockchain Coinvestors' Mr. Le Merle.

SEC Commissioner Hester M. Peirce, during a January webinar hosted by the U.S. Chamber of Commerce, said she is optimistic the agency will provide clarity for stakeholders interested in cryptocurrency assets with Mr. Gensler at the helm.

There are currently questions about how digital assets should be stored and whether a given cryptocurrency should be treated as a security. The SEC does not consider the two biggest cryptocurrencies — bitcoin and ethereum — to be securities, but there is less certainty regarding smaller cryptocurrencies.

In a February 2020 speech, Ms. Peirce, who is often called "Crypto Mom" for her longtime advocacy of these assets, outlined a proposal to establish a three-year safe harbor for cryptocurrency firms interested in offering tokens so they "could facilitate participation in and the development of a functional or decentralized network, exempted from the registration provisions of the federal securities laws," as long as certain conditions were met.

On April 13, Ms. Peirce unveiled an updated version of her proposal that would require semiannual updates and an exit report requirement at the end of the three-year grace period. The exit report would include either an analysis by outside counsel explaining why the network is decentralized or functional, or an announcement that the tokens will be registered under the Securities Exchange Act of 1934.

"Now, as a new chairman is coming into the SEC with a new agenda, is the perfect time for the commission to consider afresh how our rules can be modified to accommodate this new technology in a responsible manner," Ms. Peirce said in a statement posted on the SEC's website.
Bloomberg

Hester M. Peirce, a Republican, has served on the SEC since 2018. Her renomination as commissioner was secured Thursday.

**Bitcoin ETFs**

More recently, Ms. Peirce said the SEC has moved too slowly in approving investment products that incorporate bitcoin. To date, the SEC has not approved a bitcoin exchange-traded fund, though several applications for approval of such funds are currently pending.

"Although well-intentioned, our wariness with regard to crypto deprives investors of access to products and services that they want," Ms. Peirce said during a speech at a British Blockchain Association conference in March, according to a transcript posted on the SEC's website. "Moreover, caution-motivated delay makes it more difficult for us to change course should we decide to do that. If we have said no to one product sponsor, how can we say yes to another seeking to offer a similar product? Meanwhile, the market engineers around our denials by creating substitutes that do not require SEC approval."

Firms like VanEck Associates Corp., New York Digital Investment Group LLC, Valkyrie Digital Assets and WisdomTree Investments Inc. have bitcoin ETF proposals before the SEC.
Both VanEck and WisdomTree intend to list shares of their ETFs on the Cboe's BZX Exchange. Cboe made filings to the SEC in support of both proposals.

"We believe (ETFs are) a better wrapper than other options where investors are obtaining exposure to bitcoin," said Laura Morrison, New York-based senior vice president, global head of listings at Cboe. "The ETF in general is typically less expensive, the management fees are typically lower than say what you might be willing to spend on other options that are available in the U.S. today, such as trading in your Coinbase account or an OTC product, (where) they charge a hefty management fee."

The underlying liquidity of bitcoin has grown in recent years, which makes a bitcoin ETF more workable, Ms. Morrison said. "There are a number of data points that we plan to present to the SEC in conjunction with our issuer to reinforce why this asset class is mature enough and is best offered within a regulated, on-exchange listing," she added.

FD Funds Management, a subsidiary of Fidelity, made an initial filing at the SEC for a bitcoin ETF last month. Though separate from Fidelity Digital Assets, Mr. Jessop said a bitcoin ETF, "Given that it's an investment vehicle that's widely understood, it's an investment vehicle that investors of all types are comfortable with, it can only be positive for the industry."

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Canadian approval

Canadian regulators earlier this year approved the first bitcoin ETF in North America, the Purpose Bitcoin ETF, which had C$1.2 billion ($950 million) AUM as of April 7. Grayscale in an April 5 blog post said it is committed to converting its Grayscale Bitcoin Trust into an ETF. "Converting Grayscale Bitcoin Trust to an ETF would enable a much larger pool of investors to access the benefits of bitcoin exposure in the form of a familiar and regulated security," Grayscale's Mr. Sonnenshein said. Grayscale Bitcoin Trust, a publicly traded bitcoin fund with $37.2 billion in AUM as of April 7,
became the first digital currency investment vehicle to attain the status of an SEC-reporting company in January 2020.

Mr. Sonnenshein said it's not a matter of whether a bitcoin ETF gets approved in the U.S., but when. "While we believe the market has and continues to mature, it may be too early to know whether all of the dynamics in the market that our regulators would like to see mature have got to a place where they're ready to make that kind of approval," he said of the current proposals before the SEC. "Over time we certainly believe that will be the case."

On the whole, regulators should commit to providing regulatory clarity so that traditional financial market participants can engage with cryptocurrency assets with confidence that they are complying with their regulatory obligations, Ms. Peirce said in her March speech.

"Legacy financial institutions and traditional investors that have sat on the sidelines until now are likely to push us to allow them to play a more active role," she said. "Meanwhile, some crypto-native firms are now large companies that are woven into the fabric of the broader economy and so also will command more regulatory attention. A final regulatory lesson then is that the regulatory work is only just beginning."

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Two Virginia pension funds warm up to blockchain technology investments

BRIAN CROCE

Two public pension funds in Virginia were the first asset owners to commit to a fund that invests primarily in blockchain technology firms.

Being the first to do something can be difficult, especially with the weight of fiduciary responsibility always looming.

But roughly three years after two public pension funds in northern Virginia — the $4.8 billion Fairfax County Employees' Retirement System and the $1.6 billion Fairfax County Police Officers Retirement System — became the first known asset owners to commit to a dedicated fund that invests primarily in blockchain technology firms, the results have been reaffirming.

In 2018, the employees' fund committed $10 million and the police fund committed $11 million to the Morgan Creek Blockchain Opportunities Fund, managed by Morgan Creek Digital Assets, a subsidiary of Chapel Hill, N.C.-based Morgan Creek Capital Management LLC.

The following year, the employees fund committed $30 million and the police fund committed $22 million to Morgan Creek's second iteration of the fund.

As of March 31, Fund I had a return on invested capital of 4.4 times and Fund II was
3.4 times, according to Mark W. Yusko, founder, CEO and CIO of Morgan Creek, and managing partner of Morgan Creek Digital Assets.

The funds, which Mr. Yusko describes as venture capital, are geared about 80% to direct investments in infrastructure involving blockchain technology and about 20% in cryptocurrencies. The first fund raised $41 million and the second raised just shy of $100 million, Mr. Yusko said.

"We were not trying to invest in bitcoin only, we were not even trying to invest in cryptocurrency only," said Katherine Molnar, CIO of the Fairfax police fund. "What we liked about Morgan Creek is we thought of it as a multistrategy approach to this space — providing exposure to both venture capital direct equity investments as well as liquid cryptocurrency."

But convincing her board of trustees that investing in blockchain technology and cryptocurrencies was the right decision proved challenging.

"I manage a police officers' retirement system, and I can tell you that there were some concerns like, 'Are we going to invest in a fund that facilitates money laundering?'"

She added, "This is a strategy that people didn't know very much about, and if they did know anything about it, what they heard probably wasn't particularly positive."

So, she brought several board members and Jeff Weiler, Fairfax Country Retirement Systems' executive director, to Chapel Hill, where the manager was based, to have their questions answered directly.

Mr. Yusko and his team fielded questions and explained the basics of blockchain technology and its potential uses during a lengthy meeting in 2018.

Viewing the commitment as an innovation allocation with strong growth potential helped the more skeptical board members come around to the idea, Ms. Molnar said.

Also, the Fairfax funds have assumed rates of return of 7.25%, which is always top of mind.

"We have real concerns about our ability to still meet 7.25% every year with just the returns from the public markets alone," Ms. Molnar said. "We have increasingly been
taking money out of public markets and into private markets."

After some initial blowback from participant groups, Mr. Weiler posted a Q&A on the systems' website explaining the allocations and how they were vetted.

Since then, the Fairfax funds have gotten more comfortable with blockchain and crypto funds. At its April 14 board meeting, the police fund made two $16 million commitments. The first was to Morgan Creek's third iteration of the fund — which has been re-branded as Morgan Creek Digital Fund III — and the second was to Blockchain Capital V, managed by venture capital firm Blockchain Capital, which invests in the blockchain technology industry, Ms. Molnar said in an email.

Mr. Yusko said he expects more pension funds and other institutions to get involved in this space.

"I really believe that five years from now we'll look back and it will be deemed fiduciarily inappropriate to have zero exposure to digital assets," he said.

"This is an evolution of securities: we had analog securities, physical pieces of paper; then we went to electronic securities; and now we're going to have true digital ownership where every stock, every bond, every commodity, every piece of real estate, every everything is going to be digitized and will trade in this 24/7 global marketplace."

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